



Investing in rural people

Rwanda

Project for Inclusive Small Livestock Markets (PRISM)

Project Design Report

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Investing in rural people

Partnership for Resilient and Inclusive Small Livestock Markets PRISM Project Design Report (PDR)

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Weights and measures

1 kilogram	=	1000 g
1 000 kg	=	2.204 lb.
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres

Currency equivalents

Currency Unit
US\$1.0 = RWF 855

Abbreviations and Acronyms

ABS	Agribusiness Specialist
ABUSOL	Agribusiness Solutions
AFR	Access to Finance Rwanda
AFS	Access to Finance Specialist
AI	Artificial Insemination
ASSAR	Rwanda Insurers Association
ASF	African Swine Fever
ASF	Animal Source Food
ASWG	Agricultural sector Working Group
AU	African Union
AVCF	Agricultural Value Chain Financing Approach
AWPB	Annual Workplan and Budget
BDF	Business Development Fund
BDSP	Business Development Service Provider
BP	Business Plan
CAADP	Comprehensive African Agriculture Development Programme
CAVE	Community Agro-Vet entrepreneurs
CIP	Crop Intensification Programme
CFSVA	Comprehensive Food Security and Vulnerability Analysis
COP	Conference Of Parties
DFID	Department for International Development (UK)
DG	Director General
DP	Development Partner
DPEM	District Plans to Eliminate Malnutrition
DOC	Day Old Chick
RDC	Democratic Republic of Congo
EAC	East African Community
EDPRS	Economic Development and Poverty Reduction Strategy
EICV	Enquête intégrale sur les conditions de vie des ménages
EIRR	Economic Internal Rate of Return
ENABEL	Belgian Development Agency
ESIA	Environment and Social Impact Assessment
FI	Financial Institution
FFS	Farmers' Field School
FMA	Financial Management Assessment
FSD	Financial Sector Deepening
GDP	Gross Domestic Product
GHG	Green House Gas
GoR	Government of Rwanda
HPAI	Highly Pathogenic Avian Influenza
ICB	International Competitive Bidding
IFIMIS	Integrated Financial Management System

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ICCO	Interchurch Coordination Committee Development Aid
ILRI	International Livestock Research Institute
IMF	International Monetary fund
IMSAR	Improving Market Systems for Agriculture in Rwanda
INDC	Intended Nationally Determined Contributions
INTOSAI	International Organisation of Supreme Audit Institutions
IPSAS	International Public Sector Accounting Standard
IRF	Integrated Risk Framework
KM	Knowledge Management
LMP	Livestock Master Plan
LODA	Local Administrative Entities Development Agency
LSA	Livestock Sector analysis
LUCP	Land Use Consolidation Policy
MDA	Ministries, Departments, Agencies
MDD-W	Minimum Diversity Diet for Women
MDTF	Multi-Donor Trust Fund
M&E	Monitoring and Evaluation
MFI	Micro-Finance Institution
MINALOC	Ministry of Local Government
MINECOFIN	Ministry of Finance and Economic Planning
MINICOM	Ministry of Trade and Industry
MIS	Management Information System
MTEF	Mid Term Expenditure Framework
MTR	Mid Term Review
NCCLCD	National Strategy on Climate Change and Low-Carbon Development
NIRDA	National industrial Research and Development Agency
NISR	National Institute of Statistics of Rwanda
NST	National Strategy for Transformation
NTB	National Tender Board
OAG	Office of the Auditor General
ODA	Oversees Development Association
ORMS	Operational Results Management System
PA	Priority Area
PAFI	Premier Animal Feeds Industry
PASP	Climate Resilient Post-harvest and Agribusiness Support Programme
PEAL	Poultry East Africa Ltd
PEFA	Public Expenditure and Financial Accountability
PEs	Procurement Entities
PFI	Participating Financial Institution
PFM	Public Financial Management
PforR	Planning For Results
PoG	Passing on the Gift
PPR	Peste des Petits Ruminants
PRICE	Project for Rural Income through Exports
PSC	Programme Steering Committee
PSF	Private Sector Foundation
PSRP	Participatory Self-Review and Planning

PSTA	Strategic Plan for the Transformation of Agriculture
RAB	Rwanda Agriculture and Animal Resources Development Board
RAFA	Rwanda Animal Feeds Association
RALIS	Rwanda Agriculture Livestock Inspection and Certification Services
RCA	Rwanda Cooperative Agency
RDDP	Rwanda Dairy Development Project
RDHS	Rwanda Demographic and Health Survey
RPA	Rwanda Poultry Association
RPFA	Rwanda Pig Farmers Association
RPIA	Rwanda Pig Industry association
RPPA	Rwanda Public Procurement Authority
RSB	Rwanda Standards Board
SACCO	Savings and Credit Cooperative
SBD	Standard Bidding Documents
SC	Sub-Component
SDG	Sustainable Development Goals
SHG	Self Help Group
SPIU	Single Project Implementation Unit
SR	Small Ruminant
SUN	Scaling Up Nutrition Movement
TA	Technical Assistance
TAD	Transboundary Animal Disease
TVET	Technical and Vocational Education and Training
ToR	Terms of Reference
USAID	US Agency for International Development
USD	Dollar of the United States
VBHCD	Values-Based Holistic Community Development
VC	Value Chain
VSLA	Village Savings and Loans Associations
VSFB	Vétérinaires Sans Frontières Belgique
WHO	World Health Organization

Map of the programme area: IFAD interventions



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 25-02-2019

I. Executive Summary

A. National context

1. Since the turn of the century, Rwanda has seen its economy grow by 7.9%/p.a. According to the International Monetary Fund (IMF)'s analysis, the medium-term macroeconomic outlook remains favourable and Gross Domestic Product (GDP) growth is expected to remain strong. Rwanda's debt is assessed to be sustainable, with a continued low risk of debt distress. Since 1994, Rwanda has had a stable enabling policy environment that ensured successful delivery of development programmes. Despite strong economic growth, the country still depends on Overseas Development Assistance (ODA) for 16% of its budget. The poverty rate has not declined during the last three years, remaining a key challenge especially in rural areas: today, poverty is estimated at 43.1% in rural areas, and extreme poverty at 18.1%.
2. The Rwandan economy is still dependent on the agricultural sector, which contributes to 32.7% of the GDP. Rwandan agriculture is characterized by small production units (the average landholding size is 0.33 ha), reflecting the high population pressure on the natural resource base. Rwanda's agricultural land is fragile due to its hilly topography, thin soil layers and limited vegetative cover. Staple food production remains below domestic consumption and the gap is filled by importation.
3. The direct and indirect contribution of livestock to GDP in 2016/17 was estimated at 4.6% of national GDP and 14% of agricultural GDP. Due to agro-ecological conditions conducive to intensification, the livestock sector provides major opportunities to further increase its contribution to the economy. With a rapidly growing population, increasing urbanization and rising incomes, the demand for Animal Source Food (ASF) is expected to increase significantly for the foreseeable future.
4. Rwanda's long-term development goals are defined in its Vision 2020 and Vision 2050, which aim to transform the country from a low-income agriculture-based economy into a knowledge-based, service-oriented economy, with middle-income status. Rwanda's Strategic Plan for the Transformation of Agriculture (PSTA 4) is the Government's flagship investment programme for the sector for the period 2018-2024. PSTA 4 recognizes that agricultural growth must be driven by private sector investment and introduces improved nutrition amongst its priority areas.
5. The overarching strategic framework guiding the development of the livestock sector in Rwanda is the Rwanda Livestock Master Plan (LMP). The 2017-2022 LMP comprises six sub-sectorial master plans, which include dairy, red meat, chicken and pork. For small livestock specifically, a strategy and investment plan for small animal industry was developed in 2012, but has now expired and would require a review and update.
6. Rwanda has adopted international and regional frameworks on women's rights, making great strides in promoting gender equality, with strong Government commitment. The 2015 revised Constitution enshrines the principles of gender equality and women's empowerment (GEWE). According to the latest Agricultural Households Survey (2017), women in agricultural households represent 53% of the population. Overall, youth population makes up 26.6% of the total population of Rwanda.
7. Despite marked reductions in chronic malnutrition, stunting remains one of the Rwanda's greatest human and economic development challenges. The stunting rate remains the highest in the Western Province, at 44% (Northern Province 39% and Southern Province 36%) and continues to be a major public health concern.

B. Rationale for IFAD involvement

8. **IFAD's comparative advantage for small livestock sector development.** It is to be recalled that IFAD has extensive experience in the livestock sector in Rwanda, thanks to its support to the dairy sector¹. Moreover, IFAD also has a comparative advantage in working with smallholder and livestock-related institutions as well as being a knowledge broker, by using models, as well as experiences and lessons from across all regions for pro-poor small livestock development.
9. **IFAD as a trusted partner.** The Fund remains a trusted partner for the Government of Rwanda (GoR) having successfully provided its support to the dairy sector (RDDP) and export value chains (PRICE). Against this backdrop, the GoR requested IFAD to support its strategy of modernizing the small livestock value chains. In doing so, this will allow the GoR to widen its sectorial coverage in livestock and balance its support geographically in areas (i.e. West and South), which receive less support and are more affected by poverty and malnutrition. It will also allow the targeting of the most vulnerable households, for which small livestock is an appropriate way out of poverty and can serve as a buffer to mitigate the impact of shocks, thus contributing to increase their resilience. At the same time, small ruminants can greatly contribute to generate economic opportunities for vulnerable households and especially for women. Moreover, in a context where child undernutrition remains an important development challenge, small livestock sector can contribute to play an important role in combatting malnutrition.
10. **Market demand opportunities.** Between 2000 and 2017², the domestic consumption per capita for small livestock products has grown by 688% for poultry meat, 79% for pig meat, and 111% for small ruminants' meat. This growing market demand thus provides an opportunity for rural livelihood transformation. Moreover, Rwanda's low urbanization level is compensated by the presence, at its doorstep, of two significant urban centers in the Democratic Republic of Congo (DRC): Goma (1.2M people) and Bukavu (0.9M people). The value of small stock, exported to DRC, increased by 27% between 2010 and 2015³, and by 140% for pig only over the same period. This market is expected to keep growing in the near future. The productivity of small livestock in Rwanda could thus be substantially increased to respond to this increasing market demand, especially for the traditional systems (extensive small ruminants, backyard pig and chicken). Specifically, productivity could be significantly reduced by simple animal health measures and through genetic improvement, although crossbreeding should be handled with care in order not to affect resistance to diseases and feed scarcity. The other option to respond to the increasing market demand would be to establish new production units. Due to the land constraint, farmers cannot easily extend their cultivation area; thus, creating a small poultry or a pig unit could be a solution for smallholder farmers to expand their activity, without additional land requirement.

C. Lessons Learned

11. **Need to address sanitary risks.** The experience of IFAD-funded small livestock development projects is that all efforts dedicated to building up a livestock value chain could be constrained in case of an outbreak of major animal diseases. The integration of contingency response measures in the programme design could thus contribute to significantly reducing this risk.

¹ IFAD is supporting the Rwanda Dairy Development Project (USD65 m)
<https://www.ifad.org/en/web/operations/project/id/2000001195/country/rwanda>

² FAO, 20178

³ Source Rwanda Customs

12. **Approach to small ruminants' value chain.** In Rwanda, a significant proportion of the households, which were provided with start-up packages including small livestock were not able to keep them on the long run and had to sell them when confronted with crisis. With this target population, when placement of animals is envisaged, it is important to properly prepare the community before handing over the animals.
13. **Access to finance.** One key lesson from IFAD-funded projects in Rwanda is that there is too much focus on the management of matching grants, without proper analysis of their rationale. This results in low-efficient use of public resources and risk of crowding out of the financial sector. More needs to be done to promote a permanent and sustainable access to adequate financial services.
14. PRISM will strongly benefit from the experience and lessons learned with the Rwanda Dairy Development Project (RDDP), which have informed the programme design, especially with regard to the: (i) relevance of building the capacity of both public and private veterinary services at central and district levels; (ii) importance of Field Farmers Schools as an instrument to improve fodder cultivation for dairy cattle and small ruminant producers; (v) need to work on both the demand and supply of adequate financial service providers, building trust between beneficiaries and financial institutions; (vi) importance of proactively supporting institutional reforms, by providing technical expertise and facilitating inclusive policy dialogue (using both national-and district-level platforms).

D. Programme description

15. **Partnership with ENABEL.** PRISM is a partnership programme implemented by the Rwanda Agriculture and Animal Resources Development Board (RAB), and jointly funded by IFAD and ENABEL, with Heifer International and VSF Belgium as key implementing partners.
16. **Programme objectives.** The overall objective of the programme is to reduce poverty by empowering poor rural men, women and youth to participate in the transformation of the Rwanda livestock sector and to enhance their resilience. The Programme Development Objective (PDO) is to *improve food and nutrition security and incomes of poor rural households through better performance of the value chains*.
17. **Duration and geographic area.** The programme will have a total duration of 5 years. It will target a total of 15 districts, distributed across the northern, southern and western provinces of Rwanda. The selection of these districts and their respective sectors will be based on the incidence of poverty and food insecurity as well as the comparative advantage for the development of the targeted small livestock value chains.
18. **Targeting mechanisms.** Based on the national wealth ranking system (*Ubudehe*)⁴, and consistent with the targeting strategy, outlined in the Country Strategic Opportunities Programme (COSOP), PRISM will directly target 26,355 poor rural households, belonging to Ubudehe categories 1, 2 and 3. The programme's beneficiaries will be targeted through complementary approaches intended to support their participation in commercial and inclusive value chains, as follows: (a) with 23,400 poor and food insecure rural households (*Ubudehe* categories 1 and 2), the programme will deploy a pro-poor graduation pathway, tailoring the services provided to the socio-economic conditions and specific households' needs; (b) 1,530 rural youth (*Ubudehe* categories 1, 2, 3) will receive support to organize themselves into small livestock production cooperatives, and (c) 1,425 market-oriented producers (mostly from

⁴ Currently, there are 4 *Ubudehe* categories, with the first category designated for the poorest and food insecure people, the second one for poor/vulnerable people, the third one for more resilient households while the fourth category includes the wealthiest members of society (like large business owners). PRIMS will not address households in Category 4.

Ubudehe categories 2 and 3) will be supported through a combination of technical, business and financial capacity building⁵. PRISM will adopt an inclusive approach to ensure that women and men benefit equally from programme interventions. Indeed, 50% of the targeted beneficiaries will be women and 30% will be youth. Furthermore, ENABEL's intervention will focus on supporting already established smallholder commercial farmers and private firms (suppliers and processors) and will target an additional 21,254 beneficiaries. The IFAD-ENABEL partnership will allow to target and support different actors in the small livestock value chains, with inclusive tailored strategies, leveraging the comparative advantages of the two agencies. IFAD will concentrate its support to its core target group: the vulnerable rural producers, while ENABEL, leveraging its comparative advantage, will engage more market oriented value chain actors. This complementarity allows each partner to operate within its mandate and to leverage its comparative advantage, jointly contributing to a healthy and sustainable growth of the sector.

Component 1 - Climate-smart intensification of small livestock production systems.

19. **Social mobilization and graduation of vulnerable households:** Through this intervention, which will be implemented by Heifer International, the programme will reach 23,400 poor and food insecure rural households (*Ubudehe* 1 and 2) for whom the programme will adopt a pro-poor approach, using a graduation pathway (VBHCD⁶ model), aimed at addressing community development, through an integrated and holistic approach. This model builds on 12 Cornerstones[©] aimed at strengthening the capacity of smallholder farmers (including financial literacy, nutrition education, business management and increase gender equity) to increase their production and productivity, while connecting them to markets. Heifer International will capitalize on its existing experience and expertise in Rwanda, the African region and globally, including within IFAD-financed projects. In parallel, the Farmer Field School (FFS) approach will be implemented by ENABEL for 12,000 households, which are the most market oriented, and will be complementary to the VBHCD approach.
20. **Improve animal health status and genetic potential of small livestock:** In communities benefitting from the graduation pathway (Subcomponent 1.1), Community Agro-Vet Entrepreneurs (CAVEs) will be identified, trained and deployed to support animal wellbeing across all value chains, and community animal health funds will be established to manage health risk. In the domain of genetics, the programme will provide support to Rwanda Agriculture Board (RAB) and private actors to import, multiply and disseminate improved stock. In the animal health domain, the programme will also strengthen the epidemiological-surveillance capacities of veterinary services, with a particular focus on small livestock TADs. PRISM will also strengthen preparedness to sanitary crisis by supporting the development of contingency plans, the organization of simulation exercises, and the establishment of a disease contingency fund for major outbreaks of TADs.
21. **Support climate smart innovations in production:** In order to mitigate potential negative impact of small livestock production intensification, the programme will promote several activities for mainstreaming environmental management and climate change adaptation and mitigation, including: (i) enhanced feed efficiency through the promotion of fodder trees and shrub species (agroforestry) and use of crop residues at farm level; (ii) manure management through adoption of biogas systems and composting; and (iii) improved water efficiency through rainwater harvesting facilities installed at farm level.

⁵ 1 person = 1 household.

⁶ Value Based Holistic Community Development

Component 2: Support to Small Livestock Value Chain Development

22. **Support to animal feed industry:** This set of activities will be led and funded by ENABEL and will aim at supporting the emergence of a national feed industry, based in as much as possible on quality locally produced raw materials (maize and soya), in order to reduce the country's dependency on imports. The programme will develop a profitable, resilient and sustainable soya and maize farms network connected to feed companies through the out-grower company model.
23. **Productive Alliances with input suppliers and market facilitation in small livestock value chains:** Productive alliances will be sought in the poultry and pig value chains, building on arrangements that are already used by Rwandan animal feed manufacturers to expand their customer outreach. The beneficiaries of these productive alliances will typically belong to Ubudehe categories 2 and 3 i.e. beneficiaries who are already engaged in an entrepreneurial logic. Poor smallholder farmers (*Ubudehe* category 1), supported under Component 1, who manage to 'graduate' to a higher level and produce a surplus, will also be engaged. Market facilitation in small livestock value chains will be done at two levels: (i) assistance to off-takers for supplier network development; (ii) support to public good related investments in essential equipment.
24. **Support to youth entrepreneurship in production:** The programme will target 1,530 unemployed rural youth, who are interested to start small livestock production enterprises, by assisting them to establish viable and profitable production units and linking them to markets as well as services through productive alliance arrangements. PRISM will support groups of 10 youth, on average. The support package will include initial intensive technical and business management support, continuous tutoring through business coaches, provision of start-up capital for investment and working capital, and linkages to financial service providers.
25. **Support to Financial Institutions (FIs):** The programme will facilitate linkage of the smallholder farmers, under productive alliance with the financial sector, to finance investments and working capital. It will also contribute to linking vulnerable households under the graduation pathway in Component 1 to access formal financial services, and to linking youth (also supported under Component 1) as well as private investors to financial institutions for start-up business development financing.

Component 3: Policy support and coordination

26. **Policy and regulatory support:** For the targeted value chains, the programme will support the review and formulation of new sector strategies and policies and the updating or formulation and enforcement of food safety and animal welfare regulatory frameworks. The programme will also provide capacity building support to RAB to improve skills of selected key national staff on technical domains related to small livestock.
27. **Support national producers organizations and multi-stakeholder fora:** The programme will provide institutional support to existing or emerging national farmers organizations within the targeted small livestock value chain, to enable them to increase their capacity, visibility, and their outreach. Small livestock multi-stakeholder fora will be established at regional and national level to facilitate negotiations between value chain actors, as well as participation of value chain actors in policy dialogue.

E. Costs and financing

28. The total PRISM investment and incremental recurrent costs, including physical and price contingencies, are estimated at USD 45.64 million (RWF 41.07 billion). The table below presents the breakdown of the costs by components. The investment in Component 1 (Climate-smart intensification of small production systems) in base costs stands at USD 20.65 million

(42% of total base costs); Component 2 (Support to small livestock value chain development) in base costs totals USD 19.40 million (29% of total base costs) and Component 3 (Policy and regulatory support and Coordination) in base costs amounts to USD 5.59 million (11% of base costs), of which Project Coordination accounts for USD 2.79 million (6.1% of total base costs). In addition to the total base costs of USD 45.38 million, price and physical contingencies amounting to USD 0.26 million have been provided for. The input currency in cost tables was set as USD minimizing the effect of local inflation.

29. PRISM will be financed by: (i) the GoR with USD 3.31 million (about 7.3% of total costs), (ii) Districts with USD 0.66 million (about 1.4% of total costs), (iii) IFAD with USD 14.90 million (about 32.7% of total costs, under the current PBAS-IFAD11), (iv) ENABEL with USD 17.4 million (about 38.2% of total costs), (v) Banks with USD 1.29 million (about 2.8% of total costs), (vi) Heifer International with USD 4.68 million (about 10.2% of total costs), (vii) Beneficiaries with USD 2.38 million (about 5.2% of total costs), and (viii) private sector with USD 0.99 million (about 2.2% of total costs).

F. Summary of economic and financial analysis

30. Ten enterprise models have been used to estimate the increase in incomes at household level as a result of proposed programme investment. The overall Economic Internal Rate of Return (EIRR) of the Programme is estimated at 26% (base case) which is above the opportunity cost of capital in Rwanda estimated at 9.5%, indicating the economic convenience of the Programme. A sensitivity analysis was carried out, which indicates a strong resilience to increases in costs and reductions of benefits, which mirror the PRISM risk profile.

A)	Farm models' net incremental benefits (in 'RWF 000)										
	Graduation Pathway Models				Youth Packages			Productive Alliance Packages			
	Poultry	Swine	Sheep	Goat	Pig breeding	Pig fattening	250 broilers	250 layers	Pig fattening	100 broilers	500 layers
PY1	(101)	(529)	(344)	(344)	(903)	(2,167)	(2,569)	(2,513)	(2,167)	(1,114)	(2,207)
PY2	84	586	74	74	1,242	1,496	1,477	712	1,496	68	439
PY3	84	329	114	114	1,242	641	1,693	712	641	454	439
PY4	86	320	132	132	1,233	611	1,693	712	611	454	439
PY5	86	329	114	114	1,242	641	1,693	712	641	454	439
PY6	86	329	132	132	1,242	641	1,909	712	641	541	439
PY7	86	320	114	114	1,242	611	1,909	712	611	541	439
PY8	71	329	132	132	1,233	641	1,759	562	641	391	289
PY9	86	329	114	114	1,242	641	1,909	712	641	541	439
PY10	86	227	132	132	992	111	1,909	712	111	541	439
PY11	86	329	114	114	1,242	641	1,559	362	641	191	89
PY12	86	329	132	132	1,233	641	1,909	712	641	541	439
PY13	86	320	114	114	1,242	611	1,909	712	611	541	439
PY14	86	329	132	132	1,242	641	1,909	712	641	541	439
PY15	86	329	114	114	1,242	641	1,909	712	641	541	439
PY16	71	329	114	114	1,233	641	1,759	712	641	391	439
PY17	86	320	114	114	1,242	611	1,909	712	611	541	439
PY18	86	329	114	114	1,242	641	1,909	712	641	541	439
PY19	86	329	114	114	1,242	641	1,909	712	641	541	439
PY20	86	299	114	114	983	611	1,484	712	611	371	439
IRR	84%	84%	32%	32%	137%	40%	64%	27%	40%	33%	18%
NPV (RWF'000)	625	2,473	678	678	9,599	3,904	12,755	3,548	3,904	2,707	1,494
FIRR'000 (@ 8.5%)	625	2,473	678	678	9,599	3,904	12,755	3,548	3,904	2,707	1,494

PROGRAMME COSTS AND INDICATORS FOR LOGFRAME						
TOTAL PROGRAMME COSTS (in million USD)				32	Base costs	
Beneficiaries	115,962	people		26,355	Households	
Cost per beneficiary	276	USD x person		1,213	USD x HH	
Components and Cost (USD million)			Average increase in rural income per capita		WOP (Rwf)	MTR
Climate- smart intensification of small production systems	20.5		Average return to labour RWF	2000.000	2,512	2,512
Support to small livestock value chain development	8.3		Increase of assets ownership of participating households		15%	26%
Policy and regulatory support	3.2					

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 PRISM
 Project Design Report (PDR)

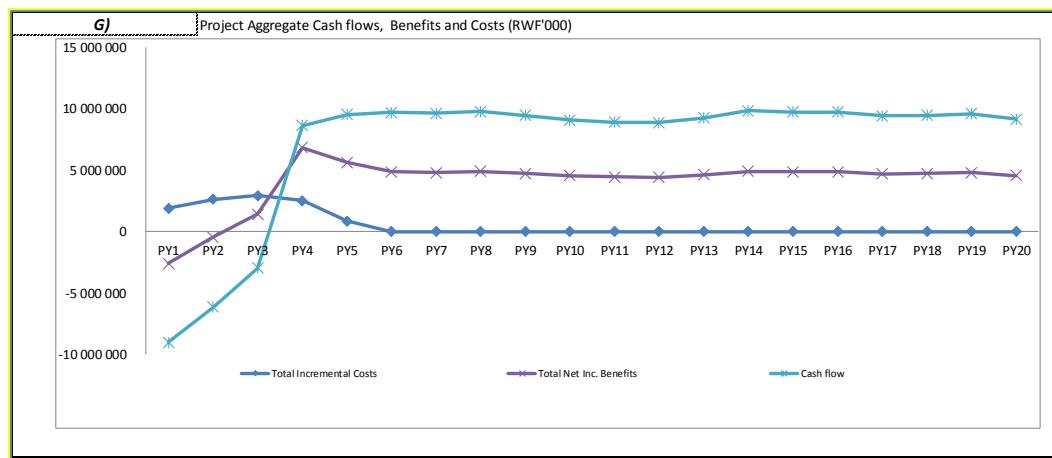
C)	MAIN ASSUMPTIONS & SHADOW PRICES ¹				
	Output		Yields (Annually)	Price (RWF)	
FINANCIAL	Layers (from 500 layers per cycle)	No. Birds	5,650	2,600	
	Backyard chicken (From 10 birds under graduation pathway)	no. birds	16	5,000	
	Broilers (from 250 Broilers per cycle)	No. Birds	1,138	700	
	Pig Breadning	Live weight of so	1,425	3,000	
	Pig Fattening	No of sold Anim	19	130,000	
	Goats (graduation pathway)	No. of sold Goat	7	15,714	
	Sheep (graduation pathway)	No.of sold Sheep	6	83,042	
ECONOMIC	Swine (graduation pathway)	No. of sold Swine	6	117,000	
	Poultry (Graduation pathway)- from a package of 10 hens	Vol of eggs	1,500	90	
	Official Exchange rate (OER)		980	Disc. rate (opp. cost of capital)	8.5%
	Shadow Exchange rate (SER)		820.00	Social Discount rate	8.5%
	Standard Conversion Factor		1.20	Output conversion factor	0.085
	Labour Conversion factor \3		0.86	Input Conversion factor	0.085

D)	BENEFICIARIES AND PHASING							
		PY1	PY2	PY3	PY4	PY5	PY6	Total
Graduation pathway	hh	7,500	8,000	7,900	-	-	-	23,400
Youths	hh	575	605	350	-	-	-	1,530
Productive alliance	hh	110	500	600	215	-	-	1,425
TOTAL		8,185	9,105	8,850	215	-	-	26,355

E. OVERALL ECONOMIC ANALYSIS

Project year	NET INCREMENTAL BENEFITS				COSTS			Cash flow
	Graduation pathway	Youth package	Productive alliances	Total Net Inc. Benefits	Economic Costs ('RWF 000)	Economic O&M Costs * ('RWF 000)	Total Incremental Costs	
PY1	(2,630,688)	(1,363,850)	(186,905)	(4,181,443)	1,903,368		1,903,368	(6,084,811)
PY2	(588,634)	(670,555)	(817,392)	(2,076,581)	2,628,564		2,628,564	(4,705,144)
PY3	98,500	468,340	(738,638)	(171,798)	2,922,158		2,922,158	(3,093,956)
PY4	3,475,613	1,654,902	317,755	5,448,271	2,517,063		2,517,063	2,931,207
PY5	3,406,938	1,548,214	750,611	5,705,764	856,693		856,693	4,849,071
PY6	3,489,126	1,591,564	722,543	5,803,233			0	5,803,233
PY7	3,380,676	1,634,689	742,793	5,758,158			0	5,758,158
PY8	3,489,126	1,596,027	746,543	5,831,695			0	5,831,695
PY9	3,365,376	1,596,027	711,011	5,672,414			0	5,672,414
PY10	3,251,526	1,545,002	691,511	5,488,039			0	5,488,039
PY11	3,317,376	1,435,002	640,261	5,392,639			0	5,392,639
PY12	3,396,126	1,441,027	541,011	5,378,164			0	5,378,164
PY13	3,400,926	1,586,027	591,511	5,578,464			0	5,578,464
PY14	3,489,126	1,656,252	714,261	5,859,639			0	5,859,639
PY15	3,390,126	1,656,252	763,511	5,809,889			0	5,809,889
PY16	3,426,376	1,630,527	759,911	5,816,814			0	5,816,814
PY17	3,285,926	1,626,027	738,611	5,650,564			0	5,650,564
PY18	3,302,876	1,641,252	735,011	5,679,139			0	5,679,139
PY19	3,340,376	1,656,252	752,261	5,748,889			0	5,748,889
PY20	3,172,110	1,564,777	758,011	5,494,898			0	5,494,898
NPV@ 9.5% ('RWF 000)							21,484,574	
NPV@ 9.5 % ('000 USD)							21,484,574	
EIRR								26%

F)		
SENSITIVITY ANALYSIS (SA)		
	IRR	NPV (RWf 000)
base scenario	26%	21,484,574
costs +10%	25%	20,639,458
costs +20%	24%	19,794,342
costs +50%	21%	17,258,994
benefits +10%	27%	24,478,147
benefits +20%	28%	27,471,720
benefits -10%	25%	18,491,000
benefits -20%	23%	15,497,427
benefits -50%	17%	6,516,707



G. Exit strategy, risks, environmental category

31. **Exit Strategy and Sustainability.** The sustainability of programme outcomes relies on its overall approach, which is based in particular on the facilitation of partnerships, social mobilization and group formation, transfer of capacity, institutional strengthening and durable market-based financing.
32. **Risks.** The overall risk profile is low to medium. The most important risks in terms of potential impact for the programme are: (i) a possible closure of export markets, or source of raw material for feed, due to a geopolitical event or diplomatic crisis; (ii) a sanitary crisis due to the emergence or introduction of a contagious and deadly animal disease affecting the small livestock species. Tailored mitigation measures have been introduced in the programme design (see page 39 and Annex IX).
33. **Environment and Social category and Climate Risk classification.** The programme is considered to be an Environment and Social **category B**. The programme is not expected to have significant adverse environmental or social implications. The programme is expected to be moderately sensitive to climate risks. In order to mitigate potential negative impact of small livestock production intensification, the programme will promote several activities for mainstreaming environmental management and climate change adaptation and mitigation, including: (i) enhanced feed efficiency through the promotion of fodder trees and shrub species (agroforestry) and use of crop residues at farm level; (ii) manure management through

adoption of biogas systems and composting; and (iii) improved water efficiency, through rainwater harvesting facilities installed at farm level.

H. Implementation

34. The programme will be implemented through the Single Project Implementation Unit (SPIU), under RAB. The *IFAD and ENABEL supported interventions will be managed by a single programme management team*, co-financed by both partners, and placed under the aegis of the SPIU coordinator. In line with the practice of other IFAD-funded projects in Rwanda, a Project Steering Committee (PSC), covering both ENABEL and IFAD supported interventions, will be established.
35. The programme will create partnerships with decentralized entities in order to cover activities that are under the direct coordination of Districts. The programme will provide logistical support to the Districts to enable them to fulfil these tasks. Same partnerships will be created with relevant Government of Rwanda's specialized technical agencies. The programme will also be engaged into a specific partnership with Heifer International who will be a co-financier but also a key implementing partner (will be responsible for the implementation of SC 1.1, and will contribute to its financing). Heifer International will be responsible for the implementation of the graduation pathway for vulnerable households under SC1.1.
36. **Procurement arrangements.** The overall responsibility will be under RAB, but the function of procurement will be delegated to the SPIU. It is to be noted that the internal tender committee is already in place at SPIU.
37. **Financial Management (FM) arrangements.** A FM assessment of PRISM was carried out in accordance with IFAD's rules. New projects within the SPIU are required to use the national financial management system, which does not entirely facilitate expenditure classification and will require adaptation of the system.
38. **Planning.** This will be guided by the programme's strategy, logical framework and broader results framework which will inform the development of annual work. A single results-based annual work plan and budget (AWPB), including both IFAD and ENABEL supported interventions, will be drawn-up in consultation with implementing partners, including beneficiaries.
39. **Monitoring and Evaluation (M&E).** This will be effectively supported by a Management Information System (MIS). The MIS will be aligned with MINAGRI's new MIS and with IFAD's new Operational Results Management System (ORMS). A baseline, mid-term and completion survey will be conducted. The Minimum Diversity Diet for Women (MDD-W) will be integrated into the baseline and follow-up surveys.
40. **Knowledge Management (KM).** Systems for information exchanges will be developed and used on a regular basis, including stakeholder review meetings, planning workshops, and a newsletter to be shared with all beneficiaries. Relevant information from the programme MIS will be used to document lessons learnt, best practices and success stories. In addition, the MIS will include a specific module on KM.

II. Context

A. National context and rationale for IFAD involvement

1. National Economic Context

41. Rwanda is a small landlocked country, with a population of about 12.5 million people⁷ and a total land area of 26,338km² of which 52% is classified as arable agricultural land. Since the turn of the century, Rwanda has seen its economy grow by 7.9% per year. In the same period (2000-2016), GDP per capita increased from USD 242 to USD 774⁸. According to International Monetary Fund's (IMF), the medium-term macroeconomic outlook remains favourable. GDP growth is expected to remain strong. This is supported by continued diversification of the export base, public investment spending to crowd-in private sector investment, and more resilient agriculture as a result of extensive irrigation programmes. Despite strong economic growth, the country still depends on Overseas Development Assistance (ODA) for 16% of its budget. Inflation is expected to remain within the central bank's target of 5%. The Rwanda public and publicly guaranteed debt has increased in recent years from 37.5% of GDP in 2015 to 44.4 % in 2016, as per the IMF⁹. However, Rwanda's debt is expected to remain sustainable, with a continued low risk of debt distress¹⁰.
42. Since 1994, Rwanda has enjoyed political stability and an enabling policy environment, which ensured successful delivery of development programmes. Rwanda has a strong anti-corruption policy. It is ranked 48th out of 180 countries in the 2018 Corruption Perceptions Index (Transparency International)¹¹. Rwanda's policies and institutions continue to be classified as "strong" under the World Bank's Country Policy Institutional Assessment (CPIA) index and as being robust by IFAD's Rural Sector Performance Assessment (RSPA). In addition, the 2018 World Bank Doing Business Report ranked Rwanda 2nd in Africa and 29th globally.
43. The Rwandan financial sector is characterized by a high level of financial inclusion (89% of the population have access to formal and informal financial services), and there are diversified players in the market (Banks, Microfinance Institutions, Savings and Credit Cooperatives, Informal systems like Village Savings and Loans Associations). Agriculture remains largely underfinanced, especially smallholder farmers, but there is a growing interest from the financial sector to venture into agricultural finance. Some commercial banks and MFIs have set up specialized agricultural finance units. MFIs and banks engaged in agricultural lending confirmed they have existing relationships with insurers and, where suitable products exist, they opt to bundle agricultural insurance with credit in order to lend to traditionally high-risk clients. Crop insurance and dairy cow insurance are already operational in Rwanda and are due to be scaled-up under a National Agricultural Insurance Scheme from 2019.
44. The Rwandan economy is still dependent on the agricultural sector, which employs around 70% of the population, provides 91% of the food consumed, accounts for 70% of export revenues, and contributes 32.7% of the GDP. The Rwandan agriculture is characterized by small production units (average landholding size is 0.33 ha), reflecting the high population pressure on the country's natural resource base. Rwanda's agricultural land is fragile due to its hilly topography, thin soil layers and limited vegetative cover. About 96% of rural households rely on agriculture for their livelihoods and about 80% of the rural population consists of subsistence

⁷ 2018 Estimate, <http://worldpopulationreview.com/countries/rwanda-population/>

⁸ National Institute of Statistics of Rwanda (NISR), *National Accounts*, 2016. IMF 2018

⁹ <https://www.imf.org/en/Publications/CR/Issues/2018/06/11/Rwanda-Ninth-Review-Under-the-Policy-Support-Instrument-45982>

¹⁰ IMFs Debt Sustainability Analysis 2017.

¹¹ <https://www.transparency.org/country/RWA>

farmers who use mostly rainfed production systems. The main staple crops are maize, cassava and beans. Less than 6% of all cultivated land is irrigated. Land remains a binding constraint and generally calls for production intensification as the only environmentally sustainable pathway for continued growth. Since 2010, significant Government of Rwanda (GoR) interventions have driven productivity gains, including the Land-Use Consolidation Policy (LUCP), Crop Intensification Programme (CIP), large-scale anti-erosion measures, expansion of irrigation schemes and more productive use of fertile marshlands. However, staple food production remains below domestic consumption and the gap is filled by importation.

45. The direct and indirect contribution of livestock to GDP in 2016/17 was estimated at US\$321 million (i.e. 4.6% of GDP and 14% of agricultural GDP¹²). Due to agro-ecological conditions, conducive to intensified livestock production, the livestock sector provides major opportunities to further increase its contribution to the economy. This potential has already been proven by the GoR's "*One cow per poor family program*", which has transformed the dairy industry. The continuous impressive growth in livestock production over the last decade (11% per year for milk, 4.5% for meat¹³) largely reflects significant productivity gains. In addition, with a rapidly growing population, as well as an increasing urbanization and rising incomes, the demand for meat, milk and eggs is expected to increase significantly in the foreseeable future.

2. Socio-economic context of the targeted beneficiaries

46. **Rural poverty context.** Rwanda is ranked 158th out of 189 countries in the 2018 Human Development Index with an index of 0.524¹⁴. According to the Africa Sustainable Development Goals (SDG) Index, Rwanda ranks 120 out of 156 countries with a score of 56.1 towards achievement of SDGs¹⁵ and with an average spillover score against GDP being 97.6¹⁶. While the country has had an impressive record in translating its sustained growth into poverty reduction over the past decade, the poverty rate has not declined during the last three years¹⁷, remaining a key challenge especially in rural areas. The prevalence of poverty is associated mainly to low productivity in subsistence agriculture and low purchasing power of households. Poverty is highest by far (76.6%) among households with little or no land. Rural women and young people are more likely to fall into this category. In this context, small livestock production can offer economic opportunities especially to the poorest households.
47. **Food security.** According to the 2018 Comprehensive Food Security and Vulnerability Analysis (CFSVA), 19% of households in Rwanda¹⁸ are classified as food insecure, with an inadequate food consumption score, particularly before the harvest season. The Western Province has the highest prevalence of food insecure households (almost 30%), followed by the Southern Province (21%) and the Northern Province (18%). Overall, in the three provinces, an average

¹² Source: Livestock Sector Analysis (MINAGRI, 2017)

¹³ FAOSTAT

¹⁴ <http://hdr.undp.org/en/countries/profiles/RWA>

¹⁵ SDG1 End Poverty performance is considered to be moderately increasing; the same progression is found for SDG 2-Zero Hunger and SDG3- Good health and well-being. Outperforming the others is SDG 5- Gender Equality where the trend remains at or above SDG achievement.

¹⁶ Spillover Index score - 0 is "worst" and 100 "best"

(<https://www.sdgindex.org/assets/files/2018/01%20SDGS%20GLOBAL%20EDITION%20WEB%20V9%2020180718.pdf#page=22>)

¹⁷ Figures from EICV5 (2016/2017) show that growth in GDP did not translate into poverty reduction and into higher consumption per adult equivalent. Although Rwanda experienced 14% growth in GDP per capita between 2014 and 2017(when EICV4 was published), equivalent to 4.5% annually, the poverty rate only fell from 39.1% to 38.2%. In contrast, the experience between 2011 and 2014, was that real GDP per capita rose and the poverty rate dropped from 44.9% to 39.1%. EICV5 relates this trend to a substantial rise in the price of foods (especially staple foods) and reduction of purchasing power of most Rwandans. Source: National Institute of Statistics of Rwanda (NISR), EICV5, Poverty Profile Report 2016/2017.

¹⁸ Among food insecure households, 17% are moderately food insecure and 2% are severely food insecure.

of 49% of households are food insecure. Food access in Rwanda is mainly determined by seasonal patterns, commodity prices and people's purchasing power. A large share of the population remains dependent on rain-fed agriculture and consumption of home-produced food. Hence, people's ability to adequately feed themselves is susceptible to periodic droughts and floods. In this framework, small livestock can serve as a buffer to mitigate the impact of fluctuations in crop production.

3. Relevant national strategies, policies and programmes

48. Rwanda's long-term development goals are defined in its Vision 2020 and Vision 2050, which aim to transform the country from a low-income agriculture-based economy into a knowledge-based, service-oriented economy with middle-income status. The National Strategy for Transformation (NST 1) follows the Economic Development and Poverty Reduction Strategy 2 (EDPRS 2). NST 1 integrates international commitments deriving from the United Nations (UN) Sustainable Development Goals (SDG); African Union (AU) Agenda 2063; East African Community (EAC) Vision 2050 focusing on job creation; and Conference Of Parties (COP) agreements on climate change.
49. The National Strategy on Climate Change and Low-Carbon Development (NCCLCD) underlines the need to manage climate variability for the social, environmental and economic development of the country. The Intended Nationally Determined Contributions (INDCs) are built upon the NCCLCD and aim at achieving Category 2 energy security as well as supports the development of green industry and services, sustainable land and water management, urban development, biodiversity and ecosystem services.
50. The overarching strategic framework guiding the development of the livestock sector in Rwanda is the Rwanda Livestock Master Plan (LMP). It covers a five-year period (2017-2022) and comprises of six sub-sectorial master plans, including for dairy, red meat, chicken and pork. For small livestock specifically, a strategy and investment plan was developed in 2012, but has now expired and would require review and update.
51. GoR has established an Agricultural Sector Working Group (ASWG), in which GoR and Development Partners (DPs), including IFAD, discuss sector and cross-sector strategies, programmes and implementation progress.
52. **Other development initiatives supporting the small livestock sector:** this sector has never received ample support from development partners unlike the dairy sector. The only significant project supporting the sector during these last decades has been the Belgium funded "Small Livestock Development Support", implemented during 2008 and 2012 (EUR 5.5 M). Its focus was on extensive and family production systems, and its main activity was assets' building, through distribution of animals. Although there are currently no significant active project in small livestock, it is to be noted that in addition to PRISM, USAID/"Feed the Future" is also launching a project called "Orora Wihaze" which aims at "sustainably increasing the availability of, access to, and consumption of Animal-Source Foods (ASF), through the development of a profitable market", and will operate mostly in Western Rwanda.

4. Special aspects relating to IFAD's corporate mainstreaming priorities

53. **Gender.** The 2015 revised Constitution enshrines the principles of gender equality and women's rights and established a minimum 30% quota for women in all decision-making

positions¹⁹. Despite these achievements, gender disparities and traditional patriarchal attitudes still persist, especially in rural areas. According to the latest Agricultural Households Survey (2017), women in agricultural households represent 53% of the population in the three provinces targeted by PRISM. In rural areas, women concentrate their work in agriculture (almost 90%)²⁰ and rely on agricultural activities as the only source of income. Yet, with lower levels of schooling and higher rates of illiteracy (23%), they are constrained to subsistence farming with insufficient skills, access to markets and control over land and other key assets and agricultural services, compared to men. Time burden, lack of access to finance and technical trainings are amongst the main issues, which constrain women in agriculture²¹. Female-headed households are amongst the poorest segments of the population: 2018 CFSVA findings show that 33% of female-headed households falls in the Ubudehe²² category 1 compared to only 11% of male-headed households in the same category²³.

54. At the programme level, and in line with the 2019-2024 COSOP, women will account for at least 50% of the beneficiaries. Special attention will be given to female-headed households. Women will be empowered to effectively engage in economic activities and to increase their decision-making power at the household and community level. To this end, PRISM will optimize on the experience gained in implementing Gender Action Learning System (GALS) and other participative households approaches in the framework of on-going IFAD operations, contributing to increase equal access of men and women to economic opportunities, decision-making processes and share of workload.
55. **Youth.** Youth is defined in Rwanda as population aged 16 to 30 years²⁴. Overall, youth population makes up 26.6% of the total population, while 50% of the population is under 20 years. In the three provinces targeted by the programme, youth represents 25% of the total rural population and 30% of agricultural labourers²⁵. In the rural areas, 80% of youth is literate; however, the level of education is low²⁶ and the percentage of young people attending tertiary education or technical and vocational schools is extremely limited. According to the EICV5, 77.2% of rural youth are workers, mostly engaged as independent farmers (36% male and 53% female). The main challenges for youth entrepreneurship and business development, besides access to markets, include: lack of technical skills, limited access to information and opportunities, inadequate access to land and capital resources, insufficient support services to build business and management skills, (e.g. internships, apprenticeships). To support youth vocational and business skills training, the programme will leverage the experience gained in partnering with the Rwanda Youth Agribusiness Forum (RYAF) in the framework of the on-going PASP and RDDP projects, in the delivery of training and extension services and in the establishment of youth business networks.
56. **Nutrition.** Rwanda joined the Scaling Up Nutrition (SUN) Movement in 2011 and since then several multi-stakeholder platforms have been set up at central and local level. All 30 districts

¹⁹ This has resulted in Rwanda having the highest percentage of women in parliament in the world (64%). Rwanda ranked 6th out of 149 countries and 4th regarding achievements in political empowerment (Global Gender Gap Report, 2018, WEF).

²⁰ 70.5% of women work as independent farmer and 18.3% as wage farmers. NISR, EICV5, 2016/2017.

²¹ Women's Empowerment Agriculture Index (WEAI) survey, 2015.

²² Currently, there are 4 *Ubudehe* categories, with the first category designated for the poorest and food insecure people, the second one for poor/vulnerable people, the third one for more resilient households while the fourth category includes the wealthiest members of society (like large business owners). PRIMS will not address households in Category 4.

²³ In most cases, women heads of household are widows and have fewer adult household members that can contribute to household's income.

²⁴ Ministry of Health, National Youth Policy, 2015 (revised 2006).

²⁵ NISR, AHS, 2017

²⁶In the Northern, Western and Southern provinces, more than 60% of youth have primary school education while less than 20% have secondary education and 2% or less are enrolled in tertiary education or in technical/vocational schools. (EICV5, 2016/2017. Education Thematic Report)

have developed District Plans to Eliminate Malnutrition (DPEM), which will be references for the development of nutrition-related activities in the district targeted by the programme. Despite marked reductions in chronic malnutrition, stunting remains one of the Rwanda's greatest human and economic development challenges. According to the CFSVA 2018 national stunting prevalence has dropped from 38% to 35% between 2015 and 2018. The stunting rate has significantly decreased from 24.8% to 12.9% in the City of Kigali, but remains the highest in the Western Province at 44%, continuing to be above WHO high severity threshold and a major public health concern. The Northern Province is at 39% and the Southern Province at 36%. Improved nutrition is at the core of the IFAD Country Programme. In the context of the on-going projects, and especially in RDDP, specific interventions have been put in place to improve diets of the target population and reduce the prevalence of chronic undernutrition. Actions include: (i) promoting nutrition-sensitive agriculture and consumption of dairy and small livestock products, vegetables and fruits, (ii) Social Behavioural Change Communication (SBCC) on nutrition; and (iii) promotion of good practices in post-harvest handling and storage. PRISM will benefit from the lessons learned from the on-going nutrition-sensitive activities and from the capacity installed at SPIU level in mainstreaming nutrition.

57. **Environment and climate focus.** The high and increasing level of population pressure, combined with the susceptibility of soils that exacerbates soil erosion (leading to landslides, soil loss and soil nutrient leaching), challenge agricultural productivity growth. Small livestock can effectively contribute to protect soils against erosion and even restore their fertility, through the provision of organic matter (manure, compost, bio slurry), and through the utilization of forage species (grasses, trees and shrubs), which acts as anti-erosive mechanisms. In the targeted areas of the northern, western and southern provinces, climate change will result in decrease of temperature and increase in rainfall means and intensities and number of rainy days (GoR, 2018), which may further exacerbate land erosion, landslides and flooding of agricultural lands. Climate change and increased frequency of flooding could also increase the incidence of climate related animal diseases such as Rift Valley fever that affects small ruminants.

5. Constraints in the small livestock sector development

58. The small ruminants' value chains in particular are still organized in a rudimentary manner. Unlike the dairy sector, which is well structured, there are very few formal farmers' organizations (e.g. cooperatives) in the monogastric²⁷ value chains, and none for small ruminants. Sales are mostly conducted through middlemen, and access to services and inputs is done on individual basis, which makes it inefficient. Slaughtering, processing and marketing facilities for small livestock are either inadequate or non-existent. Small abattoirs and slaughter slabs exist in different places, but they are not sufficient in number, inadequate to serve the needs, and do not meet sanitary and animal welfare standards. There are 64 livestock markets distributed in the three target provinces, but all of these markets lack basic infrastructure for animal holding.
59. **Small ruminants production systems:** Small ruminants are mostly reared in extensive systems. Feeding system is essentially based on natural pastures and supplementary feeding with concentrates or cultivated fodder is uncommon. Vaccination and deworming are not usual in traditional small ruminants systems, and the mortality of young animals, can as a consequence be high. The small ruminants are mostly of local breed, even if improved breeds have been introduced in some areas. These crossbreeding attempts have been moderately successful, mostly because of the poor resistance of imported breeds to sanitary shocks and

²⁷ Monogastric animals are those with a single stomach, as opposed to ruminants, which have several. In this specific case, monogastric refers to pigs and poultry.

starvation. As a result of these poor feeding and health conditions, and limited genetic potential, the productivity of small ruminants remains in general very low.

60. **Pig production systems:** The traditional pig rearing system is based on utilization of kitchen waste and agricultural by-products for feeding the animals. Animals used in these systems are local breeds that are characterized by a very slow growth, limited prolificacy and a significant amount of fat. The traditional system has a very low productivity because of production diseases and inadequate feeding and housing. Modern pig husbandry practices have recently been introduced to Rwanda. In these systems, animals are usually of imported breeds, are kept in confinement and fed with concentrate feed.
61. **Poultry production systems:** Two very distinct poultry production systems coexist in Rwanda: the traditional backyard dual purpose production system, and the modern commercial poultry systems. Whilst backyard chicken systems are dual purpose, their productivity is very low because of the genetic potential of local breeds, and also because of the sanitary problems (Newcastle disease is the most prevalent and destructive poultry disease in rural areas, that leads to mortality rates of chicks of 50% and above). Commercial modern layers and broilers farms have emerged during the last decade. These farms use imported hybrid strains, and the production itineraries are intensive. Their productivity is therefore high. The feed used by these systems is industrial and either produced at the farm for the bigger integrated units or purchased from specialized feed manufacturers for others. The size of these units varies from 100 to 60,000 birds.
62. **Competition between monogastric animals and human population over food resources:** monogastric animal joints such as poultry and pigs, unlike ruminants, mostly feed on cereals and other grains that are also consumed by people. It is therefore a challenge to support monogastric animals in food insecure countries such as Rwanda because of the risk of direct competition between animals and human over food resources. However, this adverse effect of development of the small livestock sector would be limited by: (1) putting more emphasis on poultry, that are better feed converters, than pigs, and (2) supporting family/backyard pigs and poultry that will also consume kitchen waste, crop by-products (bran) and industrial by-products (breweries waste, rice bran).
63. **Animal health:** The main endemic diseases²⁸ affecting small livestock systems in Rwanda are Newcastle disease in backyard chicken systems, swine erysipelas in rural pig systems and enterotoxaemia in small ruminants systems. All could be controlled through vaccination, but there are no systematic vaccination campaigns organized against these three diseases, mainly because of the inadequate human and financial resources of public veterinary services. On the other hand, thanks to a well-managed veterinary public health policy and the limited and well controlled cross border movements of animals, the country has so far been spared from major Transboundary Animal Diseases (TADs). However, for each species (small ruminants, pork and poultry), the risk of introduction of a major and deadly TAD remains significant. Three diseases in particular pose a high risk for these value chains: Peste des Petits Ruminants (PPR) for goats and sheep, African Swine Fever (ASF) for pigs, and Highly Pathogenic Avian Influenza (HPAI) for poultry.
64. **Inputs and services:** There are now seven main animal feed producers in the country. None of these companies run at full capacity (on average 50% to 60%). Poultry feed represents over 80% of their sales. Some of these animal-feed manufacturers are at the same time either

²⁸ An endemic disease is a disease that is always present in a certain population or region

large-scale producers of chicken, or processors/buyers. The recently privatized National Hatchery and private company "Easy Hatch" are the major suppliers of DOCs, but the country still relies heavily on imports. In the pig value chain, availability of good quality piglets and gilts is a major issue since there are very few specialized breeders with good genetic material on the market.

65. **Slaughtering, marketing and processing facilities** for small ruminants, poultry and pigs are either inadequate or non-existent, except for some major poultry producers who have established their own abattoirs. Those that are present do not ensure proper hygiene and animal welfare. The small ruminants' value chains are often very rudimentarily organized and sales are mostly conducted through middlemen at farm gate or local animal markets. There is in particular a crucial lack of pig slaughter slabs, with only a handful of them accredited.
66. **Small Livestock Farmers organizations:** There are very few formal farmers' organizations in the small livestock sector, and none for small ruminants. In the poultry sector, the Rwanda Poultry Industry Association is the main umbrella organization. In the pig sector, the Rwanda Pig Farmers Association is the main stakeholder organization. Its main activities are the organization of capacity building and information sharing events. There are no commodity-based stakeholder platforms in the small livestock value chains, but this model exists in Rwanda for other value chains (crops and dairy).
67. **The Rwandan financial sector** is characterized by a high level of financial inclusion (89% of the population having access to formal and informal financial services, compared with 85% in Kenya)²⁹, and diversified players in the market (Banks, MFIs, SACCOs, informal systems like VSLAs). Agriculture remains largely underfinanced, especially for smallholder farmers, but there is a growing interest from the financial sector to venture into agricultural finance. Some commercial banks and MFIs have set up specialized agricultural finance units.

6. Rationale for IFAD involvement

68. **IFAD as a trusted partner:** IFAD remains a trusted partner for the GoR having successfully provided its support to the dairy sector (RDDP) and export value chains (PRICE). Against this backdrop the GoR requested IFAD to support its strategy of modernizing the small livestock value chains. In doing so, this will allow the GoR to widen its sectorial coverage in livestock and balance its support geographically in areas (i.e. West and South), which receive less support and are more affected by poverty and malnutrition. It will also allow the targeting of the most vulnerable households, for which small livestock is an appropriate way out of poverty and can serve as a buffer to mitigate the impact of crisis, thus contributing to increase their resilience. In this context, a recent IFAD impact assessment reported that for an overall beneficiary population of approximately 240 million reached by IFAD-supported projects that were either closing or ongoing between 2010 and 2015, projections suggest that 44 million beneficiaries will see positive gains in poultry asset ownership (28.8 million) and livestock asset ownership (22.8 million). A joint IFAD - International Goat Association study revealed that the "net income before labour cost" increased on average by 120% in Nepal, India and Tajikistan with IFAD project interventions. In Rajasthan (IMgoat project), resource poor goat farmers earned 250-300% higher incomes from goat rearing only by adopting improved goat management practices. In Mauritania, an increase in production of approximately 500 tonnes of white meat a year (for a value of USD 1.5 million) was registered. In Senegal, a total of 1,966 women

²⁹ Finscope Rwanda 2016. High financial inclusion is largely driven by Umurenge SACCOs, promoted by the GoR and operating in all administrative sectors, and mobile money providers.

poultry producers have marketed 1, 1 M chickens for a turnover of about USD 2,860 per household.

69. **Creating economic opportunities for vulnerable households:** Small ruminants can greatly contribute to generate economic opportunities for vulnerable households and especially for women. Moreover, in a context where child undernutrition remains an important development challenge, small livestock sector can contribute to play an important role in combatting malnutrition. Targeting small livestock will also allow targeting young rural people, unemployed and with a low educational level, for whom small livestock value chain development has demonstrated to be an important pathway to generate employment and economic opportunities. These productions, in fact, are particularly well adapted to youth, as they require a very limited amount of land, limited investment and they can provide a quick return on investment.
70. **Market demand opportunities:** Between 2000 and 2017³⁰, the domestic consumption per capita for small livestock products has grown by 688% for poultry meat, 79% for pig meat, and 111% for small ruminants' meat. This growing market demand thus provides an opportunity for rural livelihood transformation. Moreover, Rwanda's low urbanization level is compensated by the presence of two significant urban centers in the Democratic Republic of Congo (DRC): Goma (1.2M people) and Bukavu (0.9M people). The value of small stock, exported to DRC, increased by 27% between 2010 and 2015³¹, and by 140% for pig only over the same period. This market is expected to keep growing in the near future. An assessment of the pig and poultry markets will be conducted before the project start-up by Palladium, under a DFID funded civil society strengthening programme. The outcome will be available before the end of 2019 and will be a critical decision-making tool for PRISM, in particular for selecting the Districts of interventions, private sector partners and sites for market access public investments.
71. **Potential for increased production:** The productivity of small livestock in Rwanda could thus be substantially increased to respond to this external cross-border market demand, especially for the traditional systems (extensive small ruminants, backyard pig and chicken). Specifically, productivity could be significantly enhanced by simple animal health measures as well as through genetic improvement, although crossbreeding should be handled with care in order not to affect resistance to diseases and feed scarcity. The other option to respond to the increasing market demand would be to establish new production units. Due to the land constraint, farmers cannot easily extend their cultivation area, and creating a small poultry or a pig unit could thus be a solution for smallholder farmers to expand their activity, without additional land requirement.
72. **IFAD's leading role in ensuring synergies with other development partners to support the Rwandan small livestock sector.** The engagement of other development partners (ENABEL, USAID/Feed the Future) in supporting the small livestock sector in a Rwanda confirms this sector's economic potential and also the GoR's political will to invest in the sector. Indeed, PRISM is a partnership programme, implemented by RAB, and jointly supported by IFAD and ENABEL, with Heifer International as implementing partner and co-financer, and VSF Belgium as implementing partner
73. The distribution of roles between IFAD and its partners in supporting the small livestock sector builds on the Fund experience and strategic niche, and will put emphasis on support to vulnerable communities, investing in key public goods necessary for an healthy and sustainable

³⁰ FAO, 2017

³¹ Source Rwanda Customs

growth of the livestock sector. This will complement and leverage the strong emphasis on private sector and commercial value chains of the other development partners.

B. Lessons Learned

- 74. Need to address sanitary risks:** The experience of other livestock development projects indicate that all efforts dedicated to building up a livestock value chain could be ruined in case of major animal disease outbreak. The World Bank has now integrated this risk in the design of its livestock development projects through inclusion of contingency response measures, targeting in particular animal disease risks, but also sometimes climatic risks. The principle of these mechanisms is that in case of crisis, the programme could mobilize programme financial resources to partially cover emergency response and costs, for instance for vaccinating animals, establishing protection zones or compensating stamping out.
- 75. Approach to small ruminants' value chain:** In Rwanda, several successive projects supporting small ruminants' production have been confronted with challenges in trying to establish durable small livestock activities with the most vulnerable households. A significant proportion of the households that were provided with start-up packages which included animals were not able to keep them in the long-run and had no other choice than selling them when confronted with crisis such as sickness, food shortage, or another urgent need for cash. One of the reasons for this failure is that small ruminants are often not considered as a long-term investment, but more as a safety net, which can be disposed of in case of need. On top of this, the most vulnerable households often do not have other alternative economic safety nets in case of shock. With this target population, and if placement of animals is envisaged, it is important to properly prepare the community before handing over the animals, by strengthening social capital of groups as a preliminary.
- 76. Cattle and small livestock:** Another lesson from several IFAD projects in the region is that when projects target both cattle production and small ruminants within the same community, cattle are always privileged by beneficiaries, and little attention is given to small livestock. In order to avoid this, the programme should focus its activities in areas and with communities where dairy cattle do not play a central role in the economy of households (such as the Eastern Province in particular). Districts targeted by the RDDP should thus not be a priority for PRISM, both because they are more oriented towards dairy than other districts, and because RDDP support may attract more interest from beneficiaries than PRISM activities.
- 77. Access to finance:** The main lesson learned from past and current IFAD-funded projects in Rwanda is that there is too much focus on the management of matching grants for various categories of programme beneficiaries, without proper analysis of their rationale in the context of the Rwandan financial sector, which is showing a growing appetite for agricultural finance. This results in inefficient use of public resources and risks of crowding out the financial sector. PRISM should therefore have a sustained focus on supporting linkages of the beneficiaries to the financial sector for access to sustainable financial services. This should be done by providing adequate capacity building support both on demand and supply sides and structuring of the value chains to contribute to risk mitigation for the financial institutions. Use of matching grants should be limited to incentivize and facilitate access to finance for high risk borrowers (such as youth), either because of lack of business track record or lack of collateral, and to incentivize development of public good related investment by the private sector.
- 78. Necessary pre-and post-financing support in grant schemes/financial packages.** The particular experience of the Climate Resilient Post-harvest and Agribusiness Support Programme (PASP) has shown that when there is insufficient support to follow-up, monitor and accompany business promoters along their project once it has been declared eligible to a grant, there is a risk that the business plan implementation will either fail to honour loan commitments, become short of working capital, or divert from the original business idea. The

lesson learned is that grant facilities set to support business development should include systematically pre- and post-finance support along three key stages: (i) Pre-financing support aimed at filling any potential business gaps (including governance); (ii) Finance and business launch facilitation to assist applicants in developing realistic and fundable business plans; and (iii) Post-finance support consisting in business coaching for successful applicants, including follow up on the businesses financed and support on the actual implementation of the business plan. PRISM will thus make extensive use of Business Development Service Providers (BDSPs) to support youth, start-up farmers, and private investors across the various project interventions.

79. **MINAGRI small livestock for the youth project:** the main lessons from this project are that commercial poultry or pig farming can be very attractive to youth, because it provides a quick return on investment, and responds to their specific constraints, because it requires limited land and investment. However, the collective ownership and management of farms, which affect the ownership and commitment, had some consequences on the performance of the production units, and alternative solutions should be tested (such as independent and individual production units).
80. **Heifer Values-Based Holistic Community Development (VBHCD) model (pro-poor graduation approach):** This model has been successfully implemented in Asia, and East Africa, within marginalized communities, including sub-groups of different socioeconomic levels. One of the lessons is that the project group should be open to all of the sub-groups that are present in the community. By building social capital and being inclusive in the group formation, the strengths of a community can be fully deployed. When members are excluded from this process, this benefit cannot be ensured. This builds community solidarity, combats discrimination and ultimately mitigates elite capture.
81. **Productive Alliances:** in commercial pig and poultry value chains, regular supply in quality feed, chicks/piglets and access to market are critical. In many countries, the solution for enabling smallholder to access services, inputs and market is the cooperative. The cooperative model is popular in Rwanda for dairy, but it does not exist for monogastric animals. What is common though in Rwanda, are arrangements whereby a bigger farmer, a feed miller, or a hatcher, supplies inputs to smallholders located around him, with advisory services, and sometimes market access services too. This context offers very good opportunities for implementing productive alliances. However, to ensure that these arrangements preserve the autonomy and incomes of smallholders, the programme should ensure that they are transparent, predictable, equitable, and mutually beneficial.
82. **Community Animal Health Workers:** IFAD has a very robust and diversified experience in establishing networks of Community Animal Health Workers (CAHWs), in various contexts. Experience has shown that CAHWs are an adequate response to address animal health needs in contexts where animal health problems are relatively simple and can be solved with easily implemented solutions. The vaccination against Newcastle disease is a perfect example of this type of situation. CAHWs, in particular for small livestock, can include a significant proportion of women and youth. CAHWs, because they belong to the community, are also more able to bring behavior change in remote and traditional communities, than external elements. On the other hand, intensive systems such as dairy, intensive broilers or layers, which require a high level of technicity and involve substantial financial volumes, require other arrangements involving veterinarians or veterinary technicians.
83. **Economic efficiency of small-scale livestock systems:** small scale intensive systems are usually less economically efficient than large commercial intensive systems. However, they supply the market with a fresher product (chicken sold alive to proximity customers) and are more flexible in terms of reducing costs (e.g. mixing commercial feed with lower costs

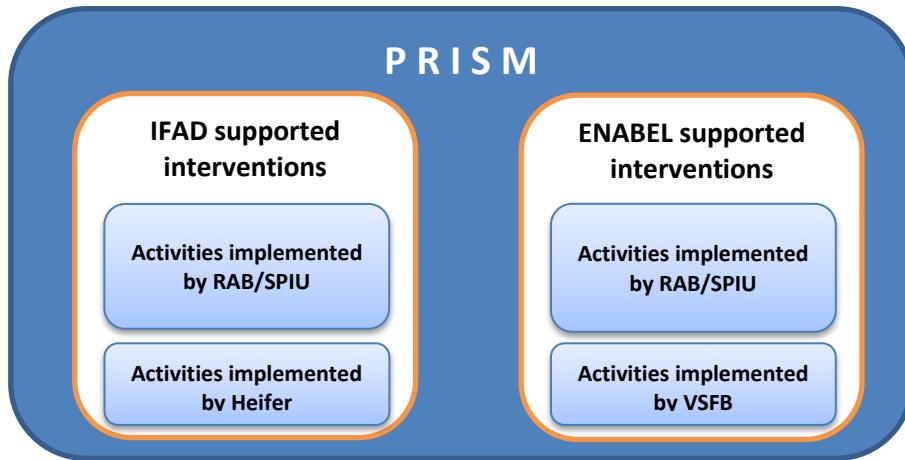
feedstuff). In addition, the problem of economy of scale is less important in Rwanda than in other African countries for two main reasons: (1) distances are very short and transport cost of feed and products are minimal; access to services and market is thus not a challenge for small scale systems; and (2) Rwandese rural producers have a strong culture of small scale and intensive production, also due to the low availability of land. Small scale intensive systems, in dairy, poultry and pig, have shown to be a successful and sustainable model in Rwanda. This will be highlighted in the PDR.

84. **Involvement of District Staff in Programme Activities:** the experience of ongoing IFAD funded projects shows that involvement of District staff in implementation of project field activities only takes place as per the plans if the project allocates and provides adequate means (perdiem and transport allowances) to the Districts to enable the personnel to carry on field missions.
85. Single Project Implementation Unit (**SPIU**). The competitively-staffed SPIU, responsible for the implementation of all IFAD funded projects has proved to be effective in providing a solid foundation for quick implementation start-up and timely disbursements. PRISM will use the same implementation arrangements.
86. **RDDP experience.** PRISM will strongly benefit from the experience and lessons learned with the Rwanda Dairy Development Project (RDDP), which have informed the programme design, especially with regard to the: (i) relevance of building the capacity of both public and private veterinary services at central and district levels; (ii) importance of Field Farmers Schools (FFS) as an instrument to improve fodder cultivation for dairy cattle and small ruminant producers; (iii) need to work on both the demand and supply of adequate financial service providers, building trust between beneficiaries and financial institutions; and (iv) importance of proactively support institutional reforms by providing technical expertise and facilitating inclusive policy dialogue (using both national-and district-level platforms).

III. Project Description

A. Programme structure and partnership principles

87. PRISM is a partnership programme implemented by RAB, and jointly supported by IFAD and ENABEL, with Heifer International as implementing partner and co-financer, and VSF Belgium as implementing partner (see figure below). PRISM is constituted of two complementary interventions, supported respectively by IFAD and ENABEL, whose content and strategies have been aligned, and which will be implemented jointly, under a common implementation mechanism. Heifer will implement activities in the framework of the IFAD supported intervention, and VSF will contribute to the implementation of some ENABEL-supported activities. In addition of being an implementing partner, Heifer is also a co-financier of the activities it will implement (this is not the case of VSF). RAB/SPIU will implement activities under both interventions.



88. The ***ENABEL and IFAD interventions were initially designed separately, but in agreement with the GoR, they have been harmonized and aligned under the same partnership programme i.e. PRISM.*** This alignment has been done in accordance with the respective mandates of the agencies, their comparative advantages and the nature of the financing (grant for ENABEL, loan for IFAD), which resulted in the following:

- At production level, IFAD-supported interventions will target primarily smallholder livestock holdings and vulnerable households, while ENABEL will engage and support larger scale commercial and industrial actors;
- In terms of geographical repartition, IFAD-supported interventions will focus on districts that are the most affected by poverty and malnutrition;
- In terms of value chains, IFAD-supported interventions will target mainly the small ruminants, backyard pig and backyard chicken value chains, that correspond to its priority target groups, while ENABEL will concentrate on pig and poultry commercial value chains;
- ENABEL will provide support to large scale private businesses (feed manufacturers, hatcheries, processors) in the pig and poultry value chains;
- IFAD-supported interventions will also support public investments and public institutions, in particular in the domain of veterinary public health.

89. The overall growth and strengthening of the small livestock value chain can take place only if all value chain actors, at all levels, are able to participate and contribute: the smallholder and vulnerable producers, but also the bigger private sector actors especially at processing and input provision levels. The partnership with ENABEL allows IFAD to concentrate its support to its core target group: the vulnerable rural producers, while ENABEL, leveraging its comparative advantage, will also support more market-oriented value chain actors. This complementarity allows each partner to operate within its mandate and to leverage its comparative advantage, jointly contributing to a healthy and sustainable growth of the sector.

90. The table below describes in more details the agreed distribution or roles between IFAD and ENABEL supported interventions:

Theme/topic	ENABEL role	IFAD role	Partnership principle
Value chains	commercial pig and poultry value chains	Small ruminants, backyard chicken and pigs	As per mandates and comparative advantage
	smallholder commercial pig and poultry		
Target groups/beneficiaries	Commercially oriented producers (Ubudehe 3&4); large scale private sector actors	Vulnerable HH in production (Ubudehe 1&2) – special focus on youth groups	
Geographic area	National, but focus on areas with commercially oriented systems	15 Districts in 3 Regions. Areas more affected by food security and poverty	
Production level activities	Soya and Maize FFS		
	Livestock FFS (through VSFB) mainly for Ubudehe 3	Heifer Graduation pathway for vulnerable households mainly for Ubudehe 1&2	Similar and complementary approaches, targeting different target groups
	Support to Veterinary technician networks (through VSFB) for Ubudehe 3	Support to Community AgroVet Entrepreneurs (through Heifer) for Ubudehe 1&2	
	Support to private pig & poultry breeders	Support to RAB small ruminants breeding stations	
	Support creation of industrial farms		
		Support to public veterinary services	
Value Chain; access to market and services	Support participation to productive alliances by private sector actor (aggregators and input suppliers)	Support to smallholder-producers participation in productive alliances	Both support “productive alliance”, but with different entry points
	Support maize and soya out growers network		
		Renovation of public slaughtering and marketing infrastructures	
	Facilitation of access to finance for private sector (off takers and input providers)	Facilitation of access to finance for smallholder farmers	
Institutional aspects	Support to policies, standards and regulations		Joint implementation
	Support to national farmers organizations and stakeholders' platforms		
	Livestock Research Fund	Disease contingency fund	
	Repository database on market and investment opportunities	Sanitary crisis simulation	
		Capacity building of public actors	

91. Heifer and IFAD are working in partnership on smallholder livestock support in various countries (Ghana, Vietnam and Cambodia). IFAD and Heifer have a general MoU, signed in 2017. Heifer has been working in Rwanda since 2000; it has been mostly active in the dairy sector and is a pivotal implementing partner and co-financier of RDDP. Heifer has successfully implemented two projects supporting small livestock value chains in Rwanda, including one supported by IFAD (KWAMP).

92. Vétérinaires Sans Frontières Belgium (VSFB) is a NGO, working in 8 African countries. VSFB has been operating in Rwanda since 2003. VSFB facilitates livestock farmers' access to veterinary services through the establishment of private veterinarians in rural areas and supports the development of livestock projects by local groups through access to micro-finance services;
93. The section below focuses mostly on the description of the IFAD supported interventions, but it also reflects the ENABEL contribution and the partnership modalities for each activity, in order to highlight the complementarities.

B. Programme objectives, geographic area of intervention and target groups

1. Programme objectives

94. **Programme overall objective:** PRISM's overall objective is to reduce poverty by empowering poor rural men, women and youth to participate in the transformation of the Rwanda livestock sector and to enhance their resilience. Specifically, the programme seeks to increase competitiveness and profitability of the small livestock sector for the provision of quality products from smallholder producers to domestic and regional consumers.
95. **Programme development objective (PDO):** The PDO is to "Improve food and nutrition security and incomes of poor rural households and through better performance of the targeted value chains".
96. **Contribution to COSOP SOs:** The programme will directly contribute to the 2019-2024 COSOP SOs, namely "sustainably increase agricultural productivity in priority food and export value chains and improve livelihoods and resilience of the rural population" (SO1), through activities aiming at intensifying small livestock production and strengthening their resilience against sanitary, climatic or economic shocks. It will also contribute to "improve post-harvest processes, strengthen market linkages and generate economic opportunities for men, women and youth in rural areas" (SO2), through promotion of partnership mechanisms to improve the inclusion of smallholders in the value chains.
97. **Contribution to IFAD's SOs:** The programme is also fully aligned to the three IFAD SOs. It will contribute to SO1 (increased production) through intensification of production systems, productivity gains and expansion of production assets; to SO2 (increased market participation) through promotion of partnerships between smallholders and private sector actors to improve access to market and services; and to SO3 (greater resilience) by improving resilience of animals to sanitary crisis on the one hand, and reinforcing the traditional role of small livestock as a buffer mechanism in case of shock.

2. Programme duration and geographic area

98. **Programme duration:** the programme will have a total implementation duration of 5 years.
99. **Targeted districts and Geographical repartition between partners:** The IFAD supported interventions will target a total of 15 districts distributed across the northern, southern and western provinces of Rwanda³², where poverty and malnutrition are widespread. The three provinces together have a population of approximately 1,769,000 households (62.6% of the total number of households at the national level)³³, corresponding to 7,784,000 people³⁴, of

³² Other districts, e.g. Bugesera (Eastern province) and the city of Kigali may be targeted for specific activities, such as the establishment of strategic partnerships between small holders and the private sector and their inclusion in productive alliances or Public Private Producers Partnerships (4P) arrangements.

³³ Source: Ministry of Local Government, data collected on February 2019.

³⁴ One household = 4,4 household members.

which 20% are in Ubudehe³⁵ category 1, 38% in category 2, 42% in category 3 and only 0.10% are in category 4, with marginal differences between the provinces. The population living in rural areas amounts to 89%³⁶.

100. ENABEL interventions will have a national coverage but will be concentrating on areas with higher potential for market-oriented poultry and pig production, and where the larger commercial producers are located (such as Kigali, Rwanamana, Musanze, and Lake Kivu region (Rubavu and Rusizi).

101. **Geographical targeting criteria.** The selection of the IFAD targeted districts and their respective sectors will be based on the following criteria: (i) districts with high rates of poverty and food insecurity; (ii) districts with comparative advantage for the development of specific small livestock value chains, such as the existence of a traditional production basin, the proximity of a strong market, favourable environmental conditions or the availability of resource base; (iii) sectors not targeted by other development projects. In this regard, in addition to the internal alignment and coordination between the two PRISM partners, the programme will also align and partner with other development partners in Rwanda³⁷ to avoid the duplication of investments and to seek complementarity among the proposed interventions.

3. Target groups

102. The targeting strategies deployed under the IFAD and ENABEL interventions are fully complementary and will allow PRISM to engage all value chain players, while allowing IFAD to reach the different segments of its core IFAD target group. The IFAD outreach strategy will target the poorest zones and households that are affected by malnutrition, while ENABEL will also target the more market-oriented areas and commercially mature farmers/households. The combination of these complementary approaches offer the opportunity to strengthen the entire value chains (mainly poultry, pork and goat meat), enhancing the sustainability, and at the same time allowing better targeting of activities tailored to the specific needs of programme beneficiaries, in line with the respective mandates of both institutions.

103. **The IFAD targeting mechanisms**³⁸ will be based on the national wealth ranking system (Ubudehe) and consistent with the targeting strategy outlined in the RB-COSOP. The IFAD supported interventions will directly benefit a total of 26,355 poor rural households belonging to Ubudehe categories 1, 2 with the 'graduation approach' promoted with Heifer international and Ubudehe 3³⁹ through the 'productive alliances'. Within the beneficiaries, the programme will address three main target groups⁴⁰ that will be reached through complementary approaches meant to support their participation in commercial and inclusive value chains:

- **23,400 poor and food insecure rural households** (approximately 88,000 household members falling in Ubudehe category 1 and 2) amongst whom the programme will give

³⁵ Following the Ubudehe ranking system, people in Rwanda are grouped into 4 categories. Cat. 1: People who do not own a house or cannot pay a rent, have a poor diet and can hardly afford basic household tools and clothes; Cat. 2: Those who have a dwelling of their own or are able to rent one, mostly get food and wages from working for others but rarely get full time jobs; and Cat. 3: Those who have a job and farmers who go beyond subsistence farming to produce a surplus, which can be sold. The fourth category (not targeted by PRISM) includes people who earn high incomes; people who own houses; people who can afford a luxurious lifestyle.

³⁶ Fourth Rwanda Population and Housing Census, 2012

³⁷ In particular, the programme will align and collaborate with the USAID/ Feed the Future. For further details, see the Project Implementation Manual (PIM)..

³⁸ A detailed targeting strategy is presented in the PIM (section 2.4).

³⁹ 1 Person= 1 Household.

⁴⁰ A detailed profile of the target groups is provided in Annex 5 (SECAP Review Note).

priority to the most vulnerable households, women (and among the latter to women heads of households), and youth. Poorest households, composed of subsistence farmers, mostly food insecure and with limited land and access to resources, have few active members and are more often headed by a single person. With this target group the programme will deploy a pro-poor approach through a graduation pathway⁴¹ (Values-Based Holistic Community Development- VBHCD- model) aiming at improving nutrition, reducing inequalities, enhancing production and ultimately market access and income generation. The VBHCD model entails that, within the targeted communities, the most vulnerable households are identified in a participatory way at the beginning of programme's implementation; although the holistic approach and related activities will be open to all community members despite their socio-economic conditions, the package of services provided will be tailored to the specific households' needs.

- **1,425 market-oriented producers (See details in para. 118, component 2)** (525 broiler farmers, 450 eggs producers, 450 pig fatteners), mostly in Ubudehe category 2 (graduated from VBHCD) and 3, who will be targeted across all districts. These less vulnerable producers who are already engaged in a more entrepreneurial logic and will be supported through a combination of technical, business and financial capacity building combined with backward and forward market facilitation. This will be provided in the scope of innovative value chain arrangements that facilitate the participation of smallholders in commercial value chains.
 - **1,530 rural youth (See details in para. 120, Component 2)** (at least 50% women), aged between 16 and 30 years, including but not limited to Ubudehe categories 1 and 2 (graduated from VBHCD), unemployed and with low educational level, and 3 (more literate and basic agriculture/livestock keeping knowledge). This target group will receive support to organize themselves into small livestock production cooperatives and receive a full start-up package, including initial technical and managerial training, provision of business development services, and assets building will be provided.
 - **Other direct beneficiaries** will be approximately 900,000 households raising small livestock that will benefit by vaccination campaigns against major small livestock diseases. The programme will also benefit service providers, such as the Community Agro-Vet Entrepreneurs and veterinary services, through the provision of training and capacity strengthening; members of national producers organizations as well as district staff and RAB trainers that will be trained on matters related to the governance and the management of their organizations and to the development of small livestock value chain, respectively.
104. The programme will adopt an inclusive approach to ensure that women and men equally benefit from programme's interventions. Overall, women will account for at least 50 % of the beneficiaries, and female-headed households and women in male-headed households will be empowered to participate in programme activities or engage in economic activities. Young people (at least 50% women) will represent at least 30% of the overall number of beneficiaries.
105. The number of beneficiaries per value chain will be: 4,500 households for small ruminants, 4,250⁴² for poultry and 2,450⁴³ for pigs.

⁴¹ The graduation pathway refers to a set of interventions that target the poorest and vulnerable beneficiaries with productive assets and skill development initiatives and that are meant to break out of the poverty cycle. The graduation pathway will be based on the Values-Based Holistic Community Development (VBHCD) model designed and implemented by Heifer International. A description of the VBHCD model is provided in the Project Implementation Manual.

⁴² 2,250 vulnerable HH + 1,000 youth + 1,000 commercial producers.

106. The number of beneficiaries targeted through the ENABEL supported interventions is 21,254 in total, composed as follows: (a) 12,000 producers of chicken and pork supported through FFS; (b) 9,000 soybean and maize producers supported through FFS; (c) 25 medium scale producers and 2 large scale producers in the pig sector, and 200 medium scale producers and 2 large scale producers in the poultry sector will benefit from business development services and capital investment support; and (d) 25 enterprises operating in the targeted value chains. ENABEL beneficiaries will be mostly in Ubudehe 3 and 4, and some in Ubudehe 2. The total number of beneficiaries targeted under the programme by both implementing agencies is therefore 47,609.

C. Components/outcomes and activities

1. Component 1 - Climate-smart intensification of small livestock production systems

Sub-component 1.1: Social mobilization and graduation of vulnerable households (to be implemented by Heifer International under IFAD intervention)

107. Through this sub-component, which will be implemented by Heifer International, the programme will reach 23,400 poor and food insecure rural households (Ubudehe 1 and 2) for whom the programme will use a pro-poor approach, through a graduation pathway (VBHCD model), aimed at addressing community development through an integrated and holistic approach. This model builds on 12 Cornerstones^{©44} aimed at strengthening the capacity of smallholder farmers (including financial literacy, nutrition education, business management and increase gender equity) to increase their production and productivity, while connecting them to markets. Heifer International will capitalize on its existing experience and expertise in Rwanda, the Africa region and globally, including within IFAD-financed projects. The main features of the VBHCD will be as follows:

108. **Self Help Group (SHG) Formation:** SHGs are the foundation for VBHCD. Specifically, Heifer International will first help community members to organize themselves into SHGs, with one representative from each household. Each SHG is generally constituted of 20-30 members. Within a group, it will be likely to have representatives from different socio-economic sub-groups (extremely vulnerable and food insecure and less vulnerable). The groups will be open to all sub-groups present in the community and they will be trained together in order to strengthen their social capital. However, the package of services provided will be tailored to the specific households' needs, depending on their social and economic situation. The 12 Cornerstones[©] for Just and Sustainable Development are used to focus the group on the shared values of the self and community.

109. **Training of Farmers:** Farmers will undergo trainings in both hard and soft skill development including on basic nutrition, gender and leadership modules for men and women, Values-Based Financial Literacy, and environmental management. Further, farmers will be trained on small business entrepreneurship, on-and off-farm income generation, production, aggregation, transportation, processing, distribution/retail, and marketing. Finally, prior to livestock placement, technical assistance focusing on poultry, sheep, swine and goat value chains (depending on the type of livestock placed) will be provided to farmers to help increase their production and productivity. This training includes capacity building in breeding,

⁴³ 1,500 vulnerable households + 500 youth + 450 commercial producers

⁴⁴ The 12 Cornerstones[©] cover a range of shared values and principles, abbreviated in Passing on the Gift. Accountability; Sharing and Caring; Sustainability and Self Reliance; Improved Animal and Resource Management; Nutrition, Health, and Income; Gender and Family Focus; Genuine need and Justice; Improving the Environment; Full Participation; Training, Education and Communication; and Spirituality.

husbandry, feeding, including zero-grazing, health and reproduction. Farmers will also be trained on ways to address seasonality such as post-harvest storage, which will make higher quality feed available during the dry season. In addition to local trainings, South-South learning will be facilitated by conducting exchange visits between Rwanda, Kenya, Nepal, and Cambodia so Rwanda may benefit from successful breeding and feeding models that Heifer International is implementing in the region and in Asia.

110. **Input Provision and Passing on the Gift (PoG):** Once farmers have completed their training series, female animals of locally-adapted/improved breeds will be passed on from household-to-household. In this regard, the selection of the first PoG's recipients will be done in a participatory way; group members themselves will be asked to identify, within each group, the neediest households, which will be prioritized in receiving the first animal. In this context, attention will be given to the most food insecure and vulnerable households and, particularly, to those headed by women. In addition to placement of animals, farmers will be provided with initial starter packs (inputs and small equipment). Smallholders will be trained in building proper housing and will receive most of the materials necessary for the construction, co-investing about 20%. Ahead of livestock placement, farmers receive inputs for fodder plots, such as grasses and legumes.
111. **Participatory Self-Review and Planning (PSRP):** Throughout the life of the programme, farmers will participate in PSRP, a values-based participatory review and planning methodology designed for assessing programme implementation progress, community participation level, and learning and planning for action.
112. **Complementarities and alignment with ENABEL intervention:** The VBHCD will be implemented in the IFAD targeted Districts only, and will target households from Ubudehe categories 1 and 2. The Farmer Field School (FFS) approach will be implemented by ENABEL at national level, but for 12,000 households selected among the most market oriented, mostly from category 3 and located in areas that are more connected to the market. VBHCD will target the poorest households and enhance extensive production systems (backyard chicken and pig, small ruminants), in line with IFAD mandate and targeting strategy, focusing on local weekly rural markets at village and district levels. Instead, FFS will focus on more commercially oriented producers able to reach processors, butchers and consumers in urban centres.
113. The combination of the two complementary approaches offer the opportunity to effectively serve the different segments of PRISM target group. The VBHCD model is considered more effective for the most vulnerable group because it focuses not only on technical aspects of livestock production, but also it includes modules such as "accountability" and "sustainability and self-reliance" to facilitate the necessary behavioral change among smallholder farmers in order for them (i) to pull themselves out of poverty and (ii) to produce surplus products for the market. On the other hand, the FFS approach is better suited for more market-oriented farmers.. Thus, the two approaches differs in a way that the VBHCD offers a graduation path out of poverty and access markets for resource-poor smallholder farmers whereas the FFS is meant to enhance or fill the gaps of knowledge for more advanced farmers.
114. The programme coordination team, and the Technical Coordination Committee will provide coordination, exchange of experiences, alignment to national policies, etc.

Sub-component 1.2: Improve animal health status and genetic potential of small livestock (to be implemented jointly by IFAD and ENABEL)

115. **Setup of Community Based Animal Health Systems:** In the Districts where communities benefit from the graduation pathway/VBHCD (SC 1.1) Community Agro-Vet entrepreneurs (CAVE) will be identified, trained and deployed to support animal well-being across all targeted value chains. With knowledge in basic preventive and animal health care,

CAVEs provide services to the community under the supervision of qualified government veterinary staff. They will be equipped with animal well-being starter kits. In order to further improve access to veterinary healthcare, every beneficiary of the graduation pathway (SC 1.1) will be sensitized to contribute towards an animal health insurance scheme. In this scheme, a farmer contributes an annual fee and pays half the price of vet drugs prescribed by qualified veterinary technician. With the establishment of this scheme, treatments are made available at reduced costs, on a sustainable way.

116. Under the ENABEL-led interventions, Veterinaries without Borders Belgium (VSFB) will train and support development of private veterinary technicians and veterinary doctors. These veterinary practitioners will have an academic level and will address the needs of the more commercially oriented farmers, at national level. In addition, they will be supported to enter in "business" relations with the CAVEs trained by Heifer, creating the development of a network of mutually reinforcing private players operating under the supervision and guidance of the public veterinary service system.

IFAD and ENABEL complementary approaches on animal health

Public veterinary services and veterinary public health issues will be promoted under IFAD supported interventions, only. For private veterinary services, the approaches deployed by Heifer (Community Agro-Vet entrepreneurs - CAVE) and by VSFB (support to networks of veterinary technicians) are complementary as they aim at providing private services to a different target group i.e. CAVE will operate at village level serving Ubedehe 1-2 mainly, while VSFB will work with private service providers addressing primarily the needs of Ubudehe 3 producers. The two approaches will allow to effectively serve the different segments of the target group with sustainable and tailored services. The coordination between public and private veterinary sectors will also be strengthened as part of the foreseen review of the veterinary legislation in Component 3. It is also important to mention that IFAD is already contributing to strengthen the National health provision services through RDDP.

117. **Support Production and Dissemination of Improved Breeding Stock:** in this domain, the IFAD-supported interventions will address the needs of the backyard poultry and small ruminants sectors, and ENABEL those of the commercial pig and poultry sectors. For **small ruminants**, PRISM will provide support to the existing RAB goat breeding station, to enable it to import new breeding stock, and to facilitate dissemination of crossed offspring into the programme area. For **backyard poultry**, PRISM will provide support to RAB to source selected breeds and strains of chicken and multiply them through the specialized young hatcheries established under sub-component 1.2. To identify the most adequate breeds and strains, the programme will support the participation of RAB in the "African Chicken Genetic Gain⁴⁵" programme implemented by the International Livestock Research Institute (ILRI) and funded by the Bill and Melinda Gates Foundation. Small ruminants and backyard poultry distributed under this activity will benefit in priority to VBHCD beneficiaries through the "Pass on the Gift" programme. For **pig and commercial poultry** (broilers and layers), PRISM will support the creation of development of pig breeding centers, hatcheries and pullet producers through the provision of capacity building, business development services and capital strengthening. The programme will ensure that these service providers are providing breeding stock to all programme beneficiaries including those supported under the IFAD interventions.

118. **Support Surveillance and Control of Small Livestock Diseases:** In order to reduce the risk of introduction of TADs, the programme will strengthen the epidemi-surveillance capacities of veterinary services, with a particular focus on small livestock TADs that are

⁴⁵ <https://africacgg.net/>

endemic in the region but not present in the country⁴⁶. PRISM will improve surveillance capacities for these diseases by providing support and capacity building to districts to mobilize communities to enable them to participate actively in passive surveillance networks, and to establish information circuits through efficient communication chains and designated focal points (including CAVEs and private veterinarians). The programme will also complement the support provided by RDDP to RAB for the upgrading of the central veterinary laboratory and of the satellite laboratories by providing specific equipment and kits for the detection of small livestock diseases.

119. Development of contingency plans and establishment of a contingency fund for small ruminants diseases: In order to mitigate the risk of sanitary crisis that could ruin all development efforts and investments in the value chains, PRISM will support the public veterinary services to prepare responses to sanitary crises, in particular for crises related to TADs or zoonotic diseases. In order to test these plans and prepare their deployment, simulation exercises will be organized. The programme will also establish a disease contingency fund. In case of an eligible sanitary crisis, the GoR may use part or all these funds to finance emergency response, in line with the pre-identified and mutually agreed operational guidelines and criteria for eligibility. If the primary allocation is not sufficient, the GoR may also request to reallocate resources from the unallocated expenditure category if they are still available. Detailed operational guidelines, criteria for eligibility of the crisis will be developed to guide the utilization of the funds. Should this activity be triggered, all expenditures will be made in accordance with IFAD procurement rules applicable to emergency situations. An exit strategy and sustainability plan will be developed at the beginning of the activity to ensure the sustainability of the fund beyond the programme lifetime. This activity will be implemented jointly and co-financed by IFAD and ENABEL.

Sub-component 1.3: Support climate smart innovations in production (*to be implemented by IFAD*)

120. In order to mitigate potential negative impacts of the intensification of small livestock production, the programme will promote several activities for mainstreaming environmental management and climate change adaptation and mitigation including:

- promotion of agroforestry, including the setup of nurseries with self-formed and youth groups, for dissemination of fodder trees and shrubs species that can be used in animal feeding; this will be done in parallel under the VBHCD approach and the FFS.
- manure management through adoption of biogas systems and composting. This activity will benefit to smallholder commercial farmers supported by both partners and will be co-financed and implemented jointly with ENABEL, through VSFB as implementing partner. The programme will promote the both the installation of flexible biogas systems which are low cost, easy to install and adapted to small scale farming, and fixed dome systems, which are more durable. At household level, under the graduation pathway and the FFS, the programme will promote manure composting.
- improved water efficiency through rainwater harvesting facilities installed at farm level with youth groups and households beneficiaries of the Heifer VBHCD pathway⁴⁷ and FFS.

⁴⁶ African Swine Fever (ASF), "Peste des Petits Ruminants" (PPR), Highly Pathogenic Avian Influenza (HPAI), and Rift Valley fever (RVF).

⁴⁷ This will target 10,000 Heifer VBHCD beneficiaries. The household will contribute to 50 % of total cost in kind (local material and unskilled labor) and the remaining 50 % will be financed by the project.

2. Component 2: Support to Small Livestock Value Chain Development

121. This component will strive to strengthen the organizational and entrepreneurial skills of the programme beneficiaries and improve their backward and forward linkages to access input, service and output markets. Different investments will support this objective, including (i) support to the development of a local feed industry (ii) soft support (facilitating “productive alliances”, raising the appetite of financial institutions to serve these specific value chains, promoting multi-stakeholder fora), and (iii) investments in public and private infrastructure to raise the compliance with food safety and animal welfare standards and reduce environmental externalities.

122. **Support to animal feed** industry : this set of activities will be led and funded by ENABEL⁴⁸, and will aim at supporting the emergence of a national feed industry based as much as possible on quality locally produced raw materials (maize and soya), in order to reduce the country dependency on imports, which weakens the poultry and pig value chains. Through the implementation of FFS, the programme will develop profitable, resilient and sustainable soya and maize farms which run their farms as business with sustainable links to input suppliers and buyers. It will also develop a reliable and sustainable supply system of locally produced soya bean for feed companies through the out-grower company model and will provide a tailor-made technical support and business development support for feed companies. Finally, it will set up a feed industry research fund to support innovative research, in particular on technologies aiming at incorporating more local ingredients in feed formulas.

Sub-Component 2.1: Productive Alliances with Input Suppliers and support to entrepreneurship in production (*to be implemented jointly, but with IFAD intervention supporting smallholder farmers including youth, and ENABEL focusing on support to larger industry players*)

123. **Productive alliances**⁴⁹ will be sought in the poultry and pig value chains, building on arrangements that are already often used by Rwandan animal feed manufacturers to expand their customer outreach. Under these alliances, the programme aims to support 525 broiler farmers, 450 layer farmers, and 450 pig fatteners. While the support to productive alliances in broiler and layer farming is foreseen to cover all 15 target districts, the productive alliances in pig raising will concentrate on the districts that are natural production basins. The participants to these productive alliances will typically belong to Ubudehe categories 2 and 3, already engaged in an entrepreneurial logic and with the capacity to contribute to the start-up capital investment. The programme will select the private sector partners, support them to identify the participating smallholders, and facilitate the preparation of contracts.

124. In the three models, the feed manufacturer will concurrently play the role of input supplier and technical service provider. The programme will complement the technical advice provided directly by the partners with business development services. For each alliance, the programme will contribute to the tune of 30% in the investment capital that will consist of a package of building, equipment and start-up stock of 100 broilers, or 500 layers, or 10 piglets, depending on the productive alliance. The beneficiary will provide the remaining part of the investment, either in cash or through a bank loan. This activity will be implemented in partnership and co-funded by ENABEL⁵⁰ which will finance the 30% contribution of the investment capital. In

⁴⁸ ENABEL sub- component 2.0: The feed industry supplies affordable and quality feed, which includes locally sourced ingredients

⁴⁹ A productive alliance is a contractual arrangement whereby farmers enter into an agreement with either an input supplier, an aggregator or a service provider, who guarantees access to inputs, market or services to the farmers on mutually agreed conditions.

⁵⁰ ENABEL activity 1.2.4 Access to finance for livestock farmers

addition to the smallholder commercial producers supported under this activity, ENABEL⁵¹ will also provide business development support, including investment capital support, to large scale industrial farmers. However, financing modalities including % of matching grant will be similar for the two sources of financing.

125. **Support to Youth Entrepreneurship in Production:** The programme will target unemployed rural youth who are willing to start small livestock production enterprises and will assist them in establishing viable and profitable production units and enter in the productive alliance arrangements. However, the support package for youth will be different from other ordinary productive alliance beneficiaries, in order to compensate their absence of experience, land and capital. The programme will build on the approach already implemented by MINAGRI in the scope of the “small livestock for youth programme” and will support groups of ten youth on average, located on the same site but with independent production units. The support package will include initial intensive technical and business management support, continuous tutoring through business coaches, provision of start-up capital for investment and initial working capital, and linkages to financial service providers for co-financing of investments.

126. 1,530 young people in total will be targeted through PRISM (100 per targeted District in average). The programme will give priority to young people aged between 16 and 30 years, with low level of education (without or up to secondary education) and TVET graduates. Specifically, the programme will support the creation of 450 pig fattening units, 50 pig breeding units, 500 broiler production units and 500 layer units, 15 pilot hatcheries and production units of pullets and cockerels for backyard chicken production, and 15 goat breeding units.

127. The beneficiaries will undergo an initial training curriculum addressing both the technical aspects and the business and financial management aspects. The training will be organized and provided by private Business Development Service Providers assisted by District Staff. The start-up package for each beneficiary will be composed of the followings: (i) Construction of premises; (ii) Small equipment (feeders, drinkers, tools); (iii) Land will be provided by local authorities; and (iv) Start-up animal stock and inputs for the first six months including a veterinary package. The youth financing package will include a grant representing maximum 70% of the cash needs to start the enterprise, the residual amount of 30% being financed by a loan from a financial institution. The grants will be managed by BDF.

Sub-Component 2.2: Market Facilitation in Small Livestock Value Chains (*to be implemented jointly, with IFAD focusing on public market infrastructures, and ENABEL on private ones*)

128. **Market appraisal:** PRISM will undertake several market appraisal studies in order to fill the gap on market demand and opportunities, and guide programme investments. An assessment of the pig and poultry (egg and meat) markets will be conducted before the programme start-up under a DFID funded programme, but for the benefit of PRISM. The outcome will be available before the end of 2019 and will be a critical decision-making tool, in particular for selecting the Districts of interventions, private sector partners and sites for market access public investments. However, since this study will only cover pig and poultry value chains, there will be a need to undertake a similar exercise for small ruminants during the inception phase of PRISM. A provision has been made under the ENABEL financing to cater for the needs for further studies on market and investment opportunities (including for selecting the location of abattoirs and markets to be funded under the programme) during the programme cycle.

⁵¹ ENABEL activity 2.2.1 Support the creation of industrial pig and poultry farms

129. **Market facilitation** in small livestock value chains will be done at three levels: (i) assistance to off-takers for supplier network development; (ii) support to public good related investments in essential equipment; and (iii) support to small livestock multi-stakeholder fora at regional and national level.
130. To complement the proximity extension, coaching and business development services foreseen under component 1 and sub-component 2.1, BDSPs will be recruited for market facilitation. Specific tasks will be to engage the producers with other actors of the value chains, typically the traders operating at farmgate and market level, the processors, the abattoirs, and the final off-takers. The role of these BDSPs will thus be the one of a match-maker, able to identify the demand and propose adequate products and services along win-win arrangements. BDSPs will serve beneficiaries of both IFAD and ENABEL supported interventions and will be financed on ENABEL budget.
131. PRISM will support private operators of abattoirs and processing units to launch public good related investments⁵² in essential equipment. The first step will be to help them develop a sound business plan that will back their eligibility to access grants and enable them to access loans from Participating Financial Institutions (PFIs) if necessary. Once their business plans are developed, the private processors/slaughterers will be able to apply for PRISM matching grants. This support must be viewed as an incentive to upgrade processing facilities in a context where private companies would otherwise prefer to secure their cashflow and not allocate their limited investment capital to 'unproductive' assets. Eligible investments will be limited to (i) equipment meant to improve and comply with national and international standards on food safety and animal welfare⁵³ and (ii) climate-smart upgrading of their facilities⁵⁴. For the first group of investments, the programme will provide a 30% matching grant, with a ceiling of USD 30,000. For the second group, the programme will provide a 67% grant (2/3) with a ceiling of USD 10,000. Both types of grants are conditional upon the sourcing of products from direct programme beneficiaries. Both the development of business plans and the matching grants will be entirely co-financed by ENABEL.
132. The programme will support the development of centres of excellence in pig and poultry value chains. These will be large scale production units that also provide training services, coaching and mentoring, business development services such as formulation of business plans or feasibility studies, in parallel to the provision of inputs such as DOC, pullets, piglets. Some embryos of such centers of excellence already exist in the country and the concept is promising and deserves to be scaled up. This activity will be led and financed by ENABEL.
133. The programme also foresees either the building or the rehabilitation of five pig slaughter slabs, to respond to the crucial lack of pig slaughtering facilities in Rwanda. Such facilities are essential to enable pig producers to shift from farmgate sales of live animals to value addition through the proceeds of pork meat. Prior Environment and Social Impact Assessment (ESIA) studies will be undertaken and the programme foresees an average budget of USD 100,000 per slab, to be complemented by a maximum of USD 25,000 to support investments in bio-digesters and solar energy. Out of the 64 district markets existing in PRISM target regions, 10 will be selected for rehabilitation (ideally one per target district), based on the outcomes of the market assessment and investment opportunities studies. The infrastructure will be owned by the districts, but their management will be entrusted to cooperatives or private sector operators

⁵² In this case this will apply to investments contributing to improvement of food safety, environmental preservation, or animal welfare.

⁵³(such as cold rooms/cool trucks, ventilated vans to transport live chicken, stainless steel machinery/furniture)

⁵⁴(such as bio-digesters, solar energy)

through a PPP. Public investments in both slaughter slabs and markets will be financed entirely by IFAD, but the feasibility studies will be co-financed by ENABEL.

Sub-Component 2.3: Support to Financial Institutions (*to be implemented jointly by IFAD and ENABEL, with IFAD focusing on smallholder producers and ENABEL on other larger value chain actors*)

134. The programme will facilitate the linkage of the smallholder farmers under productive alliances with the financial sector, to finance investments and working capital. It will also help link vulnerable households under the graduation pathway under component 1 to access formal financial services, and youth supported under component 1 to financial institutions for the financing of the start-up and further development of their business. This will result in a total of 11,750 households accessing formal financial services, including 1,425 smallholder farmers engaged in productive alliances, 1,500 members of youth small livestock production enterprises and 8,000 vulnerable households⁵⁵.
135. For smallholder farmers supported under the productive alliance model, PRISM will support private feed manufacturers and off-takers having developed or in the process of developing productive alliances with farmers to identify and negotiate with financial institutions for the financing of the farmers and provide customized technical assistance to these institutions. Technical assistance (TA) will be provided in close consultation with the private company, for the development of adapted and affordable financial products and secured delivery channels building on the business model of the company and its linkages with the farmers. It will also include training of the financial institution agents on the farmers enterprises. Priority will be given to commercial banks and MFIs that have already set up an agricultural finance unit. Technical support to banks and MFIs will be provided by a partner or a service provider. ICCO TerraFina, which has an established experience of supporting MFIs and banks in Rwanda with a specific focus on rural and agricultural finance has expressed an interest in partnering with PRISM.
136. For linkages with other beneficiaries, PRISM will organize training for interested financial institutions aiming at raising their appetite for small livestock value chains and supporting them to design or refine affordable, appropriate products and delivery channels for different categories of beneficiaries. It will include presentation of value chains mapping and analysis with focus on financial needs, risks and mitigation strategies, recommended product features and delivery channels. It will also include technical training on production and enterprise business models for targeted small livestock sub-sectors to enable financial institutions agents to do a proper appraisal and monitoring of loans. The programme will then organize fora to facilitate linkages between farmers, value chain actors and financial institutions, who have designed adapted products following training by the programme. Insurers who have been supported by the programme to design small livestock insurance products, and value chain actors like input suppliers and off-takers will also be invited.
137. For both approaches, it is expected that a total of 210 financial institutions will be supported (5 commercial banks, 5 MFIs and 200 SACCOs).
138. The project will also support innovations with a focus on (i) digitalization of transactions and operations, and (ii) development of small livestock insurance products. The rationale is that both of these tools can help reduce cost and risks for the financial institutions. Several private organizations have developed or are in the process of developing these kind of digital innovations for the agricultural sector. The programme will support selected private organizations on a cost-sharing basis for the adaptation of their existing tools to the

⁵⁵ Not counting households that may access finance and insurance indirectly as a result of TA provided by the Project to Financial institutions.

specificities of the small livestock value chains. Private organizations are targeted because they are likely to commercialize the innovations when proof of concept is carried out.

139. With regards to insurance for small livestock, there are currently two new insurance products for poultry, and one on the horizon for pigs. Whilst this is encouraging, they are not currently adapted to or available for the programme target groups. These are the two value chains most suitable for and of interest to commercial insurance. To support better access to other financial services for the programme target group(s) engaged in poultry and/or pig farming, research will be carried out into these value chain risks and insurance feasibility for the target groups. This will help underpin technical assistance to two new product designs – carried out on a cost-share basis, and also inform training of members of the Rwanda Insurers' Association. As a result of these activities, at least five insurers will receive support from the programme. Although pilot testing and roll-out of these innovations are not directly financed by the programme, as much as is possible any operations as a result of programme TA will involve financial institutions that the Programme has linked with its beneficiaries (e.g. MFIs providing productive loans). This activity will be implemented jointly with, and co-financed by ENABEL.

3. Component 3: Policy support and coordination

140. All activities related to the formulation of policies and strategies, the development, review and enforcement of legislation and standards will be supported and funded jointly with ENABEL. The support provided to the government by PRISM will build on the outcomes of an assessment being undertaken under a partner DFID funded programme, which aims at identifying the policy and regulatory gaps in the pig and poultry value chain, and whose report will be available at programme startup.

Sub-component 3.1: Policy and Regulatory Support (to be implemented jointly by IFAD and ENABEL)

141. **Support to National farmers organizations:** Under this activity, the programme will provide institutional support to existing or emerging national farmers organizations of the small livestock value chain, to enable them to play a more proactive role in the policy dialogue processes.. The executives and board members of these organizations will be trained on matters related to governance and management of their organizations, as well as on advocacy and lobbying. In addition to formal trainings, the programme will support the organization of exchange visits and study tours, to enable these organizations to learn from sister organizations in other countries. The programme will also provide support to the day-to-day running of these umbrella organizations, to enable them to increase their visibility, their outreach and finally their credibility. This support will be strategically focused on activities that could lead to self-generation of incomes and the programme financial contribution will decrease over the years.

142. **Support to multi-stakeholder fora:** Once the actors are mobilized around programme intervention, small livestock multi-stakeholder fora will be set-up at both regional and national level to facilitate the business relations between the various stakeholders and bring their specific issues/proposals at an upper level to have weight in the regulatory and policy discussions. The regional BDSPs will facilitate the establishment of a mechanism for forum self-sufficiency through members fees, district contribution, etc. The programme will gradually reduce its support since it is expected that the fora will become sustainable.

143. **Support to Development of Sector Strategies:** The programme will support the formulation and updating of relevant sector strategies, including in particular the review of the 2012-2018 small livestock strategy and investment plan. All strategies will be aligned to the overall strategic framework pertaining to the agricultural sector (PSTA4) and livestock sector (LMP). To ensure that policies and strategies are developed in an evidenced-based and

inclusive manner, the programme will provide support to MINAGRI in the following domains: (i) Provision of specialized expertise; (ii) Collation of data and evidence; and (ii) Support to inclusive stakeholder consultation processes: the multi-stakeholder fora established in the scope of component 2 will offer an excellent platform for these consultations.

144. **Support to Development and Enforcement of Food Safety and Animal Welfare Regulatory Framework:** the programme will support the updating or formulation and enforcement of food safety and animal welfare regulatory frameworks pertaining to the targeted value chains. The support provided will aim to: (i) Ensure compliance of national regulations with international standards; (ii) Improve human public health (reduce transmission of food borne diseases and zoonoses) and veterinary public health; and (iii) Enhance animal welfare and reduce unnecessary animal suffering during critical stages of handling, transport and slaughtering. The choice of regulations updated or formulated will be done in consultation with MINAGRI and other development partners. The process will be similar to the one followed for policies described above (expertise, data collation and consultation).
145. In addition to the above-mentioned activities, several complementary activities aiming at reinforcing the regulatory environment will be implemented under the ENABEL supported interventions: (i) support will be provided to RALIS to improve the delivery of meat and eggs certification and inspection services, (ii) RAB will be assisted to develop and animal identification and traceability system for pigs.
146. **Build Institutional Capacities at National and District Levels:** The programme will provide capacity building support to RAB to improve skills of selected key national staff on technical domains related to the development of small livestock value chains: animal health, animal feeding, genetics, housing and livestock infrastructures, waste management. The trained staff will then be encouraged to play the role of trainers and train other civil servants or private actors at local level.
147. ENABEL will lead the implementation of two complementary activities contributing to further support national institutional capacities i.e. the establishment of a livestock research fund in RAB⁵⁶, that will address value chain knowledge gaps that may arise in the course of implementation, and the establishment of a repository data base⁵⁷ on market and investment opportunities at RAB.

D. Theory of Change

148. The small livestock value chains in Rwanda are still organized in a rudimentary manner, which leads to inadequate access to market and services for farmers. Rural people have inadequate technical capacities, limited production assets and poor access to financial services, and their level of productivity is consequently very low. Slaughtering and processing facilities are either inadequate, or non-existent, and the feed industry is penalized by the low availability of raw material on the domestic market, and its dependency on imports. Public services and infrastructures are also insufficient. The combination of all these factors results in a limited availability of small livestock products in the market, and therefore low consumption levels. Vulnerable and food insecure households are particularly affected have nutrient-low diets and protein-rich food such as ASF is rarely consumed.
149. PRISM theory of change (Annex 2) is based on the hypothesis that vulnerable rural households women and youth, who are empowered with social and technical capacities, and included in the value chain will increase their productivity, nutrition practices and access to

⁵⁶ ENABEL Activity 2.3.11. Set up a livestock research fund in RAB

⁵⁷ ENABEL activity 2.4.4. Set up a repository database

market. This will improve their incomes, food and nutrition security and the performance/competitiveness of the value chains. The programme will ultimately reduce poverty and enhance poor rural people resilience. PRISM theory of change builds on the opportunities offered by the ongoing market expansion, both at domestic and at sub-regional levels.

150. PRISM approach is holistic and based on the principle that the development of the value chain requires balanced support to all value chain segments and categories of actors. It is a partnership programme implemented by RAB, and jointly supported by IFAD and ENABEL, with Heifer International as implementing partner and co-financer, and VSF Belgium as implementing partner (see figure on Page 12). PRISM is constituted of two complementary interventions, supported respectively by IFAD and ENABEL, whose content and strategies have been aligned, and which will be implemented jointly under a common implementation mechanism. Heifer will implement activities in the framework of the IFAD supported intervention, and VSFB will contribute to the implementation of some ENABEL supported activities. In addition of being an implementing partner, Heifer is also a co-financer of the activities it implements (This is not the case of VSFB). RAB/SPIU will implement activities under both interventions.

151. The partnership between ENABEL and IFAD will allow expanding the outreach of the programme project to all VC actors, while ensuring the mandates and targeting strategies of both institutions are respected (and for IFAD in particular, that smallholder farmers remain the primary target group). The principle of graduation is also critical to the programme project theory of change and based on the assumption that even the most vulnerable and fragile households and production systems are able, through a combination of social and economic support activities, gradually modify their production systems and become more market and service oriented. At production level, IFAD-supported interventions will target preferentially smallholder livestock holdings and vulnerable households, and ENABEL will engage and support larger scale commercial and industrial actors. In terms of geographical repartition, IFAD-supported interventions will focus on Districts that are the most affected by poverty and malnutrition, while in terms of value chains, IFAD-supported interventions will target mainly the small ruminants, backyard pig and backyard chicken value chains, that correspond to its priority target groups, while ENABEL will concentrate on pig and poultry commercial value chains. ENABEL will provide support to large scale private businesses (feed manufacturers, hatcheries, processors) in the pig and poultry value chains while IFAD-supported interventions will also support public investments and public institutions, in particular in the domain of veterinary public health.

152. In order to achieve this goal, the programme will have three inter-related components. The first component will target the production level and will aim both at increasing the productivity of existing livestock systems, and at increasing their numbers by installing new smallholder producers. This strategy will ultimately result in increasing the production and the availability of animal source food, in response to the increasing domestic and foreign demand. The second component will support participation of smallholders in the small livestock and animal feed value chains, which will on the one hand facilitate access to the expanding market for the additional production, and on the other hand assist farmers in accessing finance and inputs, that are necessary to increase their production. The third component, in addition to programme coordination, will support the improvement of the institutional and policy environment, in order to ensure that the institutional environment is enabling and supportive to the value chain transformation. The programme will adopt an inclusive approach to ensure that women and rural youth will equally benefit from programme's interventions.

153. The small livestock value chain development is also an important pathway to increase for unemployed rural young people that will engage in small livestock production enterprises. The

programme theory of change pathway is built on two main assumptions: i) Poor rural people are willing to adopt innovative technologies and practices (also nutritional) and raise the small ruminants' for production; and ii) Financial and private sector is interested and willing to partner with small livestock producers. A graphic representation of the Theory of Change is provided in annex 2.

E. Alignment, ownership, and partnerships

1. Alignment to National policy and strategic frameworks

154. PRISM's Development Goal is fully aligned with GoR's *second Economic Development and Poverty Reduction Strategy* whose overarching goal is growth acceleration and poverty reduction⁵⁸. More specifically, PRISM is well aligned with Rwanda's *Strategic Plan for the Transformation of Agriculture*, the Government's flagship investment programme for the agriculture sector. PRISM will contribute in the following ways:

- a. To PA1 (Innovation and extension) and PA2 (Productivity and resilience) through the support provided to improve animal health status and genetic potential of small livestock and the establishment of proximity extension services (Community Facilitators, CAVEs, private coaches).
- b. To PA3 (Inclusive markets and value addition) through facilitation of backward and forward linkages through productive alliances with input suppliers, enhanced marketing and processing infrastructure, and support to small livestock value chain financing.

155. To PA4 (Enabling environment and responsive institutions) through support to develop sector strategies, especially food safety regulations, and the capacity building of RAB and local government authorities. The overarching strategic framework guiding the development of the livestock sector in Rwanda is the Livestock Master Plan (LMP)⁵⁹. The priority investment envisaged in the LMP, relevant to the small livestock value chains, and the programme contribution to each of these priorities, are as follows: (a) Contributing to "improved animal health", through support to private veterinary practitioners networks and public veterinary services for surveillance and control of TADs;(b)Contributing to "Improving the quality and quantity of feed" through capacity building of producers, promotion of forage trees and other fodder varieties for small ruminants, support to feed manufacturers and facilitation of business partnerships between producers and feed millers; and (c)Enhancing/upgrading the marketing and processing facilities for meat and eggs, including the cold chain.

156. Moreover, the programme's incentives to introduce climate-smart technologies in small livestock infrastructure meets the targets of the National Strategy on Climate Change and Low-Carbon Development (NCCLCD), particularly to achieve Category 2 energy security and support the development of green industry and services.

157. The graduation pathway foreseen in Component 1 is fully aligned with the strong commitment of the National Food and Nutrition Policy (NF&NP) to solving food and malnutrition and preventing stunting in children under two years old. This comprehensive intervention, complemented by the specific support to youth entrepreneurship, responds well to the Rwanda

⁵⁸ The EDPRS 2 aims to raise GDP per capita to USD 1,000; reduce the percentage of the population living below the poverty line to less than 30%; and reduce the percentage of the population living in extreme poverty to less than 9%.

⁵⁹ The LMP was developed in 2017, following the implementation of a Livestock Sector Analysis (LSA) 2017. The LMP covers a five-year period (2017-2022) and comprises of six sub-sectorial master plans for dairy, red meat, chicken and pork. For small livestock specifically, a strategy and investment plan for small animal industry was developed in 2012 but has now expired and would require a review and update.

Youth Strategic Plan, the National Gender Policy, and in particular the Agriculture Gender Strategy aiming to address the challenges faced by women and youth through a comprehensive joint approach.

158. Alignment to IFAD strategic objectives: The programme will directly contribute to the two COSOP SOs. To SO1 "sustainably increase agricultural productivity in priority food and export value chains and improve livelihoods and resilience of the rural population" through activities aiming at intensifying small livestock production and strengthening their resilience against sanitary, climatic or economic shocks. It will also contribute to SO2 "improve post-harvest processes, strengthen market linkages and generate economic opportunities for men, women and youth in rural areas" through promotion of partnership mechanisms improving the inclusion of smallholders in the value chains.
159. **Partnerships:** In addition to its unique internal partnership arrangements, PRISM will also strive to avoid duplication and ensure harmonization and complementarity with other projects and programmes. Strong opportunities for synergies have been identified with the Feed the Future Rwanda/ USAID funded project "Orora Wihaze" which will sustainably increase the availability of, access to, and consumption of animal-source foods (ASF) through development of a profitable market.

F. Costs, benefits and financing

1. Programme costs

160. The total PRISM investment and incremental recurrent costs, including physical and price contingencies, are estimated at USD 45.64 million (RWF 41.07 billion). The table below presents a table with the breakdown of the costs by components. The investment in Component 1(Climate-smart intensification of small production systems) in base costs stands at USD 20.65 million (42% of total base costs); Component 2 (Support to small livestock value chain development) in base costs totals USD 19.40 million (29% of total base costs) and Component 3 (Policy and regulatory support and Coordination) in base costs amounts to USD 5.59 million (11% of base costs), of which Programme Coordination accounts for USD 2.79 million (6.1% of total base costs). In addition to the total base costs of USD 45.38 million, price and physical contingencies amounting to USD 0.26 million have been provided for. The input currency in cost tables was set as USD minimizing the effect of local inflation.

161. Table 1: Project/Programme cost summary by component

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Rwanda								%	% Total
Project For Inclusive Small Livestock Markets								Foreign	Base
Components Project Cost Summary		(Rwf Million)			(US\$ '000)				
		Local	Foreign	Total	Local	Foreign	Total	Exchange	Costs
A. Climate- smart intensification of small production systems									
1. Social mobilization and graduation of vulnerable households		6 299	3 495	9 794	7 118	3 949	11 067	36	24
2. Improve animal health and genetic potential		1 454	183	1 637	1 643	207	1 850	11	4
3. Support climate smart innovations		237	102	339	268	115	383	30	1
4. ENABEL other investments under component 1		3 888	2 592	6 481	4 394	2 929	7 323	40	16
Subtotal		11 879	6 372	18 251	13 422	7 200	20 622	35	45
B. Support to small livestock value chain development									
1. Productive alliances with input suppliers		7 336	1 172	8 508	8 289	1 325	9 614	14	21
2. Market facilitation through support to oftakers		1 740	595	2 335	1 967	672	2 639	25	6
3. Support to financial institutions		611	345	956	690	389	1 080	36	2
4. ENABEL other investments under component2		3 114	2 076	5 191	3 519	2 346	5 865	40	13
Subtotal		12 802	4 188	16 990	14 465	4 732	19 198	25	42
C. Policy and regulatory support									
1. Policy support		582	135	717	658	152	810	19	2
2. Project cordination		2 264	172	2 437	2 559	195	2 753	7	6
3. ENABEL contribution under coordination		882	882	1 763	996	996	1 992	50	4
Subtotal		3 728	1 188	4 917	4 213	1 343	5 556	24	12
Physical Contingencies		28 409	11 749	40 158	32 100	13 275	45 376	29	100
Price Contingencies		26	5	31	30	6	35	16	-
Total PROJECT COSTS		752	130	882	197	34	231	15	1
		29 187	11 883	41 071	32 327	13 315	45 642	29	101

162. PRISM will be financed by: (i) the GoR with USD 3.31 million (about 7.3% of total costs), (ii) Districts with USD 0.66 million (about 1.4% of total costs), (iii) IFAD with USD 14.90 million (about 32.7% of total costs, under the current PBAS-IFAD11), (iv) ENABEL with USD 17.4 million (about 38.2% of total costs), (v) Banks with USD 1.29 million (about 2.8% of total costs), (vi) Heifer International with USD 4.68 million (about 10.2% of total costs), (vii) Beneficiaries with USD 2.38 million (about 5.2% of total costs), and (viii) private sector with USD 0.99 million (about 2.2% of total costs).

163. Table 2: Programme/project costs by component (and sub-components) and financier (Thousands of United States dollars)

Components by Financiers		Local											
(US\$ '000)		GoR	IFAD 11	ENABEL	Credit	Heifer	District	Beneficiaries	Private sector	Total	For.	(Excl. Duties & Taxes)	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	For. Exch.	(Excl. Taxes)	
A. Climate- smart intensification of small production systems													
1. Social mobilization and graduation of vulnerable households		-0	-	6 009	54.3	-	-	4 677	42.3	-	-	11 067	24.2
2. Improve animal health and genetic potential		39	2.1	1 256	67.2	248	13.3	-	-	326	17.4	-	-
3. Support climate smart innovations		18	4.7	345	88.9	25	6.4	-	-	-	-	388	0.8
4. ENABEL other investments under component 1		-	-	-	-	7 323	100.0	-	-	-	-	7 323	16.0
Subtotal		57	0.3	7 610	36.9	7 596	36.8	-	-	4 677	22.7	326	1.6
								380	3.4	-	-	20 647	45.2
								-	-	-	-	7 205	13.384
													57
B. Support to small livestock value chain development													
1. Productive alliances with input suppliers		2 920	30.0	2 303	23.6	818	8.4	1 289	13.2	-	-	330	3.4
2. Market facilitation through support to oftakers		66	2.4	1 256	46.4	615	22.7	-	-	-	-	718	26.6
3. Support to financial institutions		111	10.2	777	71.4	100	9.2	-	-	-	-	101	9.3
4. ENABEL other investments under component2		-	-	-	-	5 865	100.0	-	-	-	-	-	-
Subtotal		3 096	16.0	4 336	22.3	7 399	38.1	1 289	6.6	-	-	330	1.7
								1 959	10.1	993	5.1	19 403	42.5
								-	-	-	-	4 762	14.333
													307
C. Policy and regulatory support													
1. Policy support		2	0.2	330	40.5	443	54.3	-	-	-	-	815	1.8
2. Project cordination		158	5.7	2 628	94.3	-	-	-	-	-	-	2 786	6.1
3. ENABEL contribution under coordination		-	-	-	-	1 992	100.0	-	-	-	-	1 992	4.4
Subtotal		159	2.8	2 958	52.9	2 435	43.5	-	-	-	-	5 593	12.3
Total PROJECT COSTS		3 312	7.3	14 904	32.7	17 430	38.2	1 289	2.8	4 677	10.2	656	1.4
								2 380	5.2	993	2.2	45 642	100.0
								-	-	-	-	13 315	31 804
													523

164. Table 3: Programme/project costs by expenditure category and financier (Thousands of United States dollars)

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Rwanda Project For Inclusive Small Livestock Markets Expenditure Accounts by Financiers (US\$ '000)														Total			
	GoR		IFAD 11		ENABEL		Credit		Heifer		District		Beneficiaries		Private sector	Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
I. Investment Costs																	
A. Works	64	5,0	1 227	95,0	-	-	-	-	-	-	-	-	-	-	1 291	2,8	
B. Vehicles	45	37,8	75	62,2	-	-	-	-	-	-	-	-	-	-	120	0,3	
C. Equipment and Materials	8	20,0	34	80,0	-	-	-	-	-	-	-	-	-	-	42	0,1	
D. Goods Services and inputs																	
Contingency Fund	-	-	503	100,0	-	-	-	-	-	-	-	-	-	-	503	1,1	
Goods and inputs	18	0,2	3 769	46,4	1 303	16,0	-	-	-	-	2 339	28,8	700	8,6	8 130	17,8	
Services	62	0,9	1 938	29,8	654	10,1	-	-	3 497	53,8	218	3,3	41	0,6	94	1,4	
Subtotal	80	0,5	6 210	41,0	1 957	12,9	-	-	3 497	23,1	218	1,4	2 380	15,7	794	5,2	
E. Credit and Guarantee funds	-	-	-	-	-	-	1 289	100,0	-	-	-	-	-	-	1 289	2,8	
F. Grants and subsidies	2 789	100,0	-	-	-	-	-	-	-	-	-	-	-	-	2 789	6,1	
G. Consultancies	164	8,3	1 437	72,6	180	9,1	-	-	-	-	-	-	-	-	200	10,1	
H. Training	142	2,3	4 314	69,7	112	1,8	-	-	1 180	19,1	439	7,1	-	-	-	6 187	13,6
I. ENABEL Virtual/ Other costs	-	-	-	-	13 188	100,0	-	-	-	-	-	-	-	-	13 188	28,9	
Total Investment Costs	3 293	7,8	13 297	31,6	15 438	36,7	1 289	3,1	4 677	11,1	656	1,6	2 380	5,7	993	2,4	
II. Recurrent Costs																	
A. Salaries	-	-	1 438	41,9	1 992	58,1	-	-	-	-	-	-	-	-	3 430	7,5	
B. Operating costs	19	10,3	169	89,7	-	-	-	-	-	-	-	-	-	-	188	0,4	
Total Recurrent Costs	19	0,5	1 607	44,4	1 992	55,1	-	-	-	-	-	-	-	-	3 619	7,9	
Total PROJECT COSTS	3 312	7,3	14 904	32,7	17 430	38,2	1 289	2,8	4 677	10,2	656	1,4	2 380	5,2	993	2,2	
															45 642	100,0	

165. Table 4: Programme/project costs by component and year
 (Thousands of United States dollars)

Project For Inclusive Small Livestock Markets Project Components by Year -- Base Costs (US\$ '000)														Base Cost
	Y1	Y2	Y3	Y4	Y5	Total								
A. Climate- smart intensification of small production systems														
1. Social mobilization and graduation of vulnerable households	1 274	2 744	3 282	3 227	541	11 067								
2. Improve animal health and genetic potential	747	552	365	185	2	1 850								
3. Support climate smart innovations	168	125	90	-	-	383								
4. ENABEL other investments under component 1	1 465	1 465	1 465	1 465	1 465	7 323								
Subtotal	3 653	4 885	5 201	4 876	2 008	20 622								
B. Support to small livestock value chain development														
1. Productive alliances with input suppliers	2 191	2 293	2 447	1 800	883	9 614								
2. Market facilitation through support to offtakers	137	599	962	774	166	2 639								
3. Support to financial institutions	152	464	275	189	-	1 080								
4. ENABEL other investments under component2	1 173	1 173	1 173	1 173	1 173	5 865								
Subtotal	3 653	4 530	4 858	3 936	2 222	19 198								
C. Policy and regulatory support														
1. Policy support	30	205	175	280	120	810								
2. Project coordination	684	324	439	626	681	2 753								
3. ENABEL contribution under coordination	398	398	398	398	398	1 992								
Subtotal	1 113	927	1 013	1 304	1 199	5 556								
Physical Contingencies	8 418	10 342	11 071	10 115	5 428	45 376								
Price Contingencies														
Inflation														
Local	63	187	254	190	147	842								
Foreign	2	7	10	9	6	34								
Subtotal Inflation	65	194	264	199	154	876								
Devaluation	-48	-142	-194	-146	-114	-645								
Subtotal Price Contingencies	17	52	70	53	39	231								
TOTAL	8 435	10 403	11 157	10 177	5 469	45 642								
Taxes	156	137	119	69	42	523								
Foreign Exchange	2 209	2 873	3 262	3 170	1 802	13 315								

166. In PRISM, Sub-components 1.1., 1.2. and 2.2. partially contribute towards IFAD climate change adaptation finance, and Sub-component 1.4 is counted in full as IFAD adaptation finance. The total amount of IFAD climate finance for PRISM is preliminarily calculated as US\$1,334,673, representing 9% of the total programme amount.

2. Programme financing/ co-financing strategy and plan

167. PRISM has been designed to leverage co-financing of IFAD financing to the tune of USD 30.74 million as follows:

ENABEL	GoR	Financial institutions	Heifer	Districts	Beneficiaries	Private sector	Total Cofinancing
Amount (USD '000)	Amount (USD '000)	Amount (USD '000)	Amount (USD '000)	Amount (USD '000)	Amount (USD '000)	Amount (USD '000)	
17,430	3,312	1,289	4,677	656	2,380	993	30,738

168. As ENABEL funded interventions will target more commercially mature producers and larger value chain actors, IFAD funded interventions will focus on smallholder farmers, vulnerable households and youth groups. Combining 100% of IFAD's and Heifer's funding, relevant portion of ENABEL's funding and part of contributions by beneficiaries, approximately US\$21 million (45%) of the total project cost will be used to support the most vulnerable households.

3. Disbursement

169. **Nature of programme eligible expenditures** - PRISM expenditure categories have been allocated in accordance with the standard Flexcube expenditure categories. Eligible expenditures include the following expenditure categories: (i) Works, (ii) Vehicles, (iii) Equipment and Materials, (iv) Goods, services and inputs, (v) Credit and guarantee funds, (vi) Consultancies (vii) Training, (viii) Salaries & operating costs. Detailed cost tables are presented in Annex 4 . Transaction-based disbursement procedures will be used. Other methods of disbursement will include direct payments, special commitments, and reimbursements. Details concerning disbursement methods will be detailed out in the letter to the borrower, and IFAD's disbursement handbook. The Fund will provide an initial advance with a ceiling equivalent to expenditure for the first six-months of the AWPB. Subsequently, the implementing entities will submit their Statements of Expenditures (SoE) and the Fund will process the withdrawal applications and deposit funds into the designated account.

G. Summary of financial and economic analysis

170. **Financial Analysis:** Ten enterprise models have been used to estimate the increase in incomes at household level as a result of proposed programme investment. These have been arranged by category of beneficiaries as follows: (i) Vulnerable households undergoing the graduation pathway; (ii) Youth and (iii) Productive Alliance beneficiaries. All the models show positive returns as shown in the tables below.

A)		Farm models' net incremental benefits (in 'RWF 000)										
		Graduation Pathway Models					Youth Packages				Productive Alliance Packages	
		Poultry	Swine	Sheep	Goat	Pig breeding	Pig fattening	250 broilers	250 layers	Pig fattening	100 broilers	500 layers
PY1	(101)	(529)	(344)	(344)	(903)	(2,167)	(2,569)	(2,513)	(2,167)	(1,114)	(2,207)	
	84	586	74	74	1,242	1,496	1,477	712	1,496	68	439	
	84	329	114	114	1,242	641	1,693	712	641	454	439	
	86	320	132	132	1,233	611	1,693	712	611	454	439	
	86	329	114	114	1,242	641	1,693	712	641	454	439	
	86	329	132	132	1,242	641	1,909	712	641	541	439	
	86	320	114	114	1,242	611	1,909	712	611	541	439	
	71	329	132	132	1,233	641	1,759	562	641	391	289	
	86	329	114	114	1,242	641	1,909	712	641	541	439	
	86	227	132	132	992	111	1,909	712	111	541	439	
	86	329	114	114	1,242	641	1,559	362	641	191	89	
	86	329	132	132	1,233	641	1,909	712	641	541	439	
	86	320	114	114	1,242	611	1,909	712	611	541	439	
	86	329	132	132	1,242	641	1,909	712	641	541	439	
	86	329	114	114	1,242	641	1,909	712	641	541	439	
	71	329	114	114	1,233	641	1,759	712	641	391	439	
	86	329	114	114	1,242	641	1,909	712	611	541	439	
	86	329	114	114	1,242	641	1,909	712	641	541	439	
	86	299	114	114	983	611	1,484	712	611	371	439	
IRR		84%	84%	32%	32%	137%	40%	64%	27%	40%	33%	18%
NPV (RWF'000)		625	2,473	678	678	9,599	3,904	12,755	3,548	3,904	2,707	1,494
FIRR'000 (@ 8.5%)		625	2,473	678	678	9,599	3,904	12,755	3,548	3,904	2,707	1,494

B)		PROGRAMME COSTS AND INDICATORS FOR LOGFRAME								
		TOTAL PROGRAMME COSTS (in million USD)			32	Base costs	32			
Beneficiaries		115,962	people		26,355	Households				
Cost per beneficiary		276	USD x person			1,213	USD x HH			
Components and Cost (USD million)				Average increase in rural income per capita				WOP (Rwf)	MTR	End-target
Climate- smart intensification of small production systems		20.5		Average return to labour RWF			2000,000	2,512		2,512
Support to small livestock value chain development		8.3		Increase of assets ownership of participating households				15%		26%
Policy and regulatory support		3.2								

C)		MAIN ASSUMPTIONS & SHADOW PRICES ¹								
		Output			Yields (Annually)		Price (RWF)			
FINANCIAL	Layers (from 500 layers per cycle)		No. Birds		5,650		2,600			
	Backyard chicken (From 10 birds under graduation pathway)		no. birds		16		5,000			
	Broilers (from 250 Broilers per cycle)		No. Birds		1,138		700			
	Pig Breadning		Live weight of so		1,425		3,000			
	Pig Fattening		No of sold Anim		19		130,000			
	Goats (graduation pathway)		No. of sold Goat		7		15,714			
	Sheep (graduation pathway)		No.of sold Sheep		6		83,042			
ECONOMIC	Swine (graduation pathway)		No. of sold Swine		6		117,000			
	Poultry (Graduationpathway)- from a package of 10 hens		Vol of eggs		1,500		90			
	Official Exchange rate (OER)			980			Disc. rate (opp. cost of capital)		8.5%	
	Shadow Exchange rate (SER)			820.00			Social Discount rate		8.5%	
	Standard Conversion Factor				1.20		Output conversion factor		0.085	
	Labour Conversion factor \3			0.86			Input Conversion factor		0.085	

171. PRISM will support 26,355 households (115,962 individuals) as follows:

D)		BENEFICIARIES AND PHASING								
			PY1	PY2	PY3	PY4	PY5	PY6	Total	
Graduation pathway	hh	7,500	8,000	7,900	-	-	-	-	23,400	
Youths	hh	575	605	350	-	-	-	-	1,530	
Productive alliance	hh	110	500	600	215	-	-	-	1,425	
TOTAL		8,185	9,105	8,850	215	-	-	-	26,355	

172. **Economic analysis:** The overall Economic Internal Rate of Return (EIRR) of the Programme is estimated at 26% (base case) which is above the opportunity cost of capital in Rwanda estimated at 9.5% based on long term bonds rates of returns, indicating the economic convenience of the Programme. This is after factoring prudent mortality rates and own consumption in the respective models.

E. OVERALL ECONOMIC ANALYSIS

Project year	NET INCREMENTAL BENEFITS				COSTS			Cash flow
	Graduation pathway	Youth package	Productive alliances	Total Net Inc. Benefits	Economic Costs ('RWF 000)	Economic O&M Costs * ('RWF 000)	Total Incremental Costs	
PY1	(2,630,688)	(1,363,850)	(186,905)	(4,181,443)	1,903,368 2,628,564 2,922,158 2,517,063 856,693	1,903,368 2,628,564 2,922,158 2,517,063 856,693	1,903,368	(6,084,811)
PY2	(588,634)	(670,555)	(817,392)	(2,076,581)			2,628,564	(4,705,144)
PY3	98,500	468,340	(738,638)	(171,798)			2,922,158	(3,093,956)
PY4	3,475,613	1,654,902	317,755	5,448,271			2,517,063	2,931,207
PY5	3,406,938	1,548,214	750,611	5,705,764			856,693	856,693
PY6	3,489,126	1,591,564	722,543	5,803,233			-	4,849,071
PY7	3,380,676	1,634,689	742,793	5,758,158			0	5,803,233
PY8	3,489,126	1,596,027	746,543	5,831,695			0	5,758,158
PY9	3,365,376	1,596,027	711,011	5,672,414			0	5,831,695
PY10	3,251,526	1,545,002	691,511	5,488,039			0	5,672,414
PY11	3,317,376	1,435,002	640,261	5,392,639			0	5,488,039
PY12	3,396,126	1,441,027	541,011	5,378,164			0	5,392,639
PY13	3,400,926	1,586,027	591,511	5,578,464			0	5,378,164
PY14	3,489,126	1,656,252	714,261	5,859,639			0	5,578,464
PY15	3,390,126	1,656,252	763,511	5,809,889			0	5,859,639
PY16	3,426,376	1,630,527	759,911	5,816,814			0	5,809,889
PY17	3,285,926	1,626,027	738,611	5,650,564			0	5,816,814
PY18	3,302,876	1,641,252	735,011	5,679,139			0	5,650,564
PY19	3,340,376	1,656,252	752,261	5,748,889			0	5,679,139
PY20	3,172,110	1,564,777	758,011	5,494,898			0	5,748,889
NPV@ 9.5% ('RWF 000)							21,484,574	
NPV@ 9.5 % ('000 USD)							21,484,574	
EIRR								26%

173. A sensitivity analysis was carried out to assess the likely impact of a variation of some key factors on the economic return of the programme. It indicates a strong resilience to increases of costs and reductions of benefits which mirror the PRISM risk profile. The programme would still yield an EIRR of respectively 25% and 24% if benefits were reduced by 10% and 20%. In the extreme case of benefits being reduced by 50%, the EIRR would establish at 17%, a value above the social discount rate.

F)		
SENSITIVITY ANALYSIS (SA)		
	IRR	NPV (RWF 000)
base scenario	26%	21,484,574
costs +10%	25%	20,639,458
costs +20%	24%	19,794,342
costs +50%	21%	17,258,994
benefits +10%	27%	24,478,147
benefits +20%	28%	27,471,720
benefits -10%	25%	18,491,000
benefits -20%	23%	15,497,427
benefits -50%	17%	6,516,707

174. Additional benefits: In addition to benefits perceived by the 26,355 programme beneficiaries, the broader rural community in the 3 targeted regions (apprx. 1.5 M people) will also indirectly benefit from the programme's animal health and improved husbandry interventions, which has not been quantified in the EFA.

H. Exit Strategy and Sustainability

175. A draft exit strategy is detailed in Annex 10. In order to take account of lessons learned on what works and what does not, the Programme's Exit Strategy will be further refined in the course of the Programme, while gradually shifting focus from sustaining programme benefits to scaling-up and scaling-out those benefits. The sustainability of the programme outcomes relies on its overall approach which is based in particular on the facilitation of partnerships, social mobilization and group formation, transfer of competences, institutional strengthening and durable financing, as further outlined below:
176. Public institutions will be supported to deliver their mandate in a more efficient and focused manner, through policy support and capacity building. The policy support provided to the Ministry of Agriculture will enable it to plan for the development of the sector in the long-term, and the targeted capacity building of staff will enable it to implement those plans. The support provided to stakeholders' umbrella organizations will prioritize the development of mechanisms and activities that could contribute to capacity building, income generation and thus sustainability.
177. The financing mechanisms put in place in the scope of the programme will privilege sustainability and will be based as a priority on existing and permanent financing mechanisms, either private or governmental. The programme will as much as possible avoid direct financing of investments and will privilege activities aiming at reconciling the demand in financial products and the supply. Financial institutions will be supported to develop adapted financial services for small livestock value chains farmers and other private actors, that they are expected to sustain and scale up after closure of the Programme.
178. The programme will promote production systems that are suitable to local agro-ecological zones and climatic conditions. Environmental efficiency and climate adaptation and mitigation of the selected value chains will be enhanced through the promotion of locally produced fodder and feed, the recycling of farm waste as well as the utilization of renewable sources of energy.

IV. Risks

A. Programme Risks and mitigation measures

179. A detailed integrated risk framework (IRF), is presented in Annex 14Annex 14, with the financial risks reviewed in detail in Section A.1.2. Financial management. Identified risks are either addressed in the programme design through a mitigation measure, or are externalized as Logical Framework indicators (see Annex 1), which (i) are expected to hold, and (ii) will be monitored during implementation so that additional mitigation measures may be taken if needs be. Some risks are reflected in a mitigation measure and as a Logical Framework assumption.
180. The overall risk profile is low to medium, including for financial and procurement risks which are considered as medium. The most important risks in terms of potential impact for the programme are:

Risk	Rating (Probability / Impact)	Mitigation Measure
Possible closure of export markets, or source of raw material for feed, due to geopolitical event or diplomatic	Medium	<ul style="list-style-type: none">Improving the organization of the supply of raw material for feed through support to local production, better coordination (bulk

crises		purchases) or storage, and diversification of markets (domestic/export, niche markets).
Sanitary crisis due to the emergence or introduction of a contagious and deadly animal disease affecting small livestock species.	Medium/High	<ul style="list-style-type: none"> Support to epidemiological surveillance and strengthening of contingency mechanisms including the disease contingency fund.
Most vulnerable households may not be able to keep animals over long periods and may be tempted to dispose them to cater for urgent and priority needs. This would lead to the impossibility for the programme to reach this important target group,	Medium	<ul style="list-style-type: none"> In order to avoid this, it will be crucial to envisage strengthening social capital of groups as a preliminary to placement of animals, as is foreseen in graduation pathway
The low bankability of small holders may lead to financing only those more fluent in the financial sector, and would derail the programme benefits to the less vulnerable people (elite capture).	Low	<ul style="list-style-type: none"> It will thus be critical to work with service providers with expertise in the promotion of the interests of the most vulnerable (such as Heifer International).
Inadequate technical, governance and institutional capacities at national and district level could lead to slow disbursement, lower programme benefits as well as delays in implementation.	Low	<ul style="list-style-type: none"> SPIU core staff will be backed by specific technical specialists, BDSPs, and Heifer's experience in supporting such projects/programmes. Supervision and implementation support missions, especially in years 1 and 2 will support focused programme implementation.

181. Preventing gender based violence in the agricultural sector: the programme will contribute to reducing any harmful act based on gender through: (i) sensitization on the importance of addressing GBV, application of IFAD's no tolerance for Sexual Harassment (SH) /Sexual Exploitation and Abuse (SEA) for programme staff and programme's activities and operations⁶⁰; (ii) map out and partner with GBV prevention and response actors in programme adjoining

⁶⁰ IFAD Policy on Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse (2018).

communities; (iii) have GBV risks adequately reflected in all safeguards instruments, contracts with suppliers and other third parties to be funded with IFAD funds.

B. Environment and Social category

182. The programme is considered to be an Environment and Social **category B**. The programme is not expected to have significant adverse environmental or social implications because of the nature of the small livestock systems that will be promoted by the programme.

183. The monogastric systems (pig and poultry) are mostly based on the utilization of concentrate feed, produced mainly from maize and soya, that are produced in family farming systems in the country and the region, and which do not have major environmental impacts. Besides, because of the limited dimension of the pig and poultry production units supported by the programmes, the valorization of waste in the crops fields of the farmer will be easy and will help in restoring soil fertility without leading to pollution. Finally, the will support the biogas technology for pigs, that will increase the value of manure and limit its environmental impact.

184. The small ruminants systems promoted by the programme under the Heifer graduation pathway, will have a very limited scale (less than 5 animals per family) and will be based on zero grazing production itineraries, which is a common practice in Rwanda. Zero grazing increases the production of manure, hence contributing to improving fertility and combatting erosion, and it also prevents the animals from damaging the vegetal cover when grazing. The programme will also promote the use of agroforestry techniques for the small ruminant farmers, in order to produce quality feed in a way that do not impinge on the family food production, and that at the same time preserves fertility and combats erosion. Finally, the programme will attenuate the negative impact of small livestock on water resources by promoting affordable and durable water harvesting technologies.

185. The respective environmental impact of each small livestock farming system is further detailed in the Annex 5 on Social, Environment and Climate Assessment (SECAP) Review note, and more specifically within Table 2 on Mainstreaming environmental management best practices and climate smart along small livestock value chains as well as in the section 8 related to Monitoring and Evaluation.

C. Climate Risk classification

186. In the north-west highlands and south-western regions, climate change is expected to increase mean rainfall as well as intensities and number of rainy days⁶¹. In various climate projections scenarios, northern highlands and southwest regions will more likely experience extreme events such as floods and landslides. However, climate change should have a limited impact on the small livestock production systems promoted by the programme: first because monogastric systems mostly rely on animal feed produced outside the farm, for which alternative sourcing can be found in case of localised weather incident; concerning the small ruminants, their resilience to climate shocks is well known and they can easily accommodate periods of water or feed scarcity with limited impact on their productivity. Adding small stock to a production system even reinforces the resilience of the small system to climate variability, because they are typically the kind of assets that can be disposed in case of drought to buy food on the market.

187. The main climate related risk that could affect the programme would be the emergence or re-emergence of a climate related disease, in particular a vector borne disease such as the Rift

⁶¹ GoR, 2018.

Valley fever or anthrax which re-emerges periodically in Rwanda after heavy rains and flooding. This risk will be mitigated by the strengthening of epidemio-surveillance systems and disease contingency planning, that will enable rapid and adequate response in case of outbreak of climate sensitive disease.

188. Emission intensities for small livestock are lower than for dairy cow and beef production systems (Globally, GHG emissions from small ruminants represent 6.5% of the sector's global emissions, pork represents 9%, and chicken 8%). GHG emissions will however be mitigated by the installation of biogas units both at production and slaughtering/processing level. Because processing of animal products will increase energy consumption as well as production of animal waste, the programme will in response promote energy efficiency through adoption of renewable energy such as biogas and solar energy.

Considering the abovementioned elements, the programme's climate risk classification is considered moderate.

V. Implementation

A. Organizational Framework

1. Programme management and coordination

189. **Programme implementation:** The partnership programme will be implemented through the Single Project Implementation Unit (SPIU), under Rwanda Agriculture and Animal Resources Development Board⁶². The IFAD and ENABEL supported interventions will be managed by a single programme management team, co-financed by both partners, and placed under the coordination of the SPIU coordinator.

190. The programme staff, in charge of IFAD supported interventions, to be financed by IFAD will be composed of Programme Operations Manager, Livestock Specialist, Finance Specialist, Programme Accountant, M&E Officer and Procurement Officer⁶³ in the SPIU, to be supported by existing SPIU staff on the crosscutting aspects⁶⁴ as well as district Programme Coordinators and district Focal Points. The programme staff, to be financed by ENABEL, will be an international technical assistant, livestock specialist, two Private sector experts (one international and one local expert), one livestock Specialist, one extension Specialist, one administrator, one finance & procurement specialist, and one accountant.

191. **Programme oversight:** In-line with the practice for other IFAD and ENABEL funded projects in Rwanda, a common Programme Steering Committee (PSC) will be established. The PSC will be chaired by the PS, MINAGRI, and it will play an oversight and coordination role, which is particularly critical because of the specific setup of the programme. The main responsibilities of the PSC will be to provide policy guidance and orientations at national level, to assess the implementation progress of the programme, to approve AWPB and progress reports and to decide on corrective measures where appropriate. The PSC will meet at least four times a year. Detailed Terms of Reference (ToRs) and membership of the PSC are included in the PIM.

⁶² Rwanda Agriculture and Animal Resources Development Board is under the aegis of MINAGRI.

⁶³ There will be no agribusiness specialist in IFAD team since there are already two in ENABEL team, and since these aspects are more under the responsibility of ENABEL.

⁶⁴ Animal Health, Gender, KM and Communication, Nutrition, Climate Change and Environment, and Cooperative Development

192. There will also be a Programme Technical Coordination Committee (PTCC), which will address technical and implementation issues, including those related to the coordination between partners and alignment between interventions will be composed of all implementation partners. It will be chaired by RAB. The PTTC will meet on a quarterly basis, one month ahead of the PSC meetings.
193. **Partnerships:** PRISM will create partnerships with decentralized entities in order to cover/finance activities(e.g. vaccination campaigns, epidemio-surveillance, and nutrition awareness campaigns), which are under the Districts. Same partnerships will be created with relevant GoR specialized technical agencies, such as the Rwanda Standard Board, Agriculture and Livestock Inspection and Certification Services, and Rwanda Cooperative Agency. In particular, the programme will be engaged in a partnership with Heifer International, which will be a co-financier and a key implementing partner. A global Memorandum of Understanding (MoU) will be signed between MINAGRI and Heifer International while a detailed annual AWPB reflecting activities to be implemented by Heifer International and related costs (including its own co-financing) will be developed every fiscal year.

2. Financial Management, Procurement and Governance

a) Procurement risk assessment.

194. **Overarching Country Assessment:** Rwanda made substantial progress in developing the legal and regulatory framework by enacting a public procurement law in 2007 (Law No. 12/2007 of 27/03/2007) - as revised in 2013. The decree, with the associated Regulations, also established the Rwanda Public Procurement Authority (RPPA) as a regulatory body, replacing the then existing National Tender Board (NTB). According to the law, the RPPA only exercises regulatory functions, and all procurement processes have been devolved to government procuring entities (Ministries and projects). The procurement regulations require the procuring entities (PEs) to undertake procurement planning and stipulate the nature and responsibilities of the Tender Committee and who is eligible to be in the tender committee. The Government has also adopted the use of national Standard Bidding Documents (SBDs), and these are all published on the RPPA website for public use. In addition, RPPA has prepared a Standard Manual for Public Procurement (Public Procurement User Guide) for the benefit of procuring entities, and it sets out all the public procurement guidelines, procurement methods to be applied and the thresholds.

195. **PEFA assessment.** The 2016 PEFA assessed the effectiveness of the procurement systems, which was deemed to be aligned to international standards and acceptable to IFAD. The only limitation relating to procurement was on 'public access to procurement information', which has now been addressed with the 'E-procurement' system. It is an online portal and a point of access for Rwanda PEs, allowing the negotiation of better contractual terms and to realize savings and achieve value for money. It enhances transparency and standardization of electronic documents, supplier registration, authentication of information and streamlines all elements of public procurement transactions. The SPIU is now registered into the E-procurement system, where the procurement plan is uploaded, and all procurement related actions are posted online for interested parties to view.

b) Procurement arrangements.

196. Each of the two partners will have its own procurement and its own procurement officer unit in order to follow the respective requirements of ENABEL and IFAD which are different on some aspects. The overall procurement responsibility will be under RAB, but the Rwanda procurement Law allows for the delegation of the procurement function by the Accounting officer to a Procuring Entity (PE). In this regard, the SPIU is considered a PE, and will have delegated

authority from the DG RAB (herein referred to as the accounting officer) to undertake procurement processes. A procurement unit exists at the current SPIU and is composed of four experienced staff. The roles of the procurement unit include; Procurement planning, Preparation of bidding documents, Publication and distribution of invitation to bid, Receipt and safe keeping of bids, and Ensuring adequate contract execution in collaboration with the beneficiary department, among others. The accounting officer however retains the roles of approval of bid documents, approval of procurement evaluation reports and contract award, sign contracts, and to appoint a contract/programme manager.

197. **Staffing of the procurement unit.** The procurement unit at the SPIU is made up of four experienced staff that includes a head of department and one procurement officer attached to every project/programme within the SPIU. PRISM too will be required to recruit two procurement specialists for both IFAD and ENABEL financing in order to follow their respective procurement guidelines which are different on some aspects. However, the procurement officer attached to IFAD-funded PRICE is set to end his contract in June 2020 at completion of the programme, but given the experience and coupled with the institutional memory the employee has, the SPIU may consider retaining the same employee to take on the procurement role for PRISM. This will be done after undertaking a performance evaluation by the line manager.
198. **Internal Tender Committee.** The internal tender Committee is already in place. Appointment of members to the Tender Committee is the responsibility of the DG RAB. Currently, the Internal Tender Committee is made up of five members: Tea Specialist (Chairperson), Climate and Environment Specialist (Vice Chairperson), Access to Finance Specialist, Market Support Specialist, and a Procurement Officer (as the Secretary depending on the programme issuing the tender). Each member of the Tender Committee has a mandate of three years – renewable only once. Half of the internal Tender Committee cannot have their membership renewed at the same time. PRISM will use the same Tender Committee.
199. **Procurement arrangements for partners.** For financing that will be channeled through RAB/SPIU bank accounts, as far as possible, national procurement procedures will be applied, except for guidelines specific to ENABEL or IFAD e.g threshold for no objection requests and use of ICB for given thresholds. Special consideration, however, will be given to specialised activities mentioned in the project document which will be co-financed and implemented jointly with ENABEL, through VSFB as an implementing partner. As for funds that do not flow through PRISM bank accounts, co-financiers such as Heifer will apply own procurement guidelines.
- c) Financial Management.
200. **Summary of Financial Management arrangements.** The Borrower and the lead programme agency will be required to maintain acceptable financial management systems including accounting, financial reporting, and auditing systems for PRISM. A financial management assessment of PRISM was carried out in accordance with IFAD's Guidance Note on Undertaking Financial Management Assessment (FAM) at Design. The objective of FMA is to provide assurance that PRISM will be implemented within sound financial management practices (timely and efficient accounting systems), and punctual professional reviews, both internally (internal audit) and externally (external audit).
201. **Internal Audit.** The internal audit function exists within the SPIU, and is in line with the purpose, authority, and responsibility of the internal audit activity as laid down in the government Internal Audit (AI) Charter, and AI manual. A risk based internal audit action plan for SPIU – IFAD funded projects/programmes (for financial year 2017/18) as approved by the Chairman of MINAGRI Audit Committee exists and has been fully executed.

202. **External Audit.** The current projects/programmes are all being audited by the Office of the Auditor General (OAG) as mandated under the Government Law. The Office has legal, financial and administrative autonomy, hence, while discharging its responsibilities, the Office is independent and does not receive any injunctions from other entities. The OAG has been a member of the International Organisation of Supreme Audit Institutions (INTOSAI) for the past twelve years, and the financial audit methodologies applied conform to international standards.

B. Planning, M&E, Learning, KM and Communication

203. Planning will be done jointly for the IFAD and ENABEL supported interventions in order to avoid overlapping and maximize complementarities and synergies. A single annual work plan and budget (AWPB) will be developed for the programme, which will articulate interventions under both financings. The start-up workshop will be a critical phase of the joint planning process, and sufficient time and resources will be allocated to this event.

204. The AWPB will be informed by an assessment of current implementation progress and will describe the strategic direction of the programme for the coming year along with results expected (targets) under each component and how those results will be achieved. This will be complemented by a resource plan, budget and risk analysis for each result. Previous year performance and challenges will be analysed to define review and adjust planning and generate lessons. The *AWPB will include plans for training and technical assistance, M&E, including the procurement plan for the year in question.* PRISM will have a common M&E system with a number of common indicators for both interventions, that will feed into MINAGRI's new management information system (MIS), IFAD's new Operational Results Management System (ORMS), and ENABEL "PILOT" system. The M&E system will collect, collate and analyse data, both qualitative and quantitative, to inform decision-makers and management about the programme progress against expected results, identify implementation bottlenecks and take timely corrective action when needed. M&E functions will be effectively supported by a Management Information System (MIS).

205. **Reporting.** Reporting will be done jointly by the two projects (funded by IFAD and ENABEL). The SPIU will develop standard collecting data tools and reporting templates that captured both quantitative and qualitative data for field staff in the Districts where small livestock project will intervene and for the SPs to use. The template will be aligned with the AWPB and the log frame indicators (output and outcome level). The report template should be aligned with the semi-annual and annual progress report and should include programme progress linked to the AWPB, the log frame progress, a snapshot of cumulative progress and lessons learned from previous years (challenges, solutions provided and results).

206. **Learning and knowledge management:** Cross-learning between IFAD and ENABEL-financed projects in Rwanda will be promoted by the SPIU through workshops/meetings to share knowledge and lessons learned on various topics such as M&E, FM, procurement, gender and youth, climate change and any other relevant area. South-South learning will be facilitated by conducting exchange visits across Heifer's portfolio in Kenya, Nepal, and Cambodia so Rwanda may benefit from successful models that Heifer is implementing in the region and in Asia.

207. The programme will collaborate with the Agricultural Information and Communication Centre (CICA) within MINAGRI to produce relevant knowledge products and ensure documentation of lessons learnt, best practices and success cases. Communication materials, such as press releases, extension materials, and radio spots will be prepared and distributed through a PRISM website and those of relevant Ministries, social media, local television, radio and other networks and used for policy dialogue. Factsheets will also be prepared to provide succinct summaries of lessons learned in the programme and shall have a wide circulation.

Relevant information from the programme MIS will be used to document lessons learnt, best practices and success stories. In addition, the MIS will include a specific module on KM.

208. **Innovation and scaling up:** PRISM will focus on innovation that have potential to be scaled up. This will include: (a) contingency mechanism to cope with an animal health crisis; (b) pilot hatcheries and chick breeding units producing improved dual-purpose chicken for backyard production, using renewable energy sources (solar), and managed by youth; (c) For the less vulnerable beneficiaries in poultry and pig value chains, PRISM will actively engage the private sector as a service provider, and in the case of broiler production as a final off-taker too; (d) financial Innovations, digitalization and insurance; (e) the graduation approach to the poorest households.

C. Implementation plans

209. The following actions are needed in order to ensure project readiness.

	Action	Responsible Party / Person	Target Date / Covenants
1	Undertake market assessments	Palladium/Heifer	End of 2019
2	Draft Letter of Intent between IFAD and ENABEL	IFAD and ENABEL	June 2019
3	Complete the SPIU staffing including the Project Operations Manager and other staff dedicated to PRISM on fixed-term performance-based contracts with clearly defined job descriptions and with proper segregation of duties.	Director General/RAB SPIU	Within first three months or as per agreement during negotiations
4	Update the PIM that should include a comprehensive financial management manual with a comprehensive project chart of accounts	SPIU/RAB	Within first three months of entry into force
5	Establish a PSC headed by the Permanent Secretary of MINAGRI.	PS/MINAGRI	Within three months of entry into force
6	Map the accounts codes and configure the chart field to meet the accounting and reporting requirements of project.	SPIU/RAB/IFMIS Team-MINECOFIN	Part of start-up activities and continuous

210. In order to improve start-up and early project performance through integration of PRISM funded activities and processes into RAB, IFAD will support a start-up workshop where RAB, the SPIU and all implementing partners will have a common understanding of the project implementation strategy. During start-up, the roles, responsibilities and accountability of all implementers will be clarified and agreed. Their capacities will be assessed and matched with required skills so that adequate capacity development plans can be prepared. Feedback mechanisms will be also developed to enable quick decisions on what to adapt and improve in a flexible output-oriented manner.

D. Supervision, Mid-term Review and Completion plans - Grievance redress mechanisms

211. **Programme supervision:** The programme will be supervised jointly by IFAD and ENABEL, in partnership with MINAGRI and in accordance with IFAD and ENABEL guidelines. Annual implementation support and supervision missions, followed initially by shorter follow-up missions six months later, will be organised every year during the programme's lifetime. Implementation support and supervision missions will not be conducted as a general inspection

or evaluation, but rather as an opportunity to assess achievements and lessons learnt, and to reflect upon ways to improve implementation and impact. In this context, the IFAD Livestock Development desk and ENABEL technical support teams at both HQ will provide continue technical backstopping support and through direct implementation support to the SPIU. IFAD will also be responsible for (i) reviewing withdrawal applications for IFAD proceeds; (ii) reviewing and approving requests for no-objection; (iii) monitoring compliance with the Financing Agreement, recommending remedies for any substantial non-compliance; and (iv) carrying out all other functions needed to administer the financing and supervise the programme.

212. **Reporting arrangements:** The SPIU will submit bi-annual progress reports according to a format acceptable to both IFAD and ENABEL. These reports will include physical and financial progress updates. Physical reporting will be made against a set of indicators based on the logframe. Financial reporting will be done against the approved budget.
213. **Mid-term review (MTR):** MINAGRI/RAB, ENABEL and IFAD shall jointly carry out an in-depth joint mid-term review no later than the third year of the programme based on the terms of reference prepared by the SPIU and approved by IFAD and ENABEL. Among other things, the MTR will consider the achievements of programme objectives and constraints t and recommend any reorientations that might be required. MINAGRI/RAB will ensure that the agreed actions at MTR are implemented within the agreed time frame.
214. **Programme completion:** After programme completion date and no later than the closing date, MINAGRI/RAB will carry out a programme completion report. In addition, the SPIU will conduct a programme impact evaluation in order to adequately inform the completion report.
215. **Grievance redress mechanisms (GRM):** Communities and individuals who believe that they are adversely affected by PRISM can submit complaints through the grievance redress mechanism of the programme. The mechanism ensures that complaints are promptly reviewed in order to address concerns related to PRISM (see full detailed description of GRM process in the PIM).

Annex 1: Logical framework

Results Hierarchy	Indicators				Means of Verification			Assumptions (A) / Risks (R)
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Outreach	1. Persons directly receiving services from the programme ⁶⁵			26,355 ⁶⁶	Programme records and progress reports	Yearly	SPIU and SPs	
	1a. Number of households (HHs) reached ⁶⁷			26,355				
	1b. Estimated corresponding total number of households members (average 4.4 pers. per HH)			115,962				
Programme Goal Contribute to reduce poverty and enhance resilience of poor rural people	2. Average increase in rural income per capita, derived from targeted value chains (COSOP indicator)	0	15%	25 ^{68%}	National statistics, household surveys poverty & gender studies	Y1, Y3 Y5	SPIU	Incomes increase through a combined effect of increased production and improved market access (A) Strong political leadership and support (A)
	3. Percentage increase of assets ownership of participating households	0	15%	25%	Baseline, mid & end line survey, Programme reports	Y1, Y3 and Y5	SPIU	Absence of natural disaster (A) Political and economic stability (A)
Development Objective Improved food and nutrition security and incomes of poor rural	4. Percentage of women reporting improved quality of their diets (MDD-W ⁶⁹)	0	30 %	75% ⁷⁰	Baseline, mid & end line survey (MDD-W),	Y1, Y3 and Y5		Poor rural people are willing to adopt innovative technologies and practices (also nutritional) (A)
	5. Number of people with improved access to markets	0	30%	80%	Baseline, mid & end line survey,	Y1, Y3 and Y5	SPIU	Households willing to increase

⁶⁵ 50% Female and 30% youth

⁶⁶ 24,300 beneficiaries of Heifer VBHCD model (pro-poor graduation pathway), + 1,530 rural youth + 1,425 Productive Alliances beneficiaries. Assumption: 1 Person/Household receives project support.

⁶⁷ 30% Women-headed households

⁶⁸ As per EFA

⁶⁹ Minimum Dietary Diversity Score for Women -

⁷⁰ Of total households reached

Results Hierarchy	Indicators				Means of Verification			Assumptions (A) / Risks
	(SDG 2.3 and 10.2) households through better performance of the targeted value chains							
Outcome 1: Small livestock farmers are socially, technically and economically empowered	6a.Number of vulnerable households graduated ⁷¹ from the Value Based Holistic Community Development (VBHCD) model	0	7,020	17,550 ⁷²	Outcome survey	Yearly from Y 2	SPIU	Vulnerable household willingness to participate and allocate time for the graduation programme.
	7.Productivity of small livestock production systems increased (COSOP indicator)	0	15%	30%	Outcome survey	Yearly from Y 3	SPIU	Absence of outbreak of major contagious animal disease (A). Small holders willing to keep the animal for production (A)
Output 1.1: Strengthened production skills of vulnerable rural households, women and youth	8a.Number of vulnerable households receiving a full package of capacity building ⁷³ and small livestock assets	0	10,000	23,400	Programme records and progress reports	Yearly	SPIU and SPs	Availability of adapted breeds, quality and healthy animals for placement in vulnerable households (A)
Output 1.2: Improved animal health and genetic potential	10a.Number of producers accessing animal health and breeding services (IFAD funded interventions' beneficiaries)		7,900	26,355	Programme records and progress reports	Yearly	SPIU and SPs	
Output 1.3: Response capacities to	11.Number of contingency plans developed or updated	0	2	4	Programme records and progress reports	Yearly	SPIU	Government able to mobilize its contribution to the contingency fund

⁷¹ In the context of VBHCD model, a household is considered to be graduated when it has achieved a living income. The benchmark for this in Rwanda is \$3,400. Once a household is achieving this annual salary, they will have sufficient resources to enable all members of the household to afford a decent standard of living and will be considered "graduated".

⁷² 40% (MTR) and 75% (end of project) of beneficiaries from the Heifer VBHCD model (50% women 30% youth)

⁷³ In the communities benefitting from the HBHCD model. The social mobilization full package will include community-based capacity building, saving mobilization, linkages to formal financial sector and markets, piloting of community-based mechanisms and nutrition and gender education. The project and the service provider will monitor the indicator also disaggregated by activity e.g. number of people receiving training on nutrition, gender, financial literacy, marketing etc.)

Results Hierarchy	Indicators				Means of Verification			Assumptions (A) / Risks
sanitary risks improved								
Output 1.4: Climate smart innovations promoted	12. Number of groups supported to sustainably manage natural resources and climate-related risks (CI 3.1.1)	0	500	1,320 ⁷⁴	Programme records and progress reports	Yearly	SPIU and SPs	
Outcome 2: Value chain actors access improved inputs, services and output markets	13a. Number of small livestock VC actors accessing improved inputs, services and output markets ⁷⁵ (IFAD beneficiaries)	0	6,390	15,910 ⁷⁶	Outcome survey Programme records and contractual agreement	Yearly from Y 3	SPIU	Financial service providers are available to support programme engagement with FIs (A)
	15. Number of rural producers' engaged in productive alliance with input suppliers	0 ⁷⁷	1,500	2,955				Sufficient number of private actors interested to be part of productive alliance (A)
Output 1.2: Unemployed rural youth participation in small livestock production enterprises increased	9. Number of youth benefitting from the start-up package	0	500	1,530 ⁷⁸	Programme records and progress reports	Yearly	SPIU and SPs	Local government will provide land to establish youth groups production units (A)
Output 2.3: Infrastructures rehabilitated, and	16. Number of slaughtering / processing / marketing facilities rehabilitated	0	Baseline: + 6 process.	Baseline: + 10 process.	Programme records and progress reports	Yearly	SPIU and SPs	Financial sector is willing to lend to private sector investing in food safety and improved

⁷⁴ 1,170 VBHCD beneficiaries + 150 youth groups

⁷⁵ Including 1,530 are from youth small livestock production cooperatives, 1,425 small holder farmers engaged in productive alliances, 9,720 vulnerable HH, 3,000 producers supplying improved processing facilities, 25 private entrepreneurs and 210 financing institutions

⁷⁶ 50 % women and 30% youth

⁷⁷ None of the targeted farmers are currently engaged in productive alliances

⁷⁸ 50% women

Results Hierarchy	Indicators				Means of Verification			Assumptions (A) / Risks
food safety and animal welfare improved	(CI 2.1.6)		+ 5 pig slaughter slabs + 8 markets	+ 7 pig slaughter slabs + 15 markets				animal welfare equipment (A)
Output 2.4: Smallholder access to financial services improved	17a. Number of persons in rural area accessing financial services (credit savings and payments from Banks, MFIs, SACCOs) (CI 1.1.5) under IFAD supported intervention	2,000 ⁷⁹	4,000	12,675 ⁸⁰	Programme records and progress reports	Yearly	SPIU and SPs	Financial institutions will be able to mobilize guarantee from BDF or upcoming Risk Sharing and Financing Facility (A)
Output 2.5: Small Livestock Multi-stakeholder Fora set up at both local and national level	18. Number of functioning Small Livestock Multi-stakeholder Fora supported (CI policy 2)	0 ⁸¹	3 ⁸²	6 ⁸³	Programme record and progress reports	yearly from Y3	SPIU	Value chains actors are willing to work together through the platforms (A)
Outcome3: Institutional and policy environment improved	19. Number of laws, regulations and strategies proposed to policy makers for approval, ratification or amendment (CI policy 3)	0	3	6	Programme records and progress reports	Yearly from Y3	SPIU	Strong political support from Minagri will continue (A)
Output 3.1: Small Livestock sector policies and regulations updated and enforced	20. Number of small livestock policy-relevant knowledge products completed (CI policy 1) ⁸⁴	0	2	5	Programme records and progress reports	Yearly	SPIU	

⁷⁹ Based on statistics, we assume that around 15 % of targeted beneficiaries are already benefitting from financial services

⁸⁰ Including 40% of vulnerable households, 100% of youth and 100% of smallholder farmers engaged in productive alliance

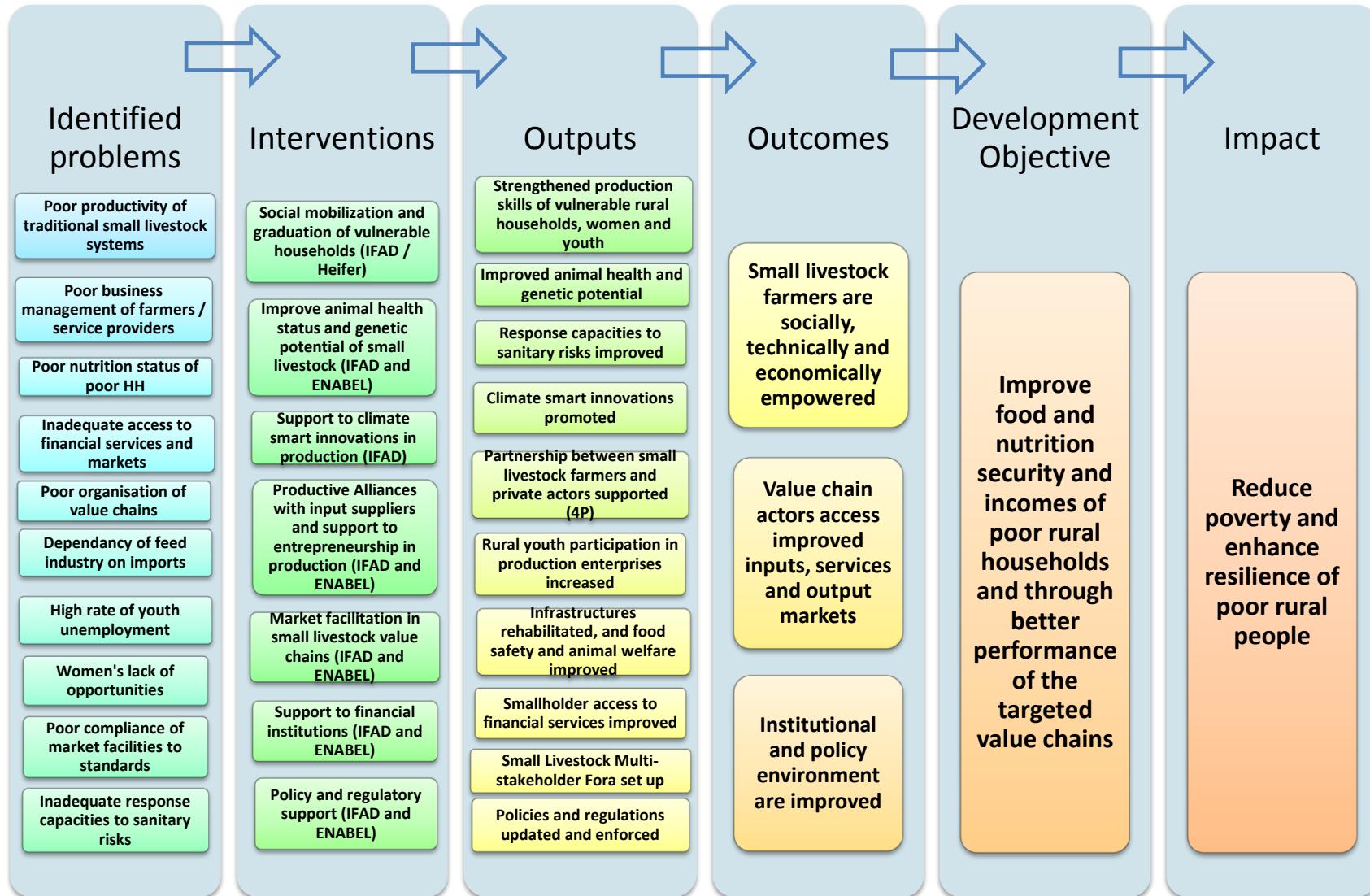
⁸¹ To be initiated when actors are actively mobilized

⁸² One multi-stakeholder forum per region

⁸³ These include 5 regional multi-stakeholder for a and 1 national small livestock multi-stakeholder forum

⁸⁴ 2 sector strategies and 3 regulatory frameworks

Annex 2 : Theory of Change



Annex 3: Project cost and financing: Detailed costs tables

1. Main Assumptions

1. **Contingencies.** The cost tab has been constructed in USD as the input currency. The Current Purchasing Power (CPP) approach has been used to estimate the effects of currency devaluation between the Rwanda Franc and the United States Dollar. Foreign Inflation was set at 2% while local price contingency at 5%. Physical contingencies are minimal given the nature of the project investments whereby maximum ceilings have been provided for the envisaged investment packages.
2. **Exchange Rate.** The Rwanda Franc to USD exchange rate is projected to stabilise around 885 during project implementation. This is the rate that has been used in the costab.
3. **Taxes and Duties.** VAT rate in Rwanda is at 18% and this has been used on the key standard rated project PRISM budget items. In addition, Import duties on finished goods are 25% while Raw Materials are at 0%. The GoR will finance or waive the tax elements in project transactions.

2. Project costs

4. The total PRISM investment and incremental recurrent costs, including physical and price contingencies, are estimated at USD 45.64 million (RWF 41.07 billion). The table below presents a table with the breakdown of the costs by components. The investment in Component 1(Climate-smart intensification of small production systems) in base costs stands at USD 20.65 million (42% of total base costs); Component 2 (Support to small livestock value chain development) in base costs totals USD 19.40 million (29% of total base costs) and Component 3 (Policy and regulatory support and Coordination) in base costs amounts to USD 5.59 million (11% of base costs), of which Project Coordination accounts for USD 2.79million (6.1% of total base costs). In addition to the total base costs of USD 45.38 million, price and physical contingencies amounting to USD 0.26 million have been provided for. The input currency in cost tables was set as USD minimizing the effect of local inflation.

Table 1: Project cost summary by component

Components Project Cost Summary	(RwF Million)			(US\$ '000)			Foreign Exchange	% Base Costs	% Total
	Local	Foreign	Total	Local	Foreign	Total			
A. Climate- smart intensification of small production systems									
1. Social mobilization and graduation of vulnerable households	6 299	3 495	9 794	7 118	3 949	11 067	36	24	
2. Improve animal health and genetic potential	1 454	183	1 637	1 643	207	1 850	11	4	
3. Support climate smart innovations	237	102	339	268	115	383	30	1	
4. ENABEL other investments under component 1	3 888	2 592	6 481	4 394	2 929	7 323	40	16	
Subtotal	11 879	6 372	18 251	13 422	7 200	20 622	35	45	
B. Support to small livestock value chain development									
1. Productive alliances with input suppliers	7 336	1 172	8 508	8 289	1 325	9 614	14	21	
2. Market facilitation through support to offtakers	1 740	595	2 335	1 967	672	2 639	25	6	
3. Support to financial institutions	611	345	956	690	389	1 080	36	2	
4. ENABEL other investments under component2	3 114	2 076	5 191	3 519	2 346	5 865	40	13	
Subtotal	12 802	4 188	16 990	14 465	4 732	19 198	25	42	
C. Policy and regulatory support									
1. Policy support	582	135	717	658	152	810	19	2	
2. Project cordination	2 264	172	2 437	2 559	195	2 753	7	6	
3. ENABEL contribution under coordination	882	882	1 763	996	996	1 992	50	4	
Subtotal	3 728	1 188	4 917	4 213	1 343	5 556	24	12	
Physical Contingencies	28 409	11 749	40 158	32 100	13 275	45 376	29	100	
Price Contingencies	26	5	31	30	6	35	16	-	
Total PROJECT COSTS	29 187	11 883	41 071	32 327	13 315	45 642	29	101	

5. PRISM will be financed by: (i) the GoR with USD 3.31 million (about 7.3% of total costs), (ii) Districts with USD 0.66 million (about 1.4% of total costs), (iii) IFAD with USD 14.90 million (about 32.7% of total costs, under the current PBAS-IFAD11), (iv) ENABEL with USD 17.4 million (about 38.2% of total costs), (v) Banks with USD 1.29 million (about 2.8% of total costs), (vi) Heifer International with USD 4.68million (about 10.2% of total costs), (vii) Beneficiaries with USD 2.38 million (about 5.2% of total costs), and (viii) private sector with USD 0.99 million (about 2.2% of total costs).

Table 2: Programme/project costs by component (and sub-components) and financier
 (Thousands of United States dollars)

Components by Financiers (US\$ '000)	Local																			
	GoR		IFAD 11		ENABEL		Credit		Heifer		District		Beneficiaries		Private sector		Total	For.	(Excl.	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	Exch.	Taxes)	Taxes
A. Climate- smart intensification of small production systems																				
1. Social mobilization and graduation of vulnerable households	-0	-	6 009	54,3	-	-	-	-	4 677	42,3	-	-	380	3,4	-	-	11 067	24,2	3 949	7 118
2. Improve animal health and genetic potential	39	2,1	1 256	67,2	248	13,3	-	-	-	-	326	17,4	-	-	-	-	1 869	4,1	211	1 620
3. Support climate smart innovations	18	4,7	345	88,9	25	6,4	-	-	-	-	-	-	-	-	-	-	388	0,8	116	253
4. ENABEL other investments under component 1	-	-	-	-	7 323	100,0	-	-	-	-	-	-	-	-	-	7 323	16,0	2 929	4 394	
Subtotal	57	0,3	7 610	36,9	7 596	36,8	-	-	4 677	22,7	326	1,6	380	1,8	-	-	20 647	45,2	7 205	13 384
B. Support to small livestock value chain development																				
1. Productive alliances with input suppliers	2 920	30,0	2 303	23,6	818	8,4	1 289	13,2	-	-	330	3,4	1 909	19,6	174	1,8	9 743	21,3	1 338	8 275
2. Market facilitation through support to offtakers	66	2,4	1 256	46,4	615	22,7	-	-	-	-	-	-	50	1,8	718	26,6	2 705	5,9	685	1 954
3. Support to financial institutions	111	10,2	777	71,4	100	9,2	-	-	-	-	-	-	-	-	101	9,3	1 089	2,4	393	585
4. ENABEL other investments under component2	-	-	-	-	5 865	100,0	-	-	-	-	-	-	-	-	-	5 865	12,9	2 346	3 519	
Subtotal	3 096	16,0	4 336	22,3	7 399	38,1	1 289	6,6	-	-	330	1,7	1 959	10,1	993	5,1	19 403	42,5	4 762	14 333
C. Policy and regulatory support																				
1. Policy support	2	0,2	330	40,5	443	54,3	-	-	-	-	-	-	41	5,0	-	-	815	1,8	153	661
2. Project cordination	158	5,7	2 628	94,3	-	-	-	-	-	-	-	-	-	-	-	-	2 786	6,1	198	2 430
3. ENABEL contribution under coordination	-	-	-	-	1 992	100,0	-	-	-	-	-	-	-	-	-	1 992	4,4	996	996	
Subtotal	159	2,8	2 958	52,9	2 435	43,5	-	-	-	-	-	-	41	0,7	-	-	5 593	12,3	1 347	4 087
Total PROJECT COSTS	3 312	7,3	14 904	32,7	17 430	38,2	1 289	2,8	4 677	10,2	656	1,4	2 380	5,2	993	2,2	45 642	100,0	13 315	31 804
																			523	

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Table 3: Programme/project costs by expenditure category and financier
 (Thousands of United States dollars)

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Expenditure Accounts by Financiers
 (US\$ '000)

	GoR		IFAD 11		ENABEL		Credit		Heifer		District		Beneficiaries		Private sector		Total		
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
I. Investment Costs																			
A. Works	64	5,0	1 227	95,0	-	-	-	-	-	-	-	-	-	-	-	-	1 291	2,8	
B. Vehicles	45	37,8	75	62,2	-	-	-	-	-	-	-	-	-	-	-	-	120	0,3	
C. Equipment and Materials	8	20,0	34	80,0	-	-	-	-	-	-	-	-	-	-	-	-	42	0,1	
D. Goods Services and inputs																			
Contingency Fund	-	-	503	100,0	-	-	-	-	-	-	-	-	-	-	-	-	503	1,1	
Goods and inputs	18	0,2	3 769	46,4	1 303	16,0	-	-	-	-	-	-	2 339	28,8	700	8,6	8 130	17,8	
Services	62	0,9	1 938	29,8	654	10,1	-	-	3 497	53,8	218	3,3	41	0,6	94	1,4	6 502	14,2	
Subtotal	80	0,5	6 210	41,0	1 957	12,9	-	-	3 497	23,1	218	1,4	2 380	15,7	794	5,2	15 135	33,2	
E. Credit and Guarantee funds	-	-	-	-	-	-	1 289	100,0	-	-	-	-	-	-	-	-	1 289	2,8	
F. Grants and subsidies	2 789	100,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 789	6,1	
G. Consultancies	164	8,3	1 437	72,6	180	9,1	-	-	-	-	-	-	-	-	-	200	10,1	1 981	4,3
H. Training	142	2,3	4 314	69,7	112	1,8	-	-	1 180	19,1	439	7,1	-	-	-	-	6 187	13,6	
I. ENABEL Virtual/ Other costs	-	-	-	-	13 188	100,0	-	-	-	-	-	-	-	-	-	-	13 188	28,9	
Total Investment Costs	3 293	7,8	13 297	31,6	15 438	36,7	1 289	3,1	4 677	11,1	656	1,6	2 380	5,7	993	2,4	42 023	92,1	
II. Recurrent Costs																			
A. Salaries	-	-	1 438	41,9	1 992	58,1	-	-	-	-	-	-	-	-	-	-	3 430	7,5	
B. Operating costs	19	10,3	169	89,7	-	-	-	-	-	-	-	-	-	-	-	-	188	0,4	
Total Recurrent Costs	19	0,5	1 607	44,4	1 992	55,1	-	-	-	-	-	-	-	-	-	-	3 619	7,9	
Total PROJECT COSTS	3 312	7,3	14 904	32,7	17 430	38,2	1 289	2,8	4 677	10,2	656	1,4	2 380	5,2	993	2,2	45 642	100,0	

Table 4: Programme/project costs by component and year
 (Thousands of United States dollars)

Project Components by Year – Base Costs (US\$ '000)	Base Cost					
	Y1	Y2	Y3	Y4	Y5	Total
	1 274	2 744	3 282	3 227	541	11 067
A. Climate- smart intensification of small production systems						
1. Social mobilization and graduation of vulnerable households	747	552	365	185	2	1 850
2. Improve animal health and genetic potential	168	125	90	-	-	383
3. Support climate smart innovations						
4. ENABEL other investments under component 1	1 465	1 465	1 465	1 465	1 465	7 323
Subtotal	3 653	4 885	5 201	4 876	2 008	20 622
B. Support to small livestock value chain development						
1. Productive alliances with input suppliers	2 191	2 293	2 447	1 800	883	9 614
2. Market facilitation through support to offtakers	137	599	962	774	166	2 639
3. Support to financial institutions	152	464	275	189	-	1 080
4. ENABEL other investments under component2	1 173	1 173	1 173	1 173	1 173	5 865
Subtotal	3 653	4 530	4 858	3 936	2 222	19 198
C. Policy and regulatory support						
1. Policy support	30	205	175	280	120	810
2. Project coordination	684	324	439	626	681	2 753
3. ENABEL contribution under coordination	398	398	398	398	398	1 992
Subtotal	1 113	927	1 013	1 304	1 199	5 556
Physical Contingencies	8 418	10 342	11 071	10 115	5 428	45 376
Price Contingencies						
Inflation						
Local	63	187	254	190	147	842
Foreign	2	7	10	9	6	34
Subtotal Inflation	65	194	264	199	154	876
Devaluation	-48	-142	-194	-146	-114	-645
Subtotal Price Contingencies	17	52	70	53	39	231
TOTAL	8 435	10 403	11 157	10 177	5 469	45 642
Taxes	156	137	119	69	42	523
Foreign Exchange	2 209	2 873	3 262	3 170	1 802	13 315

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Detailed Cost Tables

Detailed Table 1.1. Social mobilization and graduation of vulnerable households

Table 1.1. Social mobilization and graduation of vulnerable households

Detailed Costs	Unit	Quantities					Unit Cost (US\$)	Totals Including Contingencies (US\$)						
		Y1	Y2	Y3	Y4	Y5		Y1	Y2	Y3	Y4	Y5		
I. Investment Costs														
A. Social mobilisation of vulnerable households/a														
1. Personnel and Benefits														
8.1 - Country Director 10%	Per month	12	12	12	12	12	60	547	5 940	6 240	6 540	6 876		
8.2 - Director of Programs 5%	Per month	12	12	12	12	12	60	212	2 304	2 412	2 532	2 664		
8.3 - Director of Finance 10%	Per month	12	12	12	12	12	60	424	4 596	4 836	5 076	5 328		
8.4 - Social Capital & Training Manager 25%	Per month	12	12	12	12	12	60	922	10 008	10 512	11 028	11 580		
8.5 - Animal Well Being Manager 25%	Per month	12	12	12	12	12	60	856	9 300	9 768	10 248	10 764		
8.6 - Agribusiness Development Manager 15%	Per month	12	12	12	12	12	60	488	5 304	5 568	5 844	6 144		
8.7 - Monitoring Learning and Evaluation Manager 10%	Per month	12	12	12	12	12	60	212	2 304	2 424	2 544	2 664		
8.8 - Finance Office 100%	Per month	12	12	12	12	12	60	2,134	23 172	24 324	25 548	26 820		
8.9 National Coordination (Project Manager) 100%	Per month	12	12	12	12	12	60	2,315	25 140	26 400	27 720	29 100		
8.10 Community Mobilization Manager-Northern (100%)	Per month	12	12	12	12	12	60	2,194	23 820	25 020	26 268	27 576		
8.11 Community Mobilization Manager-Southern (100%)	Per month	12	12	12	12	12	60	2,194	23 820	25 020	26 268	27 576		
8.12 Community Mobilization Manager-Western (100%)	Per month	12	12	12	12	12	60	2,194	23 820	25 020	26 268	27 576		
8.13 (10) District coordinator	Per month	120	12	12	12	12	168	2,601	300 840	31 596	33 168	34 824		
8.11 HQ Staff (programs) 9%	Per month	12	12	12	12	12	60	705	7 656	8 040	8 436	8 868		
8.12 HQ Staff (finance) 9%	Per month	12	12	12	12	12	60	705	7 656	8 040	8 436	8 868		
8.14 Fringe HQ staff	Per month	12	12	12	12	12	60	367	3 984	4 180	4 392	4 608		
Subtotal								479 664	219 400	230 316	241 836	253 908		
												1 425 124		
2. Livestock and Freight														
1.1. Goats-Bucks	Each	-	90	90	90	-	270	157	-	13 453	14 130	14 850		
1.2. Goats-Does	Each	-	2 250	2 250	2 250	-	6 750	42	-	90 225	94 500	99 000		
1.3 Transportation of Goats	Each	-	2 340	2 340	2 340	-	7 020	1	-	2 855	2 855	2 855		
1.4 Chickens-hens	Each	-	7 500	7 500	7 500	-	22 500	5	-	33 750	37 500	37 500		
1.5 Chickens cockerels	Each	-	90	90	90	-	270	8	-	656	720	720		
1.5 Transportation Chickens	per trip	-	7 590	7 590	7 590	-	22 770	-	-	455	455	531		
1.6. Male swine-boar	Each	-	30	30	30	-	90	186	-	5 323	5 580	5 880		
1.7. Female Swine	Each	-	1 500	1 500	1 500	-	4 500	203	-	289 845	304 500	319 500		
1.8 Transportation swine	Each	-	1 530	1 530	1 530	-	4 590	9	-	12 454	13 770	13 770		
1.9. Male sheep	Each	-	30	30	30	-	90	115	-	3 281	3 450	3 630		
1.10 Female sheep	Each	-	2 250	2 250	2 250	-	6 750	34	-	73 823	76 500	81 000		
1.11. Transportation of sheep	per trip	-	2 280	2 280	780	-	5 340	1	-	2 782	2 918	998		
Subtotal								-	-	528 902	556 879	580 235		
										-	1 666 015			
3. Horticulture and Freight	As per Heifer Budget details							9 375	39 375	41 344	43 411	-		
4. Agricultural Equipment & Supplies	As per Heifer Budget details							175 060	406 563	706 066	611 461	3 334		
5. Project Travel and Vehicle Operations	As per Heifer Budget details							6 250	6 563	6 891	7 235	7 597		
6. Training	As per Heifer Budget details							232 156	880 660	952 390	985 887	30 912		
7. Technical Services and Evaluation	As per Heifer Budget details							36 238	66 211	70 666	68 419	7 576		
8. Monitoring and Learning	As per Heifer Budget details							1 644	11 083	23 249	12 219	56 302		
9. Capital Expenses	As per Heifer Budget details							24 676	5 688	11 944	-	-		
10. Office Expenses and Services	As per Heifer Budget details							72 331	70 053	73 556	77 234	81 096		
11. Indirect costs	As per Heifer Budget details							236 323	509 003	608 624	598 837	100 401		
Total								1 273 717	2 743 501	3 281 925	3 226 774	541 126		
												11 067 042		

\a Based on Heifer International budget

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Detailed Table 1.2. Improve animal health status and genetic potential of small livestock

Rwanda

Project For Inclusive Small Livestock Markets

Table 1.2. Improve animal health status and genetic potential of small livestock

Detailed Costs

Unit	Quantities					(US\$)	Unit Cost					Total		
	Y1	Y2	Y3	Y4	Y5		Y1	Y2	Y3	Y4	Y5			
I. Investment Costs														
A. Support dissemination of improved breeding stock														
1. Importation of improved SR breeding stock /a	lumpsum	-	1	-	-	1	30,000	-	31	-	-	31		
2. Support to Nyagatare goat station	lumpsum	-	1	-	-	1	25,000	-	25	-	-	25		
3. Sourcing of improved village chicken parental stock	lumpsum	-	1	-	-	1	5,000	-	5	-	-	5		
4. Capacity building of youth breeders by RAB	lumpsum	1	1	1	1	5	2,000	2	2	2	2	10		
5. Feasibility study for 2 pig AI station	lumpsum	2	-	-	-	2	10,000	20	-	-	-	20		
6. Importation of breeding stock/semen	lumpsum	-	1	1	1	3	10,000	-	10	10	10	30		
7. Capacity building in swine AI	lumpsum	-	1	-	-	1	20,000	-	20	-	-	20		
8. Support to establishment of 2 pig AI station	lumpsum	-	1	1	-	2	30,000	-	30	30	-	60		
Subtotal									22	123	42	12	2	201
B. Support surveillance and control of small livestock diseases														
1. Support to regional laboratories /b	lumpsum	-	3	-	-	3	30,000	-	92	-	-	92		
2. Support epidemiosurveillance networks for TADs /c	lumpsum per district	15	15	15	-	45	10,000	151	153	155	-	-	458	
3. Build capacities of District Veterinary staff on TADs surveillance /d	Lumpsum per district	5	10	-	-	15	15,000	75	153	-	-	228		
Subtotal									226	397	155	-	-	778
C. Support preparedness to animal health crisis														
1. Development of contingency plans for TADs /e	plans	-	1	-	-	1	40,000	-	41	-	-	41		
2. Updating contingency plans for TADs	plans	-	-	1	1	2	12,500	-	-	13	13	-	26	
3. Crisis response simulation exercises /f	simulation exercise	-	-	1	1	2	160,000	-	-	160	160	-	320	
4. Contingency fund	lumpsum	1	-	-	-	1	500,000	503	-	-	-	503		
Subtotal									503	41	173	173	-	890
Total									751	561	369	185	2	1 869

\a pigs, goats and dual purpose chicken; RAB will determine needs

\b one in each province

\c Awareness meetings with communities, training of community leaders, provision of communication equipment

\d Training of District staff and provision of communication equipment

\e Expertise by FAO/ECTAD 15,000 - meetings 3 x 5 000 USD - 3 plans developed but supported by ENABEL

\f Technical support from FAO OIE 10,000 + operating costs 70,000 per exercise

Detailed Table 1.3. Support climate smart innovations

Rwanda
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Table 1.3. Support climate smart innovations /a

Detailed Costs

	Unit	Quantities					Cost (US\$)	Unit Totals Incl Contingencies (US\$ '000)					
		Y1	Y2	Y3	Y4	Y5	Total	Y1	Y2	Y3	Y4	Y5	Total
I. Investment Costs													
A. Promotion of fodder trees and shrubs (nurseries) at self-formed and pigs youth groups /b	lumpsum	50	50	40	-	-	140	1,000	50	51	41	-	142
B. Promotion of waste management for the pigs groups supported under the youth entrepreneurship	lumpsum package	-	50	-	-	-	50	500	-	25	-	-	25
C. Promotion of rainwater harvesting facilities at groups level	lumpsum	150	-	-	-	-	150	450	68	-	-	-	68
D. Promotion of low cost rainwater harvesting facilities at household level	lumpsum package	1 000	1 000	1 000	-	-	3 000	50	50	51	52	-	153
Total								168	127	93	-	-	388

\a 14 nurseries will be provided in each of the district (in total 10) in which Heifer will implement the graduation pathway.

\b 1 nursery for 3 self-formed groups as part of the graduation pathway and 1 nursery for each of the 50 pigs youth groups

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Detailed Table 2.1. Production alliances and support to entrepreneurship in production

Rwanda

Project For Inclusive Small Livestock Markets

Table 2.1. Production alliances with input suppliers

Detailed Costs

Unit	Quantities					Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)							
	Y1	Y2	Y3	Y4	Y5		Y1	Y2	Y3	Y4	Y5	Total		
I. Investment Costs														
A. Development of network in poultry broilers /a	Farmer	-	50	200	200	75	525	750	-	39	158	160	61	417
B. Investment capital (building, equipment and broiler stock) /b	package	-	50	200	200	75	525	480	-	24	96	96	36	252
C. Service fee to support broiler farmers /c	cycle	-	250	1 000	1 000	375	2 625	5	-	1	5	5	2	14
D. Investment capital (building, equipment and layer stock) /d	package	-	30	150	200	70	450	4,000	-	120	600	800	280	1 800
E. Technical support to layer farmers /e	farmer	-	30	150	200	70	450	100	-	3	15	21	7	47
F. BDSP support for entrepreneurship and financial literacy /f	man/ months	-	4	16	24	16	60	1,200	-	5	20	30	20	75
G. Investment capital (building, equipment and swine stock) /g	package	-	30	150	200	70	450	1,500	-	45	225	300	105	675
H. Technical support to swine farmers /h	farmer	-	30	150	200	70	450	100	-	3	15	21	7	47
I. BDSP support for entrepreneurship and financial literacy /i	man/ month	-	4	16	24	16	60	1,200	-	5	20	30	20	75
J. Support to youth entrepreneurship in production														
1. Initial technical and business capacity building for youth	training session	30	29	17	-	-	76	6,000	180	174	102	-	-	456
2. Coaching and provision of business development services for youth	annual lumpsum	15	15	15	15	15	75	14,400	217	220	223	225	228	1 113
Group coaching by private coach annual lumpsum /k	annual lumpsum	15	15	15	15	15	75	9,000	136	137	139	141	142	696
Subtotal								353	357	362	366	370		1 808
3. Assets building for youth /m	# packages	150	150	150	-	-	450	2,000	300	300	300	-	-	900
Pig fattening package (10 pigs)	# packages	25	25	-	-	-	50	5,000	125	125	-	-	-	250
Pig breeding package (3 sows)	# packages	200	200	100	-	-	500	3,000	604	611	309	-	-	1 524
Layers package (250 hens)	# packages	200	200	100	-	-	500	2,500	503	509	258	-	-	1 270
Broiler package (250 chicken)	# packages	15	-	-	-	-	15	6,000	90	-	-	-	-	90
Chick production package (Solar hatchery)	# packages	15	-	-	-	-	15	3,000	45	-	-	-	-	45
Goat breeding package (15 ewes/ goats)	# packages													
Subtotal								1 667	1 545	867	-	-	-	4 078
Total								2 200	2 321	2 485	1 828	909		9 743

/a Including awareness raising in gender and nutrition delivered by PS to broiler farmers

/b 525 broiler farmers (average 35 per district) supported with equipment, building and 100 broilers

/c 525 farmers supported over 5 cycles @ \$5, with guaranteed market

/d 450 layer farmers (average 30 per district) supported with equipment, building and 500 layers

/e 450 layer farmers with technical support over 1 layer cycle

/f 5 BDSPs, each supporting 90 layer farmers (3 districts on average) over a period of 12 months

/g 450 pig farmers (average 30 per district) supported with equipment, building and 10 fattening pigs

/h 450 pig farmers with technical support over 2 swine cycles

/i 5 BDSPs, each supporting 90 layer farmers (3 districts on average) over a period of 12 months

/j group of 20 youth - 1 week technical 1 week business - 2 x trainers @ 150 USD per day 5 days each - DSA participants 15 USD per day

/k each BC covers 10 groups and visits them one a week (2 per day) - 600 USD fees and 400 USD op. costs per month per coach

/l each groups visited by District officer every month DSA and transport cost 50 USD per 2 visits

/m start-up stock per group member - 6-month feed (1 cycle for broilers) - 6-month vet package - Building facility incl. Collective facility - Small equipment - land provided by District - project grant 60% of investm

Detailed Table 2.2. Market facilitation

Rwanda

Project For Inclusive Small Livestock Markets

Table 2.2. Market facilitation through support to offtakers

Detailed Costs

Unit						Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					
	Y1	Y2	Y3	Y4	Y5		Y1	Y2	Y3	Y4	Y5	Total
I. Investment Costs												
A. Market facilitation through support to offtakers												
1. Rapid market appraisal for the Small Ruminant Value Chains /a	lumpsum	1	-	-	-	1	5,000	5	-	-	-	5
2. BDSP support to development of supplier network /b	man/ month	9	36	36	36	36	153	1,200	11	43	43	184
3. Assist in BP development and linkage to FIs to modernize/upgrade private processing facility /c	business plan	2	7	7	7	2	25	1,000	2	7	7	25
4. Support to modernize/upgrade private processing facility /d	business plan	1	2	3	3	1	10	100,000	100	200	300	1 000
5. Support for climate-smart innovations in private processing facility /e	business plan	1	2	3	3	1	10	15,000	15	30	45	150
6. ESIA for public slaughter slabs for pigs /f	study	1	2	2	-	-	5	4,000	4	8	8	20
7. Build/rehabilitate public slaughter slabs for pigs /g	slaughter slab	-	1	2	2	-	5	100,000	-	102	206	516
8. support climate-smart innovations in public pig slaughter slabs /h	slaughter slab	-	1	2	2	-	5	25,000	-	26	53	132
9. rehabilitate public animal markets /i	market	-	3	5	2	-	10	50,000	-	160	270	540
10. support climate-smart innovations in public animal markets /j	market	-	3	5	2	-	10	10,000	-	31	52	103
11. BDSP support to set up contractual arrangements for the operation of public pig slaughter slabs and animal markets /k	lumpsum	-	0,2	0,3	0,3	0,2	1	30,000	-	6	9	30
Total								137	613	993	796	166
												2 705

\a comprehensive study made by ENABEL on poultry and pig VCs

\b 1 BDSP in poultry, 1 BDSP in swines, 1 BDSP in SR (goats and sheeps)

\c reduced from \$2000 to \$1000 per BP

\d grant ceiling USD 30,000

\e grant ceiling USD 15,000

\f target 1 public slaughter slab per district

\g target 1 public slaughter slab in each district with high concentration of pig production

\h bio-digesters, solar energy to provide hot water

\i target 1 public animal market per district

\j solar water pumps

\k target 15 pig slaughter slabs and 15 animal markets

Detailed Table 2.3. Support to Financial Institutions

Rwanda

Project For Inclusive Small Livestock Markets

Table 2.3. Support to Financial Institutions

Detailed Costs

	Unit	Quantities					Unit Cost (US\$)	Totals Including Contingencies						
		Y1	Y2	Y3	Y4	Y5		Y1	Y2	Y3	Y4	Y5	Total	
I. Investment Costs														
A. Update mapping of the financial sector /a	lumpsum	1	-	-	-	-	1	10,000	10	-	-	-	10	
B. TA to financial institutions under the productive alliance model /b	lumpsum	1	2	2	-	-	5	40,000	40	81	82	-	204	
C. TA to financial institutions to understand the poultry, pig and SR businesses /c	lumpsum	0,1	0,3	0,3	0,3	-	1	200,000	20	60	60	60	-	200
D. Organization of fora to link financial demand and supply /d	Forum	5	10	10	5	-	30	7,500	38	75	75	38	-	225
E. Support to digitalization innovations among FIs /e	Lumpsum	-	0,4	0,3	0,3	-	1	200,000	-	80	60	60	-	200
F. Two insurance feasibility studies: 1 for the poultry value chain, 1 for the pork value chain /f	Study	1	1	-	-	-	2	44,200	44	45	-	-	-	89
G. TA to insurers to design and adjust at least 2 products in total; and train insurance sector /g	Lumpsum	-	0,8	-	0,2	-	1	156,500	-	127	-	33	-	160
Total									152	469	277	190	-	1 089

\a Possibility of partnership with ICCO Terraferna with 25% cofinancing

\b 5 FIs directly involved in lending to farmers engaged in productive alliances - Possibility of partnership with ICCO Terraferna with 25% cofinancing

\c training of 200 SACCOs + 5 MFIs + 5 banks (with Manager + analyst = 440 persons to be trained) - Possibility of partnership with ICCO Terraferna with 25% cofinancing

\d target 2 fora per district

\e 30% contribution from FI receiving support for digitalization

\f 1 FS for poultry in Y1 - 1 FS for pig in Y2

\g 30% from insurance companies receiving support to develop small livestock insurance products. Based on average costs after 1 year of operation

RWANDA: Project for Inclusive Small Livestock Markets

PRISM

Project Design Report (PDR)

Detailed Table 3.1. Project coordination

Rwanda

Project For Inclusive Small Livestock Markets

Table 3.1. Project coordination

Detailed Costs

Unit	Quantities					Is Including Contingencies (US\$)					
	Y1	Y2	Y3	Y4	Y5	Total	Y1	Y2	Y3	Y4	Y5
I. Investment Costs											
A. Vehicles	number	2	-	-	-	2	67	-	-	-	67
B. Motorbikes	number	15	-	-	-	15	53	-	-	-	53
C. Transport allowances for field staff	Per.month	180	180	180	180	180	900	36	37	37	38
D. Facilitation For District Veterinary Services	Per.month	180	180	180	180	180	900	36	37	37	38
E. Office materials	number	14	-	-	-	14	42	-	-	-	42
F. Start-up workshop	number	1	-	-	-	1	30	-	-	-	30
G. Monitoring and Evaluation/ Knowledge Management											
Baseline survey	number	1	-	-	-	1	57	-	-	-	57
Midterm survey	number	-	-	1	-	-	1	-	-	-	59
Completion survey	number	-	-	-	1	1	-	-	-	-	42
Nutrition studies for baseline, mid-term review and at completion (MDD-W)	number	1	-	1	-	1	35	-	36	-	37
Set-up of electronic participatory M&E system and MIS	Lumpsum	1	-	-	-	1	75	-	-	-	75
Knowledge Management	number	1	1	1	1	1	5	15	15	15	16
Knowledge Management for nutrition /a	number	1	1	1	1	1	5	9	9	9	9
Knowledge management for gender /b	number	1	1	1	1	1	5	9	9	9	9
Outline for nutrition and gender trainings	Lumpsum	1	-	-	-	1	15	-	-	-	15
Gender awareness training for SPIU Staff and implementing partners /c	Lumpsum	1	-	-	-	1	7	-	-	-	7
Training of Staff on M&E and MIS	Number	1	1	1	1	1	5	4	4	4	4
Annual Outcome Survey and thematic studies	Number	-	1	-	1	-	2	-	20	-	41
Subtotal							227	58	133	59	118
Total Investment Costs							492	131	207	135	194
II. Recurrent Costs											
A. Salaries and Allowances											
1. Salaries											
Project Operations Manager	Pers.month	12	12	12	12	12	60	25	25	25	25
Livestock Specialist	Pers.month	12	12	12	12	12	60	22	22	22	22
Access to Finance Specialist	Pers.month	12	12	12	12	12	60	22	22	22	22
Animal Health Officer (to be shared with RDDP)	Pers.month	12	12	12	12	12	60	11	11	11	11
Project Accountant	Pers.month	12	12	12	12	12	60	19	19	19	19
Procurement Officer	Pers.month	12	12	12	12	12	60	19	19	19	19
M&E Officer	Pers.month	12	12	12	12	12	60	19	19	19	19
Drivers	Pers.month	12	12	12	12	12	60	4	4	4	4
Subtotal							140	140	140	140	140
2. Existing SPIU Staff											
Coordinator of SPIU	Pers.month	-	-	-	12	12	24	-	-	35	35
Head of Finance	Pers.month	-	-	-	12	12	24	-	-	29	29
Head of Procurement	Pers.month	-	-	-	12	12	24	-	-	29	29
Head of M/E	Pers.month	-	-	-	12	12	24	-	-	29	29
Chief accountant	Pers.month	-	-	-	12	12	24	-	-	22	22
Access to finance specialist	Pers.month	-	-	-	12	12	24	-	-	22	22
Nutrition specialist	Pers.month	-	-	-	12	12	36	-	-	22	22
Gender Specialist	Pers.month	-	-	-	12	12	36	-	-	22	22
Administration and logistic specialist	Pers.month	-	-	-	12	12	24	-	-	22	22
Knowledge management officer	Pers.month	-	-	-	12	12	24	-	-	23	23
Information technology officer	Pers.month	-	-	-	12	12	24	-	-	14	14
Internal auditor	Pers.month	-	-	-	12	12	24	-	-	19	19
Administration officer	Pers.month	-	-	-	12	12	24	-	-	7	7
Administrative assistant	Pers.month	-	-	-	12	12	24	-	-	7	7
Messenger	Pers.month	-	-	-	12	12	24	-	-	2	3
Subtotal							-	-	43	302	302
3. Field mission perdiems											
Subtotal	month	12	12	12	12	12	60	18	18	18	18
B. Operational costs											
1. Operational costs for Vehicles /e	Vehicle @ mon	24	24	24	24	24	120	19	20	20	20
2. Office running costs	Month	12	12	12	12	12	60	2	2	2	2
3. Vehicle hiring for Kigali	Month	12	12	12	12	12	60	12	12	12	13
4. Steering/technical committee meetings	Number	4	4	4	4	4	20	1	1	1	1
5. Coordination meeting at district level	Number	5	5	5	5	5	25	3	3	3	13
6. Technical committee meetings	Number	3	3	3	3	3	15	0	0	0	2
Subtotal							37	37	38	38	188
Total Recurrent Costs							195	196	239	498	499
Total							687	327	446	633	693
											2 786

\a KM products and dissemination of Food-Based Dietary Guidelines, learning and sharing events

\b products, learning and sharing events

\c As part of start-up phase

RWANDA: Project for Inclusive Small Livestock Markets

PRISM

Project Design Report (PDR)

Detailed table 3.2. Policy Support

Rwanda

Project For Inclusive Small Livestock Markets

Table 3.2. Policy Support

Detailed Costs

Unit	Quantities					Unit Cost (US\$)	Totals Including Contingencies					
	Y1	Y2	Y3	Y4	Y5		Y1	Y2	Y3	Y4	Y5	Total
I. Investment Costs												
A. Support to development of sector strategies and policies												
1. expert support to develop draft strategy /a	Study	-	1	-	1	-	2	20,000	-	20	-	20
2. stakeholder workshop to discuss and validate strategy /b	workshop	-	1	1	1	1	4	10,000	-	10	10	10
Subtotal									-	30	10	30
B. Support to development and enforcement of food safety and animal welfare regulatory framework												
1. expert support to develop draft regulation /c	study	-	1	-	1	-	2	20,000	-	20	-	20
2. stakeholder workshop to discuss and validate regulations /d	workshop	-	1	1	1	1	4	10,000	-	10	10	10
3. awareness campaigns on new FS and AW regulations												
publication of guidelines, leaflets, posters /e	Ls	-	1	-	1	-	2	10,000	-	10	-	10
public meetings /f	Meeting	-	15	-	15	-	30	1,000	-	15	-	15
radio and TV spots /g	Spot	-	1	-	1	-	2	10,000	-	10	-	10
Subtotal									-	35	-	35
Subtotal									-	65	10	65
C. Build institutional capacities at national and District levels												
1. international training of RAB staff /h	training	-	2	2	2	-	6	10,000	-	20	21	21
2. local training by RAB trainers	training	-	-	4	4	4	12	2,500	-	-	10	10
Subtotal									-	20	31	31
D. Support national producers organizations												
1. Training on government lobbying and advocacy /i	training session	-	3	3	3	-	9	15,000	-	45	45	45
2. Support to operations of National Farmers Organizations	lumpsum	3	3	2	1,5	1	10,5	10,000	30	30	20	15
3. International exchange visits /j	exchange visit	-	3	-	3	-	6	5,000	-	15	-	16
Subtotal									30	90	65	76
Total									-	-	60	80
									30	206	176	282
									122	815		

\a 2 strategies - 10 days mission + 5 days home based - fees 750 USD DSA 250 + ticket 4000 USD + misc 1000 USD /strategy

\b 2 strategies - 1 workshop consultation + 1 validation /strategy - 15,000 USD per WS

\c FAO and OIE experts - 10 days mission + 5 days home based - fees 750 USD DSA 250 + ticket 4000 USD + misc 1000 USD

\d 1 workshop consultation + 1 validation - 10,000 USD per WS

\e 10 000 brochures or posters @ 1USD per topic/campaign

\f 1 meeting per District per topic - 2 000 USD per meeting

\g 1 radio/TV spot per topic

\h short courses (1 month average); ticket 2000 USD + DSA 30*150 + training fees 2500

\i 3 sessions per association - 3 associations (SR, pig and poultry)

\j 5 executives 5 days plane ticket 1000 USD DSA 1000 USD

Annex 4: Financial and Economic Analysis

INTRODUCION

1. The Stream of Quantifiable Benefits from the Project for Inclusive Small Livestock Markets fall under three headings all totalling to 26,355 households (115,962) with a cost per individual beneficiary of USD 276:

- a) Vulnerable households undergoing the graduation pathway (# Households 23,400);
- b) Youth (# of households 1,530) and
- c) Productive Alliance beneficiaries (# of households 1,425).

2. The key differences in the above category of beneficiaries are as follows:

3. **Graduation pathway:** Beneficiaries under this category will be supported with following # of animals or birds placed from the following menu of options per household:

Menu	# hh
Poultry (# 10)	6,850
Swine (# 3)	4,050
Sheep (# 3)	6,050
Goat (#3)	6,450
Total	23,400

4. **Youth:** Beneficiaries under this category will be supported with following # of animals or birds placed from the following menu of options per household:

Menu	# hh
Pig fattening (# 20)	450
Pig breeding (# 20)	50
Egg hen layers (# 250)	500
Broilers (#250)	500
Chicken hatching	15
Goat breeding	15
Total	1,530

5. **Productive Alliances:** Beneficiaries under this category will be supported with following # of animals or birds placed from the following menu of options per household:

Menu	# hh
Broiler farmers (# 100)	525
Egg layer farmers (# 500)	450
Pig fatteners (# 20)	450
Total	1,530

6. Although beneficiaries will supported to start brandy new enterprises like broilers, a comparison of the existing technology for other farmers was found necessary but does not represent the WOP situation for the actual beneficiaries:

- **Small ruminants production systems:** Traditional farmers situation feeding system is based essentially on natural pastures, supplementary feeding is uncommon, and vaccination and deworming are not usual. As a result of these poor feeding and health conditions, and limited genetic potential, the productivity of small ruminants remains low.

- **Pig production systems:** The traditional pig rearing system is based on utilization of kitchen waste and agricultural by-products for feeding the animals. PRISM will build on Modern pig husbandry practices that have been introduced recently to Rwanda. In this system, animals are usually of imported breeds, and are kept in claustration, fed with concentrate feed.
- **Poultry production systems:** Village backyard chickens have very low productivity and are generally not financially impressive. Backyard poultry will still be relevant for vulnerable households undergoing the graduation pathway. Commercial modern layers and broilers farms that have emerged during the last decade in Rwanda will be the form the bulk of supported investments.

7. In the PRISM design, estimating WOP or Baseline income levels is not very straight forward because the interventions will be new packages and not additive for most beneficiaries. Proxies have had to be used to represent the WOP income situations.

- In the case of Vulnerable households undergoing the graduation pathway WOP income level considerations were based on: the poverty line of RWF 159,375 per adult equivalent per year in the prices of January 2014. Extreme poverty line (Ubudehe 1) is RWF 105,064 (EICV 5, 2016/2017). The average of these two is about 12,000 per month. It is well noted that the poverty line is still calculated on the prices of 2014 even if life's cost must have increased so far; but there is no reliable alternate source of data.
- For the case of Youth and Productive alliances, again the packages will be new but all the same WOP income levels cannot be taken as nil. Proxies have been used to estimate WOP income levels. The proxy used has been based on *Boda Boda* which is the moto taxi that is the main source of employment for youth in rural and urban areas.
- Without project income levels adopted: The following considerations were made in arriving at the proxy for without project (WOP) for these brandy new enterprises. (i) the poverty line (Ubudehe category 2) which is RWF 159,375 per adult equivalent per year in the prices of January 2014. Extreme poverty line (Ubudehe 1) is RWF 105,064 (EICV 5, 2016/2017). On the otherhand, a boda boda (Motor Bike taxi) income is regarded as reference for the youth. A boda boda rider earns an average of 12,000 RWF per month has been used as a proxy. This has however been prorated because many of the enterprises such as back yard poultry do not require the keeper to be full time. Sufficient cross-reference to WOP proxy incomes have been made in the respective models.
- Hire labour and family labor rates: Labour is a combination between family and hired. The hired labor has been valued at RWF 1000 per day. For unpaid family labor a daily rate of RWF 750 is used as the financial cost⁸⁵.
- For each model, a loan amortisation schedule has been attached to see the sustainability of the proposed interventions. Apart from the graduation pathway models (mainly sheep and goats) which target very vulnerable beneficiaries, other enterprises should that a typical beneficiary would still have positive cash flow after serving the loans for Capex and initial operating costs.

8. Farm models presented in this annex indicate that the proposed interventions have the potential to increase the cash income of beneficiary by around 26%, based on 10

⁸⁵ The calculation of family labor wage rate is based on World Bank (2014) Transformation of Agriculture Sector Program Phase 3.

enterprise modes. This represents an average increase in come of RwF 528,000 (USD 596) per year. This is still sufficient to make a real difference to the lives of the beneficiaries.

9. Costs already included in enterprise models: To avoid double counting of costs, the costs already included in enterprise models in arriving the gross margins were computed at around 60% as follows:

Rwanda

Project For Inclusive Small Livestock Markets

Expenditure Accounts by Years -- Totals Including Contingencies

(US\$ '000)

	Totals Including Contingencies					
	Y1	Y2	Y3	Y4	Y5	Total
I. Investment Costs						
A. Works	-	319	581	392	-	1,291
B. Vehicles	120	-	-	-	-	120
C. Equipment and Materials	42	-	-	-	-	42
D. Goods Services and inputs	1,711	3,266	4,634	4,688	1,291	15,590
E. Grants and subsidies	1,667	2,074	1,424	580	-	5,744
F. Credit and Guarantee funds	503	-	-	-	-	503
G. Consultancies	331	531	486	424	208	1,981
H. Training	831	982	758	558	436	3,563
I. ENABEL Virtual/ Other costs	2,638	2,638	2,638	2,638	2,638	13,188
Total Investment Costs	7,842	9,809	10,520	9,281	4,572	42,023
II. Recurrent Costs						
A. Salaries	557	557	600	858	858	3,430
B. Operating costs	37	37	38	38	39	188
Total Recurrent Costs	594	594	638	897	897	3,619
Total PROJECT COSTS	8,435	10,403	11,157	10,177	5,469	45,642
Costs included in enterprise models						28,431
						62%

10. Given this level of financial benefit to the target group, it is not surprising that PRISM will also generate a high economic rate of return (ERR) – estimated to be around 19% and relatively insensitive to cost escalation, benefit reduction and delays. It is emphasised however that this is a minimum because it only considers the economic benefits at farm gate level in the value chain. The benefits to downstream actors in the value chains from increased trade volumes, quality and value adding opportunities have not been considered due to estimation difficulties.

FINANCIAL ANALYS

Objectives

11. The objectives of this financial analysis are:

- to assess the financial viability of the improved production and value addition technologies and systems promoted by PRISM for farmers and their households;
- to examine the impact of PRISM interventions on cash flow, and incomes; and
- to use enterprise models to demonstrate that there is sufficient financial incentive for typical smallholder households to participate in the Project. The purpose of enterprise modelling is to illustrate how the project interventions will bring about

increasing and positive returns to labour; and the incremental value of specific input mixes.

Enterprise Budgets

12. In attachment 1 to this annex, ten priority enterprise budgets are presented and summarised below:

AJ	Farm models' net incremental benefits (in 'RWF 000)										
	Graduation Pathway Models				Youth Packages			Productive Alliance Packages			
	Poultry	Swine	Sheep	Goat	Pig breeding	Pig fattening	250 broilers	250 layers	Pig fattening	100 broilers	500 layers
PY1	(101)	(529)	(344)	(344)	(903)	(2,167)	(2,569)	(2,513)	(2,167)	(1,114)	(2,207)
PY2	84	586	74	74	1,242	1,496	1,477	712	1,496	68	439
PY3	84	329	114	114	1,242	641	1,693	712	641	454	439
PY4	86	320	132	132	1,233	611	1,693	712	611	454	439
PY5	86	329	114	114	1,242	641	1,693	712	641	454	439
PY6	86	329	132	132	1,242	641	1,909	712	641	541	439
PY7	86	320	114	114	1,242	611	1,909	712	611	541	439
PY8	71	329	132	132	1,233	641	1,759	562	641	391	289
PY9	86	329	114	114	1,242	641	1,909	712	641	541	439
PY10	86	227	132	132	992	111	1,909	712	111	541	439
PY11	86	329	114	114	1,242	641	1,559	362	641	191	89
PY12	86	329	132	132	1,233	641	1,909	712	641	541	439
PY13	86	320	114	114	1,242	611	1,909	712	611	541	439
PY14	86	329	132	132	1,242	641	1,909	712	641	541	439
PY15	86	329	114	114	1,242	641	1,909	712	641	391	439
PY16	71	329	114	114	1,233	641	1,759	712	641	391	439
PY17	86	320	114	114	1,242	611	1,909	712	611	541	439
PY18	86	329	114	114	1,242	641	1,909	712	641	541	439
PY19	86	329	114	114	1,242	641	1,909	712	641	541	439
PY20	86	299	114	114	983	611	1,484	712	611	371	439
IRR	84%	84%	32%	32%	137%	40%	64%	27%	40%	33%	18%
NPV (RWF'000)	625	2,473	678	678	9,599	3,904	12,755	3,548	3,904	2,707	1,494
FIRR'000 (@ 8.5%)	625	2,473	678	678	9,599	3,904	12,755	3,548	3,904	2,707	1,494

13. **Choice of Discount rate.** Many options for the choice of discount rate were considered at financial analysis level. From the table below the opportunity cost of capital at financial analysis level could have been taken at 5%, however, given the agency banking approach commercial banks are using for their outreach and the typology of the target beneficiary capital levels for the kind of investments the next available rate was taken 8.5%.

	12 months deposit	6 months		Rate of savings
1. Bank of Kigali:	9.50%	7.50%		
2. I\$M Bank				
Amount	1 Year	2 Years	3 Years	
Frw 100,000-frw 900,000	8.00%	8.25%	8.50%	
Frw 10,000,000-Ffw 49,000,000	8.50%	8.75%	9.00%	
Frw 50,000,000 and above	9.00%	9.25%	9.50%	
3. Savings account were up to 5% as of June 2018.				5%

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14. From the enterprises models above aggregation was done on the following basis as per the respective:

Graduation pathway: Vulnerable households undergoing the graduation pathway

Graduation pathway			PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Poultry	Y1	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	
	Y2		3000		3000		3000		3000		3000		3000		3000		3000		3000		3000	
	Y3		2500																			
	Total		1350		4350		6850															
Aggregate benefit																						
PY1	(136,350,000)	113,909,625	113,909,625	115,765,875	115,765,875	115,765,875	95,515,875	115,765,875	115,765,875	115,765,875	115,765,875	115,765,875	115,765,875	115,765,875	115,765,875	95,515,875	115,765,875	115,765,875	115,765,875	115,765,875	-	
PY2		(303,000,000)	253,132,500	253,132,500	257,257,500	257,257,500	257,257,500	212,257,500	257,257,500	257,257,500	257,257,500	257,257,500	257,257,500	257,257,500	257,257,500	257,257,500	257,257,500	212,257,500	257,257,500	257,257,500	257,257,500	257,257,500
PY3		(252,500,000)	210,943,750	210,943,750	214,381,250	214,381,250	214,381,250	176,881,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250	214,381,250
		(136,350,000)	(189,090,375)	114,542,125	579,842,125	583,967,125	587,404,625	567,154,625	587,404,625	542,404,625	549,904,625	587,404,625	587,404,625	587,404,625	587,404,625	587,404,625	587,404,625	587,404,625	542,404,625	549,904,625	587,404,625	471,638,750
Swine	PY1	2050	PY2	2050	PY3	2050																
Y1	2050		2050		1000		1000															
Y2					1000																	
Y3					1000																	
	Total				2050		3050		4050													
Aggregate benefit																						
PY1	Year 1	1,083,937,500	1,200,412,350	674,587,350	656,137,350	674,587,350	656,137,350	674,587,350	674,587,350	674,587,350	674,587,350	674,587,350	674,587,350	674,587,350	674,587,350	674,587,350	674,587,350	674,587,350	674,587,350	674,587,350	613,087,350	
PY2		(528,750,000)	585,567,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	
PY3		(528,750,000)	585,567,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	320,067,000	
		(1,083,937,500)	671,662,350	731,404,350	1,570,771,350	1,323,721,350	1,323,721,350	1,314,271,350	1,323,721,350	1,323,721,350	1,123,621,350	1,230,721,350	1,314,271,350	1,323,721,350	1,323,721,350	1,323,721,350	1,323,721,350	1,323,721,350	1,323,721,350	1,323,721,350	1,323,721,350	1,271,221,350
Sheep	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20	PY21	
Y1	2050	2050	2050	2050	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	
Y2					2000		2000		2000		2000		2000		2000		2000		2000		2000	
Y3					2000		2000		2000		2000		2000		2000		2000		2000		2000	
	Total				2050		4050		6050													
Aggregate benefit																						
PY1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	
PY2		(705,200,000)	152,397,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000
PY3		(688,000,000)	148,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000
		(705,200,000)	(535,603,000)	(304,923,000)	647,632,000	726,757,000	762,632,000	726,757,000	762,632,000	726,757,000	762,632,000	726,757,000	762,632,000	726,757,000	762,632,000	726,757,000	762,632,000	726,757,000	762,632,000	726,757,000	762,632,000	726,757,000
Goat	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20	PY21	
Y1	2050	2050	2050	2050	2000	2000	2000	2000	2400													
Y2					2000		2000		2400													
Y3					2400																	
	Total				2050		4050		6450													
Aggregate benefit																						
PY1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	
PY2		(705,200,000)	152,397,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000	270,272,000	234,397,000
PY3		(688,000,000)	148,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000	263,680,000	228,680,000
		(705,200,000)	(635,603,000)	(442,523,000)	677,368,000	772,493,000	815,368,000	772,493,000	815,368,000	772,493,000	815,368,000	772,493,000	815,368,000	772,493,000	815,368,000	772,493,000	815,368,000	772,493,000	815,368,000	772,493,000	815,368,000	772,493,000
		(2,630,687,500)	(588,634,025)	98,500,475	3,475,613,475	3,406,938,475	3,489,125,975	3,380,675,975	3,489,125,975	3,365,375,975	3,251,525,975	3,317,375,975	3,396,125,975	3,400,925,975	3,489,125,975	3,390,125,975	3,426,375,975	3,285,925,975	3,302,875,975	3,340,375,975	3,172,110,100	

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Youth package

Youth package

Pig fattening	PY1	PY2	PY3
Y1	150	150	150
Y2		150	150
Y3			150
Total	150	300	450

Aggregate benefit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
PY1	(324,975,000)	224,329,500	96,079,500	91,579,500	96,079,500	91,579,500	96,079,500	91,579,500	96,079,500	16,579,500	96,079,500	91,579,500	96,079,500	96,079,500	96,079,500	96,079,500	91,579,500	96,079,500	91,579,500	
PY2		(324,975,000)	224,329,500	96,079,500	91,579,500	96,079,500	91,579,500	96,079,500	91,579,500	96,079,500	91,579,500	96,079,500	91,579,500	96,079,500	96,079,500	96,079,500	91,579,500	96,079,500	91,579,500	
PY3			(324,975,000)	224,329,500	96,079,500	91,579,500	96,079,500	91,579,500	96,079,500	16,579,500	96,079,500	91,579,500	96,079,500	96,079,500	96,079,500	96,079,500	91,579,500	96,079,500	91,579,500	

Pig breeding	PY1	PY2
Y1	25	25
Y2		25
Total	25	50

Aggregate benefit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
PY1	(22,575,000)	31,050,750	31,050,750	30,825,750	31,050,750	31,050,750	30,825,750	31,050,750	24,800,750	31,050,750	30,825,750	31,050,750	31,050,750	31,050,750	31,050,750	30,825,750	31,050,750	31,050,750	24,575,750	
PY2		(22,575,000)	31,050,750	31,050,750	30,825,750	31,050,750	31,050,750	30,825,750	31,050,750	24,800,750	31,050,750	30,825,750	31,050,750	31,050,750	31,050,750	31,050,750	30,825,750	31,050,750	31,050,750	

Layers	PY1	PY2	PY3
Y1	200	200	200
Y2		200	200
Total	200	400	500

Aggregate benefit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
PY1	(502,500,000)	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	112,464,706	142,464,706	72,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	
PY2		(502,500,000)	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	112,464,706	142,464,706	72,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	142,464,706	
PY3			(251,250,000)	71,232,353	71,232,353	71,232,353	71,232,353	71,232,353	56,232,353	71,232,353	36,232,353	71,232,353	71,232,353	71,232,353	71,232,353	71,232,353	71,232,353	71,232,353	71,232,353	

Broilers	PY1	PY2	PY3
Y1	200	200	200
Y2		200	200
Total	200	400	500

Aggregate benefit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
PY1	(513,800,000)	295,450,000	338,575,000	338,575,000	381,700,000	381,700,000	351,700,000	381,700,000	381,700,000	311,700,000	381,700,000	381,700,000	381,700,000	381,700,000	381,700,000	381,700,000	381,700,000	381,700,000	296,700,000	
PY2		(513,800,000)	295,450,000	338,575,000	338,575,000	381,700,000	381,700,000	351,700,000	381,700,000	311,700,000	381,700,000	381,700,000	381,700,000	381,700,000	381,700,000	381,700,000	381,700,000	381,700,000	381,700,000	
PY3			(256,900,000)	147,725,000	169,287,500	169,287,500	190,850,000	190,850,000	175,850,000	190,850,000	190,850,000	190,850,000	190,850,000	190,850,000	190,850,000	190,850,000	190,850,000	190,850,000	190,850,000	

(1,363,850,000) (670,555,044) 468,339,912 1,654,901,765 1,548,214,265 1,591,564,265 1,634,689,265 1,596,026,765 1,596,026,765 1,545,001,765 1,435,001,765 1,441,026,765 1,586,026,765 1,656,251,765 1,630,526,765 1,626,026,765 1,641,251,765 1,656,251,765 1,564,776,765

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Productive alliances

Productive alliances																				
broiler farmers																				
	PY1	PY2	PY3	PY4																
Y1	50	50	50	50																
Y2		200	200	200																
Y3			200	200																
Y4				75																
Total	50	250	450	525																
Aggregate benefit																				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
PY1	(55,700,000)	3,400,000	22,712,500	22,712,500	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	27,025,000	
PY2		(222,800,000)	13,600,000	90,850,000	90,850,000	108,100,000	108,100,000	78,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	
PY3			13,600,000	90,850,000	90,850,000	108,100,000	108,100,000	78,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	108,100,000	
PY4				5,100,000	34,068,750	34,068,750	40,537,500	40,537,500	29,287,500	40,537,500	40,537,500	40,537,500	40,537,500	40,537,500	40,537,500	40,537,500	40,537,500	40,537,500	40,537,500	
	(55,700,000)	(219,400,000)	(186,487,500)	43,612,500	209,512,500	242,793,750	260,043,750	269,793,750	253,762,500	253,762,500	255,012,500	213,762,500	213,762,500	257,512,500	283,762,500	276,262,500	253,762,500	272,512,500	275,262,500	
layer farmers																				
	PY1	PY2	PY3	PY4																
Y1	30	30	30	30																
Y2		150	150	150																
Y3			200	200																
Y4				70																
Total	30	180	380	450																
Aggregate benefits																				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
PY1	(66,210,000)	13,167,353	13,167,353	13,167,353	13,167,353	13,167,353	8,667,353	13,167,353	13,167,353	2,667,353	13,167,353	13,167,353	13,167,353	13,167,353	13,167,353	13,167,353	13,167,353	13,167,353	13,167,353	
PY2		(331,050,000)	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	65,836,765	
PY3			(441,400,000)	87,782,353	87,782,353	87,782,353	87,782,353	87,782,353	57,782,353	87,782,353	87,782,353	87,782,353	87,782,353	87,782,353	87,782,353	87,782,353	87,782,353	87,782,353	87,782,353	
PY4				(154,490,000)	30,723,824	30,723,824	30,723,824	30,723,824	30,723,824	20,223,824	30,723,824	6,223,824	30,723,824	145,010,294	176,510,294	176,510,294	173,010,294	197,510,294	197,510,294	
	(66,210,000)	(317,882,647)	(362,395,882)	12,296,471	197,510,294	197,510,294	193,010,294	175,010,294	176,510,294	176,510,294	145,010,294	176,510,294	176,510,294	173,010,294	197,510,294	197,510,294	197,510,294	197,510,294	197,510,294	
pig fatteners																				
	PY1	PY2	PY3	PY4																
Y1	30	30	30	30																
Y2		150	150	150																
Y3			200	200																
Y4				70																
Total	30	180	380	450																
Aggregate benefits																				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
PY1	(64,995,000)	44,865,900	19,215,900	18,315,900	19,215,900	18,315,900	19,215,900	19,215,900	3,315,900	19,215,900	18,315,900	19,215,900	19,215,900	19,215,900	19,215,900	19,215,900	19,215,900	19,215,900	19,215,900	
PY2		(324,975,000)	224,329,500	96,079,500	91,579,500	96,079,500	91,579,500	96,079,500	96,079,500	16,579,500	96,079,500	96,079,500	91,579,500	96,079,500	96,079,500	91,579,500	96,079,500	91,579,500	96,079,500	
PY3			(433,300,000)	299,106,000	122,106,000	128,106,000	122,106,000	128,106,000	122,106,000	128,106,000	122,106,000	128,106,000	122,106,000	128,106,000	122,106,000	128,106,000	122,106,000	128,106,000	122,106,000	
PY4				104,687,100	44,837,100	42,737,100	44,837,100	44,837,100	42,737,100	44,837,100	42,737,100	44,837,100	42,737,100	44,837,100	42,737,100	44,837,100	42,737,100	44,837,100	42,737,100	
	(64,995,000)	(280,109,100)	(189,754,600)	261,846,400	343,588,500	282,238,500	285,738,500	283,738,500	282,238,500	270,738,500	208,738,500	182,238,500	250,738,500	283,738,500	282,238,500	286,138,500	287,338,500	283,738,500	282,238,500	285,238,500
	(186,905,000)	(817,391,747)	(738,637,982)	317,755,371	750,611,294	722,542,544	742,792,544	746,542,544	711,011,294	691,511,294	640,261,294	541,011,294	591,511,294	714,261,294	763,511,294	759,911,294	738,611,294	735,011,294	752,261,294	758,011,294

From the overall aggregation analysis and factoring the project economic costs results in the over Economic Rate of Return and NPV.

Project year	NET INCREMENTAL BENEFITS				COSTS			Cash flow
	Graduation pathway	Youth package	Productive alliances	Total Net Inc. Benefits	Economic Costs ('RWF 000)	Economic O&M Costs * ('RWF 000)	Total Incremental Costs	
PY1	(2,630,688)	(1,363,850)	(186,905)	(4,181,443)	1,903,368		1,903,368	(6,084,811)
PY2	(588,634)	(670,555)	(817,392)	(2,076,581)	2,628,564		2,628,564	(4,705,144)
PY3	98,500	468,340	(738,638)	(171,798)	2,922,158		2,922,158	(3,093,956)
PY4	3,475,613	1,654,902	317,755	5,448,271	2,517,063		2,517,063	2,931,207
PY5	3,406,938	1,548,214	750,611	5,705,764	856,693		856,693	4,849,071
PY6	3,489,126	1,591,564	722,543	5,803,233		-	0	5,803,233
PY7	3,380,676	1,634,689	742,793	5,758,158		-	0	5,758,158
PY8	3,489,126	1,596,027	746,543	5,831,695		-	0	5,831,695
PY9	3,365,376	1,596,027	711,011	5,672,414		-	0	5,672,414
PY10	3,251,526	1,545,002	691,511	5,488,039		-	0	5,488,039
PY11	3,317,376	1,435,002	640,261	5,392,639		-	0	5,392,639
PY12	3,396,126	1,441,027	541,011	5,378,164		-	0	5,378,164
PY13	3,400,926	1,586,027	591,511	5,578,464		-	0	5,578,464
PY14	3,489,126	1,656,252	714,261	5,859,639		-	0	5,859,639
PY15	3,390,126	1,656,252	763,511	5,809,889		-	0	5,809,889
PY16	3,426,376	1,630,527	759,911	5,816,814		-	0	5,816,814
PY17	3,285,926	1,626,027	738,611	5,650,564		-	0	5,650,564
PY18	3,302,876	1,641,252	735,011	5,679,139		-	0	5,679,139
PY19	3,340,376	1,656,252	752,261	5,748,889		-	0	5,748,889
PY20	3,172,110	1,564,777	758,011	5,494,898		-	0	5,494,898
NPV@ 9.5% ('RWF 000)								21,484,574
NPV@ 9.5 % ('000 USD)								21,484,574
EIRR								26%

15. The results of the economic analysis justify the PRISM investments. The analysis shows that the PRISM has the capacity to generate an economic rate of return (ERR) of 26% percent over a 20-year period. It is worth noting that, due to estimation-related complications, there are some benefits that would accrue to different stakeholders of the different value chains. It is, nonetheless, prudent to point out that these other additional benefits will make the entire investment that much more viable and beneficial to the nation as a whole through increased employment creation and tax revenues. Thus, the actual ERR will likely be higher than the 19% reported herein.

16. The discount rate is based on more long term bonds as reflected in the table below (9.5%) for larger societal level investments 9.5%:

17. A sensitivity analysis was carried out to assess the likely impact of a variation of some key factors on the economic return of the project. It indicates a strong resilience to increases of costs and reductions of benefits which mirror the PRISM risk profile. The project would still yield an EIRR of respectively 18% and 17% if benefits were reduced by 10% and 20%. In the extreme case of benefits being reduced by 50%, the EIRR would establish at 12%, a value above the social discount rate. If benefits lag by two

years a 14% EIRR would still be achieved.

SENSITIVITY ANALYSIS (SA)			
	IRR	NPV (RWF 000)	
base scenario	26%	21,484,574	
costs +10%	25%	20,639,458	
costs +20%	24%	19,794,342	
costs +50%	21%	17,258,994	
benefits +10%	27%	24,478,147	
benefits +20%	28%	27,471,720	
benefits -10%	25%	18,491,000	
benefits -20%	23%	15,497,427	
benefits -50%	17%	6,516,707	

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^aThis rate considers the poverty line ($\text{RWF } 16,375$) per adult person per year in the prices of January 2016. ^bExtreme poverty line ($\text{RWF } 10,064$) (IECIV 5, 2016/2017). So it was agreed that average, $12,000 \text{ RWF}$ per month be used with compares fairly to the boda boda (Motor Bike taxi) income as reference for the youth. Boda boda rider will work about 25 days a month which yields about 480 RWF a day.

b/ The opportunity cost of attending to back yard poultry is only about one quarter of an individual's time which translates to RWF 12000 X 12/4 = 36000 as used in the model above.

Financial capacity to take on the loan product for this enterprise

Loan Variables		Calculated Variables	
Loan Amount	65,000	Loan Payment	65,000
Percent Down	10%	Down Payment	6,500
Interest Rate	5.00%	Repayment	68,250
Years	1	Optional Payment	

Loan Results			
Total Interest	3,250	Number of Payments	1
Total Principal	65,000	Rebursement date	
Total of Payments	68,250		

Payment Schedule		Payment	Interest	Principal
Date				
first year				65,000
year 1		(68,250.00)	3,250	0
year 2				
year 3				
year 4				
year 5				
	Total	(68,250)	3,250	

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ITEMS	UNIT	PRICE(RWF)	USD	WITHOUT PROJECT												WITH PROJECT											
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
Market Production																											
Live weight per Animal	Kg/pig	1,300	1.33		90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90		
Number of Animals per batch		117,000	119.39		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00		
Number of batches per year					2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00		
Total number of live expected live animals per year	Animals per year	117,000	119.39		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
Estimate of mortality					0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		
Own Consumption					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Net available production- Live Animals	Animals per year	117,000	119.39		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
Investment Inputs					3																						
Land	Cage for 5 pigs	448,900			2																						
pigsty (1 cage for 5 pigs)		120,000			122.45																						
small equipment (per pig)		3,000			10																						
Operating Inputs	Kg/pig	14	0.75		79.80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80		
Feed starter		114	0.69		650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650		
Feed finisher		115	0.71		95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	
Piglets price per kg live weight)		1	0.78		5.70	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
transport		1	0.50		5.70	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
Vet costs		0	500.00		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Misc costs																											
Labour Costs					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Number of Labourers					Skilled (paid) labour																						
(Family Labour / Labour 5 Months)					per day																						
Sub-total production- Live Animals		750			360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360		
ITEMS					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
FINANCIAL BUDGET				WOP	WITH PROJECT																						
Market Production revenue					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
Net available production- Live Animals					666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900			
Total revenue					-	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900	666,900			
Investment Input costs					(404,550.0)																						
Land					(2,000.0)																						
pigsty (1 cage for 5 pigs)					(9,000.0)																						
small equipment (per pig)					(9,000.0)																						
Sub-total investment costs					(485,550)																						
Operating Input costs																											
Feed starter						(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)	(19,152)		
Feed finisher						(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	(142,956)	
Piglets price per kg live weight)						(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)	(1,425)		
transport						(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)	(2,850)		
Vet costs						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Misc costs																											
Sub-total operating costs																											
Labour costs																											
Skilled (paid) labour						60,000	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)		
Family Labour (Labour 5 Months)						60,000	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)	(81,000)		
Sub-total labour costs																											
Benefits Summary																											
Investment & Production Related Costs																											
Gross Margin before labour costs						485,550	628,767	372,267	363,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267	372,267		
Without Project (WOP) income proxy						43,200	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)	(43,200)		
Margin after labour costs and capex							528,750	585,567	329,067	320,067	329,067	320,067	329,067	320,067	329,067	320,067	329,067	320,067	329,067	320,067	329,067	320,067	329,067	320,067	329,067	320,067	
Return to family labour*																											
*consider full development year family labour requirements																											
Discount rate																											
NPV @ 8%																											
IRR																											
NPVb																											
NPVc																											
B/C ratio																											
Switching values Benefits																											
Switching values Costs																											

a/ This rate considers the poverty line (Ubudehe category 2) which is RWF 159,375 per adult equivalent per year in the prices of January 2014. Extreme poverty line (Ubudehe 1) is RWF 105,064 (EICV 5, 2016/2017). So it was agreed that average, 12,000 RWF per month be used compares fairly to the boda boda (Motor Bike Taxi) income as reference for the youth. Boda boda rider will work about 25 days a month which yields about 450 RWF a day.

b/ The opportunity cost of one third of an individual's time which translates to RWF 12000 X 12 x 0.3 = 43,200 as used in the model above.

Financial capacity to take on the loan product for this enterprise	
Loan Variables	Calculated Variables
Loan Amount	123,

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Goal: YIELDS AND INPUTS ITEMS	UNIT	PRICE(RWF)	USD	WITHOUT PROJECT	WITH PROJECT																	
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Production					1	2	3	2	3	2	3	2	3	2	3	2	3	3	3	3	3	
young females sold		40,000	40.82		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
young males sold		50,000	51.02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
culled females sold		20,000	20.41		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Investment inputs					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shed		250,000	255.10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Animals		130,000	132.65		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Operating inputs					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Goat					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
female alive 1yr calculated					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
male alive 1 yr round					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Operating Cost Prices					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
feed (minerals and bran)		5,000			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
veterinary drugs		2,500			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Labour					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Human resources					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Skilled (paid) labour					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Family labour (spend 10% of time in a year on Labour)	person day	750			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FINANCIAL BUDGET		WOP	WITH PROJECT	WITH PROJECT															19	20		
ITEMS				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Production revenue					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
young females sold					80,000	120,000	80,000	120,000	80,000	120,000	80,000	120,000	80,000	120,000	80,000	120,000	80,000	120,000	120,000	120,000	120,000	
young males sold					150,000	150,000	200,000	150,000	200,000	150,000	200,000	150,000	200,000	150,000	200,000	150,000	200,000	150,000	200,000	150,000	200,000	
culled females sold					-	20,000	20,000	-	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	
Total revenue					-	250,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	
Investment input costs					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shed		(250,000)			(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	
Animals					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total investment costs					-	(380,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	(130,000)	
Operating input costs					-	(54,440)	(54,440)	(49,440)	(54,440)	(49,440)	(54,440)	(49,440)	(54,440)	(49,440)	(54,440)	(49,440)	(54,440)	(49,440)	(54,440)	(54,440)	(54,440)	
female alive 1yr calculated					-	(27,220)	(27,220)	(24,720)	(27,220)	(24,720)	(27,220)	(24,720)	(27,220)	(24,720)	(27,220)	(24,720)	(27,220)	(24,720)	(27,220)	(27,220)	(27,220)	
male alive 1 yr round					-	(81,660)	(81,660)	(74,160)	(81,660)	(74,160)	(81,660)	(74,160)	(81,660)	(74,160)	(81,660)	(74,160)	(81,660)	(74,160)	(81,660)	(74,160)	(81,660)	
Sub-total operating costs					-	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	
Labour costs (8.0% of Full time)																						
Skilled (paid) labour																						
Family labour (spend 10% of time in a year on Labour)																						
(27,000)		(27,000)			(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	(27,000)	
Benefits Summary					-	250,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	300,000	250,000	
Revenue						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Investment & Production Related Costs																						
Gross Margin before labour costs						(380,000)	(211,660)	(211,660)	(204,160)	(211,660)	(204,160)	(211,660)	(204,160)	(211,660)	(204,160)	(211,660)	(204,160)	(211,660)	(211,660)	(211,660)	(211,660)	
Without Project (WOP) income proxy						36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000		
Margin after labour costs and capex						(344,000)	74,340	114,340	131,840	114,340	131,840	114,340	131,840	114,340	131,840	114,340	131,840	114,340	131,840	114,340	131,840	
NPV Considering total Costs (
Return to family labour*						2,176																
*consider full development year family labour requirements																						
Discount rate						8.5%																
NPV @ 8.5%						677,992																
IRR						32%																
NPVI						2,473,031																
WCPI						(1,715,959)																
B/C ratio						1.38																
Switching values Benefits						0.27																
Switching values Costs						(0.38)																

Financial capacity to take on the loan product for this enterprise
 Sheep and goats will be on 100% grant basis targeting the most vulnerable under Heller's graduation pathway approach.

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Pig breeding		1.00		UNIT	PRICE(RWF)	USD	WITHOUT PROJECT	WITH PROJECT																						
YIELDS AND INPUTS								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
ITEMS																														
Main production																														
piglets male								1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500					
piglets female								3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000					
SALES PRICES																														
Investment inputs																														
Land								500,000																						
piglet (per cage)								250,000	250,000	255,10	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
sows								3,000	3,000	3,006	-	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3				
Operating inputs								Kg/pig																						
feed (2.5 kg/l)								4,563	4,563	4,564	4,564	4,564	4,564	4,564	4,564	4,564	4,564	4,564	4,564	4,564	4,564	4,564	4,564	4,564	4,564					
feed miller/starter								1,500	240	245	-	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500				
transport								1	100,000	313,73	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
farm manager								1	840,000	2,635,32	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
farm worker								1	480,000	1,505,89	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
vet costs								1	60,000	19,83	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
Misc								1	240,000	720,95	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
Labour (5 Months)																														
Number of Labourers									2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
Hired labor								person day	1,000			360	360	360	360	360	360	360	360	360	360	360	360	360	360	360				
Family labour								person day	750			360	360	360	360	360	360	360	360	360	360	360	360	360	360	360				
FINANCIAL BUDGET								WOP																						
ITEMS								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
Main production revenue																														
piglets male								1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000		
piglets female								2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000	2,025,000		
Total revenue								3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000			
Investment input costs																														
Land								(500,000)																						
piglet (per cage)								(250,000)	-																					
small equipment (per pig)								(9,000)	-																					
Sub-total investment costs								(759,000)	-																					
Operating input costs																														
feed (2.5 kg/l)								-																						
feed miller/starter								-																						
transport								-																						
farm manager								-																						
farm worker								-																						
vet costs								-																						
Misc								-																						
Sub-total operating costs								-																						
Labour costs																														
Skilled (local) labour (Farm manager)									360,000	270,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000		
Family labour									360,000	270,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000		
Sub-total labour costs								-																						
Benefits Summary								-																						
Revenue								3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000	3,150,000		
Investment & Production Related Costs								(759,000)	(1,763,970)	(1,772,970)	(1,763,970)	(1,772,970)	(1,763,970)	(1,772,970)	(1,763,970)	(1,772,970)	(1,763,970)	(1,772,970)	(1,763,970)	(1,772,970)	(1,763,970)	(1,772,970)	(1,763,970)	(1,772,970)	(1,763,970)	(1,772,970)	(1,763,970)	(1,772,970)		
Gross Margin before labour costs								-																						
Without Project (WOP) income proxy ^b								144,000	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)	(144,000)		
Margin after labour costs and capex								(90,000)	1,242,030	1,242,030	1,233,030	1,242,030	1,242,030	1,233,030	1,242,030	1,242,030	1,233,030	1,242,030	1,242,030	1,233,030	1,242,030	1,242,030	1,233,030	1,242,030	1,242,030	1,233,030	1,242,030	1,242,030	1,233,030	
Switching values								0.14																						
Switching values Costs								(0.17)																						

^a This rate considers the poverty line (Uburu category 2) which is RWF 159,375 per adult equivalent per year in the prices of January 2014. Extreme poverty line (Uburu 1) is RWF 105,064 (EICV 5, 2016/2017). So it was agreed that average, 12,000 RWF per month be used with compares fairly to the boda boda (Motor Bike taxi) income as reference for the youth. Boda boda rider will work about 25 days a month which yields about 480 RWF a day.

^b The opportunity cost. For runnning this enterprise one individual's time which translates to RWF 12,000 X 12 = 144,000 as used in the model above.

Financial capacity to take on the loan product for this enterprise

Loan Variables	Calculated Variables
Loan Amount	259,000
Down Payment	0
Interest	5.00%
Repayment	-27,1920
Years	5
Optional Payment	
Loan Results	
Total Interest	0
Number of Payments	1
Total Principal	259,000
Disbursement date	
Total of Payments	259,000
Payment Schedule	
Date	
from year	
year 1	(271,920,00)
year 2	
year 3	
year 4	
year 5	
Totals	(271,920)
	-

With a gross margins/cash flows above, financing both the principle and loan payments in the above amortisation schedules is feasible with a one year grace period

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ITEMS	UNIT	PRICE(RWF)	USD	WITHOUT PROJECT	WITH PROJECT																					
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Main production					100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Live weight per Animal	kg/pig	1.300	1.33		130.000	132.65																				
Number of Animals per batch					2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00		
Number of batches per year					20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20		
Total number of live expected animals per year					0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		
Estimate of mortality					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Own Consumption					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Net available production- Live Animals	Animals per year	130.000	132.65	-	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19		
Investment inputs					5																					
Lane	Cage for 5 pigs	448.500	255.10	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
pigsty (1 cage for 5 pigs)	small equipment (per pig)	250.000	3.000	3.06	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10		
Operating Inputs	Kg/pig	28	240	0.75	-	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	
Feed starter		228	220	0.69	-	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332		
Feed finisher		15	1.500	4.71	-	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285	
Piglets (price per kg live weight)		1	250	0.78	-	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	
transport		1	500.00		-	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00		
Vet costs		1	1.000		-	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00		
Misc costs		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Labour Costs					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Number of Labourers					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Hired labour	person-days	750			360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360		
Family Labour (Labour 5 Months)	person-days	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
FINANCIAL BUDGET					WOP	WITH PROJECT																				
ITEMS					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Main production revenue					-	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000		
Net available production- Live Animals					-	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000		
Total revenue					-	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000		
Investment input costs	Kg/pig	(1,348.500)	(500.000)		(1,348.500)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)	(500.000)		
Land	pigsty (1 cage for 5 pigs)	(500.000)	(30.000)		(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)		
small equipment (per pig)		(30.000)																								
Sub-total investment costs		(1,878.500)			(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)	(30.000)		
Operating Input costs																										
Feed		(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)	(127.680)			
Feed finisher		(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)	(953.040)			
Piglets (price per kg live weight)		(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)	(427.500)			
transport		(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)	(4.750)			
Vet		(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)	(19.00)			
Misc costs		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Sub-total operating costs						(686.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	
Labour costs						(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	
Hired labour						(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	
Family Labour (Labour 5 Months)						(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	
Sub-total labour costs						(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	(270.000)	
Benefits Summary																										
Revenue						-	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	2.470.000	
Investment & Production Related Costs						(1,878.500)	(686.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	(1,541.470)	
Gross Margin before labour costs						(288,000)	(1,783.530)	(928.530)	(898.530)	(928.530)	(898.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)	(928.530)
Without Project (WOP) income proxy						(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	(288,000)	
Margin after labour costs and capex						(2,166,500)	(1,495,530)	(640,530)	(610,530)	(640,530)	(610,530)</															

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af this rate considers the poverty line (Ubudehe category 2) which is RWF 159,376 per adult equivalent per year in the prices of January 2014. Extreme poverty line (Ubudehe 1) is RWF 105,064 (EICV 5, 2016/2017). So it was agreed that average, 12,000 RWF per month be used with compares fairly to the boda boda (Motor Bike taxi) income as reference for the youth. Boda boda rider will work about 25 days a month which yields about 480 RWF a day.

b/ The opportunity cost after this enterprise is one individual's time which translates to RWF 12000 X 12= 144,000 as used in the model above.

Financial capacity to take on the loan product for this enterprise

Loan Variables		Calculated Variables	
Loan Amount	\$25,000	Down Payment	0
Percent Down	0%	Loan Term	925.00
Interest Rate	5.00%	Term Requirement	\$771.250
Years	1	Optional Payment	
Loan Results			
Total Interest	46,250	Number of Payments	1
Total Principal	\$25,000	Disbursement date	
Total of Payments	\$71,250		
Payment Schedule			
Date	Payment	Interest	Principal
first year			\$92,500
year 1		(\$71,250.00)	46,250
year 2			0
year 3			0
year 4			0
year 5			0
	Totals	(\$71,250)	46,250

With a gross margins/cash flows above, financing both the principle and loan payments in the above amortisation schedules is feasible with a one year grace period

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a/ This rate considers the poverty line (Ubuduhe category 2) which is RWF 159,375 per adult equivalent per year in the prices of January 2014. Extreme poverty line (Ubuduhe 1) is RWF 105,064 (IEIV5, 2016/2017). So it was agreed that average, 12,000 RWF per month be used with compares fairly to the boda boda (Motor Bike taxi) income as reference for the youth. Boda boda rider will work about 25 days a month which yields about 480 RWF a day.

b) The opportunity cost of attending to this enterprise is two individual's time which translates to RWF 12000 X 12 x2 = 280000 as used in the model above.

Financial capacity to take on the loan product for this enterprise			
Loan Variables		Calculated Variables	
Loan Amount	417,000	Down Payment	0
Percent Down	0%	Loan Amount	417,000
Interest Rate	5.00%	Repayment	-437,850
Years	10	Optional Payment	
Loan Results		Amortization Data	
Total Interest	20,850	Number of Payments	120
Total Repayment	437,850	First Year Payments	417,000
Total of Payments	437,850	Last Year Payments	
Payment Schedule			
Date	Payment	Interest	Principal
first year			417,000
Year 1	(437,850.00)	20,850	0
Year 2			
Year 3			
Year 4			
Year 5			
Totals	(437,850)	20,850	

With a gross margins/cash flows above, financing both the principle and loan payments in the above amortisation schedules is feasible with a one year grace period.

Project for Inclusive Small Livestock Markets PRISM Project Design Report (PDR)

a/ This rate considers the poverty line (Ubudute category 2) which is RWF 159,375 per adult equivalent per year in prices of January 2014. Extreme poverty line (Ubudute 1) is RWF 106,064 (IECV 5, 2016/2017). So it was agreed that average, 12,000 RWF per month be used with compares fairly to the boda boda (Motor Bike) tax income as reference for the youth. Boda boda rider will work about 25 days a month which yields about 480 RWF a day.

Financial capacity to take on the loan product for this enterprise

Loan Variables		Calculated Variables	
Loan Amount	670,000	Optional Payment	
Percent Down	0%	Loan Amount	670,000
Interest Rate	5.00%	Repayment	-703,500
Years	1	Optional Payment	
Loan Results			
Total Interest	33,500	Number of Payments	
Total Principal	670,000	Disbursement date	
Total of Payments	703,500		
Payment Schedule			
Date	Payment	Interest	Principal
first year			670,000
year 1	(703,500.00)	33,500	
year 2			
year 3			
year 4			
year 5			
	Totals	(703,500)	33,500

With a gross margins/cash flows above, financing both the principle and loan payments in the above amortisation schedules is feasible with a one year grace period.

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b) This opportunity cost is the poverty line (Ubudehe 1) is RWF 105,064 (IECIV 5, 2016/2017). So it was agreed that average 12,000 RWF per month be used with compares fairly to the boda boda (Motor Bike taxi) income as reference for the youth. Boda boda rider will work about 25 days a month which yields about 480 RWF a day.

Financial capacity to take on the loan product for this enterprise

Loan Variables		Calculated Variables	
Loan Amount	917,647	Down Payment	500,000
Percent Down	0%	Loan Amount	500,000
Interest Rate	5.00%	Répayment	\$525,000
Years	15	Optional Payment	
Loan Results			
Total Interest	25,000	Number of Payments	180
Total Principal	500,000	Disbursement date	12/31/2010
Total of Payments	\$525,000		
Payment Schedule			
Date	Payment	Interest	Principal
first year			500,000
year 1	(\\$525,000.00)	25,000	
year 2			
year 3			
year 4			
year 5			
	Totals	(\\$525,000.00)	25,000

With a gross margin/cash flows above, financing both the principle and loan payments in the above amortisation schedules is feasible with a one year grace period.

Annex 4: Social Environment and Climate Assessment (SECAP) Review Note

1. Introduction

1. The objective of the SECAP Review Note was to assess the social, environmental and climate change issues relevant for the project, in order to identify how the project might impact them and how IFAD's mainstreaming themes (gender, youth, nutrition, environment and climate change) could be addressed through an integrated approach.
2. With this aim, consultations with relevant stakeholders were undertaken during the project design mission, including: farmers organizations, women and youth groups engaged in small livestock value chains, national authorities (Ministry of Infrastructure, Rwanda Energy Group) local authorities at the district level (including Health and Environment district officers), technical and development partners (Heifer International, FAO, WFP, SUN civil society network, ENABEL, SNV, VSF-Belgium), the Rwanda Youth Agribusiness Forum and the Imbaranga Farmers organizations, among others.

2. Situational analysis and potential project impacts

2.1 Socio-economic assessment

a. Overall poverty situation

3. The project area encompasses the Northern, Southern and Western provinces of Rwanda⁸⁶. The three provinces together have a population of approximately 1,769,000 households (62.6% of the total number of households at the national level)⁸⁷, corresponding to 7,784,000 people⁸⁸, of which 20% are in Ubudehe category 1, 38% in category 2, 42% in category 3 and only 0.10% are in category 4⁸⁹, with marginal variations between the provinces. 89% of the population live in rural areas⁹⁰. Table 1 shows the number of households in the four Ubudehe categories in the project area and respective districts.

4. Small plot sizes, limited land availability, and low soil fertility due to erosion are major constraints on farm productivity and profitability and prevent farmers from moving further up the value chain. The prevalence of poverty among rural households is primarily associated with low productivity in subsistence agriculture and low purchasing power. 60% of households cultivate less than 0.7 ha, and 30% cultivate less than 0.2 ha⁹¹. Poverty is highest by far (76.6%) among households with little or no land, who obtain their income mainly from seasonal labour. Resource poor rural households who farm small plots are the most food insecure.

⁸⁶ Other districts, e.g. Bugesera (Eastern province) and the city of Kigali may be targeted for specific activities, such as the establishment of strategic partnership between small holders and the private sector and their inclusion in productive alliances or 4P arrangements.

⁸⁷ Source: Ministry of Local Government (MINALOC), data collected on February 2019.

⁸⁸ One household = 4,4 household members.

⁸⁹ The estimation is made using the national wealth ranking system (*Ubudehe* system), whose classification is based on a participatory self-assessment (4 revised categories). The data on households falling in the 4 different Ubudehe categories have been provided by MINALOC during the project design mission (February 2019). The first category (i) includes the very poor who do not have a house or cannot to pay rent; have a poor diet; and can hardly afford basic needs; (ii) the second category includes those who have a dwelling of their own or are able to rent one but rarely get full time jobs; (iii) the third category includes those who have a job and farmers who go beyond subsistence farming to produce a surplus, which can be sold; (iv) the fourth category includes people who own large-scale business.

⁹⁰ Fourth Rwanda Population and Housing Census, 2012. There are differences in the incidence of poverty across districts: the poverty rate rises in the Southern and Western provinces, with higher incidence in Nyaruguro (South) and Nyamasheke (West) districts where the number of households living in poverty reaches 74 and 71% respectively, and in Ngororero (West), Gisagara (South) and Gakenke (north) districts where more than 65% of the population live in poverty.

⁹¹ NISR, Rwanda Natural Capital Accounts for Land, 2018

Table 1. Ubudehe categorization per province and districts

Ubudehe categorization per province and district						
North	District	Ubudehe	Ubudehe	Ubudehe	Ubudehe	Grand Total
		category 1	category 2	category 3	category 4	
Burera	Burera	18179	32782	36140	7	87108
	Gakenke	13055	45561	31230	13	89859
	Gicumbi	24181	34110	38627	70	96988
	Musanze	15431	44023	40341	230	100025
	Rulindo	13914	31065	36767	36	81782
	Subtotal	84760	187541	183105	356	455762
	South					
Gisagara	Gisagara	22931	35358	31393	19	89701
	Huye	17718	21634	49759	248	89359
	Kamonyi	12654	44197	39012	31	95894
	Muhanga	9118	22653	52692	96	84559
	Nyamagabe	16111	32229	37402	111	85853
	Nyanza	15378	31731	35957	68	83134
	Nyaruguru	22366	29674	17914	8	69962
	Ruhango	17342	32879	33611	29	83861
	Subtotal	133618	250355	297740	610	682323
West	Karongi	14117	26215	41550	57	81939
	Ngororero	24231	37593	32269	12	94105
	Nyahabihu	11481	34421	28129	16	74047
	Nyamasheke	35053	31080	26798	88	93019
	Rubavu	17161	38741	49197	407	105506
	Rusizi	12930	34179	49693	182	96984
	Rutsiro	17735	33267	34271	12	85285
	Subtotal	132708	235496	261907	774	630885
Project Area	TOTAL	351086	673392	742752	1740	1768970
Rwanda		490055	1132482	1196933	6896	2826366

Source: MINALOC, data collected in February 2019.

5. Despite increases to food availability, stability of food throughout the year and at all times remains an important constraint in the project area. Findings from EICV4 (2014/2014) and EICV5 (2016/2017) show a correlation between poverty rates with the rise in the price of foods (especially staple vegetables and root crops) and the reduction of purchasing power of households. According to the latest CFSVA (2018) almost 60% of food insecure households are in Ubudehe category 2 and 30% are in Ubudehe category 1. Household food security is strongly related to food prices with poorer households far more vulnerable to fluctuating prices. Food prices for staple commodities such as maize and beans are generally increasing at the end of the year, before the harvesting season. This is also the time of the year when household food stocks have run out and market dependency is highest.

6. Poverty also relates with households' vulnerability to shocks and with their ability to cope with these shocks⁹². As the most of the rural population is dependent on rain-fed agriculture and consumption of home produced food, people's ability to adequately feed themselves is susceptible to shocks from farming and the domestic harvest, that arise as

⁹² Shocks (unusual situations) are mostly related to farming and domestic harvest, as well as problems of high food prices and issues related to health.

result of periodic droughts and floods⁹³. Households' low resilience and high vulnerability to shocks, therefore, constrain their ability to overcome poverty barriers and to improve food security and nutrition.

7. Despite the high rates of poverty and food insecurity, the project area is a traditional production basin for small livestock and poultry: the Northern province alone accounts for 42% of the national sheep production, Southern province of pig production (42%) and poultry (30%). Table 2 presents the total number of households in the project area and respective districts, vis-à-vis the percentage of food insecure households and the small livestock and poultry production.

Table 2. Number of HHs and food insecure HHs in the project area and small livestock production

Total number of HHs in the project area, % of food insecure HHs				Small livestock and poultry production (total number of animals per province and per district)			
	District	Number of HHs	% of food insecure HHs	Goats	Sheeps	Pigs	Hens
North	Burera	87108	29,7	31334	36733	5573	37339
	Gakenke	89859	15,0	47796	37779	10938	27951
	Gicumbi	96988	17,3	74542	16807	8021	43525
	Musanze	100025	11,5	35078	28899	10545	16552
	Rulindo	81782	16,6	48667	14431	4357	18388
	Subtotal	455762	18,02	237417	134649	39434	143755
South	Gisagara	89701	23,5	116609	4393	16473	59012
	Huye	89359	14,4	46193	6636	13394	26047
	Kamonyi	95894	23,5	43796	3512	4993	29926
	Muhanga	84559	13,1	39604	12140	31585	31492
	Nyamagabe	85853	29,8	69261	22593	28268	24871
	Nyanza	83134	20,0	48499	2396	2578	57699
	Nyaruguru	69962	24,0	50615	13652	16832	8857
	Ruhango	83861	17,7	52849	3985	8860	59904
	Subtotal	682323	20,75	467426	69307	122983	297808
West	Karongi	81939	24,9	88519	9167	13593	32993
	Ngororero	94105	40,8	46898	20438	32738	16408
	Nyabihu	74047	25,8	46345	27146	6623	16862
	Nyamasheke	93019	20,6	58332	6620	18022	48119
	Rubavu	105506	21,9	50754	7438	2573	22158
	Rusizi	96984	25,4	65494	18134	14915	17683
	Rutsiro	85285	49,0	58339	4878	16370	45795
	Subtotal	630885	29,8	414681	93821	104834	200018
Project Area	TOTAL	1768970	49	1119524	297777	267251	641581
Rwanda		2826366	18,7	1736211	323002	310833	1026440

Source: MINALOC, data collected in February 2019; CFSVA 2018 and National Agricultural Survey, 2008.

b. Gender

8. Rwanda has made great strides in promoting gender equality, and significant gains in improving women's participation at the political and decision-making levels: this has resulted in Rwanda having the highest percentage (64%) of women in parliament in the world. In the 2018 World Economic Forum Gender Parity Report, Rwanda ranked 6th out of 149 countries (global index) and 4th regarding achievements in political empowerment.⁹⁴

9. Despite these achievements, gender disparities still persist, especially in rural areas, where traditional patriarchal attitudes continue to prevail. Data from EICV5 show that 39.5% of female-headed households were classified as poor compared to 37.6% of male-

⁹³ In response to farm shocks, EICV5 reports, 40% of poor rural households reacted by buying less food, while only 20% used savings or borrowed money. Similarly, households' response to high food prices was purchasing less food (70%).

⁹⁴ World Economic Forum (WEF). Global Gender Gap Report. 2018.

headed households in 2016/17. Among households headed by women, 69% are either food insecure or marginally food secure⁹⁵. In the project area, data from the Ministry of Local Government (2019) show that, while female-headed households account for 20% of the total households in Ubudehe category 3 (not poor), the average increases up to 55% in Ubudehe category 1.

10. According to the latest Agricultural Household Survey, 2017, women in agricultural households represent 53% of the population in the three provinces targeted by the project. In rural areas, women concentrate their work in agriculture (almost 90%)⁹⁶ and rely on agricultural activities as the only source of income. Yet, with lower levels of schooling and higher rates of illiteracy, they are constrained to subsistence farming with insufficient skills, access to markets and control over land and other key assets and agricultural services, compared to men. Women also lack the capacity to participate in agri-business and they are less employed in non-farm work, relative to men. In male-headed households, women work for more hours (15.5 hours) than men (7 hours), spending over three hours more on farming activities than the seven hours worked by men, in addition to five hours on unpaid reproductive and household work⁹⁷.

11. Violence against women was defined in 1993 by the United Nations Declaration on the Elimination of Violence against Women as "any act of gender-based violence (GBV) that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life".⁹⁸ In Rwanda, the Gender Monitoring Office has defined four categories of GBV: (i) **economic violence** through denial of economic rights to property, succession, employment or other economic benefits; (ii) **physical violence** as the intentional use of physical force with the potential to cause harm, injury, disability or death; (iii) **sexual violence** as an act of forcing another individual, through violence, threats, deception, cultural expectation, weapons or economic circumstances, to engage in sexual behaviour against her or his will; and (iv) **psychological violence** as a trauma to the victim caused by acts, threats of acts or coercive tactics; these threats are often related to sexual or physical violence. Yet, few data are available on the gender-based violence cases in the rural areas.

12. Major issues that constrain women in agriculture are related to (i) time burden (ii) access to finance; (iii) access to inputs and technology and (iv) extension services and trainings⁹⁹. Gender disparities are also evident in the value addition and marketing of agricultural commodities where more economic commodities are controlled by men. In general women are associated with marketing small quantities of production while larger quantities are marketed by men who also control the income from the sales.

c. Youth

13. Youth is defined in Rwanda as population aged 16 to 30 years¹⁰⁰. In the three provinces targeted by the project, youth represents 25% of the total rural population and 30% of the agricultural labourers¹⁰¹. Among them, 66% has primary education while only

⁹⁵ EICV5, 2016/2017, Thematic Report, Gender. Part of the reason is that in 70% of cases, women heads of household are widows and have fewer adult household members that can contribute to household income

⁹⁶ 70.5 of women work as independent farmer and 18.3 as wage farmers. NISR, EICV5, 2016/2017

⁹⁷ MINAGRI, Agriculture Gender Strategy, 2012

⁹⁸ Declaration on the Elimination of Violence against Women, adopted by the United Nations General Assembly (A/RES/48/104), New York, 20 December 1993

⁹⁹ Women's Empowerment Agriculture Index (WEAI) Survey, 2015.

¹⁰⁰ Ministry of Youth, National Youth Policy, 2015.

¹⁰¹ NISR, Agricultural Households Survey (AHS), 2017.

17% has secondary school education¹⁰². According to the EICV5, 77.2% of rural youth are workers, mostly engaged as independent farmers (36 % male and 53 % female). Among young people working in agriculture, the proportion of male decreases for older age groups from 64.5% (16–20 years old) to 46.5 % (26–30 years old); young male are gradually engaged in other working activities, such as construction or repair of motorcycles and vehicles. This pattern reverses for female as the proportion increases in older age groups from 52.2% (16–20 years old) to 62.2% (26–30 years old).

14. Young people are most amongst the most vulnerable sectors of the population: almost 30% of young people (16–30) live in households that are below poverty line, while the rate of extreme poverty among youth is 11.3% compared to the 16% at the national level for all ages. More female were extremely poor (12%) compared to males (10.4%) in 2016/2017¹⁰³.

15. The major causes of problems in regard to youth's access to market and challenges to youth entrepreneurship and business development include: lack of technical skills, limited access to information and opportunities, inadequate access to resources (land and capital) insufficient support services, business and management skills, among others. Precarious forms of employment with low level of earning is the main employment problem for the youth.

e. People living with disabilities

16. Around 7% of heads of household have a disability¹⁰⁴. These households tend to be more food insecure (27% against 18% for the heads of households without disability). The majority of people with disabilities live in rural areas. Women with disabilities are less likely to be married and they are more isolated than disabled men. Disabled women and girls are also more vulnerable to sexual violence and abuse.

f. Nutrition

17. According to the CFSVA, 2018, there has been a reduction of stunting prevalence among children under five years at the national level over the last few years, from 43.4% in 2012 to 36.7% in 2015 and 34.9% in 2018, although the level of stunting remains very high according to the WHO threshold. In the three provinces targeted by the project, the prevalence of child stunting reaches 40% on average¹⁰⁵. The level of acute undernutrition (wasting) for children under 5 years is 2.0 %, which is within the WHO acceptable limit. Infant and young child feeding (IYCF) practices remain inadequate: CFSVA 2018 finds that no more than 17% of children achieved the minimum acceptable diet (MAD) based on dietary diversity and meal frequency. Moreover, in 2015, 19% of women in reproductive age suffered from anaemia as a result of low iron intake (CSFA, 2015).

18. In the project area, there is a clear correlation between poverty rates, food insecurity and prevalence of stunting in children. In most cases, districts with a higher proportion of food insecure households have a higher prevalence of stunted children¹⁰⁶. However, even though stunting rate has decreased when households are more food secure, findings from CFSVA 2018 show that there is still about 26% stunted children in food secure households.

¹⁰² Proportion between male and female is equal at the primary school level while the number of female attending secondary school is slightly higher (18 % compared to 16 % of male). AHS, 2017.

¹⁰³ EICV5, 2016/2017, Thematic Report, Youth.

¹⁰⁴ CFSVA, 2018.

¹⁰⁵ According to CFSVA 2018, 11 districts presents more than 40% prevalence of child stunting, with Rutsiro, Nyabihu and Rubavu districts (West) presenting over 50% stunting prevalence.

¹⁰⁶ The four districts in the project area, Rutsiro and Ngororero (west), Nyamagabe (South) and Burera (North) with 30 % or more of food insecure households also have a stunting prevalence above 40%.

19. An analysis of determinants for chronic malnutrition in the project area suggests that poverty and education, especially of the mother, have a clear relationship with prevalence of stunting in children: (women living in poverty and with low level of education are more likely to have stunted children): almost one child out of two whose mother has no education is stunted.¹⁰⁷ CFSVA 2018 also shows a significant correlation between the mother's food consumption and the child's food consumption: women's knowledge and education on food diversity has been recognized as a significant factor impacting children's food consumption, especially for achieving the minimum acceptable diet.

20. In addition, environmental factors, both behavioural and those linked to access to water and sanitation, also contribute to this problem: access to clean drinking water remain a challenge in rural areas (47% have access to water within 500 meters of their residence)¹⁰⁸.

2.2 Environment and climate context, trends and implications

a. Environmental assessment

21. Rwanda's land is fragile due to its mountainous topography. The Northern and Western provinces host the Congo-Nile Ridge and volcanic chains of Birunga (northern regions) with altitude varying between 1,800 m and 4,507 m (on the top of Kalisimbi Volcano) while the Western and Southern regions around Kivu Lake and Bugarama plains range between 900 m to 1800 m. In these regions, high level of population pressure coupled with the susceptibility to landslides may increase soil loss and nutrient leaching from soil and thus challenging agricultural productivity growth and endangering the life of about 40 % of total population.¹⁰⁹

22. The small livestock production and family animal farming in Rwanda rely mainly on low- input systems and hence have light environmental impact. In addition, small livestock production (especially goat and sheep) in rangeland may improve soil and vegetation cover, plant and animal biodiversity by removing biomass, controlling shrubs growth and dispersing seeds through their hoofs and manure¹¹⁰. Depending on the types of production, backyard or commercial, the environmental impact of each livestock farming system will vary according to the main source of animal feed (natural pastures, home-based or agro-industry animal feed) and processing techniques and facilities.

23. **Small ruminants (sheep and goats)** are primary owned by the poor sections of rural communities and contribute significantly to subsistence farming. Their meat is largely marketed informally on local and village markets. Sheep and goats contribute significantly to local livelihoods development because of their ability to convert forages and crops and household residues into meat, fibre, skins and milk. These value chains are characterized by low environmental impact due to low productivity levels as their main source of feed is grazing and browsing on natural pastures. Due to their grazing habits and physiological characteristics, they are able to browse on plants that would normally not be eaten by other livestock species¹¹¹. Yet, the quantity and quality of natural pastures show seasonal

¹⁰⁷ CFSVA 2018. Stunting in children living in the poorest households is higher (49%) than among children in the richest households (21%) and is higher among children whose mothers have no education (47%) than among those whose mothers have a secondary education or higher (19%). More than 40% of children were stunted in households within Ubudehe category 1.

¹⁰⁸ NISR, EICV5, 2016/2017, Poverty Report.

¹⁰⁹ MIDIMAR, 2015 and CFSVA, 2018

¹¹⁰ Dubeuf, 2011

¹¹¹ Herrero & Al. 2014

fluctuations. Poor nutrition leads to poor production and reproductive performance and increased susceptibility to diseases and parasites.

24. Poultry (layers and broilers) value chains: Poultry are adaptable to various climates and altitudes. They are well suited to various agro-ecological zones in Rwanda and may be combined to other types of farming¹¹². The poultry sector in Rwanda is divided into traditional poultry farmers and industrial poultry farmers. 80% of small-scale farmers are rearing chicken and the estimated population of birds amount to 4.8 million animals, majority of them are indigenous¹¹³. The traditional poultry farmers are predominant and produce mainly in village and backyard family farming, with mainly dual purposes (meat and eggs) chicken species fed with home-based formula (e.g. mixes of by-products, soya and maize bran, etc.). The commercial poultry value chain is highly technical and relies on pricey manufactured feed composed of imported raw materials (e.g. cotton seed cake, fish meal, lake shells, etc.) or produced in small quantities (e.g. maize) and in competition with human food. The expansion of the farming system (from backyard to commercial enterprises) increases the environmental impact. Poultry large facilities produce strong odours and attract flies, rodents and other pests that create local nuisances and carry disease¹¹⁴. In addition, inadequate disposal of poultry carcasses can contribute to water pollution especially in areas prone to flooding or where there is a shallow water table¹¹⁵.

25. Pork value chain: In the project-targeted areas, the pig sector is characterized by intensive and semi-intensive production systems. Pig farming systems have low cost of production, require less space than other livestock species and are adaptable to various environmental conditions (Mbuzza & al., 2016). Feed ratio for backyard pig production is mainly composed of wastes and crop residues. Housing structures are mainly temporary and semi-permanent, including a provision of pits for waste disposal to collect manure used for fertilization of crop fields. The semi-intensive pig production enterprises rely on commercial feedstuff for supplementary feeding of on-farm ratio formulation. Manure and waste disposal is a major environmental challenge in small- and large-scale commercial systems, especially when not linked to mixed crop-livestock system (Herrero, 2014). This is also a challenge at small slaughterhouses and slabs with no effluent treatment facilities.

26. The project will mainstream environmental management through promotion of agro-forestry species at vulnerable households, promotion of rainwater harvesting technologies at both household and processing and trading facilities.

b. Climate trends and impacts

27. In the north-west highlands and south-western regions, climate change is expected to increase mean rainfall as well as intensities and number of rainy days¹¹⁶. These regions will most likely have a constant supply of water¹¹⁷. In various climate projections scenarios, northern highlands and southwest regions will more likely experience extreme events such as floods and landslides.

28. Global total Greenhouse Gas (GHG) emissions from livestock supply chains (including feed production and processing, enteric fermentation from ruminants and manure management) are estimated at 14.5 % from all human induced emissions with the highest

¹¹² Mbuzza & al., 2016

¹¹³ FAOSTAT, 2014.

¹¹⁴ Gerber, 2013.

¹¹⁵ Ibidem.

¹¹⁶ GoR, 2018.

¹¹⁷ Muhire et al., 2016.

emissions produced by beef and cattle milk production systems while pig and chicken production systems have the lowest GHG emissions¹¹⁸. GHG emissions from small ruminants (sheep and goat) represent 6.5% of the sector's global emissions. Globally pork production represents 9% of livestock sector emissions and ninety-five percent of the production is mainly geographically concentrated in East Asia, Europe and the Americas. Finally, chicken production GHG's emission is estimated at 8% of the livestock sector emissions.

29. **Access to energy.** In the recent years, access to energy has increased and 34,5 % of households had access to electricity as of June 2017. However, the Final Energy Strategy (2018) acknowledges that grid connections will be economically inefficient in the short-medium term for households which use small volumes of electricity. The grid expansion is a slow process and it will take decades to reach all households. Hence, the Government of Rwanda promotes off-grid (e.g. solar home systems) and sustainable biomass solutions which are considered as viable alternative to grid connections¹¹⁹. The promotion of renewable energy along small livestock value chain will contribute to the national targets for both climate change mitigation and adaptation.

30. During project implementation, emissions intensities will fluctuate according to the species (monogastrics are more efficient than ruminants), products (white meats and eggs are more GHG-efficient than red meat) and the productivity of the animals (the higher the productivity the lower the emissions per unit of product, apart from pig production)¹²⁰. In all production systems, manure storage, processing and applications practices will be adopted in order to mitigate GHG emissions. In addition, the project will promote energy efficiency along the small livestock value chains, through promotion of biogas systems at both households levels and processing facilities (e.g. slaughter slabs and houses), and solar panels for small scale poultry farms.

c. Climate change mitigation

31. An EACT¹²¹ assessment shall be performed at project inception. This will require collection of data during the baseline survey.

2.3. Target group profiles

32. The project will target three main categories of beneficiaries applying differentiated and complementary approaches:

33. Poor and food insecure rural households: 23,400 rural households from Ubudehe category 1 and 2 will be targeted. Poor and food insecure households have few active members (active members are between 18-60 years old), are more often headed by a person with low level of education, or a single or a person with disabilities. They mainly depend on agriculture daily labour, on their own agricultural production (low-income agriculturalist), unskilled daily labour, or on external support for their livelihoods. Those engaged in agriculture have no land or land of small size, grow fewer crops, are less likely to have a vegetable garden or livestock, and are less likely to practice land conservation. Within poor households, the project will give priority to:

¹¹⁸ Gerber & al. 2013

¹¹⁹ Republic of Rwanda, Ministry of Infrastructure, 2018, Energy sector strategic plan- 2018/19-2023/24

¹²⁰ Ibidem

¹²¹ The Ex-Ante Carbon-balance Tool (EX-ACT) is an appraisal system developed by FAO providing estimates of the impact of agriculture and forestry development projects, programmes and policies on the carbon-balance. The tool helps project designers to estimate and prioritize project activities with high benefits in economic and climate change mitigation terms.

- Female-headed households: are more prone to be food insecure (23%) than male-headed households (17%)¹²². Among female-headed households, widowed household heads are more likely to be poorer than other categories. CFSVA 2018 found that female-headed households have no land or access to small sized (<0.5 ha) compared to male-headed households. They also own less or smaller livestock than male headed households and consume less of their animal products (only 15% of female headed households consume animal products). Also, female-headed households spend a larger share on food (50 %) than male-headed (45 %).
- Young women and men: the most of the young people (16-30) are workers, engaged in the agricultural sector independent farmers, and they have a low level of education. Female youths are mostly engaged in homestead income generation activities like poultry, small livestock rearing and vegetable production. Both female and male youths also support their incomes through organized group activities like livestock fattening, tree planting, irrigation canal and roof catchment construction.
- Vulnerable households: the poorest and food insecure households, are more likely to have women with low level of education and children suffering from undernutrition and stunting. Although the project will not directly target children, it is expected that they will benefit from project's initiatives aimed at improving the quality of women and households' diets.

34. To reach the poor and food insecure households, the project will deploy a pro-poor approach through a graduation pathway, aimed at addressing community development through an integrated and holistic approach. The graduation pathway will be based on the Values-Based Holistic Community Development (VBHCD) model designed and implemented by Heifer International. This model builds on 12 Cornerstones including financial literacy, self-help groups, nutrition education, gender and women's empowerment, among others. At the core of this approach is the "Passing on the Gift (POG)" practice, through which people give one of their animals' first offspring to others in need¹²³. With this practice, it is expected to significantly increase the number of beneficiaries by the end of the project. Women heads of households, young women and men and vulnerable households will be prioritized as first recipients of the POG practice. With the poorest households the project will target the backyard poultry value chain, the family pig production and the small ruminants production, which are productions particularly suitable for women.

35. Unemployed rural youth (16-30 years age, in Ubudehe category 1 to 3): are youth engaged in agriculture, unemployed and with low level of education (primary level). Overall, 1,530 young people (50% female) will be targeted through this programme (100 per targeted District in average). The project will support groups of ten youth on average, located on the same site but with independent production units. The targeted productions will be commercial poultry (layers and broilers), and pig (breeding and fattening). These productions are particularly well adapted to youth because they require a very limited amount of land, limited investment and they can provide a very good and quick return on investment. The support package will include initial intensive technical and business management support, continuous tutoring through business coaches and provision of start-up capital for investment, and linkages to financial service providers.

36. Market-oriented producers: less vulnerable producers, mostly in Ubudehe category 2 and 3. These medium-income producers usually obtain the vast majority of their income from their own land and from other numerous activities. A total of 1,425 producers will be

¹²² CFSVA 2018.

¹²³ The VBHCD model is detailed in the Project Implementation Manual.

targeted (525 broiler farmers, 450 eggs producers, 450 pig fattener). These farmers, already engaged in a more entrepreneurial logic, will be supported through a combination of technical, business and financial capacity building combined with backward and forward market facilitation. This will be provided in the scope of innovative value chain arrangements that facilitate the participation of smallholders in commercial value chains.

3. Institutional analysis

37. Strategic institution and development partners with whom the project could collaborate to help achieve IFAD's mainstreaming agenda are listed below:

Gender	<p>Ministry of Gender and Family Promotion (MIGEPROF) plays a leading role in the implementation of the gender agenda in the country. The project could coordinate with MIGEPROF on initiatives for gender equality and women empowerment at the district level (coordinating with the Gender and Family Promotion Officers) in particular.</p> <p>The Gender Monitoring Office (GMO) is mandated by the Constitution, along with the Ministry of Gender and Family Promotion, and the National Women's Council for executing several programs and policies to address these gender gaps and constraints.</p> <p>In the Ministry of Agriculture, a gender advisor supports capacity building of staff through development of performance contracts that address gender integration, including identification of key gender-responsive indicators.</p>
Youth	<p>Rwanda Youth Agribusiness Forum (RYAF) is a platform established to bring together different youth organizations, individual youth farmers and entrepreneurs. RYAF is relevant partner, already engaged in IFAD-supported projects PASP and RDDP in the delivery of training and extension services, that could be further involved to engage youth in agriculture, as service providers as well as beneficiaries of capacity building, business and financial services.</p>
Nutrition	<p>District Plans to Eliminate Malnutrition (DPEM). At the district level, in accordance with the National Decentralization Policy, multi-sectoral committees are established to coordinate the implementation of the nutrition programmes. Under the leadership of the District Major, these committees are composed of district directors of health, nutritionists, women and youth' district representatives, agronomists and social protection, veterinary, and hygiene and sanitation officers. The district-level committees oversee the implementation of DPEMs. All 30 districts have developed DPEMs that will be key references for the development and delivery of nutrition-related activities in the districts targeted by the project.</p>
	<p>National Early Childhood Care and Development Programme (NECDP), which operates under the Ministry of Gender and Family Promotion, is a governmental programme already partnering with RDDP in the delivery of nutrition education. Collaboration will be established to deliver nutrition education to youth production groups and cooperatives.</p>
	<p>Food and Agriculture Organization (FAO) in partnership with the GoR, is currently developing national Food-Based Dietary Guidelines</p>

	(FBDGs) in Kinyarwanda, that will be used to educate people to consume a more diverse and nutrient-and balanced diet as well as guide interventions aimed at addressing nutritional concerns in the country. As part of its nutrition-sensitive activities, the project will promote the dissemination of FBDGs with the sectors where it will operate.
Environment and Climate Change	The Ministry of Infrastructures (MININFRA) is in charge initiating, developing and maintaining sustainable power generation facilities to supply clean, cost-effective and uninterrupted energy for the country and the region. In addition, the Ministry aims at increasing access to affordable energy, water and sanitation infrastructures. The Ministry hosts the Rwanda National Biogas Programme (NDBP) and is responsible for the management and implementation of domestic biogas sector development in Rwanda. The overall objective of the programme is to contribute to poverty eradication, gender equality, health improvement and environmental sustainability. NDBP requires private sector involvement in the fields of marketing and promotion, training, construction, operation and maintenance, monitoring and evaluation, quality control, extension, credit and subsidy, etc.
	Within the Ministry of Infrastructure, Rwanda Energy Group Limited (REG) was created in 2014 to expand, maintain and operate the energy infrastructure in Rwanda. The National Energy Policy and National Energy Strategy, recognizes that the use of biomass energy has potentially serious environmental implications and may be non-renewable unless properly managed. REG (EDCL ¹²⁴) in partnership with SNV has already provided training of 2 masons per Sector in 26 Districts for the construction of bio-digesters plants.
	Under supervision of the Ministry of Environment, Rwanda Environment Management Authority (REMA) , reserves the legal mandate for national environmental protection, conservation, promotion and overall management, including advisory to the government on all matters pertinent to the environment and climate change. REMA aims at closely monitor and assess development programs to ensure compliance with the laws on environment during their preparation and implementation.

38. National strategies, policies and regulatory frameworks relevant to the project from a safeguard and IFAD mainstreaming perspectives are the following:

Gender	Agriculture Gender Strategy (2012), MINAGRI: provides guidance to MINAGRI and development partners to be gender sensitive in their programming and interventions. National Gender Policy (2010) is the guiding framework to
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¹²⁴ Energy Development Corporation Limited is an agency of REG, in charge of : (i) increase investment in development of new energy generation projects in a timely and cost-efficient manner to expand supply in line with EDPRS and other national targets; (ii) develop appropriate transmission infrastructure to evacuate new plants and deliver energy to relevant distribution nodes; and (iii) Plan and execute energy access projects to meet the national access targets.

	<p>mainstreaming gender into the national development process and outcomes. The main objective of the policy is to integrate gender into critical areas such as poverty, health, agriculture and food security and education, among others.</p>
	<p>National Gender Coordination and Partnership Strategy (2016-2020), guides the coordination of gender promotion, establishing a framework for stakeholders' coordination and engagement and set strategic priorities for action.</p>
	<p>National Policy against Gender-Based Violence (2011) supports gender-based violence prevention and response, and provides an opportunity for further advancements. Significant steps have been taken in the country to have dedicated staff and resources to provide services to victims and reduce impunity for GBV. The existing One-Stop Centers provide critical support to victims of GBV and can be used as a model for integrated care and support.</p>
Youth	<p>National Youth Policy (2015) focuses on youth economic empowerment by addressing issues related to unemployment and underemployment, limited skills, low rate of access to finance and markets, among others.</p>
Nutrition	<p>Economic Development and Poverty Reduction Strategy (EDPRS2), 2013-2018: includes food security and nutrition as "long-term foundational issues" and strategic country's priorities. One of the main goals of the EDPRS2 is reduction of the rates of stunting in children; this is being tackled through community-based nutrition programmes and campaigns across the country.</p> <p>The Strategic Plan for Agriculture Transformation 4 (PSTA IV), 2018-2023, introduces improved nutrition amongst its priority areas and outcomes and nutrition-sensitive agriculture as one of the main interventions.</p> <p>The National Food and Nutrition Policy (2013) recognizes the link between adequate nutrition and household food security and focuses particularly on the "window of opportunity" for preventing malnutrition (from conception to the child's second year of life). The National Food and Nutrition Strategic Plan (2013-2018) orients Policy's implementation focusing on the prevention of child stunting.</p>
Nutrition coordination mechanisms & multi-stakeholders platform	<p>Rwanda joined the Scaling Up Nutrition (SUN) movement in 2011 and since then several multi-stakeholder platforms have been set up at central and local level to scale up nutrition. The Inter-Ministerial Coordination Committee is the highest level convening body under the leadership of MOH and co-chaired by the Minister of Finance and the United Nations Resident Coordinator. The committee brings government and development partners together. Staff from MOH, MINAGRI and MINALOC, co-chair the Social Cluster Food and Nutrition Steering Committee (SCF&NSC). The National Food and Nutrition Technical Working Group (NF&NTWG) was set up in 2013 and is Rwanda's multi-sectoral nutrition coordination platform. The NF&NTWG includes representation from the SCF&NSC, donors, UN agencies, civil society, academia and the private sector. UN REACH is working as the convener for the UN Network, while the Donor Network is convened by USAID.</p>

Environment and Climate Change	<p>The National Strategy on Climate Change and Low-Carbon Development (NCCLCD) for Green Growth and Climate Resilience underlines the need to manage the implications of climate variability for the social, environmental and economic development of the country. Given that Rwanda seasonal agriculture is vulnerable to climate change and population pressure, the strategy recognizes that slight changes in rainfall patterns would have significant impacts on crop and livestock production. The strategy promotes different agroforestry species to provide livestock fodder. Agroforestry has multiple additional benefits, namely reduced soil erosion and increased resilience to heavy rains through improved slope stability; water management and nutrient recycling which improve agricultural production and carbon sequestration.</p>
	<p>The Intended Nationally Determined Contributions (INDCs) are built upon the NCCLCD and advocate for a climate resilient economy. The framework aims at achieving Category 2 energy security and low carbon energy supply that supports the development of green industry and services, sustainable land-use and water resource management, appropriate urban development as well as biodiversity and ecosystem services. It also promotes the development of decentralised local-based agricultural processing centres that incorporate low-carbon sources of energy, such as biogas-digesters and solar systems.</p>
	<p>The phase 4 of the Strategic Plan for Agricultural Transformation (PSTA 4) outlines the priority public investments in agriculture and estimates required public resources for the agricultural sector for the period 2018/2024. As changes in weather and climate patterns are becoming more acute, PSTA 4 seeks to build resilience through on-farm measures and enabling actions to increase productivity. The strategy promotes Opportunities also exist to improve livestock productivity. Productivity gains can be realized by improving availability and access to good quality (forage, feed, feed formulation, composition) and quantity of animal feed, upgrading genetic animal resources, and enhancing knowledge regarding animal husbandry, animal health and disease management.</p>
	<p>The Energy Sector Strategic Plan (ESSP) for 2018/19-2023/24 presents the current status of, and plans for, the energy sector, covering its three subsectors: electricity, biomass and petroleum. The strategy intends to halve the number of HH using traditional cooking technologies to achieve a sustainable balance between supply and demand of biomass through promotion of most energy efficient technologies.</p>

4. Environmental and social category

39. The project is considered to be an **Environment and Social category B**. The project is not expected to have any significant adverse environmental or social implications. The project will support small livestock value chains which are adapted to the needs of vulnerable populations and do not engender major environmental impact. Their feeding requirements are lower, feeding habitats are broader while their reproduction rate is higher. The project will promote climate smart innovations and practices as well as energy and resources efficiency along the selected value chains, from production to domestic consumption and export markets (see section 6 for more details on recommendation for project design and implementation).

5. Climate risk category

40. The project's climate risk classification is considered Moderate. The project is expected to be moderately sensitive to climate risks given that small livestock are perceived to be relatively heat tolerant, disease tolerant and adaptable to adverse weather conditions. Emissions intensities for small livestock are lower than for cattle and beef production systems. GHG emissions will vary according to the level of infrastructure development along the selected value chains. Processing of animals products will increase energy consumption as well as produced wastes. The project will then promote energy efficiency through adoption of renewable energy and best practices and technologies waste management.

6. Recommendations for project design and implementation

6.1. Recommendations for gender, nutrition and youth issues:

41. Geographical targeting. Two development partners (USAID/Feed the Future and the Belgian Development Agency - ENABEL) are currently designing new operations on small livestock value chains in the Western and Southern provinces. Preliminary consultations have been carried out during the project design mission in order to avoid duplication and overlap of the interventions in the same areas and, in turn, seek to complement efforts. Consultations between IFAD, MINAGRI, Heifer International and USAID/Feed the Future and ENABLE will be conducted during the project inception phase in order to pre-screen a potential list of districts where projects may implement their respective activities, agree on the different areas of interventions and define institutional arrangements for their delivery.

42. Women's workload: women's burden is worsened by the fact that they are involved in doing routine type of activities, which are labour intensive and time consuming. Small stock is controlled and managed by women, traditionally. It is usually kept as a side business. However, to avoid increasing women's workload with new productive activities, the project will have to implement, at the same time, labour saving technologies (e.g. access to water) that will directly benefit women (who are those collecting water).

43. Effective multi-sectoral coordination will need to be ensured to work on nutrition-sensitive interventions at the district level. Coordination and collaboration with DPEMs is envisaged. At the same time, it is recommended to coordinate with the Gender and Family promotion officers at the district levels, in order to harmonize actions and complement efforts.

44. **Entry points for mainstreaming issues.** Overall, the selected value chains commodities (small ruminants, pigs and poultry) can greatly contribute to address key constraints of poverty reduction while at the same time offer opportunities to address gender, youth and nutrition sensitive related issues by:

45. Targeting the most vulnerable and food insecure households: small livestock can provide economic opportunities especially to the poorest and households with limited land availability, as raising small stock don't require big plot sizes. Small livestock can serve as a buffer to mitigate the impact of fluctuations in crop production on the availability of food for human consumption thus contributing to increase the resilience of the most vulnerable households. Small livestock can also contribute to food and nutrition security by, indirectly, increasing crop output through providing manure, which is a valuable source of organic plant nutrients and reduces the need for chemical fertilizers.

46. Promoting women's economic empowerment, increasing their voice in decision-making and promoting a more equitable balance in workload: chicken, pigs and small

ruminants are usually controlled and managed by women¹²⁵. However, women's role is often limited to the production side, having women less opportunities than men to participate in the whole value chain. Women also have less decision-making power than men about the use of income. The project will address gender disparities and the key constraints that limit women's participation in the value chain by: (a) ensuring that women and men have equal access to capacity building, training and productive assets, targeting 50% women as direct beneficiaries; (b) promoting labour-saving technologies that can contribute to decreasing women's workload (rainwater harvesting facilities at household level); (c) increase women's voice in decision-making; with this aim, gender-related trainings will be carried out at both household and group level; (d) increase women's access to skills and knowledge: women's skills in financial literacy, managing and saving money will be strengthened; (e) develop skills to improve the well-being of women and other family members: with this purpose, nutrition education will be provided at both household and groups level; (f) train project staff and extension service providers on gender-related issues. To this aim, a Gender specialist will be appointed as part of the SPIU staff¹²⁶.

47. Generating employment and economic opportunities for young people: as experiences from the field have demonstrated, small livestock can benefit youth not only as producers, but also as service providers and entrepreneurs: youth small livestock production enterprises can serve as a solid business incubator and accelerator for young entrepreneurs and youth-own businesses. To strengthen youth's entrepreneurial capacities, the project will partner with the private sector for training and capacity building.

48. Preventing gender based violence in the agricultural sector: the project will contribute to reducing any harmful act based on gender through: (i) sensitization on the importance of addressing GBV, application of IFAD's no tolerance for Sexual Harassment (SH) /Sexual Exploitation and Abuse (SEA) for project staff and project's activities and operations¹²⁷; (ii) map out and partner with GBV prevention and response actors in project adjoining communities; (iii) have GBV risks adequately reflected in all safeguards instruments, contracts with suppliers and and other third parties to be funded with IFAD funds.

49. Improving nutrition: The project recognizes that the small livestock sector can contribute to play an important role in combatting malnutrition, by both increasing availability of animal source foods at the household level and increasing income. Nevertheless, limited nutrition knowledge among beneficiaries may prevent producers to translate increased production and income into improved diets. The project will contribute to improved nutrition by (a) increasing availability of animal-source foods at the household level and promoting their consumption; (b) increasing producers' income to purchase nutritious foods (e.g. fruits and vegetables which have high prices on the market and/or meat). To support beneficiaries in addressing gaps in nutrition knowledge, the project will carry out nutrition education at the household level and with the youth small livestock production enterprises¹²⁸. Nutrition will be mainstreamed not only at the production level: sanitary risks and food safety-related issues will be addressed (including improving slaughtering and processing facilities and support to enforce sanitary regulations) along the

¹²⁵ Agriculture Gender Strategy, 2012.

¹²⁶ Targeting approaches and strategies for gender mainstreaming are included in the PIM's dedicated sections.

¹²⁷ IFAD Policy on Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse (2018).

¹²⁸ For the poorest households (Ubudehe category 1 and 2) nutrition education will be embedded into the VBHCD model implemented by Heifer International and will include training in nutrition/ dietary knowledge, food handling and storage, cooking classes and practical demonstrations on how to prepare a healthy and balanced meal. In the case of youth cooperative, nutrition education will be provided in coordination with districts authorities. Additional details on the implementing arrangements for the delivery of nutrition education are included in the PIM.

value chains. To coordinate nutrition-oriented activities, the project will contract a Nutrition Specialist as part of the project staff at the central level.

6.2. Recommendations for mainstreaming environmental management and climate change adaptation and mitigation

50. Under component 1, sub-component 1.4 on support for climate smart- innovations, the project will promote several activities for mainstreaming environmental management and climate change adaptation and mitigation in order to mitigate potential negative impact of small livestock production intensification. These activities will include: (i) enhanced feed efficiency through the promotion of fodder trees and shrub species (agroforestry) and use of crop residues at farm level; (ii) manure management through adoption of biogas systems and composting; (iii) improved water efficiency through rainwater harvesting facilities installed at farm level; and (iv) promotion of the use of solar energy for pig and poultry farms.

51. Under component 2, Sub-Component 2.2 on Market Facilitation in Small Livestock Value Chains the project will support the alignment of the private sector and compliance to national regulations pertaining to water and energy efficiency, waste management (e.g. biogas) and wastewater treatment or sewerage facilities and adequate washing facilities (e.g. running cold and hot or warm water) (See Table 2 for further details).

Table 2: Mainstreaming environmental management best practices and climate-smart along small livestock value chains development in Rwanda

Types Value chain	Production	Transport	Processing	Local consumption and export
Poultry (both layers and broilers)	<ul style="list-style-type: none"> -Leguminous and fodder trees can substitute imported feeds such as cotton seed cake, etc. -Poultry shelters must include ventilations system (at least 40 % of the wall) - Poultry manure (= source of incomes) is composed of considerable amount of nutrient - At youth farms: the project will promote solar energy at breeding farm for heating hatching eggs and day old chicks 	<ul style="list-style-type: none"> Ensure animal well-being during transportation (including ventilation, enough floor space, adequate floors, high sides of the vehicles, roofs, access to water, avoid animal suffocation, heat stress, dehydration, etc.) 	<ul style="list-style-type: none"> -Poultry processing facilities (e.g. slaughterhouses) require large quantities of water for cleaning and cooling. -The project will promote rainwater harvesting facilities at processing facilities -In addition, all facilities shall include appropriate disposal for solid and wastewater (drainage canals, incineration equipment for carcasses, composting, etc.) -Promotion of energy efficient along the processing facilities such as biogas and solar systems 	<ul style="list-style-type: none"> -Eggs storage units at the borders shall be ventilated to avoid food contamination
Pig (both fattening and breeding)	<ul style="list-style-type: none"> -Pigs may be fed with locally available feed such as rice bran, broken rice, maize brans and stover, cassava, vegetable, distillery residues etc. -Pigs manure (= source of incomes and cheap fertilizer) must be composted for at least a month prior to being 	<ul style="list-style-type: none"> Ensure animal well-being during transportation (including ventilation, enough floor space, adequate floors, high sides of the vehicles, roofs, access to water, avoid animal suffocation, heat stress, dehydration, etc..) 	<ul style="list-style-type: none"> -Manure, solid and water waste disposal must be considered at slaughter slabs and houses (including effluent treatment facilities) - Biogas plant will be promoted at processing facilities to avoid water and environmental pollution and provide energy for heating water for hygiene purposes 	/

	<p>applied on field</p> <ul style="list-style-type: none"> -At youth farms: pigs shelters must include proper drainage facilities and rainwater harvesting facilities for hygiene purposes -At productive alliance farmers: promotion of biogas plant for processing manure and urea into energy 		<ul style="list-style-type: none"> -Valorisation of fats and skins -Promotion of energy efficient along the processing facilities such solar systems 	
Small ruminants (goat and sheep)	<ul style="list-style-type: none"> -Small ruminants have the advantage of adapting to adverse ecology (grazing and browsing) in which vegetation vary in space and time -Promotion of agro-forestry (fodder trees, shrubs, leguminous trees, etc.) to improve animal nutrition (higher crude protein than cereal crop residues which are filled with fiber) 	<p>Ensure animal well-being during transportation (including ventilation, enough floor space, adequate floors, high sides of the vehicles, roofs, access to water, avoid animal suffocation, heat stress, dehydration, etc..)</p>	<ul style="list-style-type: none"> - Slaughter houses/slabs for small ruminants must be separated from the pigs slaughterhouses/slabs for hygiene purposes - Manure, solid and water waste disposal must be considered at slaughter slabs and houses (including effluent treatment facilities) - Biogas plant will be promoted at processing facilities to avoid water and environmental pollution and provide energy for heating water for hygiene purposes -Valorisation of fats and skins 	

7. Further studies needed

- Minimum Dietary Diversity Score – Women (MDD-W): at inception phase (baseline study), mid-term and completion, it has been included in a separate budget line¹²⁹.
- EX-ACT shall be included in the baseline survey. The Ex-ACT is a free Tool developed by FAO. However, this requires proper collection of data for estimating of the impact of agriculture and forestry development projects, programmes and policies on the carbon-balance.

¹²⁹ FAO (2016) MDD-W, a guide for measurement. <http://www.fao.org/3/a-i5486e.pdf>

8. Monitoring and evaluation

Parameter	Activity	Performance indicator	Baseline data	Responsibility during project implementation	Monitoring means (d) = design (o) = operation	Recommended frequency of monitoring	Cost
Micronutrient adequacy of women's diets in women aged 15-49 years (MDD-W)	Small livestock production Income generation Nutrition Education	Food items consumed out of ten defined food groups	Baseline sampling	Project Implementation Unit/ Service provider	(d) Baseline sampling (o)	(d) once to set benchmark (o) MTR and completion	-
Environmental pollution (e.g. risks for ground and surface water contamination)	Waste and crop residues management at household level	Integrated crop/livestock systems; management and recycling of livestock manure as organic nutrients for restoring soil fertility; valorisation of crop residues as animal feed	Baseline sampling	Project Implementation Unit/ RAB	(d) Baseline sampling (o)	(d) once to set benchmark (o) MTR and completion	-
	Wastewater and solid waste management at processing plants and commercial farm units	Installation of bio-digester plants for solid and waste water management for avoiding disposal of bloods and organic waste into the environment	Baseline sampling	Project Implementation Unit/ RAB	(d) Baseline sampling (o)	(d) once to set benchmark (o) MTR and completion	USD 25,000 for each build/rehabilitated pigs slaughter labs (5 in total)

	Localisation of slaughterhouse/ slabs not near ecologically sensitive areas	Compliance to REMA - Guidelines for slaughterhouses constructions and RDB regulations of rehabilitation of the animal processing plants (sewage facilities, sanitary conveniences and adequate washing facilities, etc.)	Baseline sampling	Project Implementation Unit/ RAB	(d) Baseline sampling (o)	(d) once to set benchmark (o) MTR and completion	Included in the ESIA (see below)
Use of biomass energy has potentially serious environmental implications	Promotion of renewable energy at commercial farm and processing plants	Installation of solar energy at poultry farm hatching eggs and day-olds chicks	Baseline sampling	Project Implementation Unit/ RAB	(d) Baseline sampling (o)	(d) once to set benchmark (o) MTR and completion	-
Building or rehabilitation of 5 infrastructure for the pig value chain	Compliance with Rwanda's regulations and reduce environment and social risks	Conduct of 5 Environmental and Social Impact assessment	Baseline sampling	Project Implementation Unit/ RAB	(d) Baseline sampling (o)	(d) once to set benchmark (o) MTR and completion	USD 4,000 each study
Diseases outbreak	Strengthen the epidemi-o-surveillance capacities of veterinary services, with a particular	Integration of contingency response measures and the establishment of a disease contingency fund for major outbreaks of TADs	Baseline sampling	Project Implementation Unit/ RAB	(d) Baseline sampling (o)	(d) once to set benchmark (o) MTR and completion	A total of USD 885,000 under sub-component 1.3 over 5 years of project implementation

	focus on small livestock transboundary animal diseases (TADs). The project-level grievance redress mechanism will be embedded within the national contingency plan.					
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Project for Inclusive Small Livestock Markets
 PRISM
 Project Design Report (PDR)

Annex 5: First Annual Work Plan and Budget (AWPB)

Results #	Objectives/Expected Results	Indicator	Timetable for implementation						Responsible Unit/ Staff	Implementation targets			Budget	
			Q 1	Q 2	Q 3	Q4	Q5	Q6		Appraisal (Total)	Planned (Annual)	Unit Cost	Appraisal (Total)	Planned (Annual)
(A)	(D)	(E)	(F)	(G)	(Ga)	(L)	(M)							
C1 Component 1 - Climate-smart intensification of small livestock production systems	% of vulnerable households graduated from VBHCD							75						
SC1.1 Sub-Component 1.1: Social mobilization and graduation of vulnerable households	Number of vulnerable households receiving a full package of capacity building and small livestock assets							22 000	22 000					
Activity 1.1.1: Self Help Group Formation	Number of groups							HI	1 170	90				
Activity 1.1.2: Training of Farmers in Cornerstones®	Number of trainings							HI	1 170	90				
Activity 1.1.3: Training of Farmers in Agri-Business and Income Generation	Number of trainings							HI	1 170	90				
Activity 1.1.4: Technical Trainings on Poultry, Swine, Goat and Sheep	Number of trainings							HI	1 170	90				
Activity 1.1.5: Input Provision and Passing on the Gift	Number of households provided with animals		-	-	-	-	-	HI	22 000	-				
Activity 1.1.6: Provision and Training for Animal Feed	Number of trainings							HI	1 170	90				
Activity 1.1.7: Fostering Robust South by South learning	Number of exchange visits							HI	12	-				
Activity 1.1.8: Participatory Self-Review and Planning								HI	1 170	90				
										Total Budget for SC1.1.	11 066 312	684 780		
SC1.2 Sub component 1.2: Improve animal health status and genetic potential of small livestock														
Activity 1.2.1. Establish Community based animal health systems	Number of CAVE established							HI	31	31				
	Number of community Animal Health funds established							HI	24	6				
Activity 1.2.2. Support dissemination of improved breeding stock	Youth breeders trained by RAB		55		SPIU/LS	80	55				10 000	2 000		
Activity 1.2.3. Support surveillance and control of small livestock diseases	Districts epidemiosurv. networks established		5	5	SPIU/LS	15	15				22 500	75 000		
	Training of District staff on ES					5	SPIU/LS	15	5			112 500	37 500	
Activity 1.2.4. Support preparedness to animal health crisis affecting small livestock species	Contingency fund established					1	SPIU/LS	1	1			750 000	750 000	
										Total Budget for SC 1.2:	895 000	864 500		
SC1.4 Sub component 1.3: Support climate smart innovations														
Activity 1.3.1 Promotion of fodder trees and shrubs (nurseries) at self-formed and pigs youth group	Number of nurseries established at self-groups levels and		10	10	15	15	SPIU	140	50	1 000	140 000	50 000		
Activity 1.3.2 Promotion of rainwater harvesting facilities at groups level	Number of rainwater facilities installed at group level (as part of the package distributed to the youth groups)		150	150	150	SPIU	3 000	450	150		67 500	67 500		
										Total Budget for SC1.3.	207 500	117 500		

Annex 6: Procurement Plan for first 18 months

Description	Planned	Actual
Goods	161 550	
Works	-	
Services	625 400	
Totals	786 950	

Note that this table shall be filled after finalizing the annual work plan budget

GOODS			BASIC DATA				Bid Documents		Bidding Period		Bid evaluation report		Contract finalization			
Description	AWPB Ref	Lot Number	Issue # of invitation for bids	Estimated Amount in US\$	Procurement Method	Pre- or post-review	Plan vs.	Date Proposed	Date No-objection	Bid invitation date	Bid closing/opening	Bid evaluation report	No-objection	Contract amount in US\$	Date Contract Award	Date Contract Signature
							Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
Procurement of vehicles	C201	1	10/01/2020	67 050	NCB	Post - review	Plan	10/01/2020	N/A	15/01/2020	15/02/2020	20/02/2020	N/A			
Procurement of motorcycles	C202	1	10/01/2020	52 500	NCB	Post - review	Plan	10/01/2020	N/A	15/01/2020	15/02/2020	20/02/2020	N/A			
Procurement of office equipment	C203	1	01/04/2020	42 000	NCB	Post - review	Plan	10/04/2020	N/A	15/04/2020	15/04/2020	20/04/2020	N/A			
Total				161 550												

Project for Inclusive Small Livestock Markets PRISM Project Design Report (PDR)

WORKS																		
Country/Organization:		RWANDA																
Project/Programme:		PRISM																
Loan #:																		
			BASIC DATA					Bid Documents		Bidding Period		Bid evaluation report		Contract finalization				
			Issue # of invitation for bids	Lumpsum or bill of quantities	Procurement method	Estimated Amount in US\$	Pre- or post-qualifications	Prior- or post-review	Plan vs Actual	Date Proposed	Date no-Objection	Bid invitation date	Bid closing-opening	Bid evaluation report	No-objection	Contract amount in US\$	Date contract award	Date contract signature
Description	AWPB Ref	Lot Number							Plan									
									Actual									

Annex 7: Project Implementation Manual (PIM)



**Partnership for Resilient and Inclusive Small
Livestock Markets
PRISM
Project Implementation Manual**

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Introduction

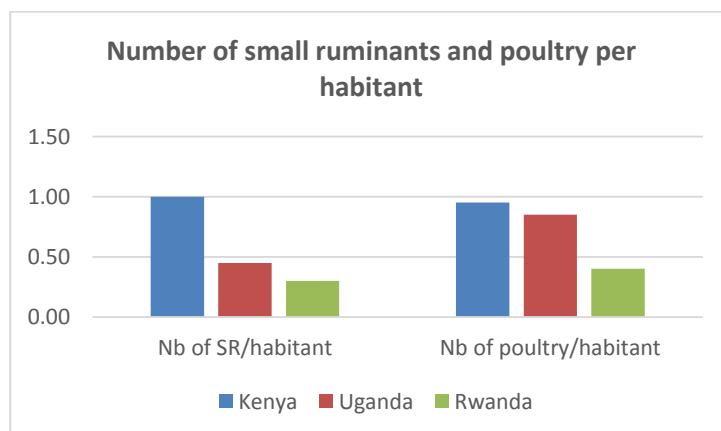
Overview

1. This draft Project Implementation Manual (PIM) provides guidelines for the implementation of the IFAD funded interventions under the PRISM partnership programme. The PIM elaborates the procedures and processes that are to be followed in the implementation of IFAD funded interventions (the project) and activities in PRISM. The PIM is an annex of the Project Design Report (PDR) and thus processes and procedures presented in this document are to be read in conjunction with the relevant sections of the main PDR.
2. The process presented here are a framework that is meant to assist the PRISM implementation staff including those from RAB and the District in thinking through the processes for the different sub-components. It is proposed that at startup, the recruited staff be facilitated to review the activities and processes presented herein. The review would update, refine and firm up the as activities and processes necessary. The value in undertaking such a review would be that through the process, the implementing staff would "own" the PIM. Such ownership would ensure that the staff would follow the PIM during the implementation of activities.

Context, justification and rationale

Small livestock production systems

3. **Small livestock populations.** Because of the limited availability of agricultural land and pasture, livestock populations in Rwanda are limited and rural households give priority to crops, in particular food crops. The country is the home of 2,923,706 heads of goats, 664,703 sheep, 1,716,438 pigs and 5,272,725 chicken¹³⁰, for a human population of around 12,5 million people. This represents a ratio of around 0.3 small ruminants and 0.4 chicken per habitant, which is very little compared with countries in the Region like Kenya and Uganda which house respectively 1 and 0.45 heads of small ruminant per person, and 0,95 and 0,85 heads of poultry per person. In total, 999,000 households (59% of total) own at least one small livestock species, and 503,000 (30%) do not own livestock at all¹³¹.



¹³⁰ Minagri; 2017

¹³¹ National agricultural census; 2008

4. **Small ruminants production systems.** Small ruminants are found everywhere in Rwanda, but their concentration varies according to regions. Goats are mostly reared in the Eastern Province¹³² (all Districts except Kayonza), where human population densities are low and rangelands are still available, but also in all districts of the Southern Province, that has the highest concentration of this species. Sheep are mostly found in the Northern Province, in high altitude Districts such as Musanze, Burera and Gakenke.
5. For both small ruminant species, the feeding system is based essentially on natural pastures: goats are often tethered in marginal pasture lands such as roadsides, fallows and harvested fields. In high density areas (North) sheep are usually tethered but in pastoral areas (East), they are usually kept with cows. Supplementary feeding of small ruminants with concentrates or cultivated fodder is uncommon, including in dry season.
6. Vaccination and deworming are not usual in traditional small ruminants systems, and as a consequence, the mortality of youth, affected by enterotoxaemia and internal parasites, can be very significant reaching 30 to 60 %. The goats are mostly of local breed, but some improved breeds have been introduced through several projects since the 90s, both for meat (Boer) and milk (Saanen and Alpine). These crossbreeding attempts have been only moderately successful, mostly because of the poor sanitary and feeding conditions and the poor resistance to sanitary and feeding shocks of imported breeds. Goats are usually not milked except in some exceptional cases for malnourished and sick infants and children. Sheep are mostly of local breed (fat tailed) in low altitude and pastoral areas, but in high altitude areas (North), animals crossed with European wool breeds are now common and these crossbreeds have adapted well. As a result of these poor feeding and health conditions, and limited genetic potential, the productivity of small ruminants remains generally low and is significantly affected in particular by the mortality of young animals.
7. **Pig production systems.** Pig rearing was not a traditional activity in Rwanda and has been introduced by missionaries during the first half of the 20th century, which explains that the most important production clusters can be found around catholic congregations, in the South (around Huye), and the North East (around Gicumbi). The traditional system is based on utilization of kitchen waste and agricultural by-products for feeding the animals, that are also sometimes allowed to scavenge around households depending on the season. Animals used in these systems are local breeds characterized by a very slow growth, limited prolificacy and significant amount of fat. This type of production system is mostly found in the southern parts of the Eastern and Southern Provinces.
8. Modern pig husbandry practices have been introduced recently to Rwanda. Modern and commercially oriented systems are found mostly in the northern part of the country around Gicumbi, Musanze and Rubavu. In this system, animals are usually of imported breeds (Landrace, Pietrain, Large White), or crossed, and are kept in claustration, fed with concentrate feed often combined with agroindustry by-products such as brewery waste, or restaurant waste. A few specialized breeders have emerged

¹³² Geographic distribution by species are extracted from the 2008 agricultural survey

recently, who supply piglets to fatteners. There is no national breeding programme and no nationwide organized service delivery system for artificial insemination in the country, despite the increasing demand for quality animals. The main animal health problem affecting pigs in Rwanda are piglet scours and swine erysipelas. Swine erysipelas mainly affects the improved breeds and crossbreeds and can lead to mortality rates of 30% in young animals. The vaccine exists but are not easily available in Rwanda.

9. **Poultry production systems.** Two very distinct poultry production systems coexist in Rwanda, the traditional backyard dual purpose production system, and the modern commercial poultry systems.
10. Only 448,000 rural household (26% of total) own chicken¹³³, which is surprisingly low compared with the proportion of households owning other small livestock species (pig and small ruminants - 52%); the common adage saying that every rural household owns chicken in Rwanda is therefore far from reality. Backyard chicken are dual purpose (egg and meat) but their productivity is very low because of the genetic potential of the local breed, but also because of the sanitary problems (Newcastle disease is the most important poultry disease in rural areas, leading to mortality rates of chicks of 50% and above). Vaccines against Newcastle Disease are available in Rwanda, but not easily accessible in remote rural areas and for farmers with only a handful of birds.
11. Commercial modern layers and broilers farms have emerged during the last decade. These farms are often owned by large scale investors for the biggest units, and by urban households looking for investment opportunities. These farms use imported hybrid birds, and the production itineraries are intensive and based on global practices. Their productivity is therefore high and comparable to global references. The feed used in these systems is industrial and either produced at the farm for the bigger integrated units or purchased from specialized feed manufacturers for others. The size of these units varies from 100 to 60,000 birds: the very small units are often out-growers of bigger units. Modern poultry farms are mostly located in Bugesera, Nyagatare and neighbouring districts. These systems usually have strict and well managed prophylactic programmes and are not subject to major sanitary problems.
12. **Animal health.** The main endemic diseases¹³⁴ affecting small livestock systems in Rwanda are Newcastle disease in backyard chicken systems, swine erysipelas in rural pig systems and enterotoxaemia and internal parasites in small ruminants systems. All could be controlled through vaccination (and deworming for parasites) but there are no systematic vaccination campaigns against these 3 diseases organized in the country, mostly because of the inadequate human and financial resources of public veterinary services, that logically prioritize and focus their efforts on the large ruminants and in particular the high potential dairy animals.
13. Thanks to a well-managed veterinary public health policy, to the limited and well controlled cross border movements of animals, the country has been spared from major transboundary animal diseases (TADs); TADs thus do not have a major impact

¹³³ National agricultural census; 2008

¹³⁴ An endemic disease is a disease that is always present in a certain population or region

on small livestock in the country, as it is the case of most neighboring countries. However, for each species (small ruminants, pork and poultry), the risk of introduction of major and deadly TAD is significant: these diseases are in particular: Peste des Petits Ruminants (PPR) for goats and sheep, African Swine Fever (ASF) for pigs, and Highly Pathogenic Avian Influenza (HPAI) for poultry. All these transboundary animal diseases are present in neighbouring countries and could be accidentally (re)introduced, leading to major catastrophes. Rift Valley fever affecting all ruminants including sheep and goats, which is a climate related disease and a zoonosis, could also re-emerge in case of massive flooding.

14. **Genetics.** Unlike the dairy sector for which the Ministry of Agriculture, through RAB, provides artificial insemination and breeding services, breeding, dissemination of improved small livestock breeds and provision of AI services (for pigs) is mostly undertaken under the leadership of the private sector; However, RAB does provide some sort of institutional support to these actors. For pigs, exotic breeds are being imported sporadically by private investors, with the support of RAB, but this genetic material is mostly disseminated in the commercial intensive farms and does not reach the rural family systems which mostly relies on local breeds. For rural poultry, Sasso hybrids are being imported and disseminated by a private investor (Uzima chicken). This strain is adapted to rural conditions and has much better performances than the local chicken, but it is a hybrid which implies that the birds are not supposed to be kept for breeding; their feeding and health requirements are also still high and challenging for rural households. For small ruminants, RAB owns and manages a station in Nyagatare district dedicated to goat breeding. This station regularly distributes offspring to farmers (imported Boer Goat and Saanen breed). In addition, various development partners implemented and disseminated exotic animals (both goats and sheep), but in a sporadic manner and without long term and harmonized strategy.

Access to services, inputs and markets

15. **Inputs and services.** Rwanda is a small country with an excellent road network which facilitates access to services and inputs. For monogastric animals, the essential inputs are feed and chicks/piglets. The main ingredient for animal feed is maize. Maize represents 60% of the volume and 45% of the cost of feed. The second ingredient is soya that accounts for about 20% of the feed product¹³⁵. Maize and soya are used both for human food and the animal feed industry, and the local production cannot satisfy the growing local demand; raw materials have thus to be sourced from Uganda, Zambia and Tanzania, and their price is highly volatile, depending on weather conditions, but also geopolitical events (such as border closures)¹³⁶. Besides, Rwanda is facing serious problems of aflatoxin contamination in its maize production, with levels often exceeding the international standards of 10-20 ppb¹³⁷. According to RAB authorities and the feed manufacturers themselves, there is a particular need to better control the quality of maize ingredients that enter into the composition of animal feed.

¹³⁵ Source: personal communication from Zamura Feeds.

¹³⁶ At the time of the design mission the price of soya had jumped from RWF 400 to RWF 550/kg in less than a year, resulting in a 20% increase in the price of animal feed (now sold at an average price of RWF 350/kg).

¹³⁷ Parts per billion.

16. There are now 7 main animal feed producers in the country, with production capacity ranging from 30 to 40 MT per day. None of these companies run at full capacity (average 50-60%); poultry feed represents over 80% of their sales; and the demand for pig and dairy feed remains very low. Some of these animal feed manufacturers are at the same time either large-scale producers of chicken¹³⁸, or processors/buyers¹³⁹. The recently privatized National Hatchery and private company Easy Hatch are the major suppliers of Day Old Chicks (DOC), but the country still relies heavily on imports from Europe, Kenya, Uganda or South Africa, and other players¹⁴⁰ are also considering investing in this segment of the value chain. It is worth noting that in parallel to the Rwanda Poultry Industry Association, the animal feed manufacturers have recently created their own body, the Rwanda Animal Feeds Association. De facto, the Rwanda poultry value chain is mostly driven by its input suppliers and the project will strive to engage these key private actors through productive alliances with target smallholder farmers, building up on arrangements that are already often used in Rwanda by feed manufacturers to expand their customer outreach.
17. In the pig value chain, there are limited actors apart from the Rwanda Pig Farmers Association whose members are mostly medium-large producers who may also provide support in the form of technical advice and business plan development for would-be pig producers. Availability of good quality piglets and gilts is a major issue since there are very few specialized breeders with good genetic material on the market. Small pig producers rarely resort to industrial pig feed mostly because they do not have the opportunity to make a proper cost-benefit analysis and will rather privilege low cost, home-made feed. Productive alliances with input suppliers would also benefit small pig producers, and the project should build on the partnership models already initiated in the poultry sub-sector.
18. **Slaughtering and processing facilities** for small ruminants, poultry and pigs are either inadequate or nonexistent, except for some major poultry producers who have established their own abattoirs (see above). The small ruminants value chains in particular are still rudimentarily organized and sales are mostly done through middlemen at farmgate or local animal markets (see below). The 7 national abattoirs registered by RAB for beef and small ruminants are all privately owned, and operate on average at 17% capacity for small ruminants¹⁴¹. At district level only 3 abattoirs are considered in good condition, able to be upgraded to national level with minimal improvements. Other several small abattoirs and slaughterhouses exist in different places to serve the local population (small commercial centers operated by either private entities or cooperatives) but they are not allowed to transport/sell the meat beyond their location. There is in particular a crucial lack of pig slaughter slabs, with only a handful of them "accredited" in Kigali, Bugesera and Rubavu. The project will thus contribute to the development of pig slaughtering facilities that can be easily accessed by smallholder producers: a target of 7 pig slaughter slabs has been set in PRISM, to be strategically located in districts with high concentration of pig production.

¹³⁸ ABUSOL (layers), PEAL (broilers)

¹³⁹ Zamura Feeds (broilers), PEAL (broilers)

¹⁴⁰ ABUSOL, Zamura Feeds

¹⁴¹ Source: Abattoir Audit Sept 2016

19. **Livestock markets.** According to the report on "Strategy for Rwanda Meat Exports to DRC" (2016), there are 64 livestock markets distributed in the three target provinces (North, West and South), where an estimated 27,620 goats and sheep and 25,920 pigs are sold every month. This report highlights the fact that "there is no link between Rwanda abattoirs and these markets. Livestock is sold to the highest bidder, who happen, in most cases to be DRC livestock importers". Indeed all of these markets lack basic infrastructure for animal holding, and do not meet sanitary standards that are supportive of meat industry. The project can thus play an important role in upgrading at least one market per district through the provision of relevant infrastructure (sheds and sanitary facilities), environmental standards and animal health care services that benefit animal holding grounds.
20. **Market demand.** The consumption of small livestock products is still low in Rwanda compared to other countries in the region: 0.7 kg per year per capita for white meat (poultry + pork) and 0.6 kg for eggs. However, the rapid urbanization and emergence of a middle class will inevitably lead to an increase in the consumption of these products. Between 2000 and 2017, according to FAO, the domestic consumption per capita has grown by 688% for poultry meat, 79% for pig meat, and 111% for small ruminants meat. Furthermore, the low level of urbanization of Rwanda is compensated by the presence, at its doorstep, of two significant urban centers: Goma (1.2 M people) and Bukavu (0.9 M). Every month, 36,670 heads of small ruminants, and 25,920 heads of pigs are exported to DRC. The value of small stock exported to DRC has raised by 27% between 2010 and 2015, and by 140% for pig only over the same period, and this market is likely to keep growing in the near future.
21. As for the eggs, domestic demand in Rwanda totaled 13,200 tons in 2015, of which 7,500 MT were produced in Rwanda. A further 7,900 tons was imported, mainly from Uganda, and 2,200 tons exported, mainly to the DRC's Kivu provinces. Rwanda's annual trade deficit of eggs is therefore 5,700 tons – equivalent to 43% of domestic demand (or 87.7 million eggs)¹⁴². The FAO 2015 report also highlighted the fact that when it comes to supplying supermarkets and hotels, Rwandan producers of quality chicken-meat find it difficult to compete with poultry meat sourced from South Africa and Kenya, where producers/suppliers have demonstrated greater reliability in meeting specifications regarding slaughtering, weight, supply period and quantity. There is thus a wide scope for improvement through targeted support to both poultry meat producers and processors in Rwanda.
22. However, detailed market information on small livestock value chains are insufficient, especially those related to market demand. To respond to this gap, several market appraisal studies will be conducted in the scope of the programme (see sub-component 2.2 below).

Access to financial and insurance services

23. **The Rwandan financial sector** is characterized by a high level of financial inclusion (89% of the population having access to formal and informal financial services,

¹⁴² Source: FAO, 2015. Study of the poultry industry in Rwanda

- compared with 85% in Kenya)¹⁴³, and diversified players in the market (Banks, MFIs, SACCOs, Informal systems like VSLAs) with a dense branch networks, including banking agents¹⁴⁴. Agriculture remains largely underfinanced, but there is a growing interest from the financial sector to venture into agricultural finance including for smallholder farmers. Some commercial banks and MFIs have set up specialized agricultural finance units, usually with support from partners like AFR, IMSAR, and ICCO TerraFina.
24. The formal financial institutions that do currently have an agricultural loan portfolio propose flexible cash flow based products adapted to specificities of agriculture, and can offer short term loans for working capital as well as mid-term loans for investments. Interest rates range from 16 to 24% depending on the institutions and risk assessment. Different collaterals and risk mitigation instruments are used like cash collateral, land title, other non-movable assets, group social guarantee, crop or dairy cow insurance, and financial institutions may also access guarantee from BDF, and possibly in the near future from the Agricultural Risk Sharing and Financing Facility. There is also a growing tendency for banks to mitigate risk of lending to smallholder farmers by building on linkages between agribusiness companies and smallholder farmers through various arrangements involving secured access to inputs, technical support and access to market (Agricultural Value Chain Financing Approach: AVCF).
 25. However, these positive developments for smallholder farmers concern mostly crops like maize, rice, Irish potato, horticulture and export crops like coffee and tea, as well as dairy in the livestock sector to some extent. For the small livestock sector, financial institutions already finance mostly big commercial farmers, feed factories, processing factories and off-takers in poultry and pig sub sectors. Loans to small farmers exist but mostly for salaried people (e.g. teachers, veterinarians). Financial institutions already engaged in agricultural finance have shown an interest for the small livestock sector, especially poultry and to a lesser extent pig, but they acknowledge that lack of understanding of the sector and of its specific risks impede their engagement.
 26. In this context, there is a clear rationale for the Project to provide technical assistance to interested financial institutions to better understand the small livestock value chains and for the design of adapted products and delivery channels, that should be based on AVCF approach for adequate risk mitigation. To ensure complementarity with existing interventions and quick results, the Project should support in priority banks and MFIs that have already set up an agricultural finance unit. Specific support should also be provided to selected SACCOs considering their presence in all geographical sectors and their high penetration rate, and strong support from the GoR for their development.

¹⁴³ Finscope Rwanda 2016. High financial inclusion is largely driven by Umurenge SACCOs, promoted by the GoR and operating in all administrative sectors, and mobile money providers.

¹⁴⁴ The Rwanda financial sector comprises of 11 commercial banks, 4 microfinance banks, 1 development bank, and 1 cooperative bank. The microfinance sector counted 472 MFIs, including SACCOs. The financial sector also includes 16 insurance companies as well, of which 10 are general insurance companies (4 engaged in agricultural insurance), 4 life insurance companies and 2 public medical insurers. Brokers and agents support the insurance sector, including one agent – ACRE Africa - specializing in agricultural insurance technical and implementation services and providing support to most insurers involved in agriculture.

27. In addition to technical assistance, the Project may provide matching grants to incentivize and facilitate access to investment finance for high risk borrowers like youths and start-up businesses, for which there is no assurance before implementation that financial institutions would take full risk. Matching grants will also be justified as an incentive for private actors for the development of networks of small scale farmers to secure their customer or supplier base, and for public good related investments in essential equipment meant to improve food safety, animal welfare and climate-smart upgrading of their facilities, conditional upon their sourcing from project beneficiaries.
28. **Small Livestock Insurance.** Another financial risk management tool which will be supported by the project in order to incentivize MFIs and banks to better serve the small livestock sector is insurance. MFIs and banks engaged in agricultural lending¹⁴⁵ confirmed they have existing relationships with insurers and, where suitable products exist, they opt to bundle agricultural insurance with credit in order to lend to traditionally high-risk clients. Crop insurance and dairy cow insurance are already operational in Rwanda¹⁴⁶ and are due to be scaled-up under a National Agricultural Insurance Scheme from 2019. However, as with the rest of the financial sector, there is little knowledge amongst insurers about small livestock value chains and even more so about how to best serve smallholders and their related organizations within them.
29. Finally, several private organizations are currently developing **financial innovations** through digitalization of the transactions and operations to contribute to reducing cost and risk of reaching out to smallholder farmers and improve quality of service for the latter. These innovations are mostly developed for crops, and there is a rationale to support adaptations of these innovations for the small livestock sector, on a cost sharing basis to incentivize these organizations to venture into these value chains.

Institutions and policies

30. **National public institutions.** In Rwanda, both agriculture and livestock are placed under the authority of the same ministry: the Ministry of Agriculture and Animal Resources (MINAGRI). The Directorate General of Animal Resources Development is one of the 4 Directorates in the Ministry. One of the mandates of the Ministry and the directorate is to elaborate and monitor policies, strategies, guidelines and instructions aimed at improving animal resources in the country. The Ministry does not implement activities directly, but the specialized implementing agencies are placed under its authority.
31. **Rwanda Agriculture and Animal Resources Development Board (RAB)** is the main implementing agency of the MINAGRI. It is in charge both of the development, extension and research, in all agricultural sectors. The Department of Animal Resources of RAB is in charge of livestock. For the livestock sub sector, its main

¹⁴⁵ MFIs and Banks spoken to by the design team.

¹⁴⁶ Experience with crop insurance includes multi-peril crop insurance, area-yield index insurance, and weather index insurance. Dairy cow insurance has been offered in the past for health, and is being scaled-up for mortality. Overall, general insurance penetration is currently low at approximately 2.5% not counting the national health insurance scheme. However, the National Agricultural Insurance Scheme is set to increase this penetration rate.

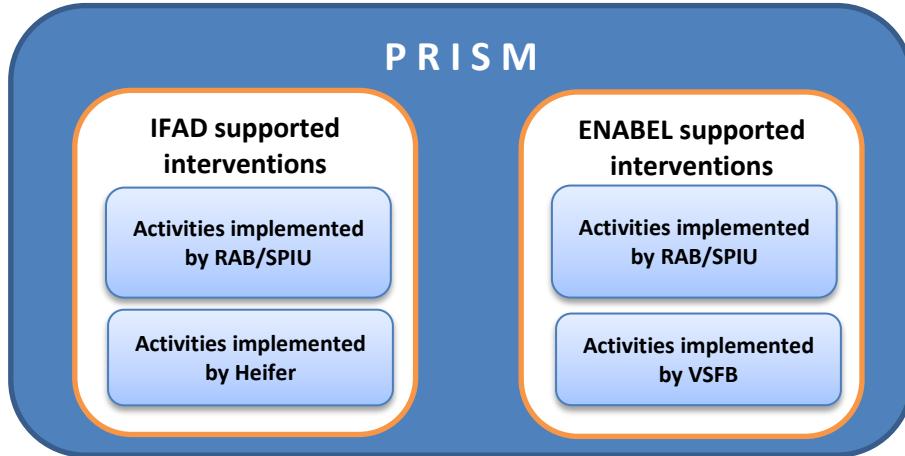
activities are provision of veterinary services, extension and research, and AI services for cattle. While RAB activities in the livestock sector are mostly focused on the dairy sector which has received a lot of attention over the last decades, RAB human resources specialized in small livestock species remain insufficient.

32. **Decentralized public institutions.** The Districts are in charge of delivering animal health services and livestock related extension services to the communities. The livestock dedicated district field staff are under the responsibility of District Animal Resource Officers (DARO - most of the time veterinarians) and are composed of sector veterinary and animal production technicians. These civil servants are not supposed to deliver private veterinary services but because of the insufficient presence of private service providers in rural areas, they combine public and private missions. However, because of their restricted number and lack of training on small livestock production systems, they focus and prioritize their support and services delivery to the dairy cattle owners.
33. **Farmers organizations.** Unlike the dairy sector which is well structured, there are very few formal farmers organizations in the small livestock sector, and none for small ruminants. In the poultry sector, the Rwanda Poultry Industry Association (RPIA) is the main producers umbrella organization. It was initially established as a value chain organization gathering all categories of value chain actors, but it is now mostly composed of producers, mainly medium and large scale farmers (above 1,000 birds). The association however envisages to broaden its membership to smaller farmers (between 300 and 1,000 birds). This organization is mostly active in advocacy and lobbying, information sharing and training of members. It is worth to note that the Association is frequently consulted by the Government on issues related to the sub-sector and involved as well in policy formulation processes. According to RPIA, only one local cooperative of poultry farmers exists in the Country (in Rwamagana). In the pig sector, the Rwanda Pig Farmers Association (RPFA) is the main stakeholder organization; it gathers mostly commercial pig farmers (90 members). Its main activities are the organization of capacity building and information sharing events. There is no commodity based stakeholder platforms in the small livestock value chains, but this model exists in Rwanda for other value chains (crops, and dairy).
34. **Relevant national strategies, policies and programmes.** Rwanda's long-term development goals are defined in the Vision 2020 and Vision 2050 documents that aim to transform the country from a low-income agriculture-based economy into a knowledge-based, service-oriented economy with middle-income status. The National Strategy for Transformation (NST 1) follows the Economic Development and Poverty Reduction Strategy 2 (EPRDS 2). NST 1 integrates international commitments deriving from the UN Sustainable Development Goals (SDGs); African Union (AU) Agenda 2063; East African Community (EAC) Vision 2050 focusing on job creation; and COP agreements on climate change.
35. Rwanda's Strategic Plan for the Transformation of Agriculture (PSTA 4) - the Government's flagship investment programme for the sector - outlines the priority public investments in agriculture and estimates the required public resources for the sector for the period 2018-2024. Though PSTA 4 focuses on public investments, it recognizes that agricultural growth must be driven by private sector investment, including farmers, with government becoming a market enabler rather than a market

- actor. PSTA4 introduces improved nutrition amongst its priority areas and outcomes and nutrition-sensitive agriculture as one of the main interventions.
36. At the continental and regional level, the PSTA 4 constitutes Rwanda's commitment to the African Union's Comprehensive African Agriculture Development Programme (CAADP). Under this framework, the Malabo Declaration 2014 sets specific targets on the agriculture sector's contribution to economic growth, economic opportunities, nutrition and food security, and resilience. Rwanda is the top performer in the level of progress vis-à-vis these targets.
 37. The Government of Rwanda (GoR) in partnership with World Bank is implementing the 2nd Programme for Results (PforR) in agriculture (2018–2021) in support of PSTA 4. A PforR Multi-Donor Trust Fund (PforR-MDTF) has been established to finance PforR and to provide the required technical assistance and institutional support.
 38. The National Strategy on Climate Change and Low-Carbon Development (NCCLCD) underlines the need to manage the climate variability for the social, environmental and economic development of the country. The Intended Nationally Determined Contributions (INDCs) are built upon the NCCLCD and aim at achieving Category 2 energy security and supports the development of green industry and services, sustainable land and water management, urban development, biodiversity and ecosystem services.
 39. The overarching strategic framework guiding the development of the livestock sector in Rwanda is the Livestock Master Plan (LMP). The LMP was developed in 2017, following the implementation of a Livestock Sector Analysis (LSA) 2017. The LMP covers a five-year period (2017-2022) and comprises of six sub-sectorial master plans for dairy, red meat, chicken and pork. For small livestock specifically, a strategy and investment plan for small animal industry was developed in 2012 but has now expired and would require a review and update.

Programme structure and partnership principles

PRISM is a partnership programme implemented by RAB, and jointly supported by IFAD and ENABEL, with Heifer International as implementing partner and co-finance, and VSF Belgium as implementing partner (see figure below). PRISM is constituted of two complementary interventions (projects), supported respectively by IFAD and ENABEL, whose content and strategies have been aligned, and which will be implemented jointly under a common implementation mechanism. Heifer will implement activities in the framework of the IFAD supported intervention, and VSFB will contribute to the implementation of some ENABEL supported activities. In addition of being an implementing partner, Heifer is also a co-finance of the activities its implements, which is not the case for VSFB. RAB/SPIU will implement activities under both interventions.



40. The two projects have initially been designed separately but have been harmonized and aligned under the same partnership programme later on. This alignment has been done in accordance with the respective mandates of the agencies, their comparative advantages and the nature of the financing (grant for ENABEL, loan for IFAD), that led to the following principles:

- At production level, IFAD-supported interventions will target preferentially smallholder livestock holdings and vulnerable households, and ENABEL will engage and support larger scale commercial and industrial actors
- In terms of geographical repartition, IFAD-supported interventions will focus on Districts that are the most affected by poverty and malnutrition
- In terms of value chains, IFAD-supported interventions will target mainly the small ruminants and backyard chicken value chains, that correspond to its priority target groups, when ENABEL will concentrate on pig and poultry commercial value chains (also targeted by IFAD)
- ENABEL will provide support to large scale private businesses (feed manufacturers, hatcheries, processors) in the pig and poultry value chains
- IFAD-supported interventions will also support public investments and public institutions, in particular in the domain of veterinary public health

41. The screening of respective project activities and the application of the above principles has resulted in four different harmonization scenarios depending on activities:

- In case an activity was initially foreseen by only one partner, it will remain under his responsibility
- In case similar field level activities had been planned for by the two partners, but with different modalities or methodological approaches (e.g. group mobilization and capacity building through FFS for ENABEL, and through Heifer VBHCD for IFAD), it was agreed to implement both approaches in parallel but in different areas, in order to compare methodologies and share lessons
- Finally, for activities that had been planned on both sides and could potentially overlap, two options could apply (i) one partner could delegate the entire responsibility to the other, based on comparative advantages and mandates, or (ii) the activity could be implemented jointly (this will be the case for instance for policy support)

42. The figure below describes in more details the agreed distribution or roles between IFAD and ENABEL supported interventions:

Theme/topic	ENABEL role	IFAD role	Partnership principle
Value chains	commercial pig and poultry value chains	Small ruminants, backyard chicken and pigs	As per mandates and comparative advantage
		smallholder commercial pig and poultry	
Target groups/beneficiaries	Commercially oriented producers (Ubudehe 3&4); large scale private sector actors	Vulnerable HH in production (Ubudehe 1&2) – special focus on youth groups	
Geographic area	National but focus on areas with commercially oriented systems	15 Districts in 3 Regions. Areas more affected by food security and poverty	
Production level activities	Soya and Maize FFS		
	Livestock FFS (through VSFB) mainly for Ubudehe 3	Heifer Graduation pathway for vulnerable households mainly for Ubudehe 1&2	Similar and complementary approaches, targeting different target groups
	Support to Veterinary technician networks (through VSFB) for Ubudehe 3	Support to Community AgroVet Entrepreneurs (through Heifer) for Ubudehe 1&2	
	Support to private pig & poultry breeders	Support to RAB small ruminants breeding stations	
	Support creation of industrial farms		
		Support to public veterinary services	
Value Chain; access to market and services	Support participation to productive alliances by private sector actor (aggregators and input suppliers)	Support to smallholder-producers participation in productive alliances	Both support “productive alliance”, but with different entry points
	Support maize and soya out growers network		
		Renovation of public slaughtering and marketing infrastructures	

Theme/topic	ENABEL role	IFAD role	Partnership principle
	Facilitation of access to finance for private sector (off takers and input providers)	Facilitation of access to finance for smallholder farmers	
Institutional aspects	Support to policies, standards and regulations		Joint implementation
	Support to national farmers organizations and stakeholders' platforms		
		Disease contingency fund	
		Sanitary crisis simulation	
		Capacity building of public actors	

43. The content of the section below focuses mostly on the description of the IFAD supported interventions, but it also reflects the ENABEL contribution and the partnership modalities for each activity, in order to highlight the complementarities.

Programme development objective

44. **Programme overall objective.** The overall objective of the programme is to reduce poverty by empowering poor rural men, women and youth to participate in the transformation of the Rwanda livestock sector and to enhance their resilience. Specifically, the project seeks to increase competitiveness and profitability of the small livestock sector for the provision of quality products from smallholder producers to domestic and regional consumers.
45. **Programme development objective.** The PDO is to "Improve food and nutrition security and incomes of poor rural households through better performance of the targeted value chains".

Programme Approach

46. The programme builds upon a combination of new and tested approaches. It builds on the successful implementation of IFAD-funded interventions (the project) and on lessons learnt from their inclusive development approaches. In terms of project management, the project maintains the same implementation structure through the Single Project Implementation Unit, but with joint arrangements with ENABEL such as common project team, and common planning and implementation mechanisms. In addition to the partnership with ENABEL, there are also other new elements introduced by the programme, such as the pro-poor approach through a graduation pathway aimed at extremely poor households, and the productive alliances promoted with Rwandan input suppliers who are actively involved in the development of small livestock value chains.
47. By improving the competitiveness of small livestock smallholder production systems, the programme aims to contribute to poverty reduction and improved nutrition. The strengthened access to markets for producers will increase both availability of animal source foods and producers' income.

48. Three main categories of beneficiaries will be targeted through complementary approaches meant to support their participation in commercial and inclusive value chains:
- For extremely poor and poor rural households, the project will target the backyard poultry value chain, the family pig production and the small ruminants production. For these beneficiaries, the project will deploy a pro-poor graduation pathway aimed at addressing community development through an integrated and holistic approach. Through this approach, it is expected to improve the performance of livestock managed at the household level, increase availability of animal source foods and improve nutrition, reduce gender inequalities, and ultimately increase income generation and market access.
 - For unemployed rural youth, a specific support package including group formation, initial technical and managerial training, provision of business development services, and assets building will be provided. The targeted productions will be commercial poultry (layers and broilers), and pig (breeding and fattening). These productions are particularly well adapted to youth because they require a very limited amount of land, limited investment and they can provide a very good and quick return on investment, which is what the youth look for.
 - The less vulnerable producers that are already engaged in a more entrepreneurial logic in the commercial poultry and pig value chains will be supported through a combination of technical, business and financial capacity building combined with backward and forward market facilitation. This will be provided in the scope of innovative value chain arrangements that facilitate the inclusion of smallholder farmers in commercial small livestock value chains.
 - While the three categories of actors above will be targeted through both the ENABEL and IFAD supported interventions, the industrial producers and private sector actors such as feed millers, hatchers and breeders will be targeted through the ENABEL supported interventions.
49. At production level, the first step for some of the beneficiary groups (in particular the most vulnerable rural households and the youth) will be to establish the production units: for the rural poor, this will be achieved through the provision of a startup asset building package composed of animals, materials for the poultry/goat house, and inputs for a startup period. For these households, this package will be provided without financial contribution from the recipient, but beneficiaries will be required to “pass on the gift” (give animals) to other beneficiary households. For youth, the project will also provide the assets and inputs required for startup, but the beneficiary will contribute to the costs by contracting a bank loan that will partially cover the cost investment. For other producers of the third category above, the project will facilitate access to startup or extension capital through intensive engagement with financial institutions, mobilization of contributions from the private sector and the beneficiaries, and limited project grants.
50. In parallel with the setting up of the production units, the project will enable the beneficiaries to properly manage their livestock unit: the capacity building activities will therefore both address technical issues (health and hygiene management, feeding, reproduction) and management related matters (financial management, marketing).

After the initial training, the beneficiaries will be followed by community facilitators (for rural households) or business coaches (for the youth or producers involved in the productive alliances), that will provide continuous capacity building and coaching on both technical and business management issues. Furthermore, nutrition education and gender awareness training will be provided at both household and cooperative level to ensure that, on the one hand, increasing in production and income would translate into improved diets and that, on the other hand, workload and benefits will be equitably shared amongst female and male producers.

51. On the production aspects, the project will also ensure that beneficiaries:
 - access to proximity veterinary services through the establishment of a network of community veterinary practitioners;
 - are protected against the main animal health risks, through improved surveillance and establishment of a diseases contingency mechanism;
 - and access good quality genetic material to improve the performance of their flocks, through professional private breeders;
 - access to locally produced fodder and feed and;
 - improve the management of farm effluents, as well as the utilization of renewable sources of energy (biogas solar).
52. The project will address the problem of dependency of the domestic poultry and pig value chains on imported feed and imported raw material, by contributing to building a strong domestic feed value chain based on a basis a smallholder producer of maize and soya, connected to feed manufacturers through contractual arrangements. It will also support research in the feed domain in order to improve the valorization of alternative local products in animal feed.
53. The issues related to weak access to input/output markets and services will be addressed among others through the promotion of "Productive Alliances"¹⁴⁷ between smallholder farmers and input suppliers in the poultry and pig value chains, building up on arrangements that are already often used in Rwanda by feed manufacturers to expand their customer outreach. In the best scenario the private sector would be both an input seller and an off-taker of the end product, thus also guaranteeing the market, but the project will also support other more common arrangements where the private sector would focus on its core business of input provision, while delivering at the same time tailor-made technical advices to enhance the productivity of their clients.
54. The programme support to construction/upgrading of animal markets and processing facilities at both public and private level will further ensure that small livestock produce are channeled through market outlets that (i) are locally available; (ii) comply with food safety and animal welfare standards; and (iii) incorporate simple, affordable climate-resilient technologies in line with the targets set in the National Strategy for Climate Change and Low Carbon Development. These public works will be conducted in compliance with building code established by Rwanda Bureau of Standards and

¹⁴⁷ A productive alliance is a contractual arrangement whereby farmers enter into an agreement with either an input supplier, an aggregator or a service provider, who guarantees access to inputs, market or services to the farmers on mutually agreed conditions.

global best practices pertaining to water and energy efficiency, waste management (e.g. biogas), wastewater and sewerage treatment.

55. With regard to access to finance, the overall approach and principle will be to support programme beneficiaries to access finance from formal financial institutions (banks, MFIs and SACCOs) on market terms, to ensure sustainability of access and avoid market distortion. Linkage with formal financial institutions will be promoted for (i) smallholder poultry and pig farmers in productive alliance to finance capital investment and working capital, (ii) vulnerable households under graduation pathway through linkages of their savings and loans association with the formal financial sector as one step of the graduation model, and (iii) youth in cooperatives to finance and develop their start up business. This will be done by providing adequate capacity building support both on demand and supply sides, and structuring of the value chains to contribute to risk mitigation for the financial institutions. The programme will work with financial service institutions who already have commitments to serving the agricultural sector and have expressed interest in the small livestock sector, and invest in TA in order to help them better understand the target group features and needs, and design appropriate products and services. Fora organized by the project to link financial institution and smallholder farmers, and financial literacy training for clients, will help break down access barriers and match the target group with the right service providers.
56. Finally, the programme is sensitive to the risk aversion of financial service providers, and will link with or help develop risk management tools – these include matching grants, access to guarantees, specialist insurance products, and digital financial services. Use of matching grants will be restricted to incentivize and facilitate access to finance for high risk borrowers, either because of lack of business track record or lack of collateral, which is the case of youths and start up smallholder farmers. For private sector actors, matching grants will be used only to incentivize development of social or public good related investment: development of smallholder farmers network to secure their customer or supplier base, investment in essential equipment meant to improve food safety, animal welfare and climate-smart upgrading of their facilities, conditional upon their sourcing from programme beneficiaries. Accordingly, the limited grants meant to support these investments will be disbursed along the different Public-Private-Producers Partnerships (4P) models already in use under PASP project (see detailed 4P models in Annex).
57. By increasing the business proposition of the clients and helping the financial sector to better understand and manage risks, it is expected that adapted products will be developed and delivered, with affordable interest rates.
58. The programme will contribute to improve the policy formulation process by ensuring that policy dialogue is evidence based and inclusive, and involves all categories of value chain actors, smallholder producers in particular. This will guarantee that the policies and strategies developed are based on the actual needs and constraints of the value chain actors, and that proposed policy options are acceptable and implementable. The main instrument to guarantee this inclusivity and ownership will be the stakeholders platforms initiated by the project.

59. The programme will also support the development and enforcement of regulatory framework, with a particular focus on food safety and animal welfare. The same approach as for policies will be followed, and participation of value chain actors through the platforms will ensure a better ownership and acceptance of regulations by the value chain actors, which will facilitate their enforcement by public authorities.
60. The programme will maintain close consultation and coordination with all potential partners involved in the areas covered by PRISM in order to promote the emergence of synergies between activities and avoid duplication. Strong opportunities for synergies have been identified with the Feed the Future Rwanda/ USAID funded project called "Orora Wihaze" which will sustainably increase the availability of, access to, and consumption of animal-source foods (ASF) through development of a profitable market. In addition, the project will partner with the international organization Heifer International in co-investing (approx. USD3 million) and co-implementing selected activities under PRISM, building on successful previous experiences under KWAMP and the grant project "Dairy Hub Model integration into IFAD funded projects in Rwanda and Tanzania (Zanzibar).

Targeting strategy

Geographical targeting and project intervention area

61. Targeted districts and Geographical repartition between partners: the IFAD supported interventions (the project) will target a total of 15 districts distributed across the Northern, Southern and Western Provinces of Rwanda, where poverty and malnutrition are widespread. The ENABEL intervention will have a national coverage but will be concentrating its activities where there is potential for market-oriented poultry and pig production, and where the larger commercial producers are located (such as Kigali, Rwamagana, Musanze, and Lake Kivu region (Rubavu and Rusizi).

Table1: Number of HHs. Ubudehe categorization per province and district						
North	District	Ubudehe category	Ubudehe category	Ubudehe category	Ubudehe category	Grand Total
		1	2	3	4	
	Burera	18179	32782	36140	7	87108
	Gakenke	13055	45561	31230	13	89859
	Gicumbi	24181	34110	38627	70	96988
	Musanze	15431	44023	40341	230	100025
	Rulindo	13914	31065	36767	36	81782
	Subtotal	84760	187541	183105	356	455762
South	Gisagara	22931	35358	31393	19	89701
	Huye	17718	21634	49759	248	89359
	Kamonyi	12654	44197	39012	31	95894
	Muhanga	9118	22653	52692	96	84559
	Nyamagabe	16111	32229	37402	111	85853
	Nyanza	15378	31731	35957	68	83134
	Nyaruguru	22366	29674	17914	8	69962
	Ruhango	17342	32879	33611	29	83861
	Subtotal	133618	250355	297740	610	682323
West	Karongi	14117	26215	41550	57	81939
	Ngororero	24231	37593	32269	12	94105
	Nyabihu	11481	34421	28129	16	74047
	Nyamasheke	35053	31080	26798	88	93019
	Rubavu	17161	38741	49197	407	105506
	Rusizi	12930	34179	49693	182	96984
	Rutsiro	17735	33267	34271	12	85285
	Subtotal	132708	235496	261907	774	630885
Project Area	TOTAL	351086	673392	742752	1740	1768970
Rwanda		490055	1132482	1196933	6896	2826366

Source: MINALOC, data collected in February 2019



62. Within the three provinces, IFAD will select 15 districts to implement its operations. The **selection criteria** for the IFAD targeted districts and their respective sectors will be the following:
- Districts with high rates of poverty and food insecurity (see Table 2);
 - Districts that present comparative advantage for the development of specific small livestock value chains, such as the existence of a traditional production basin, the proximity of a strong market, favourable environmental conditions or the availability of resource base;

63. Sectors not targeted by other small livestock value chain development projects. In this regard, the programme will align and cooperate with the USAID/ Feed the Future and other possible development partners active in the small livestock sector to avoid the duplication of investments and to seek complementarity among the proposed interventions; in this sense, it will be possible have some geographical overlap in terms of districts, but working in different sectors. Furthermore, territorial contiguity among districts should be sought, in order to facilitate implementing arrangements and the delivery of the project's services.
64. Other districts, e.g. Bugesera (Eastern province) and the city of Kigali may be targeted for specific activities, such as the establishment of strategic partnership between smallholders and the private sector and their inclusion in productive alliances or 4P arrangements.
65. Despite the high rate of poverty, the programme area is a traditional production basin for small livestock and poultry: the Northern province alone accounts for 42% of the national sheep production, Southern province of pig production (42%) and poultry (30%). The table below shows the total number of households the project area (provinces and respective districts), vis-à-vis the percentage of food insecure households and the small livestock and poultry production.

Table 2. Number of HHs and food insecure HHs in the project area and small livestock production

Total number of HHs in the project area, % of food insecure HHs				Small livestock and poultry production (total number of animals per province and per district)			
	District	Number of HHs	% of food insecure HHs	Goats	Sheeps	Pigs	Hens
North	Burera	87108	29,7	31334	36733	5573	37339
	Gakenke	89859	15,0	47796	37779	10938	27951
	Gicumbi	96988	17,3	74542	16807	8021	43525
	Musanze	100025	11,5	35078	28899	10545	16552
	Ruliindo	81782	16,6	48667	14431	4357	18388
	Subtotal	455762	18,02	237417	134649	39434	143755
	South	Gisagara	89701	23,5	116609	4393	16473
		Huye	89359	14,4	46193	6636	13394
		Kamonyi	95894	23,5	43796	3512	4993
		Muhanga	84559	13,1	39604	12140	31585
		Nyamagabe	85853	29,8	69261	22593	28268
		Nyanza	83134	20,0	48499	2396	2578
		Nyaruguru	69962	24,0	50615	13652	16832
		Ruhango	83861	17,7	52849	3985	8860
		Subtotal	682323	20,75	467426	69307	122983
	West	Karongi	81939	24,9	88519	9167	13593
		Ngororero	94105	40,8	46898	20438	32738
		Nyabihu	74047	25,8	46345	27146	6623
		Nyamasheke	93019	20,6	58332	6620	18022
		Rubavu	105506	21,9	50754	7438	2573
		Rusizi	96984	25,4	65494	18134	14915
		Rutsiro	85285	49,0	58339	4878	17683
		Subtotal	630885	29,8	414681	93821	104834
	Project Area	TOTAL	1768970	49	1119524	297777	267251
	Rwanda		2826366	18,7	1736211	323002	641581
						310833	1026440

Source: MINALOC, data collected in February 2019; CFSVA 2018 and National Agricultural Survey, 2008.

66. Data show that districts such as Ngororero (West) or Gisagara (South), with very high rates of poverty (66% and 65% respectively) and food insecure households (40% and 23,5%) count with very high production of small livestock (Ngororero is the first district for pig production at the national level and Gisagara the second district for poultry and goat production at the national level). Following the same criteria, districts as Gakenke and Giacumbi may be targeted for their sheep and goat production, respectively, being also districts where more than 60% of the households live in poverty. In the South, Nyamagabe has almost 30% of households food insecure but a high level of goat production; similarly, Nyanza and Ruhango have a strong poultry production and high poverty rates (60%). In the West, Rutsiro has a good production of goat and hens and alarming rates of food insecurity (49%) and poverty (60%).
67. **Process of selection of the districts and sectors.** The selection of the districts and respective sectors will be based on the criteria above mentioned. Consultations between MINAGRI, RAB, IFAD, Heifer International and USAID/Feed the Future and ENABEL will be conducted during the programme inception phase in order to pre-screen a potential list of districts where projects may implement their respective activities, agree on the different areas of interventions and define institutional arrangements for their delivery.

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Selection of districts and sectors for programme implementation	MINAGRI, RAB, IFAD, Heifer International, USAID/ Feed the Future, ENABEL							The geographical coverage of the programme is defined and institutional agreements with development partners are taken.
Selection of cells and villages	SPIU and IFAD/ ENABEL project district staff							Cells and villages selected.

68. The selection of cells and villages will be done in close collaboration with the project district staff during the project start-up phase. The criteria for selection will be poverty, food insecurity and malnutrition rates.

Value Chains

69. The programme will target 4 small livestock value chains: the poultry value chain, the pig value chain, the goat value chain, and the sheep value chain. These value chains have been selected because of their potential for poverty reduction and improved nutrition, their potential for social, gender and youth inclusion, their market potential (domestic and export markets), their limited impact on environment and their resilience to climate shocks.
70. The number of beneficiaries per value chain will be: 4,500 households for small ruminants, 4,250¹⁴⁸ for poultry and 2,450¹⁴⁹ for pigs.

¹⁴⁸ 2,250 vulnerable HH + 1,000 youth + 1,000 commercial producers.

71. IFAD-supported interventions (the project) will target mainly the small ruminants and backyard chicken value chains, that correspond to its priority target groups, when ENABEL will concentrate on pig and poultry commercial value chains (also targeted by IFAD);
72. For poultry, the project will target both the dual purpose (meat and egg) backyard systems, in particular through sub-component 1.1, and the commercial intensive systems (broilers and layers), through sub-component 1.2 (youth support) and sub-component 2.1 (productive alliances). However, in the commercial poultry value chain, the project will not target directly industrial farmers with more than 1,000 birds.
73. For pig, the same approach will apply, and the project will support both the traditional family system, through sub-component 1.1, and the commercial intensive system through sub component 1.2 (youth support) and sub component 2.1 (productive alliances). The project will not support industrial units in case some emerge.
74. For small ruminants, the project will target the goat value chain in priority, with a particular focus on meat production. In regions where sheep are in abundance (North West), this value chain will also be supported. When feasible, support to these two value chains will be envisaged jointly (support to public infrastructures, market facilitation, support to producers organizations).

Target group(s)

75. **Target groups.** The targeting mechanism will be based on the national wealth ranking system (Ubudehe) and consistent with the targeting strategy outlined in the COSOP. The IFAD supported interventions will directly benefit a total of 26,355 poor rural households belonging to Ubudehe categories 1, 2 and 3. Within the beneficiaries, the project will address three main target groups through complementary approaches meant to support their participation in commercial and inclusive value chains:
 - **23,400 poor and food insecure rural households** (approximately 88,000 household members falling in Ubudehe category 1 and 2) amongst whom the project will give priority to the most vulnerable households, women (and among them to women heads of households) and youth. Poorest households are composed of subsistence farmers, mostly food insecure and with limited land and access to resources, have few active members, are more often headed by a single person. Women will represent at least 50% and youth 30% of the target beneficiaries. To reach the poorest households, the project will deploy a pro-poor graduation pathway, aimed at addressing community development through an integrated and holistic approach. The graduation pathway will be based on the Values-Based Holistic Community Development (VBHCD) model designed and implemented by Heifer International (see, sub-component 1.1.). The VBHCD model entails that, within the targeted communities, the most vulnerable households are identified in a participatory way at the beginning of project's implementation; although the holistic approach and related activities will be open to all community members despite their socio-economic conditions, the package of services provided will be tailored to the specific households' needs. Women

¹⁴⁹ 1,500 vulnerable households + 500 youth + 450 commercial producers

heads of households, young women and men and most vulnerable households will be prioritized as first recipients of the POG practice. With the poorest households the project will target the backyard poultry value chain, the family pig production and the small ruminants production, which are productions particularly suitable for women.

- **1,530 rural youth** (50% women), aged between 16 and 30 years, in Ubudehe categories 1 to 3, unemployed and with low educational level, will receive support to organize themselves into small livestock production cooperatives and receive a full start-up package, including: initial technical and managerial training, provision of business development services, and assets building will be provided. Furthermore, will be youth 75% of the CAVEs¹⁵⁰ and 50% of the community facilitators.
- **1,425 market-oriented producers** (525 broiler farmers, 450 eggs producers, 450 pig fatteners), in Ubudehe categories 2- 3, will be targeted across all districts. These less vulnerable producers, are already engaged in a more entrepreneurial logic, will be supported through a combination of technical, business and financial capacity building combined with backward and forward market facilitation. This will be provided in the scope of innovative value chain arrangements that facilitate the participation of smallholders in commercial value chains.

76. Other direct beneficiaries will be approximately 900,000 households raising small livestock that will benefit by vaccination campaigns against major small livestock diseases. The project will also benefit service providers, such as the Community Agro-Vet Entrepreneurs and veterinary services, through the provision of training and capacity strengthening; members of national producers organizations as well as district staff and RAB trainers that will be trained on matters related to the governance and the management of their organizations and to the development of small livestock value chain, respectively. Specifically, and across all components and activities, the project will target 50% women and 30% youth.

77. The number of beneficiaries per value chain will be : 4,500 households for small ruminants, 4,250 for poultry and 2,450 for pigs.
78. The number of beneficiaries targeted through the ENABEL supported interventions is 21,254 in total, composed as follows: (a) 12,000 producers of chicken and pork supported through FFS; (b) 9,000 soybean and maize producers supported through FFS; (c) 25 medium scale producers and 2 large scale producers in the pig sector, and 200 medium scale producers and 2 large scale producers in the poultry sector will benefit from business development services and capital investment support; and (d) 25 enterprises operating in the targeted value chains. ENABEL beneficiaries will be mostly in Ubudehe categories 2, 3 and 4.
79. The total number of beneficiaries targeted under the programme by both implementing agencies is therefore 47,609.

¹⁵⁰ Community Agro-Vet Entrepreneurs that will provide technical assistance to the targeted households.

Targeting mechanisms/strategy

80. The targeting strategy for the IFAD-supported project to reach beneficiary population will be based on the following targeting mechanisms:
81. **Complementary targeting approach with ENABEL:** The overall growth and strengthening of the small livestock value chain can take place only if all value chain actors, at all levels, are able to participate and contribute: the smallholder and vulnerable producers, but also the bigger private sector actors especially at processing and input provision levels. The partnership with ENABEL allows IFAD to concentrate its support to its core target group: the vulnerable rural producers, while ENABEL, leveraging its comparative advantage, will also engage more market-oriented value chain actors. This complementarity allows each partner to operate within its mandate and to leverage its comparative advantage, jointly contributing to a healthy and sustainable growth of the sector.
82. **Self-targeting.** The goods and services provided by the project will respond to the priorities, and livelihood strategies of the target groups. Smallholders producers will be encouraged to join small livestock production groups/ cooperatives and they will be supported to link to market opportunities.
83. **Direct targeting.** The poorest households (from Ubudehe category I) and, within these, women-headed households, young women and men and households with under-nourished children will be targeted directly by the project to be the first recipients of the POG practice (see, component 1.1). Young women and men will be directly targeted as primary beneficiaries for the development of small livestock cooperatives (component 1.2).
84. **Empowering measures.** In addition to developing technical skills in small livestock production, the project will support beneficiaries to develop skills in household nutrition, basic literacy and numeracy, business and leadership. Gender awareness training will contribute fostering more equitable gender roles and relations at household and group levels.
85. **Enabling policy and institutional environment.** The project benefits from a highly enabling policy and institutional environment fully supportive of the development of the small livestock sector, with a pro-poor and inclusive approach. Support to formulation and enforcement of sector policies and regulations and standards will be addressed under component 3.
86. **Procedural measures.** Attention will be given to costs/beneficiary contributions, timing and administrative procedures required for effective participation of the various target groups.
87. **Operational measures and monitoring.** A Gender, Targeting and Community Mobilisation Officer has been appointed in the MINAGRI Single Project Management Unit (SPIU) to coordinate implementation of the gender and targeting strategies. Similarly, a Nutrition Specialist has been appointed under the on-going Rwanda Diary Development Project and will be responsible to coordinate nutrition-related activities under the project. The Minimum Dietary Diversity for Women-MDD-W indicator has been introduced to monitor improvements in diets as a direct result of project's activities. Studies will be conducted at baseline, mid-term and completion to assess

the effectiveness and relevance of the strategies/mechanisms. M&E indicators will be sex- and age-disaggregated.

Strategy /approach for gender and youth mainstreaming, social inclusion and nutrition

88. **Gender.** Despite the great strides in promoting gender equality and achievements reached at the national level, gender disparities still persist in rural areas, where traditional patriarchal attitudes continue to prevail. Households headed by women tend to be the poorest: in the project area, female-headed households account for 55% of households in Ubudehe category 1.
89. In the provinces targeted by the project the majority of the female population work in agriculture and rely on agricultural activities as the only source of income. Yet, with lower levels of schooling and higher rates of illiteracy they are constrained to subsistence farming with insufficient skills, access to markets and control over land and other key assets and agricultural services, compared to men. Women also lack the capacity to participate in agri-business and they are less employed in non-farm work, relative to men.
90. Major issues that constrain women in agriculture are related to (i) time burden (ii) access to finance; (iii) access to inputs and technology and (iv) extension services and trainings. Gender disparities are also evident in the value addition and marketing of agricultural commodities where more economic commodities are controlled by men. In general women are associated with marketing small quantities of produce while larger quantities are marketed by men who also control the income from the sales.
91. At the project level, and in line with the latest COSOP, women will account for at least 50% of the beneficiaries. Special attention will be given to female-headed households. Women will be empowered to effectively engage in the economic activities and to increase their decision-making power at the household and community level. To this aim, PRISM will count on the experience gained in implementing Gender Action Learning System (GALS) and other participative households approaches in the frame of the on-going operations, contributing to increase equal access of men and women to economic opportunities, decision-making processes and share of workload.
92. **Approach for gender mainstreaming and social inclusion.** To contribute to tackle constraints faced by rural women, the project will adopt an inclusive approach to ensure that women and men equally benefit from project's interventions. Overall, women will account for at least 50% of the beneficiaries, and female-headed households and women in male-headed households will be empowered to participate in project activities or engage in economic activities. Young people (50% women), will represent 30% of the overall number of beneficiaries.
93. The targeting and social inclusion strategy will rely on a strong mobilization strategy to be undertaken at the beginning of the project. With the poorest and food insecure households (Ubudehe category 1 and 2) the community mobilization will be carried out by community facilitators, in the frame of the Heifer's VBHCD model. While mobilizing the communities, direct targeting measures (see, targeting strategy above) will be applied to ensure that the most vulnerable groups will be included, that representation of female and male participants is equal and that elite capture is avoided.

94. The project's approach to gender mainstreaming will be aimed to:

- (a) Ensure that women and men have equal access to capacity building, training and productive assets. With this objective, the project will target 50% women as direct beneficiaries;
 - (b) Promote labour-saving technologies that can contribute to decreasing women's workload, as time burden is one of the major issues that constrain women in agriculture; for example, the intensification of dairy production provides opportunities for biogas systems which can be used for household energy;
 - (c) Increase women's voice in decision-making at the household and community level. Under the VBHCD model, women will be trained to form groups and their leadership and negotiation skills will be strengthened to enable them to make informed decisions. Gender-awareness trainings, including both women and men, will be carried out at both household and cooperative levels;
 - (d) Increase women's access to skills and knowledge: women's skills in financial literacy, managing and saving money will be strengthened, encouraging the economic empowerment of women and their participation throughout the whole value chain (also in areas that are not traditionally in their domain);
 - (e) Develop skills to improve the well-being of women and other family members: with this purpose, nutrition education will be provided at both household and groups level. The training will include training in nutrition/ dietary knowledge, food handling and storage, cooking classes and practical demonstrations on how to prepare a healthy and balanced meal (see, component 1.1). In the case of youth cooperative, nutrition education will be provided in coordination with Districts authorities (see, component 1.2);
 - (f) Train project staff and extension service providers on gender-related issues (component 1.1). It will be ensured that training modules include specific sections related to gender. To this aim, Gender, Targeting and Community Mobilisation Officer has been appointed to oversee the training modules and curricula that will be delivered to targeted communities/ households under the VBHCD model.
95. In order to harmonize with on-going activities on gender and women's empowerment carried out at the district level, the project (through the District Project Coordinators) will articulate with local governmental authorities and, in particular, with the Gender and Family Promotion Officers at the district level.
96. **Gender Strategy.** The Gender, Targeting and Community Mobilisation Officer will be responsible to outline the Gender strategy of the project during the project inception phase. The overall objective of the Gender strategy will be to ensure that women and men are equally involved in decision-making and in sharing the benefit of project's interventions and that gender will be mainstreamed throughout all project activities. The strategy will have to include the following items:
- (i) Specific objectives, related to project's components;
 - (ii) Specific activities foreseen to reach the objectives and expected outcomes/ outputs;

- (iii) Methodological approach;
 - (iv) Knowledge management: the strategy should explain how the knowledge and experience acquired in mainstreaming gender-related issues in on-going projects will be capitalized;
 - (v) Coordination strategies: collaborations with external partners (at national and district level), service providers, should be included here.
97. Coordination among ENABEL and IFAD-funded projects on gender-related issues and activities will be foreseen. This will be facilitated by the fact that Gender and Family Promotion Officers appointed for RDDP will be also responsible to mainstreaming gender issues into PRISM. The experience acquired in previous projects should be capitalized and used to build the gender strategy of the project.
98. Gender training. Training on gender-related issues will be included in the VBHCD model addressing the poorest households in Ubudehe category 1 and 2. (see, sub-component 1.2). The training will use a mix approach by addressing women's groups and mixed-gender groups. Gender sensitivity training will be offered to both women and men, which encourages husbands and wives to share in decision-making, ownership of the animals, labour and the benefits of the productive activities. The training will also use family focus, demonstrating how gender equity benefits all family members, resulting in improved family harmony. The Gender training will ultimately be aimed to:
- (i) Equip participants with information on what gender is and how it affects the community;
 - (ii) Understand how gender roles and social factors contribute to one's behaviors as a farmer;
 - (iii) Help participant understand the importance of gender in their everyday farm activities;
 - (iv) Identify gender appropriate interventions that can be applied to improve their participation in and benefit from the hub and at the households.
99. The Community Facilitators (CFs) will play an important role in ensuring gender justice. They will help mobilize the farmers themselves and host the sensitization trainings to strengthen gender relations among households and within the groups of producers. They also may conduct home visits, support groups on ensuring gender balance during the group formation and training them on gender. CFs also document best practices among couples and groups and help disseminate learnings.
100. Preventing gender based violence in the agricultural sector: the project will contribute to reducing any harmful act based on gender through: (i) sensitization on the importance of addressing GBV, application of IFAD's no tolerance for Sexual Harassment (SH) /Sexual Exploitation and Abuse (SEA) for project staff and project's activities and operations; (ii) map out and partner with GBV prevention and response actors in project adjoining communities; (iii) have GBV risks adequately reflected in all safeguards instruments, contracts with suppliers and other third parties to be funded with IFAD funds.

101. In youth small livestock enterprises, trainings on gender will be delivered through the districts. MoUs will be signed with the Districts during the inception phase in order to formalize the modalities of partnership between the Districts and the project. The Gender, Targeting and Mobilisation Officer will be responsible to outline the contents of the trainings and to coordinate their delivery. To this aim, the Officer will be assisted, during the first year, by a consultant, who will be hired to support the design of the modules, among other duties (See ToRs in annex).
102. **Start-up workshop (gender & nutrition).** The project start-up workshop will provide the opportunity to raise awareness on targeting, gender and nutrition related issues, to describe the strategies and approaches that the project will apply to work with women, men and youth and to address nutrition-sensitive issues. To this regard, a specific session on targeting and gender, on the one hand, and on nutrition mainstreaming, on the other hand, will be included as part of the workshop. The Gender, Targeting and Community Mobilisation Officer and the Nutrition Specialist, will be responsible to prepare and present on their related areas of competency. Suggestions for presentations are in Annex 13.

103. Implementation plan for gender strategy

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Raise awareness on targeting and gender related issues during the project start up workshop	Gender, Targeting and Community Mobilisation Officer							Presentation
Outline of the Gender Strategy	Gender, Targeting and Community Mobilisation Officer							Project gender strategy
Define specific contents for the delivery of gender training in youth cooperatives	Gender, Targeting and Community Mobilisation Officer							Outline of gender training
Build the capacities of SPIU staff and implementing partners on gender issues	Gender, Targeting and Community Mobilisation Officer							Workshop

104. **Jobs for youth.** Job creation for the youth (16 to 30 years age) will be targeted throughout the project. Youth will represent 30% of total target beneficiaries (50% women). In the three provinces targeted by the IFAD funded interventions, youth represents 25% of the total rural population. Although most of the youth is literate, the level of education is low (primary school education completed); the majority of the rural youth are workers, mostly engaged as independent farmers.

105. The agricultural sector is characterized by low productivity, low earnings and precarious working conditions. The major causes of problems in regard to access to market and challenges to youth entrepreneurship and business development include: lack of technical skills, limited access to information and opportunities, inadequate access to resources (land and capital) insufficient support services (internship, apprenticeship) business and management skills, among others. To contribute to generate employment and economic opportunities for young people, a specific package of services (see, component 1.2) will be aimed at youth.
106. **Nutrition.** Although, over the last few years, there has been a reduction of stunting prevalence among children under five years (from 43.4% in 2012 to 34.9% in 2018), the level of stunting remains very high. In the three provinces targeted by the project, the prevalence of child stunting reaches 40% on average. Infant and young child feeding (IYCF) practices also remain inadequate and few children achieved the minimum acceptable diet (MAD) based on dietary diversity and meal frequency.
107. There is a clear correlation in the project area between poverty rates, food insecurity and prevalence of stunting in children. In most cases, districts with a higher proportion of food insecure households have a higher prevalence of stunted children. Food insecure households have nutrient-low diets; protein-rich foods in particular are rarely consumed. An analysis of determinants for chronic malnutrition in the project area suggests that poverty and education, especially of the mother, have a clear relationship with prevalence of stunting in children (women living in poverty and with no education are more likely to have stunted children). There is also a strong correlation between the mother's food consumption and the child's food consumption: women's knowledge and education on food diversity has been recognized as a significant factor impacting children's food consumption, especially for achieving the minimum acceptable diet. In addition, environmental factors, both behavioural and those linked to access to water and sanitation, also contribute to this problem: access to clean drinking water remain a challenge in rural areas.
108. **Nutrition strategy.** The project recognizes that the small livestock sector can contribute to play an important role in combatting malnutrition, by both increasing availability of animal source foods at the household level and increasing income. Nevertheless, limited nutrition knowledge among beneficiaries may prevent producers to translate increased production and income into improved diets. The project will contribute to improved nutrition by (a) increasing availability of animal-source foods at the household level and promoting their consumption, especially amongst women and children; (b) increasing producers' income to purchase nutritious foods. To support beneficiaries in addressing gaps in nutrition knowledge, the project will conduct nutrition education at the household level and with the youth cooperatives.
109. Nutrition education aimed at the poorest and food insecure households (Ubudehe category 1 and 2) will be embedded into the VBHCD approach implemented by Heifer International (see component 1.1) and will include training in nutrition/dietary knowledge, livestock sourced food, proper consumption pattern (with emphasis to pregnant and lactating women and children under five to reduce malnutrition and stunting growth), food handling and storage, cooking classes and practical demonstrations on how to prepare a healthy and balanced meal. The following learning areas will be addressed in the nutrition education training:

- Definition of nutrition and its related concepts;
- Essential nutrients: macronutrients and micronutrients;
- Practices to maintain proper nutrients (e.g. food preparation, drying cereals after harvesting them, protecting vegetables and fruits directly after removing them from their trees, etc.)
- Energy requirements for adults, adolescents, children, and infants;
- Causes of under nutrition and its consequences on a society;
- Protein energy malnutrition (PEM) and body mass index (BMI);
- Minerals and vitamin deficiencies.

110. Nutrition education sessions will be complemented by training on gender aimed at both husbands and wives, that will address intra-household dynamics (decision-making, sharing of labour): this will help to tackle those challenges that, beyond food, may compromise improvements in diets at the household level (e.g. intra-household food distribution, choices on the use of family's income, etc.).
111. The promotion of climate-smart labour-saving technologies (such as biogas) would contribute to decrease women's workload and, it is expected, to increase their caring capacities. Trainings at the community level will also include raising awareness on the importance of good hygiene and sanitation, including actions to improve the surrounding environment.
112. Nutrition will be mainstreamed not only at the production level: sanitary risks and food safety-related issues will be addressed (including improving slaughtering and processing facilities and support to enforce sanitary regulations) along the value chains (see component 2).
113. In the case of youth small livestock cooperatives, nutrition education will be provided in coordination with Districts authorities. A project Nutrition Specialist, already part of the SPIU project staff and to mainstreaming nutrition in the IFAD-supported project RDDP, will be responsible to coordinate the nutrition activities at the national level. The Nutrition Specialist will work in close consultation with the Gender, Targeting and Community Mobilisation Officer to ensure that nutrition and gender-related initiatives are aligned and coordinated; furthermore, the Specialist will be responsible to facilitate the cooperation with governmental programmes and key development partners engaged in nutrition initiatives at the national and local level and with the Districts.
114. Nutrition training (youth small livestock cooperatives). Nutrition education will be done by conducting training at the district level. Building on the experience of RDDP, the training curriculum will be developed in close collaboration with the National Early Childhood Development Programme (NECDP), a governmental programme, under the Ministry of Gender and Family promotion, currently in charge of mainstreaming the nutrition agenda at the country level, with particular focus on stunting reduction and prevention. NECDP is the institutional partners responsible for the delivery of nutrition education under RDDP. Specific contents for the trainings will have to be agreed during the programme inception phase. Alignment and harmonization with the District Plan to Eliminate Malnutrition (DPEM) should be also sought at this stage and maintained throughout the programme implementation.

115. The Minimum Dietary Diversity for Women-MDD-W indicator has been introduced to monitor improvements in diets in women in reproductive age, as a direct result of project's activities. Studies will be conducted at baseline, mid-term and completion to assess the effectiveness and relevance of the strategies/mechanisms.
116. In partnership with the GoR, FAO is currently developing national Food-Based Dietary Guidelines (FBDGs) in Kinyarwanda, that will be used to educate people to consume a more diverse and nutrient-and balanced diet as well as guide interventions aimed at addressing nutritional concerns in the country. As part of its communication activities, the project will promote the dissemination of FBDGs with the sectors/communities/ households where it will operate.
117. Activities described below will be complemented by the ENABEL led activity 2.3.12 – “Behaviour change for a better balanced diet with sufficient attention for animal protein sources” whose objective is to raise awareness on the importance of the source of animal proteins by conducting various activities of sensitization (Media campaigns, awareness modules for SHF and at the level of households, etc.)

118. Implementation plan for nutrition strategy

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Define specific contents for the delivery of nutrition training in youth cooperatives	Nutrition Specialist and NECDP							Outline of nutrition trainings

Programme description

Programme duration

119. The programme will have a total implementation duration of 5 years.

The Components and activities of PRISM

120. The IFAD supported project will have three inter-related components. The first component will target the production level, the second will support participation of smallholders in the value chain, and the third component will ensure project coordination and support the improvement of the institutional and policy environment. The structure by component, sub-component and activity is as follows:

Project structure

Component 1 - Climate-smart intensification of small livestock production systems

Sub component 1.1: Social mobilization and graduation of vulnerable households

- Activity 1.1.1: Self Help Group Formation
- Activity 1.1.2: Training of Farmers in Cornerstones©
- Activity 1.1.3: Training of Farmers in Agri-Business and Income Generation
- Activity 1.1.4: Technical Trainings on Poultry, Swine, Goat and Sheep
- Activity 1.1.5: Input Provision and Passing on the Gift
- Activity 1.1.6: Provision and Training for Animal Feed
- Activity 1.1.7: Fostering Robust South by South learning

Activity 1.1.8: Participatory Self-Review and Planning

Sub component 1.2: Improve animal health status and genetic potential of small livestock

Activity 1.2.1. Establish Community based animal health systems

Activity 1.2.2. Support dissemination of improved breeding stock

Activity 1.2.3. Support surveillance and control of small livestock diseases

Activity 1.2.4. Support preparedness to animal health crisis affecting small livestock species

Sub component 1.3: Support climate smart innovations in production

Activity 1.3.1 Promotion of agroforestry with self- formed groups and youth groups

Activity 1.3.2 Manure management at youth farm and household levels

Activity 1.3.3 Promotion of low-cost water harvesting technologies at household levels

Component 2: Support to small livestock value chain development

Sub-component 2.1: Productive alliances with input suppliers

Activity 2.1.1: Productive alliances in broiler farming

Activity 2.1.2: Productive alliances in layer farming

Activity 2.1.3: Productive alliances in pig fattening

Activity 2.1.4: Support to youth entrepreneurship in production

Sub-component 2.2: Market Facilitation in Small Livestock Value Chains

Activity 2.2.1: Business Development Services

Activity 2.2.2: Financial support to modernize/upgrade private processing facilities

Activity 2.2.3: Development of public pig slaughter slabs and livestock markets

Sub-Component 2.3: Support to Financial Institutions

Activity 2.3.1: Enhancing access to financial services in the small livestock sector

Activity 2.3.2: Support for innovations and small livestock insurance

Component 3: Policy support and coordination

Sub component 3.1: Policy and regulatory support

Activity 3.1.1: Support to National farmers organizations

Activity 3.1.2.: Support to Small Livestock Multi-stakeholder Fora

Activity 3.1.3: Support to development of sector strategies and policies

Activity 3.1.4: Support to development and enforcement of food safety and animal welfare regulatory framework

Activity 3.1.5: Build institutional capacities at national and District levels

Sub component 3.2: Project Coordination

Component 1 - Climate-smart intensification of small livestock production systems

Sub component 1.1: Social mobilization and graduation of vulnerable households

Detailed description and implementation modalities of SC 1.1

121. Through this sub-component, which will be implemented by Heifer International, the project will reach 23,400 poor and food insecure rural households with whom the project will deploy a pro-poor approach through a graduation pathway (VBHCD model), aimed at addressing community development through an integrated and

holistic approach. This model builds on 12 Cornerstones^{©151} aimed at strengthening the capacity of smallholder farmers (including financial literacy, nutrition education, business management and increase gender equity) to increase their production and productivity, while connecting them to markets. At the core of this approach is the "Passing on the Gift (POG)" practice, through which people give one of their animals' first offspring to others in needs. Heifer will capitalize on its existing experience and expertise in Rwanda, the Africa region and globally. The main activities implemented under the VBHCD will be as follows:

Activity 1.1.1: Self Help Group Formation

122. SHG is the foundation for VBHCD. Heifer first helps community members to organize themselves into SHGs with one representative from each household. Each SHG is generally constituted of 20-30 members. Within a group, it will be likely to have representatives from different socio-economic sub-groups (extremely vulnerable and food insecure and less vulnerable). The groups will be open to all sub-groups present in the community and they will be trained together in order to strengthen their social capital. However, the package of services provided will be tailored to the specific households' needs, depending on their social and economic situation. Once the SHCs organized, Heifer continues to provide capacity building training and mentoring support to the SHGs. SHGs offer project participants opportunity to create bonds among members and enable them to think and work together for a common cause. SHGs are platforms that facilitate the full participation of individual members in project activities, such as group savings and loan, training, leadership skills development, etc. After receiving training, the SHGs establish Group Savings and Credit Funds and are put on a pathway towards graduation to form a larger platform of a Cooperative, through which they can achieve economies of scale by aggregating their agricultural goods. Approximately 1,170 groups (~23,400 farmers) will be formed.

Activity 1.1.2: Training of Farmers in Cornerstones©

123. In implementing this project, Heifer will use its VBHCD model to organize and mobilize poultry, swine, goat and sheep groups. The 12 Cornerstones© for Just and Sustainable Development are used to focus the group on the shared values of the self and community. Shared values discussed are used for group visioning and planning. This helps the group to plan for three types of key activities: activities done by SHG members (without assistance); activities done with Heifer support (e.g., Heifer project activities); activities done with outside support (e.g., local government). Approximately 1,170 groups (~23,400 farmers) will be trained.

Activity 1.1.3: Training of Farmers in Agri-Business and Income Generation

124. Farmers will also undergo important trainings to develop both hard and soft skills such as basic nutrition, gender and leadership modules for men and women, Values Based Financial Literacy, and environmental management in order to build and strengthen

¹⁵¹ The 12 Cornerstones© cover a range of shared values and principles, abbreviated in Passing on the Gift. Accountability; Sharing and Caring; Sustainability and Self Reliance; Improved Animal and Resource Management; Nutrition, Health, and Income; Gender and Family Focus; Genuine need and Justice; Improving the Environment; Full Participation; Training, Education and Communication; and Spirituality.

holistic skills and capacities for long-term success in agri-business. Further, the SHGs will be introduced to income generating opportunities that exist in their communities and undergo skills assessment to determine their strengths, weaknesses, and areas of interest. Based on this assessment, farmers will be trained on skills related to potential opportunities, including small business entrepreneurship, on-and off-farm income generation, and other employment opportunities that exist along the value chains, including: production, aggregation, transportation, processing, distribution/retail, and marketing. As the project progresses, agri-business workshops and input fairs linking farmers to private sector partners will be facilitated to further sharpen the business acumen and prospects of farmers while forging stronger outlets to formal markets. Approximately 1,170 groups (~23,400 farmers) will be trained.

Activity 1.1.4: Technical Trainings on Poultry, Swine, Goat and Sheep

125. Prior to livestock placement, specific technical assistance focusing on poultry, sheep, swine and goat value chains will be provided to farmers to help increase their production and productivity. These trainings include capacity building in: breeding, husbandry, feeding including zero-grazing, health and reproduction. Farmers also receive training in establishing a rotation scheme at the SHG level. Each SHG is supplied with at least one male animal used for breeding purposes. A carefully designed technique is employed to avoid cases of inbreeding and to increase the genetic diversity among the animals. Proper record keeping and follow up mechanisms are in place to ensure that animals that are closely related do not mate. The ratio of male to female per animal is described below:

- Swine, the boar to sow breeding ratio is 1:20
- Goats, the buck to doe ratio is 1:30
- Chicken, the rooster to hen ratio is 1:10

Approximately 1,170 groups (~23,400 farmers) will be trained.

Activity 1.1.5: Input Provision and Passing on the Gift

126. Once farmers have completed their training series, female animals of improved breeds will be placed at the household level. The selection of the first PoG's recipients will be done in a participatory way; group's members themselves will be asked to identify, within the group, the most needy households, which will be prioritize in receiving the first animal. In this context, attention will be given to the most food insecure and vulnerable households and, particularly, to those headed by women. The selection criteria for households to receive livestock is described below:

- Resides in the Project Implementation Zone
- Be in the Ubudehe category 1 or 2, priority will be given to households headed by women and to the most vulnerable and food insecure households
- Completed and participated in Year 1 trainings
- Constructed a modern animal shed
- Willing and committed to pass on the first-born female animal together with construction material to new a beneficiary
- Socially well integrated in community and active participation in development activities

127. In order to identify POG recipients, Heifer will also rely upon a set of criteria developed by Heifer-Rwanda and aligned with the Ubudehe ranking system. The criteria for households' categorization are depicted in the table below:

Categories	Highly Vulnerable/Extremely poor (Ubudehe 1) (Heifer category A)	Vulnerable/Poor (Ubudehe 2) (Heifer category B)	Resilient (Ubudehe 3&4) (Heifer category C)
Annual Income and Assets (\$)			
Household Income	< \$1,240/annum	\$1,240– \$3,300/annum	> \$3,300/annum
Assets	Minimal or no productive assets, Have no land or have very small pieces of land	Some productive assets, farm tools, own small land.	Increased productive assets, land, house, farm tools or equipment
Household expenditures on food	>75% of the income	50 – 75 % of income spent on food	<50% of income spent on food
Saving	Nil	<\$197/year	> \$197/year
Market access	No access to market	Limited access to market	Full access to market
Food Security and Nutrition			
Food Adequacy	Highly malnourished, Adequate food for < 8 months	Adequate for 12 months	Surplus in quantity for selling
Availability vegetables for home garden	Consume < 5 types of vegetables, Vegetables available less than 3 months/year	5-8 types of vegetables and available from 3-6 months/year	>8 types of vegetables and available more than 6 months/year
Health care	No reserve fund for health care, rely on public/community support to access health care	Can afford to pay for basic health care	Has reserve fund for health care
Education			
Schooling for adults and children	Adults are not educated or have low level of education, Cannot send all children to school especially for higher education	All children can access basic education (12 years basic education)	Selective schooling for higher education
Environment, Climate Change Adaptation and Mitigation			
Environmentally friendly technology adoption	Does not apply	Partly adopt environmentally friendly technology	Fully practice agro-ecological farming
Disaster risk management	High level of vulnerability to environmental shocks	Medium level of vulnerability to natural disasters	Medium level of vulnerability to natural disasters
Hygiene and Sanitation			
Hygiene and sanitation	Poor hygiene and sanitation; poor condition latrine	Improved hygiene and sanitation practices and have latrine	Improved hygiene and sanitation practices and some with concrete toilet
Women's Empowerment			
Level of participation in community actions	Very low	Moderate	High
Women in leadership positions	None	≤ 20% of DFGs	> 20 and ≤30% of DFGs

Decision making at the household level	Only small expenditures and investments	Partly involved in large expenditures and investments	Fully involved in large expenditures and investments
Women's access to/control over productive assets	None or very limited	Some level of consultation	Full access and control
Social Capital			
Level of social mobilization and engagement	Low	Medium	High
Social connectivity	Within family circles only	Expanded beyond family circles	Wider
Caring for and supporting each other	Low	Medium	High

128. The small stock are placed with households in the following packages with each family receiving and specializing in one type of animal:

Animal	Poultry	Swine	Sheep	Goat
# placed per household	10	3	3	3

129. In addition to placement of animals, farmers will be provided initial starter packs with inputs, including: feeds of grasses and legumes; disinfectants; feed troughs; drinkers; and nests. At the household level, smallholders will be trained in building proper housing structures for their animals. After training, farmers will receive most of the materials necessary for the construction and will co-invest about 20% of the building materials. No animal will be placed before a farmer has received training and constructed an appropriate housing structure that will protect the investment of the animal from elements and pests.

130. Heifer's model of Passing on the Gift© (POG) represents an innovative approach that fosters sustainability and produces a multiplier effect for impact. POG© is a requirement for each Heifer program participant and involves the initial direct beneficiaries (who received the livestock) passing on the first female offspring, to another person. The group determines who receive the "pass on" animals, training and guidance. This recipient will be expected to do the same for another person. On average, Heifer gifts are passed on for four generations in Rwanda.

131. The table below describes the overall schedule of initial small stock procurement, placement and pass on scheme.

TYPE	SOURCE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	Year 5	TOTAL
		ANIMALS	ANIMALS	ANIMALS	ANIMALS	ANIMALS	ANIMALS
SWINE	NEW PURCHASE	0	1500	1500	1500	0	4500
	POG	0	0	1350	2565	3659	7574
	Swine Total	0	1500	2850	4065	3659	12074
SHEEP	NEW PURCHASE	0	2250	2250	2250	0	6750
	POG	0	0	1688	4641	5168	11496
	Sheep Total	0	2250	3938	6891	5168	18246

	NEW PURCHASE	0	2,250	2,250	2,250	0	6750
GOAT	POG	0	0	1,688	5,203	5590	12480
	Goat Total	0	2,250	3,938	7,453	5590	19230
POULTRY	NEW PURCHASE	0	7,500	7,500	7,500	0	22500
	POG	0	0	7,500	15,000	22500	45000
	Poultry Total	0	7,500	15,000	22,500	22,500	67500

Activity 1.1.6: Provision and Training for Animal Feed

132. Ahead of livestock placement, farmers receive inputs for fodder plots, such as grasses and legumes. Farmers will also be trained on ways to address seasonality such as post-harvest storage, which will make higher quality feed available during the dry season. Various strategies suitable for smallholders such as planted forages, silage, and improved conservation of crop residues will be included. Feed packages will be provided to approximately 1,170 groups (~23,400 farmers).

Activity 1.1.7: Fostering Robust South by South learning

133. Throughout the life of the programme, South-South learning will be facilitated by conducting exchange visits both at the local farmer level, but also among global project staff across Heifer's portfolio. Current plans are in place to first exchange between Rwanda, Kenya, Nepal, and Cambodia so Rwanda may benefit from successful breeding and feeding models that Heifer is implementing in the region and in Asia. Each exchange visit will articulate a clear learning agenda to enhance small stock productivity and will capture and disseminate lessons learned. Up to four participants will participate in exchange visits for years 2,3,4.

Activity 1.1.8: Participatory Self-Review and Planning

134. PSRP is a values-based participatory review and planning methodology designed for assessing project implementation progress, community participation level, and learning and planning for action. Throughout the life of the project, farmers will participate in PSRP, which takes place at the different levels and involves all project stakeholders. During this process, farmers asses their goals, development actions plans and self-monitor their progress.

Implementation modalities for SC1.1

135. Heifer will operate in the three Provinces covered by PRISM; in each province, 3 to 4 Districts will be selected.
136. Heifer will recruit a dedicated project implementation team placed under the coordination of a project manager, and composed of a dedicated finance officer, 3 Community Mobilization Manager (1 per province) and 10 District Coordinators. The Country Office staff and in particular the Country Director, the Director of Programs, the Director of Finance, the Social Capital & Training Manager, the Animal Well Being Manager, the Agribusiness Development Manager and the Monitoring Learning and Evaluation Manager will all dedicate 10 to 25% of their time to PRISM activities. They will receive backstopping support from Heifer HQ.

137. Heifer dedicated team will be equipped with specific vehicles and office equipment purchased by and used for the Project.
138. The responsibilities of each specific staff member for various activities are shown in the table below:

S/n	Activities	Responsible/ implementer	Accountable/ Direct supervisor	Consulted	Informed
1	Self Help Group Formation (Year 1)	CF	Project staff	SC, PM	DoP, MEL, CD
2	Training of Farmers in Cornerstones© (Year 1)	CF	Project staff	SC, PM	DoP, MEL, CD
3	Training of Farmers in Agri-Business and Income Generation (Years 1, 2, 3, 4, 5)	CF	Project staff	SC & E&AB	DoP, MEL, CD
4	Technical Trainings on Poultry, Swine, Goat and Sheep (Year 1)	CAVE	Project staff	PM, AWB	DoP, MEL, CD
5	Provision of Training and Equipment to Community Agrovet Entrepreneurs (CAVEs) (Years 1,2)	Project Staff	PM	AWB	DoP, MEL, CD
6	Input Provision and Passing on the Gift (Years 2, 3, 4, 5)	Project staff	PM	AWB	DoP, MEL, CD
7	Establishing a Community Health Fund (Years 1, 2, 3, 4, 5)	Project staff	PM	AWB	DoP, MEL, CD
8	Provision and Training for Animal Feed (Years 1, 2, 3, 4)	Project staff	PM	AWB	DoP, MEL, CD
9	Fostering Robust South by South learning (Years 2, 3, 4)	Project Staff	PM	DoP, DAF	MEL, CD
10	Participatory Self-Review and Planning (PSRP) (Years 1, 2, 3, 4, 5)	CF	Project Staff	PM, SC	DoP, MEL, CD

CF: Community Facilitator / CAVE: Community Agrovet Entrepreneurs / SC: Social Capital and Training Manager / AWB: Animal Well-being Manager / EAB: Enterprise and Agribusiness Manager / Project Staff: Heifer Project Field Staff / PM: Project Manager / MEL: Monitoring, Evaluation and Learning Manager / DoP: Director of Program / DAF: Director of Finance
CD: Country Director

139. Complementarities and alignment with ENABEL intervention: The VBHCD will be implemented in the IFAD targeted Districts only, and will target households from categories 1 and 2. The Farmer Field School (FFS) approach will be implemented by ENABEL at national level, but for 12,000 households selected among the most market oriented, mostly from categories 2 and 3 and located in areas that are more connected to the market. The commonalities between VBHCD and FFS are that they both combine groups mobilization, technical capacity building, financial literacy, and support to market access. However, VBHCD will target the poorest households and the extensive production systems (backyard chicken and pig, small ruminants), in line with IFAD mandate and targeting strategy, while FFS will target the more commercially oriented producers. Because it targets resource poor household, VBHCD includes assets building, which is not the case of FFS. The FFS curricula developed by ENABEL includes business management aspects and is therefore more intended for already

market-oriented smallholder. The two approaches may thus be implemented in the same areas but for different target groups.

Implementation plan for SC 1.1

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Baseline study and market assessment	Heifer							
Facilitate training in VBHCD for CAVEs, Community Development Officers	Heifer							increased capacity for productive agri-business ventures
Training and equipping of 117 CFs	Heifer							
Development of training materials (Goat, Swine, Sheep, poultry and enterprise development manuals)	Heifer							
Group mobilization	Heifer							
Livestock Provision	Heifer							Households are equipped with improved breeds
Fodder provision	Heifer							Households have appropriate feeding resources
Provision of animal wellbeing inputs	Heifer							CAVEs equipped
Support the establishment of livestock housing	Heifer							Housing built
Meetings with local leaders and registration of participants	Heifer							Project participants are identified and registered.
Establishment of Project Management Committees	Heifer							strengthened rural platforms
Training of project management committeees	Heifer							increased governance capacity
Training of farmers in Cornerstones	Heifer							Farmers have increased skills
Training in group savings and credit	Heifer							
Training in livestock management	Heifer							increased knowledge in animal husbandry
Training of Farmers in entrepreneurship and enterprise development	Heifer							increased capacity for productive agri-business venture
Training in business management and record keeping	Heifer							increased capacity for agri-business venture
Training in Gender and Leadership for women, youths and men	Heifer							strenghtened group cohesion
Facilitate training of livestock business hub	Heifer							increased capacity for productive agri-

management								business ventures
Training in value addition	Heifer							increased opportunity for income generation
Train farmers in Cooperative Governance & Management	Heifer							strenghtened group cohesion
Training in environmental management	Heifer							increased climate-smart productivity
Training in values base literacy	Heifer							increased capacity for productive agri-business ventures
Training/awarenesss raising of human nutrition	Heifer							increased knowledge on human nutrition
Training in development of business plans, strategic plans	Heifer							increased capacity for productive agri-business ventures
Facilitate livestock bulk marketing	Heifer							increased opportunity for income generation
Train and facilitate PSRP	Heifer							increased ownership and agency over project results
Facilitate input and output market fairs and Facilitation of linkages with Private Sector	Heifer							strengthened linkages to formal market outlets
Best practices in Agri-Business workshop	Heifer							increased capacity for productive agri-business venture
Facilitate robust exchange visits for South by South Learning	Heifer							Farmers are exposed to new innovations

Sub component 1.2: Improve animal health status and genetic potential of small livestock

IFAD and ENABEL complementary approaches on animal health:

Public veterinary services and veterinary public health issues will be promoted under IFAD supported interventions only, as per the principles of collaboration mentioned earlier; for private veterinary services, the approach deployed by Heifer (Community Agro-Vet entrepreneurs = CAVE) and by VSBF (support to networks of veterinary technicians) approach are complementary as they will aim at providing private services to a different target group i.e. CAVE at village level serving Ubedehe 1-2 mainly, while VSBF will work with more professional private service providers addressing the needs of Ubudehe 3 producers principally. Thus, the approaches are not conflicting rather tailored to strategically cover the territory and provide with effective services the different segments of the target group. The coordination between public and private veterinary sectors will also be part of issues to be discussed in Component 3, especially in the scope of support to veterinary legislation review. It is also important to mention that IFAD is already contributing to strengthen the National health provision services through RDDP.

Detailed description of activities and implementation modalities for sub component 1.3

Activity 1.2.1. Establish Community based animal health systems

140. **Training of Community Agro-Vet entrepreneurs (CAVE):** In communities benefitting from the graduation pathway (SC 1.1) CAVEs will be identified, trained and deployed to support animal wellbeing across all value chains. With knowledge in basic preventive and animal health care, CAVEs provide services to the community under the supervision of qualified government veterinary staff. CAVEs have a high school education and become registered service providers with the government. This model bridges the gap of government extension services, increases the animal wellbeing and productivity and generates income opportunities, particularly for women and youth. Each CAVE is trained in animal well-being and conducting basic animal care ranging from administering vaccines to simple surgeries. CAVEs are equipped with animal well-being starter kits for their businesses including: a thermometer; antibiotics, dewormers, anticoccidials, multi-vitamins; ear-tag applicator; vaccination kit; vaccines; AI kits; surgical kits; cool box and icepacks; hoof trimmer; a motorcycle and other key supplies. Approximately 31 CAVEs will be trained and equipped.
141. **Establishing a Community Health Fund:** Every animal beneficiary is sensitized to contribute towards the animal health insurance scheme. In this scheme, a farmer contributes between Rwf 500 and 2000 (depending on the general assembly's decision) and pays half the price of vet drugs prescribed by qualified veterinary technician. With the establishment of this scheme, animals belonging to qualified farmers are treated at a subsidized cost, thereby reducing mortality.
142. Under the ENABEL-led interventions, a complementary approach will be deployed by Veterinaries without Borders Belgium (VSFB). VSFB will train and support the installation of private veterinary technicians and veterinary doctors. These veterinary practitioners will have a higher academic level than the CAVEs trained by Heifer and will address the needs of the more commercially oriented farmers, at national level. As for VBHCD and FFS, the two approaches will be complementary and address the needs of different producers' categories. ENABEL will also train private veterinarians for the larger industrial producers, and these three levels of private veterinary services will be complementary and address all the needs of the value chain.

Activity 1.2.2. Support dissemination of improved breeding stock

143. In this domain, the IFAD supported interventions will address the needs of the backyard poultry and small ruminants sectors, and ENABEL those of the commercial pig and poultry sectors.
144. The programme will provide support to RAB to enable this institution to play a more prominent role in the genetic improvement of small ruminants, pigs and poultry. Since roles and responsibilities differ between breeding of monogastric species and small ruminants, the approach will be different according to species: for monogastric, breeding and genetic improvement are mostly undertaken under the leadership and responsibility of the private sector, and RAB mostly plays a role of facilitation, coordination, supervision, and technical capacity building. For small ruminants, the private sector is not strong enough, farmers are mostly smallholders and cannot handle operations of selection or importation of improved breeds. Importation of parent stock, multiplication and dissemination of improved stock must therefore be undertaken directly by RAB.

145. **Support to pig artificial insemination and breeding, and production of DoC and pullets for commercial poultry.** The programme will support the creation of development of pig breeding centers, hatcheries and pullet producers through capacity building, business development services and capital strengthening. The two programme partners will ensure that these service providers are providing breeding stock to all project beneficiaries including those supported under the IFAD interventions. This will be done under the ENABEL activity 2.2.2 "Technical advice, business development and financial support to businesses in the pig and poultry value chain such as breeding centres, centre of excellence, pullet producers, slaughter houses and meat processors".
146. **Support to small ruminants breeding.** The IFAD supported project will provide support to the RAB Nyagatare breeding station, to enable it to import new breeding stock in order to avoid inbreeding, and to facilitate dissemination of offspring in the project area, in particular in the Southern region where small ruminants are concentrated. The project will give priority to the Boer breed, which constitutes the largest part of the existing flock in Nyagatare and is the most demanded exotic breed. The crossbreeding with the local goats gives good results for meat production, which is the main purpose of goat rearing in Rwanda, and does not affect too much the reproduction performance (prolificity and fertility) or the resistance to diseases and drought. The project will support the upgrading of the Nyagatare station infrastructures, and the dissemination of genetic material. The dissemination scheme for offsprings will follow a two layers mechanism: the RAB station will distribute crossed (F1) males to the 15 young breeders established under sub-component 1.2 and will provide them with capacity building top enable them to properly manage the reproduction. These young breeders will then cross these F1 males with local females and produce F2 (25% boer) animals, that will be placed in rural households in the scope of the Pass On the Gift Mechanism implemented by Heifer International under sub-component 1.1., or sold on a private and commercial basis.
147. **Support to genetic improvement of backyard poultry.** The programme will not work on genetic aspects for commercial intensive poultry production, since these aspects are totally handled by the private sector, through importation of hatching eggs, day old chicks or parental stock for the production of highly productive hybrid strains. The programme will only work on the genetic improvement of backyard dual purpose chicken. The programme will provide support to RAB to source selected breeds and strains of chicken, and multiply them through the specialized young hatchers established under sub-component 2. To identify the most adequate breeds and strains, the project will support the participation of RAB in the "African Chicken Genetic Gain¹⁵²" project implemented by a consortium of research organizations under the leadership of ILRI and funded by the Bill and Melinda Gates Foundation. Selected parental stocks will be sourced locally or imported (e.g. Kuroiler breed) by RAB and distributed to the 15 breeders equipped with solar hatcheries. RAB will provide technical support to these young entrepreneurs on a regular basis. The young farmers will raise the chicks until the age of 2-3 months, and the offspring will then be purchased by the Project and distributed to selected households in the scope of the

¹⁵² <https://africacgg.net/>

Pass On the Gift (POG) embedded in the graduation pathway (sub component 1.1.). Since the ratio for the POG will be one male for 10 females, the breeders will have males in excess that they will sell directly to farmers on a private basis.

148. This activity will be undertaken under the supervision and coordination of RAB, since animal breeding fully falls under its mandate and mission.
149. For small ruminants, the IFAD supported project will provide financial support to RAB to import the additional breeding stock, upgrade the Nyagatare breeding station facilities, and provide capacity building services to the youth breeders. Similar modalities will be applied for poultry. In addition, an MoU could be signed with ILRI to formalize the collaboration with the "African Chicken Genetic Gain" project.
150. Heifer International will play a key role in the final dissemination of improved genetic material through the dissemination of off springs produced by the young breeders supported under sub component 1.2.

Activity 1.2.3. Support surveillance and control of small livestock diseases

151. In order to reduce the risk of introduction of Transboundary Animal Diseases (TADs), the project will strengthen the epidemi-surveillance capacities of veterinary services, with a particular focus on small livestock TADs that are endemic in the region but not present in the country: African Swine Fever (ASF), Peste des Petits Ruminants (PPR), Highly Pathogenic Avian Influenza (HPAI), and Rift Valley fever (RVF). The project will improve surveillance capacities by providing support on three important aspects: (i) the strengthening of passive surveillance networks, in particular in border regions, to enable early detection of potential introductions and outbreaks; (ii) the strengthening of laboratory capacities, to facilitate active surveillance and confirmation of outbreaks; and (iii) the capacity building of field agents.
152. **Support to passive¹⁵³ community based surveillance networks.** The project will provide support to Districts to raise awareness of the communities and mobilize them to participate actively in passive surveillance networks. The Community Agro-Vet Entrepreneurs (CAVE) established under component 1.1 and the private veterinarians supported by VSFB will be key components of these networks. The Districts will provide information to communities on how to detect the main diseases at risk and will establish information circuits through efficient communication chains and designated focal points to enable the information to reach the veterinary authority in a swift way.
153. **Strengthening of laboratory capacities.** Rwanda Dairy Development Project (RDDP) is currently supporting RAB for the upgrading of the central veterinary laboratory and of the satellite laboratories. RDDP also provides capacity building and technical assistance to RAB personnel. The project will complement this support by providing specific equipment and kits for the detection of small livestock diseases (PPR, ASF and HPAI).
154. **Capacity building of field agents in surveillance.** The district veterinary staff who will be in charge of raising awareness and training communities will themselves need

¹⁵³ Passive surveillance is based on vigilance, observation and reporting of cases and outbreaks; active surveillance is based on systematic collection of samples and further analysis.

to be trained on epdemio-surveillance techniques and methodologies (e.g. syndromic epdemio-surveillance, sampling and management of samples), but also community mobilization and communication techniques.

155. Surveillance of TADs is a core public mission and must be undertaken by the Veterinary Authority, which is represented by RAB at National level. RAB will therefore ensure the coordination and leadership for the implementation of this activity.
156. RAB will actively collaborate with the District Veterinary Services who will be in charge of the community mobilization, and who will represent the intermediate level in the chain of information and transmission of epidemiological data. The district will receive direct support from the project for the field activities they will conduct. For the upgrading of laboratories, the needs will be assessed by RAB and submitted to the project for approval. Trainings of District staff will be undertaken at Province level by RAB scientists.

Activity 1.2.4. Support preparedness to animal health crisis affecting small livestock species

157. The support provided by the IFAD supported project will benefit directly and entirely to the public veterinary authority which is mandated for preparing responses to sanitary crisis, in particular when these crises are related to TADs or zoonotic diseases. This support will address three important aspects of preparedness: (i) the development of contingency plans (ii) the implementation of simulation exercises, and (iii) the establishment of a contingency fund.
158. **Development of contingency plans.** In order to be ready to respond to any sanitary crisis, veterinary services need to have ready and up to date contingency plans at hand, for each disease at risk (the response will be different depending on the specie affected, the epidemiology of the disease). Rwanda has already developed contingency plans for most of the major diseases affecting cattle (FMD), for PPR (modeled on the Pan African Plan) and for HPAI (developed in 2008 and updated in 2016); The project will therefore support the government to develop plans for ASF, which is missing, but also any other known or emerging disease depending on the epidemiological situation in the region and the actual major risks; It will also provide support to update the PPR and HPAI plans when necessary. For the diseases affecting monogastric species, the project will partner with ENABEL which has made provisions to support RAB for the same purpose. For diseases affecting small ruminants, PPR and possibly RVF, the project will bear 100 % of the costs. This activity will be implemented jointly and co-financed by ENABEL under activity 2.3.2 "Develop an animal epidemic contingency policy".
159. **Organization of simulation exercises:** once the contingency plans are developed, it is a recommended practice to undertake simulation exercises to: (i) test the Contingency Plan, (ii) build capacity of staff for implementation of the plan in almost real conditions (on hands training); (iii) test operational response arrangements and examine the liaison and interdependencies between the key operational partners (the deployment of the plan often requires cooperation between veterinary services, police, customs, public health for zoonotic diseases, which makes its implementation very complex). During the exercise, all components of the response will be reviewed, such as laboratory diagnosis, epidemiological investigation, biosecurity measures, containment barriers as well as cleaning and disinfection processes of affected

holdings. The project will support the organization of simulation exercises for two diseases: one affecting the small ruminants (probably PPR), and one affecting monogastric species (ASF or HPAI). This activity will be implemented jointly and co-financed by ENABEL under activity 2.3.2 "Develop an animal epidemic contingency policy".

160. **Establishment of a contingency fund for small ruminants diseases:** even if a contingency plan is available and updated, and if capacities for response have been strengthened and tested through simulation exercises, the deployment of an adequate response to a sanitary crisis also depend on the availability and accessibility of means, including in particular financial means, to implement the response mechanisms. The response depends on the disease and on the epidemiological situation, but it can require deployment of measures of containment, protection disinfection, restriction of movements, establishment of buffer zones and protection zones, preventive vaccination, laboratory testing, and even in some cases stamping out of animals infected or at risk. All these measures are costly, in particular stamping out which requires proper compensation of farmers affected.
161. The project will establish a reserve fund that will constitute the primary contingency fund. In case of eligible sanitary crisis, the government of Rwanda may use part or totality of these funds to finance emergency response, in line with the mutually agreed operational guidelines and criteria for eligibility of the crisis. If the primary allocation is not sufficient, the Government may also request to reallocate resources from the unallocated expenditure category if they are still available. Detailed operational guidelines and criteria for eligibility of the crisis will be developed to guide the utilization of the funds. Should this activity be triggered, all expenditures will be made in accordance with IFAD procurement rules applicable to emergency situations.
162. The implementation of this activity will be coordinated and overseen by the National Veterinary Services in RAB. For the development of contingency plans and the organization of the simulation exercises, they will receive technical support from the FAO-ECTAD¹⁵⁴ regional team located in Nairobi. FAO-ECTAD is highly specialized in this kind of exercise and has a unique comparative advantage. An MoU will be established with FAO for this purpose. FAO-ECTAD will involve OIE¹⁵⁵ experts in these activities but under their mutual arrangements and the project will not enter in any form of direct partnership with OIE. The participation of OIE will ensure that all mechanism established are conform to international standards and guidelines.
163. The contingency fund will be housed on a bank account owned and managed by RAB. The utilization of funds will be made possible only if the crisis fulfills the criteria mutually agreed upon, and should be done according to the operational guidelines. These criteria and operational guidelines will be developed the first year of the project and submitted to IFAD for approval. The transfer of the funds on the bank account will be done only after approval of these two sets of documents. Utilization of funds housed in the special account will also require a preliminary authorization from IFAD.

¹⁵⁴ Emergency Centre for Transboundary Animal Diseases

¹⁵⁵ World Animal Health Organisation

Only RAB will be authorized to use the contingency funds, and their utilization will follow the procurement rules in force in the country in case of emergency.

Implementation plan for sub-component 1.2

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Strengthen community based animal health management committee and CAVEs	Heifer							Agri-business and entrepreneurship ventures are strengthened
Facilitate establishment and monitoring of community animal health fund	Heifer							increased access to animal wellbeing resources
Recruitment of consultant to undertake feasibility studies for establishment of new pig AI stations	SPIU							Consultant contracted
Feasibility study for establishment of new pig AI stations								Feasibility study
Selection of promoters of new pig AI stations	SPIU - RAB							CFP launched Beneficiaries selected
Procurement of equipment and genitors for new pig AI stations	SPIU							Equipment and breeding stock procured
Construction of new pig AI stations	SPIU							2 new pig AI stations built
Capacity building to promoters of pig AI stations	RAB							Promoters of new pig AI stations trained
Recruitment of consultant to undertake feasibility study for upgrading Nyagatare RAB goat station	SPIU							Consultant contracted
Feasibility study for upgrading Nyagatare RAB goat station	RAB							Feasibility study
Procurement of genitors for upgrading Nyagatare RAB goat station	SPIU							Additional breeding stock procured
Upgrading of Nyagatare RAB goat station	SPIU							Station infrastructures upgraded
Draft District Action Plans to establish community based surveillance networks	RAB-Districts – SPIU - LCU							15 Draft District Action Plans to establish community based surveillance networks
Develop MoUs with Districts to involve them in project activities	SPIU – LCU - Districts							MoUs with Districts signed
Establish community based surveillance networks	Districts – LCU- SPIU - RAB							Community based surveillance networks functional
Develop specifications and bills of quantities for	RAB							Specifications and bills of quantities for

upgrading RAB satellite lab facilities							upgrading RAB satellite lab facilities
Procure equipment for upgrading RAB satellite lab facilities	SPIU						Equipment procured and delivered to RAB
Training of District staff on surveillance	SPIU – LCU - RAB						District staff trained
Preparation of MoU with FAO ECTAD for supporting the development of contingency plans and simulation exercises	SPIU - FAO						
Formulation/updating of contingency plans	RAB- FAO						
Organization of simulation exercises	RAB- FAO - OIE						
Development of criteria and operational guidelines for the contingency fund							
Establishment of the contingency fund							

Sub component 1.3: Support climate smart innovations

Detailed description of activities and implementation modalities for sub component 1.3

164. In order to mitigate potential negative impact of small livestock production intensification, the programme will promote several activities for mainstreaming environmental management and climate change adaptation and mitigation including: (i) enhanced feed efficiency through the promotion of fodder trees and shrub species (agroforestry) and use of crop residues at farm level; (ii) manure management through adoption of biogas systems and composting; (iii) improved water efficiency through rainwater harvesting facilities installed at farm level.

Activity 1.3.1 Promotion of agroforestry with self- formed groups and youth groups

165. Nurseries will be established¹⁵⁶ to promote fodder trees and shrubs species as animal feed. Agroforestry has multiple additional benefits, namely reduced soil erosion and increased resilience to heavy rains through improved slope stability; water management and nutrient recycling which improve agricultural production and carbon sequestration. This activity will be implemented together with Heifer, with 50 groups targeted in Year 1, 50- groups targeted in year 2 and 40 groups to be targeted in year 3.

Activity 1.3.2 Manure management and biogas

166. Small livestock produce rich manure which is a valuable source of organic plant nutrients, improves soil fertility and reduces the need for chemical fertilizers. The IFAD supported project will promote the installation of biogas plant at pigs farm and better manure composting and application at household level. The project will promote both the flexible biogas systems which are low cost, easy to install and adapted to small

¹⁵⁶ 14 nurseries in each of the district in which Heifer will implement the graduation pathway

scale farming, and fixed dome systems, which are more durable.. The beneficiaries will contribute in form of local labor (for digging the pit in particular) and local material (sand and gravel), and in cash for a percentage of around 20% (which could be provided through a loan with a SACCO) This activity will benefit to smallholder commercial farmers supported by both partners and will be co-financed and implemented jointly with ENABEL (under activity 1.2.3 “Co-financing of specific green investments”).

Activity 1.4.3 Promotion of rainwater harvesting with youth groups

167. All youth groups will be supported to establish communal rainwater harvesting and storage systems in order to increase access to water at their small livestock production sites and improve hygiene. The youth group will contribute in kind to this investment (unskilled labor and local materials).

Activity 1.3.3 Promotion of low-cost water harvesting technologies at household levels

168. Less than 47% of households in Rwanda have access to water within 500 meters of their residence¹⁵⁷. Water harvesting/ fetching is hence a daily burden for both women and children. In addition, small livestock rearing will increase water needs at household level. Therefore, the project will subsidize¹⁵⁸ the construction of low-cost and small scale water harvesting and small storage technologies (e.g. small scale farm ponds) for 3,000 households. The beneficiary household will contribute to 50% of total cost in kind (local materials and inputs and labour) and the remaining 50% will be financed by the project (purchased materials and inputs). This activity will be implemented, together with Heifer, and shall be implemented in year 2 and 3 to allow enough time for households to save enough money to contribute to the cost of the low-cost rainwater harvesting storage units.

Implementation plan for sub component 1.3

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Promotion of agroforestry at self- formed groups and youth groups levels	Heifer/SPIU							Access to locally produced fodder
Manure management at youth pig farm level and household levels (biogas plant)	SPIU							Production of organic fertilizers
Promotion of rainwater harvesting at all youth groups	SPIU							Increased access to water for livestock
Promotion of low-cost water harvesting technologies at household levels	Heifer/ SPIU							Increased access to water for livestock and domestic uses

¹⁵⁷ NISR, EICV5, 2016/2017, Poverty Report.

¹⁵⁸ This will target the first generation of POG beneficiaries (approximately 8,250) and 1,750 others selected among the second-generation beneficiaries, especially in areas where water scarcity is a challenge.

Component 2: Support to Small Livestock Value Chain Development

169. This component will strive to strengthen the organizational and entrepreneurial skills of the project beneficiaries and improve their backward and forward linkages to access input, service and output markets. Different investments will support this objective, including (i) support to the development of a local feed industry (ii) soft support (facilitating “productive alliances”, raising the appetite of financial institutions to serve these specific value chains, promoting multistakeholder fora), and (iii) investments in public and private infrastructure to raise the compliance to food safety and animal welfare standards and reduce environmental externalities.

Support to animal feed industry

170. This set of activities will be led and funded by ENABEL, and will aim at supporting the emergence of a national feed industry based as much as possible on quality locally produced raw materials (maize and soya), in order to reduce the country dependency on imports, that weakens the whole poultry and pig value chains. Through the implementation of FFS, the programme will develop profitable, resilient and sustainable soya and maize farms which run their farms as business with sustainable links to input suppliers and buyers. It will also develop a reliable and sustainable supply system of locally produced soya bean for feed companies through the out-grower company model and will provide a tailor-made technical support and business development support for feed companies. Finally, it will set up a feed industry research fund to support innovative research, in particular on technologies aiming at incorporating more local ingredients in feed formulas.

Sub-Component 2.1: Productive Alliances and support to entrepreneurship in production

Detailed description of activities and implementation modalities for SC2.1. Productive Alliances and support to entrepreneurship in production

171. A productive alliance is a contractual arrangement whereby farmers enter into an agreement with either an input supplier, an aggregator or a service provider, who guarantees access to inputs, market or services to the farmers on mutually agreed conditions. In the case of PRISM, productive alliances will be sought in the poultry and pig value chains, building on arrangements that are already often used by Rwandan animal feed manufacturers to expand their customer outreach. Under these alliances the IFAD supported project aims at supporting 525 broiler farmers, 450 layer farmers, and 450 pig fatteners. While the support to productive alliances in broiler and layer farming is foreseen to cover all target 15 districts, the productive alliances in pig raising will concentrate on the districts that are natural production basins with the existence of significant, though often informal pig trade. The beneficiaries of these productive alliances will typically belong to ubudehe categories 2 and 3; they are already engaged in more entrepreneurial logic than target beneficiaries in component 1 and have the capacity to contribute to the start-up capital investment in cash and/or through a loan from financial institutions supported by the project (see below activities 2.1.1 and 2.3.1).

172. All activities related to productive alliances will be placed under the direct supervision of the Agribusiness Specialist at SPIU, who will work in close coordination with (i) the Access to Finance Specialist to ensure active linkage with financial institutions (see

also sub-component 2.3); and (ii) the SPIU Livestock Specialist and RAB technicians for issues related to animal feeding and animal health.

173. In the first year of the project, the SPIU will launch a call for expression of interest among all input suppliers operating in Rwanda, particularly (but not exclusively) targeting the major companies such as Zamura Feeds, Premier Animal Feeds Industry (PAFI), Gorilla Feeds, Poultry East Africa Ltd (PEAL), Agribusiness Solutions (ABUSOL), Pro-Dev and Huye Animal Feeds, as well as Uzima Chicken and Easy Hatch for the production of Day Old Chicks. The interested input supplier(s) = 'Partner(s) in productive alliances' will then sign a contract with RAB/SPIU to implement the activities foreseen in this sub-component.

Activity 2.1.1: Productive alliances in broiler farming

174. In this model the feed manufacturer = 'Broiler Partner' will be at the same time an input supplier and a service provider, and possibly an off-taker of the end product, thus also guaranteeing the market for broiler farmers, if he wishes to do so. This type of productive alliance is based on the pilot set up by Zamura Feeds with the support of Feed the Future/USAID-funded project Tworore Inkoko, Twunguke (Let's Raise Chickens, and Make a Profit in Kinyarwanda)¹⁵⁹.
175. **Development of network in poultry broilers.** The project will support the 'Broiler Partner(s)' (who could be Zamura Feeds, or any other feed manufacturer willing and capable of engaging in such broiler contractual arrangement) in developing a network of broiler farmers. The mobilization will be made by the 'Broiler Partner' through weekly village meetings. The eligibility criteria for beneficiary farmers will particularly insist on the ability to comply with bio-security requirements, the level of acceptance of the family head (man or woman) to engage in this new economic activity, and the capacity to raise a significant contribution to the investment capital.
176. Selected beneficiaries will be involved in consecutive batches of maximum 25 farmers at a time. They will initially receive from the 'Broiler Partner' an intensive 3 to 4-day training package with a blend of classroom and practical on-farm training sessions to get acquainted with all stages of broiler production, from the reception of Day One Chicks (see support to investment capital below) to the final slaughtering stage. The training will also include a specific topic on the composting of chicken manure at the end of the first 42-day cycle.
177. A simple, user friendly tool will be developed by the 'Broiler Partner' to enable each beneficiary to record his/her daily interventions and costs of production. Follow up will be provided by the 'Broiler Partner' on a regular basis along the first two cycles in order to ensure proper implementation of technical advices and minimize failure risks. A specific training on nutrition will be delivered by the 'Broiler Partner' during the last

¹⁵⁹ *Feed the Future Tworore Inkoko, Twunguke* is a partnership between the University of Tennessee Institute of Agriculture (UTIA) and Zamura Feeds, Ltd. (Rwanda), with support from USAID/Rwanda and the African Sustainable Agriculture Project (ASAP) Foundation, to provide expertise, training, and resources for smallholder broiler chicken production. With the ultimate outcome being improvements in both household income and nutrition for participants, the activity seeks to improve the livelihood of farmers living in Musanze District, Rwanda. Through Tworore Inkoko, 750 men and women will have the training and a support package to successfully produce broiler chickens. At the end of each grow-out cycle, farmers have a guaranteed market to sell their birds, as well as the option to consume some of their chickens, adding protein to the household diet.

<https://aq.tennessee.edu/international/Pages/Rwanda.aspx>

week of the cycle, to sensitize the farmers on the interest to complement their diet with chicken-source food. The content of this training will be shared with the Nutrition Specialist at SPIU for approval before it is delivered to broiler farmers.

178. To support this activity, the project will contribute 50% of the cost estimated at USD 750 per farmer, including mobilization, training and intensive follow-up during the first two cycles.
179. **Support to investment capital for broilers farmers.** The start-up investment capital will consist of a package including the chicken building (standard 3x3m), the necessary equipment (feeders, waterers, wheelbarrow), and a first batch of 100 DOC broilers. This package is estimated at a maximum of USD 480, to which the project will contribute up to 30%. The beneficiary will provide the remaining part of the investment, either in cash or through a bank loan. The beneficiary will also provide the land to erect the chicken house¹⁶⁰. The 'Broiler Partner' will be in charge of sourcing all required materials, equipment and DOCs and ensuring that the chicken houses are constructed as per its own set of standards.
180. **Service fee to support broiler farmers.** The 'Broiler Partner' will guarantee the market to project beneficiaries supported under this productive alliance. The service foreseen in this activity will include the collection of ready-to-kill chicken at farmgate, and payment of broiler to the farmer at average market price. The fee will be USD 5 per cycle and per farmer, paid 100% by the project over the first five cycles of broiler production (i.e. over the first year of production). Once the marketing channels are well established and the broiler farmer experienced enough to produce and sell the broilers on his/her own, the project will facilitate direct contractual arrangements with the 'Broiler Partner' and withdraw its service fee support.

Activity 2.1.2. Productive alliances in layer farming

181. In this model the 'Layer Partner' will be first and foremost an input supplier and a technical service provider. This type of productive alliance builds on the informal arrangements already put in place by companies like ABUSOL, who started engaging with egg producers by providing technical advice on how best to feed their layer chickens in order to increase egg production. The farmers to participate in these productive alliances will be selected following a call for proposal made at district level, indicating precisely the eligibility criteria and conditions of project support under the productive alliance model promoted in layer farming.
182. **Support to investment capital for 500 layers.** The start-up investment capital will consist of a package including the chicken building (7 chicken per square meter), the necessary equipment (feeders, waterers, wheelbarrow, etc.), and a first batch of 500 DOC layers. This package is estimated at a maximum of USD 4,000, to which the project will contribute to the tune of 30%. The beneficiary will provide the remaining part of the investment, either in cash or through a bank loan. The beneficiary will also provide the land to erect the layer house and a room to store the equipment and inputs (esp. feed). The standard design of a 500-layer house will be prepared by the 'Layer Partner' as part of its technical support (see paragraph below); it will be

¹⁶⁰ (estimated at about 12m² including access to the 3x3 chicken house)

reviewed by the SPIU Civil Works Engineer prior approval and co-financing by the project.

183. **Technical support to layer farmers.** Besides the provision of standard design for a 500-layer house (see above), the 'Layer Partner' will provide technical advice to layer farmers engaged in the productive alliance. The curriculum will be drafted by the 'Layer Partner' based on the best practices that apply to this value chain in Rwanda's context. Before approval by the SPIU, the curriculum will be revised by PRISM Livestock Specialist at the SPIU, who may also seek additional inputs from RAB specialists in layer feeding and veterinary care if necessary. The technical advice will be provided by the 'Layer Partner' to farmers on an individual basis, all along the first cycle of layers (equivalent to about 18 months), with a particular emphasis on the first 4-5 months after reception of DOCs, i.e. the critical pre-laying period (requiring about 60% of the total technical support). The technical advice fee is estimated at USD 100 per farmer in the first cycle of layer production, to which the project will contribute 50%, while the remaining 50% will be borne by the 'Layer Partner'. Once the broiler farmer is experienced enough to produce eggs in a commercial way, the project will facilitate direct contractual arrangements with the 'Layer Partner' (if technical advice is still needed) and withdraw its technical advice fee support.
184. **Business development support to enhance entrepreneurship skills and financial literacy of Layer Farmers.** This support will be delivered by Business Development Services Providers (BDSPs) who will be recruited through a competitive process (e.g. call for proposal) during the first year of the project, in order to be operational at the beginning of Year 2. The key deliverables of the layer BDSPs will focus around the ability of egg producers to (i) record, calculate and analyse their production costs; (ii) monitor their break-even point and make enlightened decisions as regards to working capital needs, selling prices, new investments, etc.; (iii) understand the market demand in terms of quality, volumes, timely delivery; and (iv) present bankable business plans to financial institutions whenever a loan is solicited. The layer BDSPs will work in very close coordination with the other BDSPs foreseen under sub-component 2.2, who will be in charge of developing the supplier network for final off-takers of eggs.
185. It is foreseen that 5 such layer BDSPs will be contracted, each supporting ultimately 90 layer farmers across three districts on average. The level of effort will gradually raise along the years as the project supports more and more layer farmers (see implementation plan below). The BDSPs' contract will be established for one year and renewed according to their performance. The contract will be based on a lump sum of USD 1,200 per month including the fees (staff cost) and the operating costs (transport, per diem, etc.). All in all, a total of 60 man/month is foreseen for layer BDSPs. The project will not purchase vehicles or any other equipment for the layer BDSPs.

Activity 2.1.3: Productive alliances in pig fattening

186. Like productive alliances in layers, in this model the 'Pig Partner' will be first and foremost an input supplier and a technical service provider. Companies like Vision Agribusiness Farm, who started engaging with pig producers by providing technical support and developing their business plans, may be considered as active partners in

- the pig productive alliances. The farmers to participate in these productive alliances will be selected following a call for proposal made at district level, indicating precisely the eligibility criteria and conditions of project support under productive alliance in pig fattening.
187. **Support to investment capital for 10 fattening pigs.** The start-up investment capital will consist of a package including the pigsty (2 cages for 10 pigs), the necessary equipment (feeders, waterers, wheelbarrow, etc.), and a start-up batch of 10 piglets. This package is estimated at a maximum of USD 1,500, of which the project will contribute 30%. The beneficiary will contribute to the remaining part of the investment, either in cash or through a bank loan. The beneficiary will also provide the land to erect the pigsty and a room to store the equipment and inputs (esp. feed). The standard design of a 10-head pigsty will be prepared by the 'Pig Partner' as part of its technical support (see paragraph below); it will be reviewed by the SPIU Civil Works Engineer prior approval and co-financing by the project.
188. **Technical support to pig farmers.** Besides the provision of standard design for a 10-head pigsty (see above), the 'Pig Partner' will provide technical advice to pig farmers engaged in a productive alliance, along the same principle as the layer model. The curriculum will be drafted by the 'Pig Partner' based on the best practices that apply to this value chain in Rwanda's context. Before approval by the SPIU, the curriculum will be revised by PRISM Livestock Specialist at the SPIU, who may also seek additional inputs from RAB specialists in layer feeding and veterinary care if necessary. The technical advice will be provided to farmers on an individual basis along 2 cycles of production (equivalent to about one year). The technical advice fee will be USD 100 per farmer, paid 50% by the project and 50% by the 'Pig Partner' over the first two cycles of pig production (i.e. over the first year of pig fattening). Once the pig farmer is experienced enough to fatten his/her pigs in a commercial way, the project will facilitate direct contractual arrangements with the 'Pig Partner' (if technical advice is still needed) and withdraw its technical advice fee support.
189. **Business development support to enhance entrepreneurship skills and financial literacy of Pig Farmers.** This support will be delivered by Business Development Services Providers (BDSPs) who will be recruited through a competitive process (Call for Proposal) the first year of the project, in order to be operational at the beginning of Year 2. The key deliverables of the pig BDSPs will focus around the ability of pig fatteners to (i) record, calculate and analyse their production costs; (ii) monitor their break-even point and make enlightened decisions as regards to working capital needs, selling prices, new investments, etc.; (iii) understand the market demand in terms of quality, volumes, timely delivery; and (iv) present bankable business plans to financial institutions whenever a loan is solicited. The pig BDSPs will work in very close coordination with the other BDSPs foreseen under sub-component 2.2, who will be in charge of developing the supplier network for processors, public/private abattoirs and final off-takers of pig meat.
190. It is foreseen that up to 5 such BDSPs will be contracted, each supporting ultimately 90 pig farmers in the targeted districts. However, given that the productive alliance in pig fattening will be concentrated on a few districts that are the traditional production

basins, one can envisage that the project will hire less than 5 BDSPs, in which case each BDSP will be in charge of more than 90 pig farmers¹⁶¹. The level of effort will gradually raise along the years as the project supports more and more pig farmers (see implementation plan below). The BDSPs' contract will be established for one year and renewed according to their performance. The contract will be based on a lump sum of USD 1,200 per month including the fees (staff cost) and the operating costs (transport, per diem, etc.). All in all, a total of 60 man/month is foreseen for layer BDSPs. The project will not purchase vehicles or any other equipment for the pig BDSPs.

Activity 2.1.4: Support to youth entrepreneurship in production

191. The project will target unemployed rural youth that are willing to start small livestock production enterprises and will assist them to establish viable and profitable production units for pigs and poultry, that could ultimately graduate to commercially oriented producers and enter in productive alliance arrangements. However, to compensate the handicaps of youth compared to "ordinary" productive alliance beneficiaries (lack of experience, skills, land and capital), the project will provide a more incentivized specific support package. The project will build on the approach already implemented by MINAGRI in the scope of the "small livestock for youth programme" and will support groups of ten youth on average, located on the same site but with independent production units. The support package will include initial intensive technical and business management support, continuous tutoring through business coaches, provision of start-up capital for investment and working capital, and linkages to financial service providers.
192. 1,530 young people in total will be targeted through this programme (100 per targeted District in average). These youth will be selected through a call for expression of interest launched in all Districts. They will have to be aged between 16 and 30, to demonstrate interest in agriculture and livestock, to be un-employed, and to belong to Ubedehe category 1, 2 or 3. The project will give priority to young people with low level of education (primary level completed and/or enrolled in secondary education) and TVET graduates.
193. For these 1,530 beneficiaries, the project will support the creation of the following startup businesses:
 - Pig fattening: 450 units will be established. Each unit will accommodate 10 pigs and 2 batches will be fattened per year.
 - Pig breeding: 50 units will be established. Each unit will accommodate 3 sows. The breeders will supply the fatteners with piglets but will also produce piglets that will be placed under the POG programme for vulnerable households under sub-component 1.1.
 - Broiler production: 500 unit will be established; Each unit will accommodate 250 broilers per batch; depending on the cycle duration, they will produce 4 to 6 batches per year.
 - Egg production (layers): 500 unit will be established; Each unit will accommodate 250 layers per batch and the duration of each cycle will be around 18 months.

¹⁶¹ Note : if less BDSPs are used in the pig productive alliances, the overall budget for this support will remain the same, but the share to each BDSP will increase according to the level of effort required to support more farmers.

194. **Production of pullets and cockerels for backyard chicken production.** 15 pilot units will be established (one per District). Each unit will include a small building accommodating the parental stock for egg production, a solar hatchery, and a chick raising unit where chicks will be raised until the age of 2 months. Some of the pullets and cockerels will be purchased by the project and placed under the POG programme for vulnerable households under SC 1.1. Others (males in excess in particular) will be sold directly to farmers for backyard poultry meat production. The parental stock will be provided by RAB under activity 1.3.2. described further.
195. **Goat breeding units.** 15 units will be established. These units will produce improved goats (25% Boer, 75 % local) that will then be purchased by the project and placed under the POG programme for vulnerable households under SC 1.1. The males (50% Boer) will be provided by RAB under activity 1.3.2. described further. The females will be of local breed.
196. For the selection of the 1,530 beneficiaries, a full set of selection criteria will be developed during the inception phase by SPIU and validated by the project steering committee. The selection beneficiaries will be done by District committees following the launch of the call. The District committees will be composed of Project focal points at District level, project local coordinators, the District Cooperative Development Officers, the District Agribusiness officers, and the District Animal Resources Officers.
197. The 1,530 youth will be installed in a progressive and phase manner. A proposed phasing is shown below:

Type of business	Year 1	Year 2	Year 3
Pig fattening package	150	150	150
Pig breeding package	25	25	
Layers package	200	200	100
Broiler package	200	200	100
Chick production package	15		
Goat breeding package	15		
TOTAL	605	575	350

198. **Initial technical and business capacity building.** Before the reception of animals and attribution of the startup package, the beneficiaries will undergo an initial training curriculum of two weeks. Each training will gather the 8 to 12 members of the same group. The training will be organized at the District level for the theoretical part, and on selected voluntary farms for the practical aspects. The first week of the training will be dedicated to technical aspects: production itineraries, health management including hygiene and biosecurity, feeding, animal welfare, waste management, production data recording, among other topics. The second week will be dedicated to business, financial management and social-related aspects: book keeping, financial management and planning, marketing, nutrition education and gender awareness training. The technical and business training will be organized and provided by private Business Development Service providers with both technical competences pertaining to the groups activities, and business and financial management support capacities. They will be assisted by the District Cooperative Development Officers, the District Agribusiness

officers, and the District Animal Resources Officers. In the case of nutrition and gender awareness trainings, these will be implemented by the Districts.

199. **Coaching and provision of Business Development Services nutrition and gender training.** The same private Business Development Services Provider (BDSP) as for other productive alliance beneficiaries will be contracted as well to provide continuous BDS / coaching to the youth. Each group will be visited every week by a business coaches, who will provide a close follow up and individual support to each beneficiary individually, and to the group. The coaches will also provide feedback to the Districts staff and the project on the performance of the youth businesses.
200. The BDSP providing the initial training (activity 1.2.1.) and the coaching (activity 1.2.2.) to the 150 youth groups will be recruited during the inception phase through a competitive process (Call for Proposal). A maximum of three service providers will be contracted (1 for 5 Districts and for each 50 groups). The contract will be established for one year and renewed according to performance. The contract will be based on a lump sum per beneficiary including the fees (staff cost) and the operating costs (transport). The project will not purchase vehicles or any other equipment for the BDSP.
201. The project will participate to the cost incurred by the Districts for their contribution to the initial training and the continuous coaching. Annual lumpsum based on the number of groups supported will be allocated to Districts to cover the costs of transport of their contributing staff (covering fuel costs and DSA). The staff salaries will constitute the contribution of Districts.
202. **Assets building and provision of startup package for youth.** The startup package for each beneficiary will be composed of the followings:
 - Construction of the premises: each youth will have its own independent production unit (poultry house, pigsty), to enable the beneficiaries to manage their own business independently, improve their ownership and responsibility, but also to enhance biosecurity and reduce sanitary risks. For broilers and layers, each site will gather 10 units in average, of the same nature. For pigs, each site will gather 9 fattener and one breeder (who will supply the 9 fattener). The goat breeding units and hatcheries for village chicken will be established as standalone units.
 - Even if the production units themselves will be independent, on collective sites, common infrastructures will also be established: a feed store for all groups, an egg store for layers production groups, a small slaughtering room with solar refrigeration facility for broiler production groups.
 - The collective sites will all be equipped with water harvesting systems, and the pig production sites will be equipped with a collective biogas unit (see S.C. 1.4).
 - Small equipment (feeders, drinkers, tools) will be provided by the project.
 - The land will be provided by local authorities.
 - The project will also provide the startup animal stock and inputs for the first six months (chicks and piglets, feed for 6 months, a 6-month veterinary package (follow up and standard prophylactic program including drugs).
203. The youth financing package will include a grant representing 70% of the cash needs to start the enterprise (excluding land to be provided by the District), the residual amount of 30% being financed by a loan in case the beneficiary cannot mobilize this amount, which is highly likely. Grant will be managed by BDF. To facilitate access to

the loan, the project will organize training sessions at district level for shortlisted financial institutions (Banks, MFIs and SACCOs) aiming at raising their appetite for small livestock value chains and supporting them to design or refine affordable products and delivery channels for different categories of beneficiaries supported by the project, including the youth. During the training, the youth financing model will be presented, including matching grant of 70% to be provided by the project, and suggested loan features for the residual 30% to be financed by the FI. This will include loan amount, purpose of the loan, required graced period and repayment modalities based on cash flow analysis for each type of business, and possible collaterals (group joint liability and possible guarantee by BDF or other guarantee mechanism). Technical and business development support provided by the project will also be presented since it will contribute to mitigate lending risk. The project will then organize fora to facilitate linkages between farmers and FIs that have confirmed interest to increase their engagement in the sector and have designed adapted products following training by the project which are ready for promotion, including for the youth. Youth will be invited by the project and will thus have the opportunity to identify and engage with FIs for the financing of their enterprise.

204. A specialized service provider will be contracted during the inception phase to draft standard blue prints for the infrastructures that will be built for youth.
205. The construction of infrastructures, including livestock keeping premises, stores, biogas units, water harvesting systems will be contracted to specialized private public works contractors.
206. The provision of equipment and feed startup packages will be contracted to private sector firms and the veterinary packages (services and drugs) to private veterinarians, preferably those established in the project area.
207. The project will facilitate linkage of the youths with BDF to access matching grant funded by the project, under an addendum to the MoU already signed between SPIU and BDF.
208. To facilitate access to loans from the financial sector in complement to the matching grant if required, the project will deploy various measures described into details under sub component 2.3.
209. Complementarities and alignment with ENABEL supporter intervention: ENABEL pursues the objective of targeting at least 30% of youth under its activities supporting producers. These activities are activity 1.2.4 – “Access to finance for livestock farmers”, and activity 2.2.1 – “Support the creation of industrial pig and poultry farms”. The support provided under these activities will, as under IFAD intervention, combine technical and business training and coaching, facilitation of access to credit and matching grants. The maximum percentage of matching grant will be aligned under both interventions to 70% maximum.

Implementation Plan for sub-component 2.1: Productive Alliances and support to entrepreneurship in production

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
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Request for expression of Interest among Input Suppliers	SPIU							Partners selected in productive alliances for broilers, layers and pigs
Preparation of contracts with Partners in Productive Alliances	SPIU							Contracts signed with Partners in productive alliances
Recruitment of Business Development Service Providers (BDSP)	SPIU							Business Development Service Providers contracted
Mobilization, training and service to broiler farmers	Broiler Partner, SPIU			50	200	200	75	525 broiler farmers engaged in productive alliances with guaranteed market
Support to investment capital for broiler farmers	SPIU, BDF							
Awareness campaign and call for proposal among farmers interested in layer productive alliances	SPIU, District Committee			30	150	200	70	450 layer farmers engaged in productive alliances
Support to investment capital for layer farmers	SPIU, BDF							
Technical support to layer farmers	Layer Partner, SPIU							
BDSP support to layer farmers	BDSP, SPIU			30	150	200	70	450 layer farmers engaged in productive alliances receive additional support in entrepreneurship and financial literacy
Awareness campaign and call for proposal among farmers interested in pig productive alliances	SPIU, District Committee			30	150	200	70	450 pig farmers are engaged in productive alliances
Support to investment capital for pig farmers	SPIU, BDF							
Technical support to pig farmers	Pig Partner, SPIU							
BDSP support to pig farmers	BDSP, SPIU			30	150	200	70	450 pig farmers engaged in productive alliances receive additional support in entrepreneurship and financial literacy
Draft criteria for selection of beneficiary youth	National committee							Set of criteria for selection of beneficiary youth
Selection of first batch of beneficiary youth (605)	District committee							605 beneficiaries selected
Recruitment of Business Development Service Provider	SPIU							Business Development Service Provider contracted
Developing blue prints for infrastructures	SPIU – Service provider							blue prints for infrastructures

Recruitment of contractors for construction of infrastructures, provision of equipment, inputs and provision of veterinary services	SPIU						Contractors and service providers recruited
Develop MoUs with Districts to involve them in project activities	SPIU – LCU - Districts						MoUs with Districts signed
Allocation of land for first batch	Districts						Land allocated by Districts
Initial training of first batch of youth	SPIU ¹⁶² – LCU ¹⁶³ - BDSP - Districts						605 youth trained on technical matters and business financial management nutrition & gender
Delivery of startup package to first batch of beneficiaries	SPIU – LCU - BDSP - Districts						605 youth businesses established
Coaching of first batch of youth by BDSP and Veterinary Service Provider	SPIU – BDSP - Districts						605 youth coached weekly on technical and business management issues
Selection of second batch of beneficiary youth (575)	District committee						575 beneficiaries selected
Allocation of land for second batch	Districts						Land allocated by Districts
Initial training of second batch of youth	SPIU – LCU - BDSP - Districts						575 youth trained on technical matters and business financial management nutrition & gender
Delivery of startup package to second batch of beneficiaries	SPIU – LCU - BDSP - Districts						575 youth businesses established
Coaching of first batch of youth by BDSP and Veterinary Service Provider	SPIU – BDSP - Districts						575 youth coached weekly on technical and business management issues
Selection of third batch of beneficiary youth (350)	District committee						350 beneficiaries selected
Allocation of land for third batch of beneficiaries	Districts						Land allocated by Districts
Initial training of third batch of youth	SPIU – LCU - BDSP - Districts						350 youth trained on technical matters and business financial management

¹⁶² Single Project Implementation Unit (National level)

¹⁶³ Local Coordination Unit (Covering 2 to 4 Districts)

Delivery of startup package to third batch of beneficiaries	SPIU – LCU - BDSP - Districts						350 youth businesses established
Coaching of third batch of youth by BDSP and Veterinary Service Provider	SPIU – BDSP - Districts						350 youth coached weekly on technical and business management issues
Linkage with BDF to access matching grants	SPIU - AFS						1500 youths access matching grant
Training of financial institutions to design adapted financial products for the youths	Partner / Service provider / SPIU - AFS						5 banks, 5 MFIs and 200 SACCOs trained
Organization of fora to link youths with the Financial Institutions	Partner / Service provider / SPIU - AFS						2 for a per district organized

Sub-Component 2.2: Market Facilitation in Small Livestock Value Chains

Detailed description of activities and implementation modalities for sub-component .2: Market Facilitation in Small Livestock Value Chains

210. Market facilitation in small livestock value chains will be done at three levels: (i) assistance to off-takers for supplier network development; and (ii) support to public good related investments in essential equipment meant to improve food safety, animal welfare and climate-smart upgrading of their facilities, conditional upon their sourcing from project beneficiaries.

211. All activities related to market facilitation will be placed under the direct supervision of the Agribusiness Specialist at SPIU, who will work in close coordination with (i) the Access to Finance Specialist to ensure active linkage with financial institutions (see also sub-component 2.3); and (ii) the SPIU Livestock Specialist and RAB technicians for issues related to compliance to food and animal welfare standards.

Activity 2.2.1: Business Development services

212. **Market appraisal for commercial pig and poultry value chains.** An assessment of the pig and poultry (egg and meat) markets will be conducted before the project start-up by Palladium, under a DFID funded civil society strengthening programme. The outcome will be available before the end of 2019 and will be a critical decision-making tool for PRISM, in particular for selecting the Districts of interventions, private sector partners and sites for market access public investments. However, since this study will only cover pig and poultry value chains, there will be a need to undertake a similar exercise for small ruminants during the inception phase of PRISM. A provision has been made under the ENABEL financing (ENABEL activity 2.1.1. Studies on modernisation of the pig and poultry value chain to cater for the needs for further studies on market and investment opportunities), including for selecting the location of abattoirs and markets to be funded under the programme, during the project cycle.

213. **Rapid market appraisal for the small ruminants value chains:** Very little information is available on Rwanda Small Ruminants value chains, and the project will

thus conduct a rapid market appraisal for this sub-sector. The key overall objectives of this study are:

- To analyse the markets both national and regional, with a specific focus on the DRC market;
- To assess the markets systems and characteristics of private and public actors;
- To define the current small ruminants chains, identify current bottlenecks as well as business opportunities available for smallholder farmers;
- To provide recommendations on how to facilitate/broker market-based interventions that focus on adding value to small ruminants products and connecting smallholder farmers with the market;
- The terms of reference for this study will be developed at the inception of the project by the SPIU Agribusiness Specialist in close collaboration with RAB and Heifer. A specialized consultant will be recruited to undertake this assignment in the first year of the project.

214. **BDSP support to the development of supplier network.** This market facilitation support will complement the proximity extension services, coaching and business development services foreseen (i) under the component 1 (graduation package and support to young entrepreneurs) and (ii) under sub-component 2.1 for the farmers engaged in pig and layers productive alliances. Three BDSPs will be recruited under this activity: 1 poultry BDSP, 1 pig BDSP, and 1 small ruminant BDSP (for both goats and sheep). Specific tasks will be to engage the producers with the other actors of the value chains, typically the traders operating at farmgate and market level, the processors, the abattoirs/slaughter slabs, and the final off-takers (butchers, exporters, etc.). The role of these BDSPs will thus be the one of a match-maker, able to identify the demand and propose adequate products along win-win arrangements.
215. The terms of reference for these BDSPs will be developed at the inception of the project by the SPIU Agribusiness Specialist. Selection criteria for these BDSPs include inter alia market experience and intelligence; staff capabilities to use a comprehensive value chain approach inclusive of smallholder farmers, women and youth; and adequacy of the proposed work plan. For this activity the project has set aside a BDSP budget equivalent to 153 person/month at a monthly rate of USD 1,200, starting from year 1. Ninety percent of the cost will be borne by the project, but it is also expected that the private sector will contribute to the remaining 10% part, given that this support is meant to increase substantially their supplier outreach, which is for instance in the best interest of abattoir operators who are currently running at less than 20% capacity in the small ruminant value chain.
216. The same three BDSPs will also be engaged in the development of business plans for the private sector (see below), and in the support to small livestock multi-stakeholder fora (see activity 2.2.4).
217. BDSPs will serve beneficiaries of both IFAD and ENABEL supported interventions and will be financed on ENABEL budget (ENABEL activity 2.2.2. Technical advice, business development and financial support to businesses in the pig and poultry value chain and activity 1.2.5 Provide business development support to egg collectors, traders, meat processors, depending of nature of business supported by BDSP).
218. **Business Plan (BP) development and linkage to financial institutions to modernize/upgrade private processing facilities.** PRISM will support private operators of abattoirs and processing units to launch public good related investments

in essential equipment meant to improve food safety, animal welfare and climate-smart upgrading of their facilities. The first step will be to help them develop a sound business plan that will back their eligibility to grants (see activity 2.2.2 below) and enable them to access loans from Participating Financial Institutions (PFIs) if necessary. To meet this latter objective, the BDSPs will work in very close collaboration with the technical assistants foreseen in sub-component 2.3 (see activity 2.3.1).

219. The three Pig, Poultry and SR BDSPs engaged for market facilitation under activity 2.1.2. will also be in charge of developing these business plans, with an additional service fee of USD 1,000 per BP that will be paid 100% by the project. PRISM intends to develop 25 business plans under this activity.

Activity 2.2.2: Financial support to modernize/upgrade private processing facilities

220. Once their business plans are developed, the private processors/slaughterers will be able to apply for PRISM matching grants, that are meant to ease the investment efforts mentioned above. This support must be viewed as an incentive, a 'stimulus package' to upgrade processing facilities in a context where private companies would otherwise prefer to secure their cashflow and not allocate their limited investment capital to 'unproductive' assets.
221. Eligible investments will be limited to (i) essential equipment meant to improve food safety and animal welfare (such as cold rooms/cool trucks, ventilated vans to transport live chicken, stainless steel machinery/furniture) and (ii) climate-smart upgrading of their facilities (such as bio-digesters, solar energy). For the first group of investments, the project will provide a 30% matching grant, with a ceiling of USD 30,000. For the second group (climate smart technologies), the project will provide a 67% grant with a ceiling of USD 10,000. Both types of grants are conditional upon the sourcing of products from direct project beneficiaries, along the same principles as the 4P models implemented in PASP project and summarized in the table below.
222. Both the development of business plans and the matching grants will be entirely co-financed by ENABEL under activity 2.1.2. Feasibility studies and development of investment profiles and business plans and Activity 2.2.2 Technical advice, business development and financial support to businesses in the pig and poultry value chain. The project will support the development of centres of excellence in pig and poultry value chains. These will be large scale production units that also provide training services, coaching and mentoring, business development services such as formulation of business plans or feasibility studies, in parallel to the provision of inputs such as DoC, pullets, piglets. Some embryos of such centers of excellence already exist in the country and the concept is promising and deserves to be scaled up. This activity will be led and financed by ENABEL under activity 2.2.2 Technical advice, business development and financial support to businesses in the pig and poultry value chain.

Type of 4P Business Plan	Type activities to be funded for 4P partners	Sources of funding	Project contribution %	Conditions and Ceiling of project contribution ¹⁶⁴
i) Private sector agribusiness-led BP including contractual arrangements with producers' coop(s) or individuals	Investments in essential equipment meant to improve food safety and animal welfare (such as cold rooms/ cool trucks, ventilated vans to transport live chicken, stainless steel machinery/ furniture)	- Private sector own resources (equity) - Loan from PFI	Up to 30% of total investment	- USD 100 per coop member or individual farmer engaged in contractual relationship - Maximum amount of USD 30,000
ii) Support private sector agri-business led BP to cover the incremental cost of climate resilient technology/ processes	Investments in climate-smart upgrading of processing/slaughtering facilities (such as bio-digesters, solar energy).	- Private sector own resources (equity) - Loan from PFI	Maximum 2/3 (67%)	- USD 100 per coop member or individual farmer engaged in contractual relationship - Maximum amount of USD 10,000

Activity 2.2.3: Support to pig slaughter slabs and livestock markets

223. **ESIA for public pig slaughter slabs.** According to Rwanda regulations, any new infrastructure, even slaughter slabs, should be subject to prior Environment and Social Impact Study. The project foresees either the building or the rehabilitation of 5 such infrastructure for the pig value chain (see below), the latter (rehabilitation) not necessarily needing an ESIA. However, given the nature of the investment, and the anticipated support in climate-smart adaptations, the project will systematically fund ESIA studies for all 5 pig slaughter slabs. Consultant(s) will be recruited for that purpose, and ESAs are expected to be delivered between year 1 and year 3, as a preliminary phase to infrastructures activities described below.

224. **Build/rehabilitate public pig slaughter slabs and support climate-smart innovation.** This activity is meant to respond to the crucial lack of pig slaughtering facilities in Rwanda, that is seen as a major impediment to the development of the value chain. Even when they exist, pig slaughter slabs in Rwanda remain very rudimentary and rarely comply with the basic hygiene and animal welfare requirements. Yet, such facilities are essential to enable pig producers to shift from farmgate sales of live animals to value addition through the proceeds of pork meat. PRISM will thus build or rehabilitate 5 pig slaughter slabs in strategic production basins; the facilities will be owned by the districts, but their management will be entrusted to cooperatives or private sector operators (see below).

225. The exact locations of these facilities will be determined) based on the outcomes of the market assessment and investment opportunities studies and after wide consultation between the district authorities, the SPIU, the pig producers and the private sector actors. A call for tender will be launched for civil works, taking into account the results of the ESAs. The project foresees an average budget of USD

¹⁶⁴ Note: all investments supported by grants are not to be used as collateral for a duration of at least 5 years

100,000 per slab, to be complemented by a maximum allocation of USD 25,000 to support investments in bio-digesters and solar energy for hot-water supply. These costs will 100% borne by the project. Should these facilities cost less than the budget allocation, more pig slaughter slabs will be rehabilitated.

- 226. Rehabilitate district livestock markets and support climate-smart innovation.** As highlighted in the “Strategy for Rwanda Meat Exports to DRC” (2016), all of the district markets lack basic infrastructure for animal holding, and do not meet sanitary standards that are supportive of the meat industry. Out of the 64 district markets existing in PRISM target regions, 10 will thus be selected for rehabilitation (ideally one per target district), based on the outcomes of the market assessment and investment opportunities studies. Like for pig slaughter slabs, the exact locations of these markets will be determined after wide consultation between the district authorities, the SPIU, the small livestock producers and the private sector actors. The markets will be owned by the districts, but their management will be entrusted to cooperatives or private sector operators (see below).
227. A call for tender will be launched for civil works. The project foresees an average budget of USD 50,000 per market, to be complemented by a maximum allocation of USD 10,000 to support investments in solar pumps. These costs will 100% borne by the project. Should these markets cost less than the budget allocation, more markets will be rehabilitated.
228. Public investments in both slaughter slabs and markets will be financed entirely by IFAD.
- 229. BDSP support to set up contractual arrangements for the operation of public pig slaughter slabs and livestock markets.** This support will ensure that the management of public infrastructure supported by the project is undertaken in a professional and sustainable manner that meets the interests of PRISM primary beneficiaries. To this effect, a specialist Business Development Service Provided will be recruited in Y2, whose task will be spread along the last 4 years of the project as the 15 facilities (5 pig slaughter slabs and 10 markets) are being built/rehabilitated.

Implementation Plan for sub-component 2.2: Market Facilitation in Small Livestock Value Chains

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Develop ToRs for rapid market appraisal in small ruminant value chains	SPIU							ToRs for rapid market appraisal ready
Recruitment of consultant to conduct rapid market appraisal	SPIU							Consultant for rapid market appraisal recruited
Develop ToRs for Pig, Poultry and SR BDSPs	SPIU							ToRs for Pig, Poultry and SR BDSPs ready
Recruitment of Pig, Poultry and SR BDSPs	SPIU							Pig, Poultry and SR BDSPs contracted
Development of Business Plans to modernize/upgrade private	Pig, Poultry and SR BDSPs, SPIU		2	7	7	7	2	25 BPs to modernize/upgrade private

Activity	Responsibility	Incep-tion	Y1	Y2	Y3	Y4	Y5	Outputs
processing facilities								processing facilities developed
Financial support to modernize/ upgrade private processing facilities	BDF, SPIU		1	2	3	3	1	10 private processing facilities modernized/ upgraded with climate-smart innovation
Recruitment of consultant(s) for ESIAAs in pig slaughter slabs	SPIU							Consultant(s) for ESIA recruited
Identify locations for pig slaughter slabs	District committees SPIU, VC actors							7 sites for building/ rehabilitation of pig slaughter slabs selected
Build/rehabilitate public pig slaughter slabs and support climate-smart innovation	SPIU, Civil contractors			1	4	2		7 pig slaughter slabs built/rehabilitated
Identify locations for livestock markets	District committees SPIU, VC actors							15 sites for livestock markets rehabilitation selected
Build/rehabilitate livestock markets and support climate-smart innovation	SPIU, Civil contractors			3	5	5	2	15 livestock markets rehabilitated
Recruitment of consultant to prepare contractual arrangements for the operation of public pig slaughter slabs and livestock markets	SPIU							Consultant for contractual arrangements in public pig slaughter slabs and livestock markets recruited
Prepare contractual arrangements for the operation of public pig slaughter slabs and livestock markets	Specialized BDSP, SPIU							contractual arrangements in public pig slaughter slabs and livestock markets established

Sub-Component 2.3: Support to Financial Institutions

230. The project will facilitate linkage of the smallholder farmers under productive alliance with the financial sector, to finance investments and working capital. It will also contribute to linking vulnerable households under the graduation pathway under component 1 to access formal financial services as one of the graduation indicators, and to linking youths supported under component 1 to financial institutions for the financing of their start up business and further development of the business.

231. It is expected that at least 2 innovations for digitalization of financial services and 2 insurance products (poultry and pig) will be developed and rolled out. As much as possible, pilot testing and roll out of these innovations will involve financial institutions that the Project has contributed to link with its beneficiaries.
232. All activities related to productive alliances will be placed under the direct supervision of the Access to Finance Specialist, who will work in close coordination with the Agribusiness Specialist and Livestock Specialist at SPIU to ensure active linkage with producers engaged in productive alliances (see also sub-component 2.1) and other small livestock producers supported by the project under component 1 (esp. the young entrepreneurs).

Detailed description of activities and implementation modalities for SC 2.3: Support to Financial Institutions

Activity 2.3.1: Enhancing access to financial services in the small livestock sector

233. **Update mapping of the financial sector.** A study will be implemented during the inception phase to map the financial institutions (Banks, MFIs, SACCOs, Mobile money providers and Insurers) providing services (current and prospective), with specifications of the services provided, for each administrative sector where the project will intervene. Interest of the financial institutions for the development of a portfolio for small livestock value chains also be assessed, specifically for each value chain targeted (poultry, pig, goat and sheep). The study will be used by the Project to identify and contact potential partners for technical assistance and partnerships under the two approaches described below.
234. The study will be carried out by a local consultant recruited on competitive basis, under supervision of the project AFS. Required profile should be a senior expert with experience in the Rwandan financial sector, with previous experience in carrying out similar study or research.
235. **Technical assistance to financial institutions under the productive alliance models.** For smallholder farmers supported under the productive alliance models, the project will support private feed manufacturers and off-takers having developed or in the process of developing productive alliances with farmers to identify and negotiate with financial institutions (FI) for the financing of the farmers, and provide customized technical assistance to these institutions. One FI will be selected for each productive alliance.
236. Technical assistance will be provided to the FI in close consultation with the private company, for the development of adapted and affordable financial products and secured delivery channels building on the business model of the company and the farmers and modalities of their linkages. TA will include training of relevant FI agents on poultry and/or pig farm enterprise on production, business model and cash flow, to enable them to do proper appraisal and monitoring of the loans. A quadripartite agreement will be signed between the private company, representatives of the farmers, the FI and the project. The agreement will specify features of the financial services to the farmers, targets and loan disbursement plan, conditions for delivery of the services and respective responsibilities of the parties for their delivery. It will in particular include specific responsibilities of the company for the loan repayments (check off procedures when feasible), and of the farmers (especially in case group

- joint liability for loan repayment is implemented). Project responsibilities will be specified regarding TA to the FI and support to be provided to the private company for the development or strengthening of the farmers network and to the farmers in enterprise skills and financial literacy.
237. The project will issue competitive calls for proposal to shortlisted banks or MFIs. SACCOs will not be targeted for this approach since they lack financial and managerial capacities to manage this kind of partnership, knowing also that their geographical coverage is restricted to one sector. Priority will be given to commercial banks and MFIs that have set up an agricultural finance unit, and have expressed interest to develop their portfolio for poultry or pig value chains. Banks and MFIs should in particular specify in their proposal conditions to finance investment and working capital for smallholder farmers, including interest rates and other fees, and what technical assistance they would require from the project to design products and deliver the services in partnership with the company.
238. Selection will be made using the following main eligibility and evaluation criteria: (i) compliance with National Bank regulations, (ii) financial performance and financial capacity to deliver the services, (iii) experience in agricultural lending, (iv) operational presence in the area of operations of the company and farmers, (v) relevance of the financial products and delivery channels proposed, including required collaterals, and interest and fees proposed, and scope of TA requested. Negotiations will be conducted between the selected FI, the company, farmers representatives when possible and the project before signing of the agreement.
239. ICCO Terrafina has been identified as potential partner for implementation of this activity. In case partnership does not materialized, a service provider will be recruited on competitive basis. Priority will be given to locally based service providers, but international tender may be issued if local tender is not conclusive. ToRs (see in annex) will include the main following activities: (i) conduct value chain mapping and studies for poultry and pig with focus on financing needs and gaps, lending risks and risk mitigation strategies, (ii) support private companies under productive alliance to identify, recruit and negotiate with a partner FIs, (iii) provide TA to the FI to design adapted products and delivery channels for the farmers, (iv) provide training to the FI agents on understanding of the poultry or pig farmer enterprise (on production and business model), with recourse to specialized service providers if needed, and (v) support and monitor delivery of the financial services to the farmers.
240. **Technical assistance to financial institutions for linkage with Project beneficiaries (out of productive alliance).** For linkages with other beneficiaries, the project will organize training for interested financial institutions aiming at raising their appetite for small livestock value chains and supporting them to design or refine affordable products and delivery channels for different categories of beneficiaries. Training will be organized for managers and loan agents of banks, MFIs and SACCOs operating in areas of intervention of the project. It will include presentation of value chains mapping and analysis with focus on financial needs, risks and risks mitigating strategies, and recommended product features and delivery channels for different categories of beneficiaries. It will also include a training on farm enterprise on production, business model and cash flow, to enable FI agents to do proper appraisal and monitoring of the loans.

241. Training sessions will be organized at district level to ensure participation of the sector based SACCOs. The project will invite shortlisted FI based on the mapping study carried out during the inception phase (noting that regular updates should be made by the project to include possible new entrants in the agricultural sector). Each session will last 3 days, with a maximum number of participants of 30 (between 2 and 3 participants per FI, including a manager and a loan agent). Each participating FI will be requested to specify after the training session its plan to develop small livestock portfolio, including for the project beneficiaries.
242. Training of FI will be implemented by the partner (see above TA), or a service provider recruited under the productive alliance model, to ensure synergies and cross learning between the two activities.
243. **Organization of fora to link beneficiaries, value chain actors and financial institutions.** The project will then organize fora to facilitate linkages between farmers, value chain actors and FI that have confirmed interest to increase their engagement in the sector, and have designed adapted products following training by the project which are ready for promotion. Insurers that have been supported by the project to design small livestock insurance products will also be invited once products are ready for roll out. The project will specifically invite supported beneficiaries under component 1 and private actors supported or partnering under component 2. However, the fora will be opened to the public to allow for indirect impact, and the event will be promoted in collaboration with the relevant district authorities. Value chain actors like input suppliers and off-takers will also be invited. It will be an opportunity for them to interact with farmers as potential clients or suppliers, and to interact with financial institutions for possible access to finance (assumptions being that FIs trained by the project will also be incentivized to finance other actors than farmers in the small livestock value chains). 2 fora per district will be organized (total of 30 for 15 districts).
244. Fora will be organized by the project under responsibility of the AFS, in collaboration with the district authorities.

Activity 2.3.2: Support to financial innovations and small livestock insurance

245. **TA to insurers, development and delivery of 'small livestock insurance product development/operation' course.** With regards to insurance for small livestock, insurance products available are not suitable or available for the project target groups. To support better access to other financial services for the project target group(s) engaged in poultry and/or pig farming, research will be carried out into these value chain risks and insurance feasibility for the target groups. This will help underpin technical assistance to two new product designs – carried out on a cost-share basis, and also inform training of members of the Rwanda Insurers' Association. As a result of these activities, at least 5 insurers will receive support from the project - one or two will be selected for intensive product design support, and more will benefit from sector training.
246. For support to development of small livestock insurance innovations, there are three main sub-activities: (i) two market and feasibility studies, one for poultry, one for pigs; (ii) TA to two product designs based on market /feasibility studies – one for

- poultry, one for pigs (providing feasibility is positive), and (iii) development and delivery of small livestock insurance training for members of ASSAR.
247. To ensure reliable conclusions on the feasibility, the tasks will be split into two separate contracts. One service provider/consultancy firm will be selected to carry out the feasibility studies. If the outcomes are positive, a second selection process will be launched for a separate service provider to provide TA to two product designs based on market /feasibility, and development and delivery of small livestock insurance training for members of ASSAR. Two draft ToR to support selection of these specialist service providers are provided in Annex. An additional selection process will take place to determine which one or two insurers receive TA to develop a poultry and a pig product. It could be one insurer receiving support for poultry and another one for pig, or only one receiving support to design and adjust both products. Insurer(s) will be selected based on (i) proposal for scale up and commercial viability, (ii) potential for impact on smallholder farmers in small livestock value chains, (iii) compliance with social and environmental standards, and responsible finance principles, (iv) capacity of the organization to develop the product, (v) commitment of the organization to cover at least 30% of the development costs. The insurer(s) selected will be eligible for TA to both product development, and following the first year of roll-out, product review/adjustments.
248. Like for innovations for digital financial services, decision on partnership will be made by a screening committee comprising Project management, recognized experts with thorough knowledge of the Rwandan financial sectors (for instance from Access to Finance Rwanda), representative of the National Bank of Rwanda to ensure compliance of the innovation with national regulations, and representatives of the insurance sector like ASSAR. Monitoring of development of the innovations will be done by the specialist service provider under overall supervision of the AFS through desk review of reports and regular meetings with the supported organizations, and on site visits to assess implementation and impact of the solutions developed. Senior experts may be mobilized by the project to conduct thorough assessment of the development of the innovation.
249. **Training of Rwanda Insurers' Association technical members.** To support the rest of the sector, in project year three, a five-day training course will be developed and delivered by the same specialist service provider who is selected to support product development. The training will be focused on small livestock insurance product and scheme development for smallholder value chains in the project. It will highlight international experiences with small livestock insurance, as well as the Rwandan context of small livestock value chains and existing products/schemes (both for large and small-scale farmers), embodied by learning from the feasibility studies and product development activities. This course will be delivered in two sittings over a period of two-working weeks. It will be targeted at ASSAR members, especially those involved or with an interest in agricultural insurance. The target group is one or two agricultural insurance focal points from each of these insurers.
250. This activity will be implemented jointly with, and co-financed by ENABEL (activity 2.3.2. Support to financial innovations and small livestock insurance, and activity 2.4.3. Set up a Innovation fund to implement innovative ideas (IT solutions, insurance, financing, etc.)

Implementation Plan for sub-component 2.3: Support to Financial Institutions

251. Synergies and collaboration with relevant stakeholders: for all activities above, the project will look for synergies and collaboration with relevant stakeholders. It will be the case of BDF for access to guarantee for the FI clients and management of matching grants, the upcoming Risk Sharing and Financing Facility for access to guarantee, AFR for support to innovations, IMSAR for TA to financial institutions, Rwanda Insurers' association for insurance and other stakeholders that may be further identified during implementation.
252. MoU specifying modalities of collaboration will be established when relevant. In other cases, collaboration will be ensured through regular interaction between the stakeholder and the Project Access to Finance Specialist (AFS).

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Mapping of the financial sector	Consultant / AFS							Mapping study
Technical assistance to financial institutions under the productive alliance model	Partner or Service Provider / AFS							Quadripartite agreements signed and implemented for 5 Productive alliances (1 agreement signed in year 1, 2 in year 2 and 2 in year 3). Monitoring in years 4 and 5
Technical assistance to financial institutions for linkage with Project beneficiaries (out of productive alliance)	Partner or Service Provider / AFS							Training sessions organized for 5 commercial banks, 5 MFIs and 200 SACCOs
Organization of fora to link beneficiaries, value chain actors and financial institutions	Partner or Service provider/ AFS							2 for a per district organized (total 30)
Support for innovations	Partner or Service provider/ AFS							At least 2 innovations for digitalization of financial services rolled out 2 insurance feasibility studies: 1 on poultry, 1 on pig. 2 insurance products (poultry and pig) rolled out and adjusted. 1 training course delivered to relevant ASSAR members Year 5 for monitoring

AFS: Access to Finance Specialist

Component 3: Policy support and coordination

253. This component will include two sub components: an operational component (3.1. policy and regulatory support), whose activities are described below, and a non-operation sub-component (3.2. project coordination), which will be described in the section 4 below.

254. All activities related to support to national farmers organizations, stakeholder for a, formulation of policies and strategies, development, review and enforcement of legislation and standards will be supported and funded jointly with ENABEL (Activity 2.3.1. Develop laws, strategies, policies, guidelines and 2.3.3 Develop and harmonize international export standards/certification for pork and poultry). The support provided to the government by PRISM will build on the outcomes of an assessment being undertaken (by Palladium, under a DFID funding), which aims at identifying the policy and regulatory gaps in the pig and poultry value chain, and whose report will be available at the beginning of the programme.

Sub component 3.1: Policy and regulatory support

Detailed description of activities and implementation modalities for S.C. 3.1. policy and regulatory support

255. Under this sub-component, the programme will provide institutional support to existing or emerging national farmers organizations of the small livestock value chain, in order to enable them to play a more proactive role in the policy dialogue process.

256. The programme will also establish stakeholder for a at both regional and national level to facilitate the business relations between the various stakeholders and bring their specific issues/proposals at an upper level to have weight in the livestock regulatory framework discussions

257. The programme will support institutional reforms in order to create an enabling environment for the development of the targeted value chains. National policies and strategies pertaining to the sector will be reviewed and updated when necessary, and the regulatory environment, particularly for aspects related to food safety and animal welfare, will be strengthened. Finally, targeted capacity building will be provided to national institutions in charge of the sector to enhance their technical capacities related to the small livestock value chains.

258. In the process of policy formulation, the programme will pay particular attention to strengthen the role of the private sector/VC stakeholder and their contribution to policy dialogue, through their national organizations and through the value chain platforms.

259. This sub-component will be implementing jointly and co-financed by both ENABEL (under activity 2.4.1 Strengthen the capability of existing industry and sector representative bodies to advocate for improvements within the value chains) and IFAD.

Activity 3.1.1. Support national producers organizations

260. **Build capacities of umbrella organizations executives:** Three farmers umbrella organizations could benefit from this support: the Rwanda Poultry Industry association (RPIA), the Rwanda Pig Farmers Association (RPFA), the Rwanda Animal Feed Association (RAFA)¹⁶⁵, and a potential emerging umbrella organization for the small ruminants value chain (covering both goats and sheep). The executives and board

¹⁶⁵ Will be supported by ENABEL only since IFAD does not support directly the feed industry and has entirely delegated this aspect

members of these organizations will be trained on matters related to the governance and the management of their organizations, in order to ensure inclusivity, participation of smaller farmers, women and youth in the governance, and avoid elite capture. They will also be trained in financial management, with special emphasis on possible approaches to improve the sustainability of these organizations and reduce their dependency on external partners. Finally, the members will be trained on advocacy and lobbying techniques, to enhance the weight of producers in negotiation processes and policy dialogue.

261. In addition to formal trainings, the project will support the organization of exchange visits and study tours, in priority within the East and Central African Region, to enable these organizations to learn from sister organizations in other countries. The trainings undertaken under this activity will be contracted to a local NGO specialized in governance and support to civil society organizations. This NGO will be recruited at the beginning of the project and contracted for one year, renewable every year based on performance.
262. The same service provider will also be in charge of preparing, organizing, accompanying and debriefing the exchange visits.
263. **Support operations of farmers umbrella organizations:** The programme will provide support to the day to day running of these umbrella organizations, to enable them to increase their visibility, their outreach and finally their credibility. This support will be strategically focused on activities that could lead to self-generation of incomes and improve the sustainability of the organization. The support will be decreasing over the years to encourage the organizations to mobilize alternative and more stable resources.
264. The contribution to the operations of the umbrella organizations will be channeled to the organization in the scope of a Memorandum of Understanding established between the programme and the organization during the first year of implementation. The organization will manage its funds independently and will report to the project as per the financial rules in force.

Activities 3.1.2.: Support to Small Livestock Multi-stakeholder Fora

265. Once the actors are mobilized around programme intervention, **small livestock multi-stakeholder fora** will be set up at both regional and national level to facilitate the business relations between the various stakeholders and bring their specific issues/proposals at an upper level to have weight in the livestock regulatory framework discussions. From Y3 of the programme, it is thus expected that forum members with different backgrounds and interests (farmers, traders, processors, researchers, government officials, development partners, etc.) will come together to diagnose problems, identify opportunities and find ways to achieve their goals.
266. The programme will facilitate this gathering, first at regional level, and then at national level. The cost of these fora will be 100% borne by the project in the first two years for regional fora and in the first year for the national forum (due to be established in Y4). During this period, the fora will be led by the SPIU Agribusiness Specialist, supported by the BDSPs hired under activity 2.2.1. Their task will also be to facilitate the establishment of a mechanism for self-sufficiency through members fees, district

contribution, etc. In the last year the project will reduce its support by half, and it is then expected that the fora will be sustainable, i.e. that the comparative advantage that they offer will sufficiently attract the interest of the members that they will accept to contribute to its 'maintenance'.

267. This activity will be implemented and financed jointly by IFAD and ENABEL.

Activity 3.1.3: Support to development of sector strategies and policies

268. Under this activity, the programme will support the formulation of relevant sector strategies and policies, for instance the small livestock strategy which is outdated and needs updating. All policies and strategies will be aligned to the overall strategic framework pertaining to the agricultural sector (PSTA4) and livestock sector (LMP). To ensure that policies and strategies are developed in an evidenced based and inclusive manner, the programme will provide support to MINAGRI in the following domains:

- Provision of specialized expertise (consultancies);
- Collation of data and evidences (baseline and diagnostic studies when necessary);
- Support to inclusive stakeholder consultation processes: organization of stakeholder consultation workshops for needs assessment or validation of draft documents; the stakeholder fora established in the scope of component 2 will offer an excellent opportunity and platform for these consultations.

Activity 3.1.4: Support to development and enforcement of food safety and animal welfare regulatory framework

269. Under this activity, the programme will support the updating or formulation and enforcement of food safety and animal welfare regulatory frameworks pertaining to the targeted value chains. The support provided will aim at:

- Ensuring compliance of national regulations with international standards (Codex Alimentarius for food safety standards, OIE for animal health and animal welfare standards) and facilitate international trade
- Improve human public health (reduce transmission of food borne diseases and zoonoses) and veterinary public health
- Improve animal welfare and reduce animal suffering during critical stages of transport and slaughtering

270. The choice of regulations updated or formulated will be done in consultation with MINAGRI and other development partners such as ENABEL. The process will be similar to the one followed for policies and will include the following stages:

- Provision of specialized expertise: the project will recruit specialized consultant but may also recourse to the expertise of FAO and OIE experts, in order to ensure the alignment of regulations developed with international standards and guidelines;
- Support to inclusive stakeholder consultation processes: organization of stakeholder consultation workshops for needs assessment or validation of draft documents (using the stakeholder fora established under component 2);
- Awareness raising to facilitate adoption of new regulations by value chain actors: publication of guidelines, leaflets, posters, and organization of public meetings

where the purpose and the content of the regulations will be explained; done by ENABEL

271. The main beneficiary of these activities 3.1.1. and 3.1.2. will be MINAGRI who is the institution mandated for formulation of policies, strategies and regulations. The expertise will be provided either by private consultants recruited on a competitive basis, or by FAO and OIE experts, recruited in the scope of MoUs. FAO and OIE experts will be preferred for regulations where alignment with international standards is critical. The consultation workshops will be organized by MINAGRI and expenditures related to the organization of workshops (DSA of participants, meeting room rental) will be covered directly by the programme.
272. In addition to the above-mentioned activities, several complementary activities aiming at reinforcing the regulatory environment will be implemented under the ENABEL supported interventions: (i) support will be provided to RALIS to improve the delivery of meat and eggs certification and inspection services (ENABEL activity 2.3.6. Support the implement the meat certification/inspection services), (ii) RAB will be assisted to develop and animal identification and traceability system for pigs (ENABEL activity 2.3.5. Design and implement an animal identification in pig/pork value chain).

Activity 3.1.5: Build institutional capacities at national and District levels

273. As mentioned in the problem analysis, MINAGRI faces a problem of deficit of technical staff specialized in small livestock production. The project will thus provide capacity building support to RAB to improve skills of selected key national staff on technical domains related to the development of small livestock value chains: animal health, animal feeding, genetics, housing and livestock infrastructures, waste management. Six staff will be selected and will undergo short trainings (less than 2 months) in foreign countries.
274. The trained staff will then be encouraged to play the role of trainers and train other civil servants or private actors at local level. Local training will be organized in the 3 targeted provinces, to disseminate the skills acquired in the scope of the international trainings. 12 training sessions for an average of 15 participants will be organized over the project duration.
275. Training institutions that will provide the short courses for RAB staff will be identified jointly by RAB and SPIU according to the training needs. The project will establish contract or MoUs directly with the training institutions and will cover directly the other costs of the training (plane ticket and DSA).
276. For secondary trainings organized at Province level, the local coordination units will be in charge of the practical organization in partnership with the District housing the training, and expenditures will be covered directly by the project through the local coordinators.
277. ENABEL will led the implementation of two complementary activities contributing to further support national institutional capacities i.e. the establishment of a livestock research fund in RAB (ENABEL Activity 2.3.11. Set up a livestock research fund in RAB), that will address value chain knowledge gaps that may arise in the course of

implementation, and the establishment of a repository data base (ENABEL activity 2.4.4. Set up a repository database) on market and investment opportunities at RAB.

Implementation plan for sub component 3.1 Policy and regulatory support

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Recruitment of expert to develop draft policy/strategy	SPIU							2 experts recruited (for 2 regulations)
Initial stakeholder consultation workshop for policy/strategy	MINAGRI - SPIU							2 consultation workshops organized
Validation workshop for policy/strategy	MINAGRI - SPIU							2 policies strategies validated
Negotiation of MoU with FAO and OIE for support to formulation of regulations	SPIU							MoU with FAO and OIE signed
Initial stakeholder consultation workshop for regulation	MINAGRI - SPIU							2 consultation workshops organized
Validation workshop for regulation	MINAGRI - SPIU							2 regulations validated
Production of awareness raising material and guidelines on new regulations	MINAGRI - SPIU							Awareness raising materials and guidelines produced
Organization of awareness campaigns on new regulations	MINAGRI - SPIU							Awareness raising campaigns organized
Technical training of RAB trainers	RAB/SPIU							6 short courses followed by RAB staff
Local training of District staff by RAB trainers								12 trainings organized
Recruitment of NGO to provide capacity building to umbrella organizations	SPIU							NGO contracted
Organization of trainings for umbrella organizations	NGO -SPIU							6 Trainings organized
Organization of exchange visits	NGO-SPIU							4 Exchange visit organized
Signature of MoUs with umbrella organizations	SPIU							
Provision of operational support to operations of umbrella organizations	SPIU							
Support to small livestock multistakeholder fora	Pig, Poultry and SR BDSPs, SPIU							small livestock multistakeholder fora operational and sustainable

Institutional framework and project management
 Alignment and ownership
 Alignment to National policy and strategic frameworks

278. Rwanda's long-term development goals are defined in the Vision 2020 and Vision 2050 documents that aim to transform the country from a low-income agriculture-based economy into a knowledge-based, service-oriented economy with middle-income status. The National Strategy for Transformation (NST 1) follows the Economic Development and Poverty Reduction Strategy 2 (EPRDS 2). NST 1 integrates international commitments deriving from the UN Sustainable Development Goals (SDGs); African Union (AU) Agenda 2063; East African Community (EAC) Vision 2050 focusing on job creation; and COP agreements on climate change.
279. The Strategic Plan for Agriculture Transformation 2018-2024 (PSTA 4) guides the strategic thrusts and priority investments to transform the sector. PSTA 4 is the implementation plan of the National Agricultural Policy (2017-2030) and Sector Strategic Plan (SSP) for Agriculture. PSTA 4 recognises the private sector, including farmers and their cooperatives, as a driver for transformation, with MINAGRI and public sector providing an enabling environment.
280. At the continental and regional level, the PSTA 4 constitutes Rwanda's commitment to the African Union's Comprehensive African Agriculture Development Programme (CAADP). Under this framework, the Malabo Declaration 2014¹⁶⁶ sets specific targets on the agriculture sector's contribution to economic growth, economic opportunities, nutrition and food security, and resilience. Rwanda is the top performer in the level of progress vis-à-vis these targets.¹⁶⁷

Rwanda's **Strategic Plan for the Transformation of Agriculture 4 (PSTA 4)** builds on the achievements and successes of PSTA 3, while envisaging a transformation of agriculture from a subsistence sector to a knowledge-based value creating sector that contributes to the national economy and ensures food and nutrition security.

Though the PSTA 4 focuses on public investments, it recognises that agricultural growth must be driven by investments of private actors, including farmers, with government becoming a market enabler rather than a market actor.

PSTA 4 is structured around four Priority Areas (PAs):

- **PA 1: Innovation and extension** provide the knowledge base for Priority Areas 2 and 3. The focus is on improving agronomic knowledge and technology in terms of basic research and innovation, development of efficient proximity extension services, as well as promoting knowledge and skills of value chain actors.
- **PA 2: Productivity and resilience** focus on promoting sustainable and resilient production systems for crops and animal resources.
- **PA 3: Inclusive markets and value addition** seek to improve markets and linkages between production and processing. This includes key input markets such as fertilisers, insurance and finance as well as upstream activities such as aggregation, promotion of value addition, access to finance, certification, market infrastructure and export readiness.
- **PA 4: Enabling environment and responsive institutions** provide the regulatory framework and define and coordinate public sector involvement.

Figure 1: PSTA 4 Priority Areas

¹⁶⁶ Source: <https://au.int/en/documents/31247/malabo-declaration-201411-26>.

¹⁶⁷ with a score of 6.1 based on the CAADP African Agricultural Transformation Scorecard (AATS).

281. The support to improve animal health status and genetic potential of small livestock foreseen in component 1 and the establishment of proximity extension services (Community Facilitators, Community Agro-Vet Entrepreneurs, private coaches) respond well to the first two Priority Areas (PAs):
- PA 1: Innovation and extension provide the knowledge base for PAs 2-3. The focus is on improving agronomic knowledge and technology in terms of basic research and innovation, development of efficient extension services, as well as promoting knowledge and skills of value chain actors.
 - PA 2: Productivity and resilience focus on promoting sustainable and resilient production systems for crops and animal resources.
282. The backward and forward linkages facilitated under component 2 through productive alliances with input suppliers, enhanced marketing and processing infrastructure, and support to small livestock value chain financing are well aligned with the third PA:
- PA 3: Inclusive markets and value addition seek to improve markets and linkages between production and processing. This includes key input markets such as fertilisers, insurance and finance as well as upstream activities such as aggregation, promotion of value addition, market infrastructure and export readiness.
283. Under Component 3 the support to develop sector strategies, esp. food safety regulations, and the capacity building of RAB and local government authorities align with the fourth PA:
- PA 4: Enabling environment and responsive institutions provide the regulatory framework and define and coordinate public sector involvement.
284. The overarching strategic framework guiding the development of the livestock sector in Rwanda is the Livestock Master Plan (LMP). The LMP was developed in 2017, following the implementation of a Livestock Sector Analysis (LSA) 2017. The LMP covers a five-year period (2017-2022) and comprises of six sub-sectorial master plans for dairy, red meat, chicken and pork. For small livestock specifically, a strategy and investment plan for small animal industry was developed in 2012 but has now expired and would require a review and update.
285. The priority investment envisaged in the LMP, relevant to the small livestock value chains, and the project contribution to each of these priorities, are as follows:
- Targeting animal health interventions for young and adult stock mortality (vaccinations, parasite control) ensuring improved productivity, thereby increasing animal and product off take of meat and dairy: the project will contribute to this through the support to private veterinary practitioners networks (CAVE) and through support to public veterinary services for surveillance and control of TADs.
 - Improving the quality and quantity of livestock feed resources through introducing improved forage crops and improved animal feed management practices, feed production on irrigated land, as well as increased access to existing lands appropriate for grazing; the Project will contribute to this through capacity building of producers, support to feed manufacturers and facilitation of

- business partnerships between producers and feed millers; For small ruminants, the project will promote the utilization of forage trees and other fodder varieties.
 - Contributing to “Improving collection, marketing and processing” by enhancing the marketing and processing facilities for meat and eggs, including the cold chain.
286. The National Strategy on Climate Change and Low-Carbon Development (NCCLCD) underlines the need to manage the climate variability for the social, environmental and economic development of the country. The Intended Nationally Determined Contributions (INDCs) are built upon the NCCLCD and aim at achieving Category 2 energy security and supports the development of green industry and services, sustainable land and water management, urban development, biodiversity and ecosystem services.
287. The National Food and Nutrition Policy (NF&NP) reaffirms the strong commitment to solving food and malnutrition and preventing stunting in children under two years. Furthermore, the Rwanda Youth Strategic Plan, the National Gender Policy, and in particular the Agriculture Gender Strategy aim to address the challenges faced by women and youth through a comprehensive joint approach.
288. Other government policies and strategies related to the project include the National Policy on Promotion of Cooperatives (under revision), Post-Harvest Sector Strategy, and National ICT4Ag Strategy.

Alignment to IFAD strategic objectives

289. **Contribution to COSOP SOs.** The programme will directly contribute to the two COSOP SOs: to SO1 “sustainably increase agricultural productivity in priority food and export value chains and improve livelihoods and resilience of the rural population” through activities aiming at intensifying small livestock production and strengthening their resilience against sanitary, climatic or economic shocks. It will also contribute to SO2 “improve post-harvest processes, strengthen market linkages and generate economic opportunities for men, women and youth in rural areas” through promotion of partnership mechanisms improving the inclusion of smallholders in the value chains.
290. **Contribution to IFAD’s SOs.** The programme is also fully aligned to the three IFAD’s SOs: (i) it will contribute to SO1(increased production) through intensification of production systems, productivity gains and expansion of production assets, (ii) to SO2 (increased market participation) through promotion of partnerships between smallholders and private sector actors to improve access to market and services; and (iii) to SO3 (greater resilience) by improving resilience of animals to sanitary crisis on the one hand, and reinforcing the traditional role of small livestock as a buffer mechanism in case of shock.
291. The programme reflects IFAD’s mainstreaming agenda covering gender, nutrition, youth, and climate change resilience. In particular, the project is aligned with IFAD Targeting Policy, adopting an inclusive and differentiated approach to ensure that the most vulnerable segments of the population will be able to benefit from project's initiatives; with IFAD Policy on Gender equality and Women's empowerment, aimed at promoting equitable participation and share of benefits for women and men involved in small livestock value chains; with the IFAD Youth Action Plan, supporting youth employment and entrepreneurship; with the Nutrition Action Plan, contributing to

improved nutrition of targeted households. Finally, the programme is aligned with the IFAD ENRM policy, particularly with principle 3 – promote climate-smart approaches to rural development.

Programme implementation

292. The partnership programme will be implemented through the Single Project Implementation Unit (SPIU) under MINAGRI's main implementing agency for agriculture and livestock programmes: the Rwanda Agriculture and Animal Resources Development Board. This arrangement is considered relevant as it places the SPIU strategically to manage ongoing and future projects under MINAGRI's implementing agencies. The advantages of the SPIU model also include i) improved coordination and synergies among ongoing projects/programmes; ii) improved staff retention leading to reduction in staff turnover and increase in institutional memory; iii) and increased knowledge and expertise as well as best practices in project/programme management.
293. The overall fiduciary aspects, procurement and M&E functions will continue to be under the core team of the SPIU as they have been key element contributing to the good performance of the IFAD portfolio in Rwanda.

Project oversight and strategic guidance

294. **Role of MINAGRI and RAB:** MINAGRI will provide overall guidance for programme implementation in order to ensure its alignment to PSTA IV. In line with the practice for other IFAD-funded projects in Rwanda, MINAGRI will put in place a Programme Steering Committee chaired by the PS of MINAGRI. In addition, MINAGRI will lead all activities related to the formulation of policies, strategies and regulations.
295. RAB will be responsible for the project implementation. It will supervise the overall planning of programme activities and guide project implementation. In addition, RAB will be responsible for signing MoUs with implementing partners as well as contracts with service providers. Lastly, RAB will implement directly activities under its mandate in the areas of animal health, genetics, research, and capacity building of District staff.
296. **Programme Steering Committee:** In-line with the practice for other IFAD and ENABEL funded projects in Rwanda, a common Programme Steering Committee (PSC) will be established. The PSC will be common to the two interventions and will play a both an oversight and coordination role, which is particularly critical because of the specific setup of the programme. The main responsibilities of the PSC will be to provide policy guidance and orientations at national level, to assess the implementation progress of the project, to approve AWPB and progress reports and to decide on corrective measures where appropriate. Membership of the PSC will include: PS MINAGRI (Chair), DG RAB (Vice Chair), DG Animal Resources and DG Strategic planning (MINAGRI), MINECOFIN, MINICOM, MINALOC, SPIU Coordinator, PRISM project coordinators (Secretaries), Representatives of RCA, RSB, RALIS, BDF, NIRDA, RAFA, RPA, RPFA, VSFB, Heifer International, Private Sector Foundation (PSF) and National Cooperative Confederation of Rwanda (NCCR). The PSC will meet at least four times a year. Detailed Terms of Reference (ToRs) and membership of the PSC are included in the PIM.
297. The programme will also have a technical coordination committee (PTCC), which will address technical and implementation issues, including those related to the coordination between partners and alignment between the two projects. The PTCC will

- also prepare the ground for the steering committee by identifying issues and bottlenecks, as well as success stories, that need to be addressed at a higher institutional level. The membership of the technical coordination committee will include all implementation partners. It will be chaired by RAB. The PTTC will meet on a quarterly basis, one month ahead of the PSC meetings.
298. The PSC shall meet at least four times a year in June to examine the AWPB and to assess the progress made against targets, and respectively in October, January and April to examine and approve the different progress reports. The Minister of Agriculture and Animal Resources has the sole responsibility of appointing members of PSC.
299. The programme will also participate in the technical coordination committees set in the scope of RDDP (Animal nutrition and genetics committee, Scientific Committee for Research, animal health technical committee), since matters discussed in the scope of these committees pertain to both projects and all livestock value chains. The participation of both projects in those committees will also ensure better coordination and sharing of lessons and knowledge. RDDP will cover the costs related to these meetings until its closure planned for 2022.
300. **Role of IFAD.** IFAD will carry out supervision missions jointly with MINAGRI ENABEL and implementing agencies (Heifer, VSFB). One or two implementation support and supervision missions will be conducted by IFAD every year to review effectiveness of the programme approach in targeted districts; planning, gender and targeting, procurement and financial management, partnerships, and monitor the achievement of outputs, outcomes and impact.
301. IFAD country office will play a key role in supervising the project by continually assessing bottlenecks and risks in order to ensure successful implementation and sustainability; monitoring changes in implementation circumstances that require adjustments to programme design; appraising the continued relevance of the programme objective to the country, target groups and IFAD development priorities; and proactively proposing adjustments to the project design, implementation arrangements and log-frame when appropriate. In addition, IFAD will review and provide prior no objection to the following documents: AWPB, Procurement Plan, tender documents and evaluation reports. In addition, the IFAD Livestock Development desk at HQ will provide continue technical backstopping support from HQ and through direct implementation support to the SPIU.

Programme coordination

National level

302. The IFAD and ENABEL supported interventions (projects) will be managed by a single programme management team, composed of two project teams working in close collaboration. Each of the two project teams will have its own coordinator and will be specifically in charge of the activities led and funded under its project, but some activities (as indicated in the description of activities) will also be implemented jointly by the two project teams. Staff of the respective two teams has been rationalized to avoid duplication of efforts. Technical specialists will also be shared to reduce costs and enhance coordination. The coordination between the two project teams will be a common responsibility of the two project coordinators and will be overseen by the

SPIU CoordinatorThe project staffing will be composed of specific staff at SPIU level (Project Operations Manager, Livestock Specialist, Access to Finance Specialist, Project Accountant, M&E Officer, Procurement Officer) supported by SPIU shared staff for crosscutting issues (Animal Health, Gender, KM and Communication, Nutrition, Climate Change and Environment, and Cooperative Development), and District staff (District Project Coordinators and District Focal Points).

303. The ENABEL project team, will be led by a Project Intervention Manager (international technical assistant, livestock specialist). It will be composed of two Private sector experts (one international technical assistant, one local expert), one livestock Specialist, one extension Specialist, one administrator, one finance & procurement specialist, and one accountant.
304. The IFAD project coordination team will be equipped with two 4x4 vehicles; in addition, a budget for car hire will be availed for Kigali movements.
305. Additional staff will be shared with other projects, for crosscutting and shared functions that do not require a full time staff as follows; the percentage of the cost covered by PRISM and other projects will depend on the time allocated to each project, and on the number of active projects (probably 5 in 2020, 3 from 2021):
 - Animal health (shared with RDDP)
 - Gender specialist (shared with all other projects; will be seconded by a consultant during year 1)
 - Knowledge Management and communication (shared with all other projects)
 - Nutrition (shared with RDDP)
 - Climate Change and environment (shared with all other projects)
 - Civil works (shared with all other projects)
 - Cooperative Development (shared with all other projects)

306. The project will also contribute (20%) to the costs of the following SPIU staff:

- Coordinator of SPIU
- Head of Finance
- Head of Procurement
- Head of M/E
- Chief accountant
- Administration and logistic specialist
- Information technology officer
- Internal auditor
- Administration officer
- Administrative assistant
- Messenger

307. National level staff will be recruited on a competitive basis on the basis of the terms of reference for each position (attached in annex 2), and employed by RAB through a two year contract, renewable based on performance. Administrative assistants, drivers and messengers and District-based will be employed through a 1 year renewable contract with RAB.

District level

308. Co-implementation with decentralized entities: based on the experience from ongoing projects under RAB/MINAGRI, the project will create partnerships with decentralized entities (mostly Districts) in order to implement and co-finance activities that are under their direct coordination: vaccination campaigns, epidemi-surveillance, nutrition education and gender awareness trainings, etc.
309. PRISM will have dedicated staff (District Programme Coordinators) in all the 15 Districts where it operates. The District Coordinators will be equipped with motorcycles and a monthly lumpsum budget for transport costs will be allocated to each of them.
310. In each District, a programme focal point will be designated. It should normally be the District Animal Resources Officer, but depending on the District context, it could also be the District agribusiness Officer or the District Cooperative Development Officer. The programme will allocate a lumpsum transport fee to the District Focal Point.
311. Any district staff technical staff could be mobilized for programme activities, in particular the District staff in charge of Animal Resources and Animal Health, of nutrition, of cooperative development and of agribusiness. The programme will in this case cover their transport costs, through the budget related to the specific activity they are involved in.
312. MoUs will be signed with the Districts during the inception phase in order to formalize the modalities of partnership between the Districts and the project.
313. At the district level, the Joint Action Development Forum (JADF), made up of district authorities, local and international NGOs, farmer and community organizations, and traditional and religious leaders, meets regularly to discuss sectoral issues. The implementation of the District Development Plan is overseen by the JADF. These forums are also essential in the implantation of the project.
314. In order to facilitate the cooperation with the Districts, but also create synergies and exchanges knowledge between Districts, a platform will be established at Province level, where districts and SPIU will discuss about their cooperation. Two meetings will take place every year: one before commencing each fiscal year and one before project the budget review. The platform shall include District Vice Mayors in charge of economics affairs, District animal Resource Officers, a representative of the Province, RAB deputy Director General in charge of animal resources, research and technology transfer, and the SPIU team.

Partnerships

Strategic partnerships

315. The implementation of the PRISM will be structured around performance-based MoUs with key government agencies, partnership agreement with key partners (HPI and FAO) and service contracts with recruited service providers. To ensure uninterrupted service delivery during project implementation, MINAGRI will draw multi-year agreements with the key government implementing partners and HPI but provide for annual reviews to ensure strict adherence to achievement of results.
316. **Partnerships with specialized national technical agencies.** Partnerships will be established with relevant Government of Rwanda's specialized technical agencies such as

- RAB, in addition to being the implementing agency, will also play the role of implementing partner especially in the areas of animal health, genetics, research, and capacity building of District staff
 - MINAGRI, in addition to its essential role for project supervision, will also be an implementing partner, in particular for activities related to policy and regulatory development
 - Rwanda Standard Board and Rwanda Agriculture and Livestock Inspection and Certification Services for the support to the development and enforcement of food safety and animal welfare standards related to slaughtering, processing and transport facilities
 - The Rwanda Cooperative Agency will be involved in support to cooperatives including in particular the youth cooperatives
 - The National Early Childhood Development Programme (NECDP) will be involved in the delivery of nutrition education to youth cooperatives
317. When the partnership with a specialized agency implies a transfer of funds and a sub-delegation of project activities, an MoU will be established (except for RAB and MINAGRI). The partner agencies will be requested to formulate an annual work plan and budget that will be approved by the OPSC and included in the overall project AWPB.

318. **Synergies and partnership with other development partners and projects.**

In addition to its unique internal partnership arrangements, PRISM will also strive to avoid duplication and ensure harmonization/complementarity with other projects. Strong opportunities for synergies have been identified in particular with the Feed the Future Rwanda/ USAID funded project called "Orora Wihaze" which will sustainably increase the availability of, access to, and consumption of animal-source foods (ASF) through development of a profitable market. The Feed the Future Rwanda/USAID office has launched a "Call for proposal" in order to identify a suitable local institution to implement the project "Orora Wihaze". See bow below:

USAID - Feed the Future Rwanda "Orora Wihaze" ("Let's do it")

The purpose of the project is to sustainably increase the availability of, access to, and consumption of animal-source foods (ASF) through development of a profitable market. The main project's targets are: (i) income for at least 125,000 households increased; (ii) prevalence of children 6-23 months receiving a minimum acceptable diet increased by 40%, and (iii) prevalence of women of reproductive age consuming a diet of minimum diversity increased by 40%. The focus value chains will include poultry, fish, pig and goat and the project target area will cover eight districts included in the Feed the Future Rwanda Zone of Influence (ZOI): Rutsiro, Nyabihu, Ngororero, Karongi, Rubavu, Nyamasheke, Nyamagabe, Burera, Gakenke, Kayonza, Gatsibo, Ngoma, and Bugesera. The total budget is between \$12 to \$15 million for a 5 years period.

The project seeks to remove production, marketing and consumption constraints affecting dietary diversity women of reproductive age (15-49 years of age), especially pregnant and lactating women (PLW), and of children between the ages of 6 to 23 months in poor, rural households. The Orora Wihaze project will use a private sector oriented, market facilitation approach to achieve the intended goal. The approach must sustainably increase livestock productivity, improve relationships across actors in the ASF value chains, build capacity of

enterprises in the ASF sector, facilitate access to finance and increase private sector investments in ASF value chains. At the time of the finalization of the PRISM project document, the selected implementing institution is not known yet. Therefore the IFAD ICO will immediately seek alignment as soon as Feed the Future Rwanda/USAID will publicly announce the implementing agency.

319. In the financial sector, other strategic partners will be ICCO Terrafina, which has been supporting the financial sector since several years, especially in the field of agriculture finance; and IMSAR , a DFID-funded project providing technical assistance and financial instruments for the financial sector and agribusiness companies.
320. The programme will of course work in close partnership with two IFAD funded projects implemented under the SPIU as well, which it will share resources and means:
321. ***The IFAD-funded "Climate Resilient Post-Harvest and Agribusiness Support Project" (PASP)*** will play an important role through its efforts to curb aflatoxin contamination in the maize value chain. The introduction of appropriate drying facilities/equipment (including large mobile dryers) is indeed expected to significantly reduce moisture levels and generally improve maize drying operations countrywide, which in turn will increase the quality of maize that is the main ingredient in animal feed produced in Rwanda.
322. ***The IFAD-funded Rwanda Dairy Development Program (RDDP)*** covers 12 districts countrywide¹⁶⁸, focusing on developing the dairy value chain through improving cattle productivity, milk quality and processing capacity of the dairy industry. RDDP is also strengthening the policy and institutional framework for the sector. PRISM will build on the lessons learned along RDDP implementation, and harmonize its interventions in the livestock sector. Whenever possible, the project will avoid overlapping with RDDP districts, except when there is definite comparative advantage (e.g. Rubavu that is a key location for exports to DRC), or when the poverty and malnutrition levels are the highest (e.g. Nyabihu or Rutsiro).

Implementing partners

323. The IFAD supported project will partner with the international organization Heifer International in co-investing (approx. USD 4.7 million) and co-implementing selected activities under PRISM, building on successful previous experiences under KWAMP and the grant project "Dairy Hub Model integration into IFAD funded projects in Rwanda and Tanzania (Zanzibar)".
324. Heifer International will be responsible for the implementation of the Values-Based Holistic Community Development (VBHCD) model that leads to sustainable results in community transformation through enhanced small livestock development practices and access to services (veterinary, inputs, financial and marketing services) in the context of vibrant value chains. A global MOU will be signed between MINAGRI and Heifer International while a detailed annual AWPB reflecting activities to be implemented by Heifer International and related cost (including its own co-financing) will be developed every fiscal year.

¹⁶⁸ Of which 3 districts in the North (Gicumbi, Burera and Musanze), 3 districts in the South (Nyanza, Huye and Ruhango) and 3 districts in the West (Nyabihu, Rubavu and Rutsiro).

325. The programme will enter into an MoU with FAO to implement activities in the animal health and food safety area where FAO has a very clear comparative advantage: FAO will provide support to RAB to develop the diseases contingency plans, to organize the simulation exercises of sanitary crisis, and support the development of food safety and animal welfare regulations and standards. For food safety related support, FAO will mobilize experts from the "Codex Alimentarius Committee" which sets international standards on food safety, and for contingency plans and simulation exercises, experts from the regional and global ECTAD (Emergency Centre for Transboundary Animal Diseases) teams. FAO-ECTAD will involve OIE experts in these activities but under their mutual arrangements and the project will not enter in any form of direct partnership with OIE. The participation of OIE will ensure that all mechanism established are conform to international standards and guidelines related to animal health and welfare.
326. Finally, the programme will enter in an MoU with ILRI to ensure collaboration with the "African Chicken Genetic Gain " funded by the Bill and Melinda Gates Foundation.
327. VSFB will be a major implementing partner for the ENABEL funded intervention at production level (FFS, biogas and animal health). VSFB and Heifer will be invited to closely coordinate their activities and exchange lessons, even if they will not be operating in the same geographic areas.

Service providers

328. For the implementation of some of its activities that cannot be implemented by SPIU, RAB, or the Districts, the project will recourse to specialized service providers. Service providers could be private entities, or civil society organizations. Private service providers will be preferred when the purpose is to provide support to private actors (producers in particular), on management of private businesses. NGOs will be preferred when the support is related to public or collective goods such as community development, support to civil society and stakeholders organizations.
329. The main service providers that will need to be mobilized by the project are as follows:
- Business Development Service providers (BDSP) for provision of initial training (technical and business management) to youth groups, and continuous coaching (activity 1.2.1 and 1.2.2)
 - BDSPs to build the capacity (entrepreneurship skills and financial literacy) of farmers engaged in productive alliances (activities 2.1.2 and 2.1.3)
 - Pig, Poultry and Small Ruminant BDSPs for market facilitation, development of supplier network, development of business plans for private processing facilities and facilitation of small livestock multistakeholder forum (activities 2.2.1 and 2.2.4)
 - Specialized consultants for conducting technical feasibility studies: design of standard youth package (premises and equipment) for activity 1.23, design of pig AI station under activity 1.3.2, rehabilitation of RAB goat breeding station, construction and rehabilitation of market infrastructures and abattoirs
 - Specialized consultants (local recruitment) to conduct rapid market appraisal of small livestock sector (activity 2.2.1), ESIAAs for public pig slaughter slabs (activity 2.2.3), to set up contractual arrangements for the operation of public

- slaughter slabs and livestock markets (activity 2.2.3), and to update the mapping of Rwanda financial sector (activity 2.3.1).
- Specialized NGO/consulting firm to provide technical assistance to financial institutions (within and outside the productive alliances) (activity 2.3.1)
 - Specialized consultancy firms or service providers(international tenders) to: develop or adapt digital innovations for the financial sector in small livestock value chains; to undertake 2 insurance feasibility studies (poultry and pig value chains); and a separate one to help insurers design and adjust at least 2 insurance products and to develop and deliver small livestock insurance product development/operation course (activity 2.3.2).
 - Private veterinarians and agro-vet dealers for provision and distribution of inputs and veterinary services to youth under activity 1.2.3 (possibly one or two service providers per province)
 - Local NGO for provision of capacity building to national farmers organizations on governance, management of organizations, lobbying and advocacy, including organization of exchange visits (activity 1.5.2 and 1.5.3).
 - Civil Works contractors for construction of youth infrastructures, biogas and water harvesting systems, pig AI stations, rehabilitation and construction of markets and abattoirs
 - Specialized consultancies for the baseline, mid-term and completion studies, including a specific study on Minimum Dietary Diversity (MDD-W) for women in reproductive age.

330. All service contracts requiring multi-year engagement will be issued on an annual basis, renewable only upon achievement of clearly set performance thresholds.

Implementation plan for project coordination and management (including partnerships)

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
Project coordination and management								
Formulation and signature of MoU/letter of intent between IFAD and ENABEL								
Finalization and adoption of ToRs of PSC	SPIU - RAB							PSC established
Steering committee meeting	SPIU							4 meetings of PSC per year held
Update the PIM that should include a comprehensive financial management manual with a comprehensive project chart of accounts	SPIU							PIM updated
Map the accounts codes and configure the chart field to meet the accounting and reporting requirements of project.	SPIU/RAB/I FMIS Team-MINECOFIN							
Technical committee meetings (Research, genetics and feeding,	SPIU - RAB							At least one meeting of each per year

health) common with RDDP								
Preparation of MoUs with Districts	SPIU							Draft MoU prepared
Validation and signature of MoUs with Districts	PSC- RAB							15 MoUs signed
Designation of District Focal points	SPIU - Districts							15 PFC designated
District meeting at province level	SPIU- Districts - RAB							2 meetings per year held in 3 provinces
Recruitment of staff	SPIU - RAB							Staff recruited
Procurement of vehicles and equipment	SPIU							Project vehicles and equipment procured
Partnership management								
Establishment of MoUs with national governmental agencies								MoUs signed
Establishment of MoUs with international partners (HPI, FAO, ILRI)								
Establishment of contracts with service providers								Contracts signed
Organization of consultation forums with ENABEL	+ before inception							

Programme startup

331. In order to improve start-up and early programme performance through integration of PRISM funded activities and processes into RAB, IFAD will support a start-up workshop where RAB, the SPIU and all implementing partners will have a common understanding of the programme implementation strategy. During start-up, the roles, responsibilities and accountability of all implementers will be clarified and agreed. Their capacities will be assessed and matched with required skills so that adequate capacity development plans can be prepared. Feedback mechanisms will be also developed to enable quick decisions on what to adapt and improve in a flexible output-oriented manner.

Implementation plan for startup activities

Activity	Responsibility	Inception	Y1	Y2	Y3	Y4	Y5	Outputs
start-up workshop	RBA-SPIU							Ownership and common understanding of project approach by project team and partners
Selection of districts and sectors for project implementation	MINAGRI, RAB, IFAD, Heifer International, USAID/ Feed							The geographical coverage of the project is defined and institutional agreements with

n	the Future						development partners are taken.
Outline of the Gender Strategy	Gender, Targeting and Community Mobilisation Officer						Project gender strategy
Define specific contents for the delivery of gender training in youth cooperatives	Gender, Targeting and Community Mobilisation Officer						Outline of gender training
Define specific contents for the delivery of nutrition training in youth cooperatives	Nutrition specialist and NECDP						Outline of nutrition trainings

Planning and Budget Development

332. Planning will be done jointly by the two projects in order to avoid overlapping and maximize complementarities and synergies. A single annual work plan and budget (AWPB) will be developed for the programme, which will articulate interventions under both fundings.
333. Planning will be guided by the project's strategy, log-frame and broader results framework which will inform the development of annual work plans and budgets oriented towards planned results with clear identification of how planned activities are expected to lead to those results. Key documents for planning at the start of the Programme are the Programme's Logical Framework, its budget and the initial agreements with implementing partners.
334. **Logical Framework.** The format for the annual supervision reports includes an appendix for revision of the Logical Framework. The log frame format should be aligned with the ORMS. Proposals for revision (if needed) are prepared by the PMU (through its M&E specialist) and reviewed and processed by the annual Supervision Missions. The log frame will be updated constantly, discussed and adequately analysed with project staff especially components managers. The supervision mission is in charge of reviewing and validating progress and data reported in the log frame.
335. **Annual Work Plan and Budget (AWPB).** The PMU in collaboration with the SPIU is responsible to allocate Programme resources to activities through annual work plans and budgets. The PDR includes a draft AWPB for the first 18 months of Programme Implementation and needs to be updated at the Programme's start, following the guidance given in the Financial Management Manual. The results-based AWPB will be drawn up in consultation with implementing partners, including beneficiaries (e.g. cooperatives) where relevant. The SPIU will be responsible for the process and for the inclusion of and collaboration with key stakeholders in the planning process. AWPBs will be approved by the project steering committee and sent to IFAD for no objection 60 days prior to the end of each fiscal year. IFAD will have 30 days for reviewing and

provision of "No Objection" and the PMU will have 30 days to revise and finalize the AWPB. Following GOR's planning cycle, the fiscal year will go from July to June. To ensure timely submission of the draft AWPB budget preparation will begin in January and end in April with the submission to the programme steering committee.

336. **Procurement Plans.** Each AWPB is accompanied by a procurement plan, which details which procurement processes will take place in the upcoming period. The PPs derive from the AWPBs and are prepared by the Procurement specialist, with due inputs from the technical coordinators and M&E specialist. Due care should be taken to reflect the time requirement for procurement processes in the activity planning in the AWPBs.
337. Both the AWPB and the PP should be submitted to IFAD for no-objection after approval by the project steering committee. Both AWPB and PP will be prepared at the beginning of each fiscal year but can be revised during the year based on the needs to be addressed.

Financial Management

Financial Responsibilities of Parties to the IFAD Loan Agreement

338. The parties to the loan are the Government of Rwanda, MINECOFIN (the designated Borrower) and IFAD (designated Lender), and the Lead project Agency (RAB), and they all bear specific responsibility in project execution. The responsible offices will be held accountable for the achievement of project objectives within the framework of the law, prevailing constraints, and limits of authority and by embracing the best principles of public expenditure management.
339. **MINECOFIN**, the borrower, will be fully responsible to IFAD for the due and timely performance of all obligations ascribed to in the Project Loan Agreement. The obligations include:
 - Appointing the signatory to sign the Withdrawal Application
 - Apply to the fund for the transfer of Funds from the project's loan accounts into special accounts;
 - Ensure that all parties perform their obligations;
 - Open and operate the Special Accounts in a bank acceptable to the IFAD;
 - Confirm to the Fund that GoR contributions have been availed and issued to the project as per AWPB;
 - Appoint account signatories to the Special Account and operation accounts; and
 - Pay the Loan service charge and the Principal.
340. **The Lead Project Agency** (RAB) will provide oversight role and policy direction to the project, review the project's AWPB progress against set targets and approve accordingly. It will also ensure the funds are used economically and efficiently to deliver project goals.
341. RAB will ensure that the project funds (from both GoR/IFAD) are budgeted for properly and captured in the IFIMS in the acceptable format. It shall also facilitate the Project to access both GoR and IFAD funds in time for smooth implementation of project activities.
342. **IFAD** on the other hand, shall be responsible for:

- Extending a loan of USD 10 million;
- A loan account in the name of the borrower in its books and crediting with the same amount of loan;
- Advancing initial deposit and replenishing the Special Account from time to time as per Withdrawal Applications;
- Making direct payments out of loan proceeds as requested by the project's clients;
- Reviewing and approving project's withdrawal applications, expenditure justifications, no objection requests etc.;
- Reviewing and approving AWPB, expenditure category re-allocation request, among others.
- Participating in implementation support missions.

343. The SPIU will be responsible for:

- Ensure the project is coordinated and implemented as per Loan Agreement;
- Responsible for overall financial management (budgeting, procurement, accounting) of the project;
- Preparation of overall AWPB, procurement plans etc and oversee their execution;
- Effective capacity building of project team across project area- training, IT system etc;
- Effect timely and accurate financial reporting and disclosures – publicity; and
- Preparation of withdrawal application and funds disbursement to implementing partners/agencies.

Management and mitigation of fiduciary risks

344. The accounting system and the chart of accounts of the PRISM will be based on government financial and accounting procedures, and the chart of account to be adopted is based on the MINECOFIN Standard Chart of Accounts. Currently the accounting method/basis applicable for reporting in GoR is cash basis of Accounting. The project shall account to IFAD on Generally Acceptable Accounting Practice (GAAP) and IPSAS cash based accounting method in line with GoR Financial Procedures.

345. **Financial Management Systems (FMS).** The GoR has widened the coverage of the Integrated Financial Management System (IFMIS) to include non-budget entities and extra budgetary units (these include recipients of external grants and loans). It is in this context that, newly designed projects within the IFAD/RAB SPIU are required to use the IFMIS as the accounting software. The IFIMIS is a highly structured Financial Management System (FMS), and it entails careful assignment of responsibilities and approval processes (based on the existing SPIU expenditure approval structures). This will ensure effective internal control processes, financial reporting, budget monitoring, and commitment control for PRISM.

346. **Financial reporting.** The set-up of the chart of accounts in the IFMIS however, is mainly tailored to suit government reporting requirements, and does not entirely facilitate expenditure classification that will result into additional disclosures to the financial reports required by IFAD (both interim and end of financial year). In order to capture the project AWPB into the IFIMIS, the activity layout in the AWPB has to be re-aligned to the layout of activities in the MTEF. MTEF classification of activities is in

the form of; outcome, output, and activity. While outcome and output can easily be equated to a component(s) and a sub-component(s), it would be difficult to match activities and sub-activities to expenditure classification by categories. This poses a challenge in loan administration since semi-automated FM systems could result in untimely, inconsistent and error prone financial data. The Office of Budget formulation & Reform should explore the possibility of using the IFIMIS 'reporting analysis tools' to mitigate this risk by; (a) configuring a reporting template for AWPB execution by component within in the IFMIS, (b) include 'Category' as an expenditure classification which will be applicable to IFAD and other donors, (c) IFIMIS coordinator to meet IFAD team to agree on the applicability and timing of these changes.

Financing flows and disbursement plan

347. The ENABEL and IFAD financing will have distinct financing flows and financing reporting mechanisms.

348. To facilitate flow of PRISM funds to the SPIU, the following steps will be followed:

- Appropriate Project Bank Accounts will be opened and operated in line with the ENABEL/IFAD/Government procedures.
- The accounts are operated by the SPIU and HPI.
- The special accounts will be replenished by timely submitting Statements of Expenditure (SOEs) accompanied with bank statements, Special account reconciliations, cash book to bank reconciliations, among others to IFAD, and for ENABEL, the SPIU will follow the specified disbursement procedures.
- Only PRISM project funds will be transacted through these bank accounts, which clearly demarcate funds for the project rather than pool them with all other SPIU funds.

349. The SPIU will open and maintain five bank accounts for PRISM;

- Counterpart Account in FRW for the government counterpart funds
- IFAD Designated Account (DA) in US\$
- ENABEL Designated Account in US\$
- Operations Account in FRW/ENABEL
- Operations Account in FRW/IFAD
- HPI will open a PRISM dedicated operation bank in FRW to which PRISM will transfer funds, and receive funds for PRISM related activities from the HPI headquarters

350. All five bank accounts shall be held in the National Bank of Rwanda (BNR), with the following signatories;

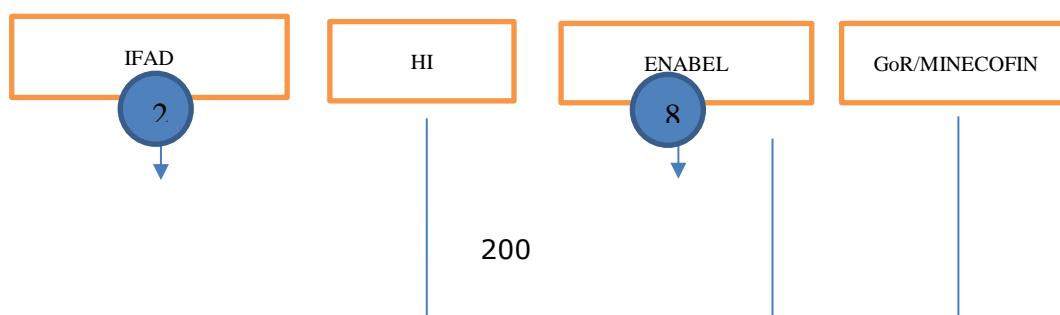
- The Director General (DG) of RAB
- The RAB DG of Corporate Services
- The SPIU Coordinator
- And SPIU/Head of Finance and Fiduciary aspects

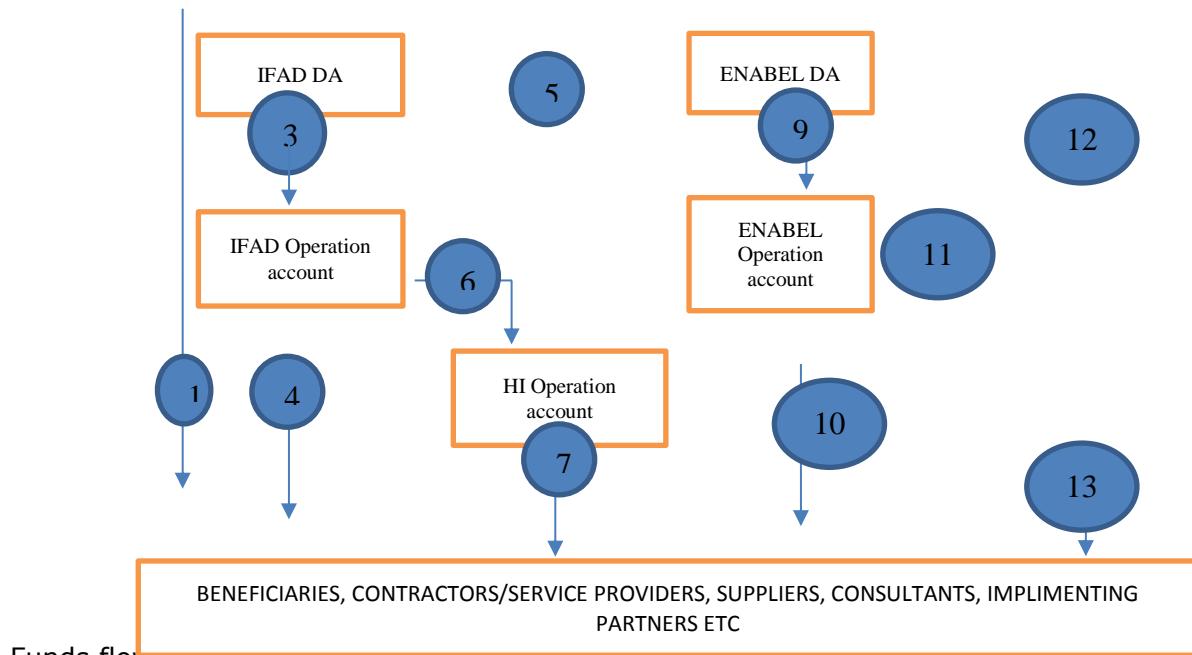
351. The DAs are maintained by the SPIU in US\$. They will operate with an advance payment from IFAD/ENABEL (Authorized Allocation) which will be in line with expected patterns of expenditure, withdrawal application processing timeframes, and

requirements for financial efficiency. The DAs will be replenished following the rules set out in the IFAD Disbursement Handbook and the Letter to the Borrower.

352. In order to avoid difficulties in the replenishment of funds, the SPIU Head of Finance and Chief Accountant must ensure that all expenditures made with project funds by the various offices of the SPIU and by the other contracted service providers are duly justified by proper documentation on a strict regular basis.
353. To avoid funds flow constraints, since transfer of funds to HPI will be tagged to specific activities as per the approved AWPB, the project should replenish the designated account immediately. To ensure that funds are used for intended purposes, the project should provide a reporting format for financial management, which will be accompanied by monthly reconciled cashbooks on a quarterly basis, and/or at the request of the next transfer – whichever comes earlier.
354. The following conditions need to be met by RAB for IFAD/ENABEL to make the first disbursement of project funds to the DA:
 - First AWPB receives IFAD no objection
 - RAB opens project Designated Accounts in US\$ and Operations Accounts in FRW in the National Bank of Rwanda;
 - Appointment of the Operations Manager; and Project Steering Committee is established.
355. The SPIU Operations Accounts will be used to make payments directly to suppliers, service providers and contractors. The SPIU Counterpart Account is used to make payments of local taxes and activities fully funded by government, again directly to suppliers, service providers and contractors.
356. As a control measure, thresholds for the management of project bank accounts may be instituted by RAB. In such a case, the DG RAB - as the Chief Budget Manager, will delegate power to the signatories as per the provisions of the Organic law on State finances.
357. Currently, For all inter accounts transfer and payments, the national bank has adopted internet banking system. Within the SPIU, the documentation and initial operations are done by the accountants at the first level, verification and first authorized by the chief accountant at the second level, and signed off by the signatories of the bank accounts (SPIU DAF, Coordinator, and DG RAB or DG Corporate Services) at the third level and last level.
358. The Designated Accounts and the SPIU Operations Accounts would be the preferred accounts for making payments to local and international contractors, suppliers and service providers.

PRISM FUNDS FLOW CHART





Funds flow chart explanations.

Line 1: Direct payment by IFAD from Loan account to suppliers

Line 2: Transfer by IFAD from Loan account to Designated Account in the National Bank of Rwanda

Line 3: Transfer from the DA to operation account by PRISM

Line 4: Payments by the project to suppliers

Line 5: Heifer International Headquarter transfer of funds to HI – Rwanda bank account.
 This will be the HI contribution to PRISM

Line 6: Transfer of funds by PRISM to HI account for implementation of dedicated activities

Line 7: Payment by HI for planned activities

Line 8: Transfer by ENABEL to DA in the National Bank of Rwanda

Line 9: Transfer by PRISM to operation account

Line 10: Payments by the project to suppliers

Line 11: Direct payment by ENABEL to suppliers

Line 12: Counterpart contribution transfer GoR/PRISM operation account

Line 13: Payment for taxes and other GoR funded activities

Audit

298. **External Audit.** The current projects are all being audited by the Office of the Auditor General (OAG) as mandated under the government Act/Law. The Office has legal personality and financial and administrative autonomy; hence, while discharging its responsibilities, the Office is independent and does not receive any injunctions from other organs. The OAG has been a member of INTOSAI and AFROSAI for the past twelve years, and the financial audit methodologies applied conform to international standards.

299. Reviews of the quality of the OAG reports for existing projects indicate highly satisfactory performance ratings, with positive comments given for the level of detail of the audits and use of acceptable standards (INTOSAI auditing standards). It is recommended therefore that RDDP will also be audited by the OAG. A complete set of Financial Statements specific to PRISM will be prepared in accordance with International Public Sector Accounting Standards (IPSAS) – modified cash basis, audited by the OAG and submitted to IFAD before the 31st December.

Procurement Procedures and Management

359. **Introduction.** The overall procurement responsibility will be under RAB, but the Rwanda procurement Law allows for the delegation of the procurement function by the Accounting officer to a Procuring Entity (PE). In this regard, the SPIU is considered a PE, and will have delegated authority from the DG RAB (herein referred to as the accounting officer) to undertake procurement processes. The procurement unit at the SPIU is made up of four experienced staff that includes a head of department and one procurement officer attached to every project within the SPIU. PRISM too will be required to recruit two procurement specialists for both IFAD and ENABEL financing in order to follow their respective procurement guidelines which are different on some aspects.

360. According to the IFAD general conditions for financing, 'Procurement of goods, works and services shall be carried out in accordance with the provisions of the Borrower/Recipient's procurement regulations; to the extent such are consistent with the IFAD Procurement Guidelines. Therefore, for financing that will be channeled through RAB/SPIU bank accounts, as far as possible, national procurement procedures will be applied, except for guidelines specific to ENABEL or IFAD (e.g. threshold for no objection requests and use of ICB for given thresholds). As for funds that do not flow through PRISM bank accounts, co-financiers such as Heifer will apply own procurement guidelines. Special consideration, however, will be given to specialized activities mentioned in the project document which will be co-financed and implemented jointly with ENABEL, through VSFB as an implementing partner. In such instances direct contracting method of procurement will be applied. As for funds that do not flow through PRISM bank accounts, co-financiers will apply own procurement guidelines. General conditions further state that each Procurement Plan shall identify procedures which must be implemented by the Borrower/Recipient in order to ensure consistency with the IFAD Procurement Guidelines'. By specifying that the borrower's or recipient's procurement regulations must be consistent with IFAD's procurement guidelines, and by requiring the borrower/recipient and the Fund to agree on mandatory procedures, it ensures that there is consistency, and that there is a more predictable and coherent approach to procurement processes.

361. General principles as established in IFAD's Project Procurement Guidelines are to be followed at all times. In addition;

- The responsibility for project and programme implementation and for procurement using IFAD funds lies with the Government.
- IFAD ensures that the proceeds of any financing are used only for the purposes for which the financing was provided, after a full, fair and legitimate competition among the bidders with due attention to the principles of transparency, efficiency, effectiveness and economy.

- IFAD may permit the adoption of the Borrower's national procurement regulations provided that such regulations are compatible with IFAD's guidelines.

362. Project Specific principles are;

- Procurement is carried out in accordance with the Financing Agreement and the Letter to the Borrower (and PIM) and any amendments thereto as reflected in the Fund's Mission Reports (e.g. supervision reports, mid-term reviews, back-to-office reports, aide-memoires, and correspondence);
- Procurement is to be conducted within the project implementation period (from the date of effectiveness to the date of completion). Procurement cannot be undertaken between the date of completion and the closing date;
- Does not exceed the availability of funds duly allocated by the financial agreement
- Is consistent with the approved Annual Work Plan and Budget; and
- Provides the best value for money: Best value does not necessarily mean the lowest initial SPIU option, but rather represents the best return on investments, taking into consideration the unique and specific circumstances of each procurement activity; the balance of time, cost and quality required; and the successful overall outcome of the contract in meeting its original objectives.

363. **National rules and regulations.** Public procurement in Rwanda is governed by the Law on Public Procurement no. 12/2007 of 29/03/2007 and ministerial order no. 001/08/10/MIN of 16/01/2008 establishing the procurement regulations. The Law on Public Procurement applies to procurement conducted by Central Government authorities, Local Government authorities, public institutions, Commissions, Government projects, parastatals, agencies or specialized institutions. The 2007 Law, based on the UNCITRAL model brings to a new level the existing public procurement framework and is generally consistent with international standards.

364. The Government has also undertaken the use of national Standard Bidding Documents (SBDs), modeled after the World Bank's SBDs. All are published on the RPPA website (<http://www.rppa.gov.rw/>) for public use. In addition to the amendment to the law, RPPA has prepared a Standard Manual for Public Procurement (User's Guide) for the benefit of practitioners. With this action one of the gaps identified under the current assessment (lack of a unique national manual for procuring entities) has been filled.

365. According to the Law, RPPA retained the responsibility for conducting procurement processes (except preparation of the bidding documents) for a three years transition period for agreed thresholds. The final move to decentralization in February 2011 followed a period of gradual devolution (with an annual increase in authority for the decentralized entities). It is now enacted that as from 20 March 2012, RPPA only exercise regulatory functions, and has devolved all procurement processes to the government procuring agencies (Ministries and projects i.e.). It is on this basis that for all IFAD funded projects there is no longer need for "no objection" request from the RPPA.

Procurement and prior review thresholds. The following procurement and prior review thresholds shall apply:

Procurement Thresholds Currency: US\$				
	International competitive bidding (ICB)	National competitive Bidding (NCB)	National Shopping	Prior-Review Thresholds
Goods	$\geq 250,000$	$> 100,000 \text{ to} < 250,000$	$\leq 100,000$	$\geq 100,000$
Works	$\geq 1,000,000$	$> 200,000 \text{ to} < 1,000,000$	$\leq 200,000$	$\geq 200,000$
	Request for proposals internationally	Request for proposals nationally	Request for quotations (National Shopping)	
Services	$\geq 200,000$	$> 100,000 \text{ to} < 200,000$	$\leq 100,000$	$\geq 100,000$

366. **Internal Tender Committee.** The Internal Tender Committee is already in place. Appointment of members to the tender committee is the responsibility of the DG RAB. Currently, the Internal Tender Committee is made up of five members; Tea Specialist (Chairperson), Climate and Environment Specialist (Vice chairperson), Access to Finance Specialist, Market Support Specialist, and a procurement officer (as secretary depending on the project issuing the tender). A member of the tender committee has a mandate of 3 years – renewable only once. Half of the Internal Tender Committee cannot have their membership renewed at the same time. PRISM will use the same tender committee.
367. **Contract management.** Contract management will be regulated by the law on public procurement. There is however, one specific arrangement with regard to practices of the SPIU where; if a contract is amended with the increase of contract amount, the amendment will be signed by both parties, whereas when the contract is extended without increase of contract amount, a letter will be signed by the DG RAB notifying the contractor of the extension of contract period and indicating the reasons of this extension.
368. **Fraud and Corruption :** The Revised IFAD Policy on Preventing Fraud and Corruption in Its Activities and Operations (hereinafter, the "Revised Policy") applies to individuals and entities that receive, apply to receive, are responsible for the deposit or transfer of, or take or influence decisions regarding the use of proceeds from IFAD financing or financing managed by IFAD, including, but not limited to, implementing partners, service providers, contractors, suppliers, subcontractors, sub-suppliers, bidders, consultant and any of their agents or personnel (all such individuals and entities are collectively referred to as "Third Parties" or "Third Party"). Pursuant to the Revised Policy, third parties shall refrain from engaging in the following practices, which are

considered to be prohibited practices when engaged in connection with an IFAD-financed and/or IFAD-managed operation or activity:

- (i) a "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value in order to improperly influence the actions of another party;
- (ii) a "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party in order to obtain a financial or other benefit or to avoid an obligation;
- (iii) a "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including improperly influencing the actions of another party;
- (iv) a "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to improperly influence the actions of that or another party;
- (v) an "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering or concealing evidence that may be material to an investigation by IFAD or making false statements to investigators in order to materially impede an investigation by IFAD;
 - (b) threatening, harassing or intimidating any party in order to prevent that party from disclosing its knowledge of matters relevant to an investigation by IFAD or from pursuing such an investigation; and/or
 - (c) the commission of any act intended to materially impede the exercise of IFAD's contractual rights of audit, inspection and access to information, provided for under clause 62 below.

In pursuance of this policy:

- (i) Third Parties shall disclose, in the course of a procurement process or any time thereafter, information relating to themselves or any of their key personnel concerning:
 - (aa) relevant criminal convictions, administrative sanctions and/or temporary suspensions;
 - (bb) agents engaged in connection with a procurement process or the execution of a contract, including the commissions or fees paid or to be paid; and
 - (cc) any actual or potential conflict of interest in connection with a procurement process or the execution of a contract;
- (ii) Third Parties shall promptly report to IFAD any allegations or other indications of prohibited practices that come to their attention by virtue of their involvement in an IFAD-financed and/or IFAD-managed operation or activity;
- (iii) IFAD possesses jurisdiction to investigate allegations and other indications of prohibited practices and to impose sanctions on Third Parties for such practices in connection with an IFAD-financed and/or IFAD-managed operation or activity;
- (iv) Third Parties shall fully cooperate with any investigation conducted by IFAD,

including by making personnel available for interviews and by providing full access to any and all accounts, premises, documents and records (including electronic records) relating to the relevant IFAD-financed and/or IFAD-managed operation or activity and to have such accounts, premises, records and documents audited and/or inspected by auditors and/or investigators appointed by IFAD;

- (v) Third Parties shall maintain all accounts, documents and records relating to an IFAD-financed and/or IFAD-managed operation or activity for a period of 3 years after completion of the bid;
- (vi) Should IFAD determine that a Third Party has engaged in any of the prohibited practices defined under clause 61 above, it may impose on the Third Party any of the administrative sanctions provided by the Revised Policy, Section F, (ii);
- (vii) During the course of an IFAD review or investigation, or pending the conclusion of a sanctioning process, IFAD may decide, at any time, to temporarily suspend payments to a Third Party or to temporarily suspend its eligibility to participate in IFAD-financed and/or IFAD managed operations and activities for an initial period of six (6) months, subject to a possible extension of that suspension for an additional period of six (6) months, as provided by the Revised Policy, Section F, (i);
- (viii) Public entities receiving IFAD financing or financing managed by IFAD and any of their agents or personnel and private entities receiving IFAD financing or financing managed by IFAD and any of their agents or personnel shall terminate or suspend the contract if such termination or suspension is required as a consequence of a temporary suspension or sanction imposed or recognized by IFAD;

369. Furthermore, the project's attention is drawn to IFAD's policy of unilaterally recognizing debarments imposed by other International Financial Institutions if such debarments meet the requirements for mutual recognition under the Agreement for Mutual Enforcement of Debarment Decisions.

Monitoring and Evaluation

Monitoring and evaluation

370. The programme will have a common M&E system with a number of common indicators for both interventions, that will feed into MINAGRI's new management information system (MIS), IFAD's new Operational Results Management System (ORMS), and ENABEL "PILOT" system.

371. Monitoring & evaluation (M&E) are closely linked to the plans described above. The M&E system will collect, collate and analyse data, both qualitative and quantitative, to inform decision-makers and management about the project progress against expected result, identify implementation bottlenecks and take timely corrective action when needed.

372. The IFAD supported project employs several complementary mechanisms to keep track of and analyse its achievements: a Management Information System (MIS),

baseline, mid -term and completion surveys, thematic studies and joint reviews (participatory assessments); as well as less standardised mechanisms, including feedback on the implementation of agreements. The MIS will act as database to track and analyse implementation achievements of outputs, outcomes and impacts.

373. **Management information system (MIS).** The MIS keeps track of implementation progress and is chiefly concerned with tracking activities and results (outputs and outcomes). The MIS is developed by the SPIU and the project M&E officer and aligned with the MINAGRI's MIS. It will collect information and report on the project components, Logical Framework and AWPBs progress. The MIS is updated on an as & when-basis, and reports are produced at least quarterly.
374. The risks identified in the PRISM risks matrix, as well as other external factors that come to affect the Programme during its implementation are monitored as well, and indicators gauging the effect and likelihood of these risks are included in the MIS.
375. **IFAD Core Indicators.** Relevant indicators have been identified in the PRISM log frame and targets estimated. Each intervention/project will have its own log frame but it will reflect the partner's indicator too. The indicators relate to the different levels (output, outcome and impact), and include IFAD Core Indicators (CIs), relevant COSOP indicators, as well as project specific indicators. The log frame will be updated constantly and presented to the supervision mission which is in charge of reviewing and validating progress and data reported in the log frame.
376. **Baseline, mid-term and completion surveys.** In order to capture information on PRISM effects and impacts, separate studies will be undertaken jointly by IFAD and ENABEL to evaluate how successful PRISM is vis-à-vis its overall goal. These studies inter alia show whether the economic and financial benefits of the programme have been predicted correctly. The baseline studies and follow-up surveys combine collection of basic demographic and socio-economic data with application of the Minimum Diversity Diet for women analysis, in order to understand and assess impacts on poverty reduction.
377. **Studies.** Good monitoring and evaluation requires understanding how an intervention translates into an impact on poverty, nutrition and resilience. To this end, PRISM has funds to undertake in-depth studies into the mechanisms that are expected to increase the small livestock production and the access to market (e.g. mapping of the financial sector, market assessment). The studies will be outsourced based on a term of reference and an appropriate procurement process. For the tracer studies into land tenure a single source has been identified during programme design.

Learning and knowledge management

378. The core relevance of the M&E system is in the use of the information to improve current project performance and results and inform the Government and development partners on future investments.
379. A knowledge management strategy for the drought-prone agricultural sectors (in alignment with the broad KM and communication strategy of MINAGRI) will be developed built on three core pillars of knowledge management: people, processes and technology. The strategy will outline systems, processes and responsibilities to

ensure that the project will generate, capture, analyse, document, package and disseminate knowledge and lessons learnt throughout the project as well as externally.

380. Learning and knowledge management is a cross-cutting activity and derives its lessons from knowledge management, monitoring and evaluation in all components of the Programme. This implies that all technical coordinators are party in the knowledge management process and responsible for drawing lessons for the sub-set of activities that they are responsible for.

Communication and Reporting

381. Reporting will be done jointly by the two projects. The programme will collaborate with the Agricultural Information and Communication Centre (CICA) within MINAGRI to produce relevant knowledge products and ensure documentation of lessons learnt, best practices and success cases. Communication materials, such as press releases, extension materials, and radio spots will be prepared and distributed through a PRISM and relevant.
382. The SPIU KM Officer is responsible for a good presentation of the external communication. Whereas the technical coordinators and the M&E officer (and at times the Project Coordinator) will contribute most of the substance, she/he will structure all standard external communications, such as recurrent reports, study reports, website material, factsheets and press releases. This includes attention to branding, lay-out and text editing.
383. **Reports.** Reporting will be done jointly by the two projects. The programme will prepare quarterly, semi-annual and annual progress reports. The progress reports will include a qualitative and quantitative discussion of progress; a review of programme management and a section dedicated to issues affecting the effective programme implementation. This section shall include proposals on how to resolve the issue, and will serve to inform decision-making in the PSC.
384. **Website.** A simple website will be developed for PRIMS, preferably embedded within the website of MINAGRI. The website will provide access to the reports published by the project. Links will be provided to relevant departments.
385. **Factsheets.** These provide succinct summaries of lessons learned in the programme and shall have a wide circulation. They are essentially brief and should lead the interested reader to the concerned key informant (technical coordinator) and the relevant technical documentation. Factsheets describe lessons that the PMU thinks should be incorporated into relevant programmes and policies; and are produced to influence decisions.

Supervision and implementation support

386. IFAD and ENABEL will undertake jointly one supervision mission and one follow up mission each on a six-monthly arrangement are proposed as per current IFAD supervision and implementation support arrangements.
387. **Supervision missions** will adhere to the standard approach set by IFAD. Outcomes of the Mission will be recorded in an Aide-Memoire that is signed by Government and IFAD; followed shortly by a more detailed Supervision Report and a Management Letter from IFAD. Supervision missions will focus on the AWPB and will help adjust the Logical Framework, if and when needed. Each mission will include review of fiduciary

management and procurement processes. For reasons of continuity, there will be as much continuity in the mission members as possible.

388. **Implementation support** is more flexible and can focus on issues identified by the PMU and / or the supervision missions. Mission composition is, however, decided upon by IFAD.

Grievance and redressal procedures/ complaints handling

PRISM grievance redress mechanisms

389. Communities and individuals who believe that they are adversely affected by PRISM can submit complaints through the grievance redress mechanism of the project. The mechanism ensures that complaints are promptly reviewed in order to address concerns related to PRISM. Complaints are submitted to an assigned person in the SPIU who determines whether harm occurred, or could occur, as a result of IFAD non-compliance with its policies and procedures. For more information on IFAD's Accountability and complaints procedures, please visit <https://www.ifad.org/en/accountability-and-complaints-procedures>.

1.1 Mechanism for resolving grievances and complaints at community level

390. Grievance redress mechanisms provide an avenue to express concerns, achieve remedies for communities, promote a mutually constructive relationship and enhance the achievement of project development objectives. Grievance redress mechanisms are increasingly important for development projects where ongoing risks or adverse impacts are anticipated. They serve as a way to prevent and address community concerns, reduce risk, and assist larger processes that create positive social change. They support building strong and effective relationships with all those directly impacted by project activities. The management of grievances is therefore a vital element of stakeholder management and an important aspect of risk management for the project.

1.2 Grievance redress mechanism

391. Stage 1: The grievance /complaint is made by a minimum of two people, who should be nationals of the country concerned and/or living in the project area. Complainants should first bring the matter before Project District focal point to explain their concern. The District focal point will then review the complaint and will assist in filling in the Project Complaint Register Form, that SPIU will provide, that will specify the reasons for the concern(s) with a possible/preferable settlement proposal. The complaint and settlement proposal in writing will be signed by the complainant(s) and the District focal point.
392. The issue may be brought straight to IFAD if the complainants feel they may be subject to retaliation if they were to go to the government/lead agency first. IFAD guarantees confidentiality if requested by the complainants.

393. Stage 2: One copy of the Project Complaint Register Form will be filed at the District project focal point level, one copy given to the complainant(s) and one will be submitted to SPIU. Within 15 working days after receiving the official complaint, a member of SPIU, related field specialists and the District focal point will visit the complainant to evaluate the severity of the grievance and determine the appropriate management response. This may include commencing an investigation into the causes of the concern. If a solution is found, it will be captured in writing and the document signed by all concerned parties.
394. Stage 3: In cases where the complainant is dissatisfied with the outcome of the intervention in stage two, an official complaint appeal will be submitted to the SPIU for settlement within 10 working days. If a solution is reached, it will then be signed by all concerned parties.
395. Stage 4: In cases where the settlement or solution of the grievance/complaint is not acceptable to the complainant, the next step will be TWO OPTIONS:
 396. OPTION 1: To take the matter to an appropriate court. This implies that the matter at this point is a judicial issue to which the applicable Rwandan laws will be applied. At this stage, the responsibility will be with the courts and not with the SPIU.
 397. OPTION2: To bring the matter to IFAD. Complaints are received by IFAD's Programme Management Department (PMD), which will refer the complaint to the responsible regional division director and country programme manager. The regional division then examines the complaint and if eligible contacts the lead agency (SPIU), or governmental body overseeing the lead agency, to decide if the complaint is justified. If the complaint is not justified, the regional division informs the complainants in writing. If the regional division finds the complaint justified with proof of actual or likely harm through IFAD's failure to follow its policies and procedures, IFAD will take action. This may consist of making changes to the project or requiring the government to observe its obligations under the Financing Agreement. The regional division informs the complainants of the outcome.
398. If complainants disagree with IFAD's response through the above offices, they may request that an impartial review be conducted by the Office of the President and Vice-President (OPV). The OPV decides how such complaints are examined, including if necessary, contracting external experts to review the matter. Complainants are informed of the results of the review.

Anticipated grievances

399. Potential grievances could include:

- Conflicts over land ownership involving project beneficiaries
- Negative Impact of public/private infrastructures supported by the project (e.g. smell)
- Degradations caused by animals supplied by the project
- Distortion of competition

Grievance prevention

400. There are ways to proactively solve issues before they even become grievances. Project implementers should be aware and accept that grievances are likely to occur. Dealing with them is part of the work and they should be considered in a work plan. Project implementers can prevent complaints by the following:

- Providing sufficient and timely information to communities
- Conducting meaningful community consultations involving all stakeholders
- Building capacity for project staff, particularly in community facilitations and other field-related issues

Timeframe

401. There is no standard model for grievance resolution. The best ways to solve conflicts are in most cases through local mechanisms that take into account the specific cultural context, local customs, and project conditions and scale. In its simplest form, a grievance mechanism can be broken down into the following components:

- Receipt and register of a complaint
- Formulate a response
- Select a resolution approach, based on consultation with affected person/group.
- Implement the approach
- Settle the issues
- Track and evaluate results
- Learn from the experience and communicate back to all parties involved.

Annex 8: Draft Terms of reference of key project staff

1. Project Operations Manager

Under the authority of the SPIU coordinator, the Project's Operations Manager is in charge of the management of PRISM's daily activities according to the financing agreement signed between the Government of Rwanda and IFAD. He (She) will respect all documented agreements in relation to the management of the project (aide memoire, back to office report, audit report, evaluation reports, midterm review, and completion report). He (She) is responsible of the subsidiary agreements between the Project and different service providers. S/he will report to the SPIU Coordinator and RAB DG especially ensuring timely physical progress report and financial statements in the required format. The Project Operations Manager will perform the following duties:

- Provide orientations for the implementation of the project;
- Ensure the project performance in accordance with the Rwandan policies on performance contracts and IFAD procedures;
- Coordinate the project team and ensure partnership with key stakeholders;
- Coordinate the implementation of sub-component 3.1 Policy and regulatory Support
- Ensure synergies between project components to maximize the project's impact;
- Supervise the project planning and implementation according to the financing agreement, the recommendations of the steering committee as well as the recommendations of the supervision missions;
- Timely coordinate the preparation of the annual work plan and budget as well as progress reports;
- Supervise the preparation and negotiation of the MoUs, contracts and other agreements with partners and service providers;
- Execute the approved annual action plan and budget;
- Identify areas which require external support and recruit suitable consultants;
- Guide the consultants, experts and contractors toward the realization of planned project outputs and evaluate their performance;
- Monitor the project implementation progress;
- Support the implementation support missions and the follow up missions.

Expected outputs:

- Project general objective, specific objectives and activities timely reached within the frame of the financing agreement;
- Project planning and budgeting processes implemented timely with the full participation of key partners in a participation approach;
- Project physical and financial report timely submitted to the relevant authorities in accordance to the provision of the financial agreement;
- Disbursement procedures done in accordance to the project design report;
- The Project impact data updated regularly and disseminated to project partners for measuring the results across all project components;
- Excellent relations with line ministries, implementing agencies, project beneficiaries and other key partners.

Qualification: The Operational Manager must have a Master's degree in in the following areas: Agriculture or Animal Production with 5 years of working experience or a Bachelor's degree with 10 years of working experience.

Key competences:

- Fluency in Kinyarwanda, English or French;
- Computer literacy;
- Good communication skills;
- Ability to work with project's implementing partners.
- Ability to meet deadlines;
- Working experience with IFAD funded project is an advantage.

Duration: 2 years renewable performance based contract with a 6 months' probation period.

2. Livestock specialist

Under the authority of Project's Operations Manager, the Livestock specialist is in charge of the technical coordination and oversight of PRISM's activities in the field of animal production. He will be coordinating and leading the implementation of Component 1 Climate-smart intensification of small livestock production systems, but also contribute to the implementation of Component 2, on technical aspects related to production, in collaboration with the value chain specialist. Project Operations Manager will perform the following duties:

- Coordinating and facilitating planning, implementation and reporting on projects activities for animal production and animal health in the project area;
- Coordinating the multiplication and dissemination of improved animal breeds;
- Participating in the development of technical training and coaching curricula on animal production
- Supervision and methodological support to business/technical coaches
- Establishing strategic partnership with pertinent public institutions, implementing partners, private sector, national and regional civil society organizations for enhancing effectiveness, and efficiency in veterinary service delivery and disease control
- Establishing partnership with relevant stakeholders in multiplication and distribution of improved forage species
- Support the dissemination of climate smart technologies (biogas, water harvesting)

Expected outputs:

- Component 1 outputs and activities timely reached as per the log frame;
- Planning and budgeting processes for Component 1 implemented timely with the full participation of key partners in a participation approach;
- Project physical and financial report for Component 1 timely submitted to the relevant authorities in accordance to the provision of the financial agreement;

Qualification: Master's Degree in Animal sciences, Animal Husbandry and Veterinary sciences with 3 year of working experience or Bachelor's holder in Animal Sciences or Veterinary Medicine with 5 years of working experience in Animal Resources.

Key competences:

- Fluency in Kinyarwanda, English or French;
- Computer literacy;
- Good communication skills;
- Ability to work with project's implementing partners.
- Ability to meet deadlines;
- Experience in the small livestock sector;
- Working experience with IFAD funded project is an advantage.

Duration: 2 years renewable performance based contract with a 6 months' probation period.

3. Access to Finance Specialist

Under the authority of the Project Operations Manager, the Access to Finance Specialist (AFS) is in charge of activities of the Project aiming at facilitating access of the Project beneficiaries to adapted formal financial services to start up and / or develop their small livestock enterprises. This refers to vulnerable households under the graduation pathway, Youths supported to start small livestock production enterprises, and Smallholder farmers engaged in poultry and pig production under the productive alliance model. He (She) will also ensure that eligible beneficiaries and value chain private sector actors access matching grants designed to incentivize investments and facilitate linkage with financial institutions (FI). He (She) will also be responsible for the financial innovations component of the Project, and involved in design and supervision of studies and knowledge management activities related to his area of expertise.

The AFS will work in close consultation with the Value Chain Specialist and Livestock Specialist, in line with the Project operational documents and guidelines, including amongst others the Project Design Report (PDR), the Project Implementation Manual (PIM), and the Annual Work Plan and Budgets (AWPB).

Specific duties:

- a) Supervision of the study on the mapping of the financial sector.
- b) Technical assistance to finance institutions to develop adapted product and delivery channels for the Project beneficiaries
 - Negotiate with the Partner or the Service provider to be contracted by the Project annual work plan and budgets, including targets to be achieved and performance indicators
 - Monitor activities and performance of the Partner / Service provider through desk review of reports by the Partner / Service Provider, regular management meetings with Partner / Service Provider, and on-site missions to interact with FI and other stakeholder involved, including private actors involved in productive alliances and farmers.
- c) Organize district based fora to link farmers, value chain actors and FIs, in coordination with district authorities.
- d) Monitor and facilitate matching grant management by BDF based on addendum to the MoU signed with BDF, through desk review of reports by BDF, regular management meetings with BDF and on site missions to interact with Grantees.
- e) Support to financial innovations
 - Identify potential partners for development of innovations.

- Submit proposal for partnerships to the Screening committee (or run a selection process for insurance service provider if needed – see Annex xx for draft ToR).
 - Develop MoU with the Partners.
 - Monitor development of the innovations.
- f) Design and supervision of studies and knowledge management activities related to his area of expertise.

Expected outputs

- Mapping of the financial sector available.
- Project beneficiaries are linked to formal financial services.
- Quadripartite agreements signed and implemented for xx Productive alliances.
- The Project provides TA to a xx Banks, MFIs and SACCOs
- Fora to link farmers and financial institutions are organized.
- Project beneficiaries and private sector actors access matching grants
- Innovations for digitalization of financial services and insurance products (poultry and pig) rolled out.
- Knowledge management products developed in areas related to access to finance.

Qualification

At least Masters holder in economy, finance, banking, business or equivalent field, with at least 5 years' experience in rural / agricultural finance in Rwanda, in management / high level positions, in Financial Institutions, Donor funded Projects or NGOs.

Key competences

- Fluent in Kinyarwanda, English or French.
- Computer skills.
- Good communication skills'
- Good writing skills.
- Good knowledge of the financial sector in Rwanda.

Duration: 2 years renewable performance-based contract with a 6-month probation period

4. Monitoring &Evaluation Officer

Main duties:

The Monitoring and Evaluation Officer will serve as the main focal person for all monitoring and evaluation related activities for the Small Livestock Value Chains Development Project. S/he will assist and report to the Head of the MIS and assists him/her in his/her function of project planning and data management. S/he will be responsible for development and updating of the M&E system. S/he will provide a mechanism for systematic flow of information on the project's performance, and assist in institution building for M&E of the SPIU.

Specific duties:

The tasks to be performed by the M&E Specialist are:

- Lead development of and oversee the review of programme level Monitoring &Evaluation (M&E) plan and associated work plans for each component/activity;
- Developing and establishing a pragmatic and participatory project management system (MIS) within the SPIU to capture input-output data as well as outcome and impact on project objectives assisted by consultants;
- In addition to the indicator identified in the project logical framework, identify appropriate monitoring indicators for each component (gender and sex disaggregated as relevant) and ensure that they are used in measuring the Project progress;
- Systematic collection of monitoring data provided by component heads (who will obtain most of it from reports by implementing partners), collation of the information and compilation of quarterly comprehensive M&E and progress reports;
- Providing feedback to component heads for onward transmission to impending partners;
- Analysing data (linking inputs to outputs, and outputs to outcome) and preparing analytical reports for project management on implementation progress, performance and impact;
- Establishing and managing the framework for the baseline survey; Oversee and participate in evaluations and assessments;
- Measuring achievements against targets and measuring the impact of project activities on beneficiaries through agreed indicators and using both data that flows regularly from the M&E system and additional data collected through special surveys, participatory workshops with the beneficiary groups and participatory impact assessment studies that s/he will organise;
- Review and update the log frame, IFAD Core Indicators and programme key performance indicators;

- Coordinating activity planning through AWPBs within the SPIU in collaboration with other PRISM staff, and also monitoring performance of all Project parties;
- Ensuring that all participating institutions and project officers maintain updated records on their activities and feed this information into the overall MIS with the close collaboration of the other officers (K&M, Database & Archives Officers);
- carrying out regular internal evaluations, so as to give early warning on project performance;
- Developing a simple reporting system in monitoring all projects' activities;
- Develop a knowledge management and communication strategy in collaboration with the KM officer at SPIU and propose a four year implementation plan with associated budgets and monitoring;
- Closely cooperate and coordinate with the Knowledge Management Officer at SPIU for the design, quality, development and completion of all assessments, analytical reports, case studies, success stories etc;
- Coordinate and cooperate with the Knowledge Management Officer for promoting information sharing on all aspects related to programme activities among stakeholders.
- Ensure that innovative experiences, learning and good practices are captured
- synthesized, documented and shared continuously within the programme, within the relevant government ministries with the IFAD country portfolio manager and with in-country partners, IFAD and other regional and international partners.
- Ensure that lessons and good practice emerging from the programme support knowledge based decision making and policy dialogue.

Outputs (expected results):

- Simple, efficient and cost-effective MIS;
- Planning and budgeting process implemented timely on a participatory approach and final consolidate project AWPB submitted timely to MINAGRI and IFAD;
- Quarterly project progress reports available to all project partners;
- Project impact information regularly updated and available to all project partners;
- KM and communication strategy;
- Good communications with all project partners, especially at local structure levels;

Qualifications:

At least bachelor's degree in one of the following Domain: Project Management, Rural Development, Agricultural Economics, or Business

Administration. Proven knowledge and practical experience of at least 5 years in project M&E. Computer literacy (Microsoft office and statistical software). Communication and result oriented management skills. Fluent in English (reading, writing and speaking) with a very good knowledge of the second language (French). Fluent in Kinyarwanda. Prepared to work in an interdisciplinary team, under pressure and meet crucial deadlines.

Duration: 2 years renewable performance-based contract with a 6-month probation period

5. Nutritionist Specialist

The Nutrition Specialist will be engaged in the SPIU as a dedicated expert and focal point on nutrition with the responsibilities to coordinate and facilitate the implementation of the nutrition interventions defined in project at national and district levels. The Nutrition Specialist will ensure the operationalization of nutrition mainstreaming in the project investments and proper coordination of nutrition related activities implemented under the project. In collaboration with the technical team, he will provide guidance on priority actions to be taken. In addition, the Nutrition Specialist will support the team in providing direct technical support to project in the development and preparation of action plans, as appropriate.

Specific duties:

- In close liaison with other SPIU staff, particularly the Gender, Targeting and Mobilisation Officer, ensure adequate integration of nutrition in the project documents such as M&E system, Annual Work Plan and Budget and Progress reports;
- In collaboration with the project M&E specialist, ensure adequate data collection on nutrition indicators and entry in the Project's M&E database (e.g. develop terms of reference for baseline/end-line studies); ensure that a specific consultancy for the development of the baseline study for MDD-W is hired;
- Ensure that activities and deliverables are met on time and as per the set standards;
- Establish and maintain working relationships with the line ministries (such as health, gender, education) to build synergy in nutrition-sensitive interventions in project activities and establish coordination mechanisms; ensure partnership with the National Early Childhood Development Programme for the outline of training curricula for nutrition education and their delivery to youth cooperatives;

- Support the coordinator to establish local partnerships on nutrition (UN, Private sector, CSOs) to support implementation and technical assistance; in particular, ensure that coordination with FAO is in place for the dissemination of Food-Based Dietary Guidelines (FBDGs) in the sectors/ communities where the project operates;
- Facilitate the implementation of nutrition activities in close collaboration with relevant stakeholders (e.g., implementing partners, extension workers, community service providers); in particular, the Nutrition Specialist would ensure that coordination is maintained with the Districts (District Plan to Eliminate Malnutrition, Health officers, nutrition specialists at the district level) for the design and delivery of nutrition education and other nutrition-related activities;
- Coordinate capacity building and training sessions on nutrition-sensitive interventions for project staff, implementers and extension workers;
- In close liaison with the SPIU staff, support the documentation of best practices and lessons learned on nutrition for in-country and global dissemination; ensure harmonisation between strategies and exchange of good practices and lessons learned between PRISM and RDDP on nutrition-related issues;
- Perform other duties as required in the overall operations of the project.

Expected outputs:

- Outline of nutrition training contents(project inception phase);
- Delivery of AWPB, Progress reports, project documentation related to nutrition issues and activities;
- Coordination mechanisms for the delivery of nutrition activities are settled.

Qualifications:

At least a bachelor's degree in health, nutrition, Food science and Technology, or social sciences with expertise in food policy or nutrition issues.

3 years working experience. Having worked with an IFAD project is an advantage.

Key Competencies:

Communicates effectively to varied audiences, including during formal public speaking; Able to work effectively in a multi-cultural environment; Sets high standards for quality of work and consistently achieves project goals; Translates strategic direction into plans and objectives. Analyses and integrates diverse and complex quantitative and qualitative data from a wide range of sources. Quickly builds report with individuals and groups; Identifies urgent and potentially difficult decisions and acts on them promptly; Demonstrates, applies and shares expert technical knowledge across the project.

Languages:

Fluency in Kinyarwanda, English or French

Duration: currently employed under RDDP, the Nutrition specialist will dedicate 50% of the time to PRIMS. 2 years contract renewable upon an annual performance evaluation

6. Gender, Targeting and Mobilisation Officer

Duties and Responsibilities:

The Gender, Targeting and Mobilisation Officer will be engaged in the SPIU as a dedicated expert and focal point on gender with the responsibilities to coordinate and facilitate the implementation of the gender related interventions defined in project at national and district levels. The Gender, Targeting and Mobilisation Officer will ensure the operationalization of gender mainstreaming in the project investments and proper coordination of gender related activities implemented under the project. In collaboration with the technical team, he will provide guidance on priority actions to be taken. In addition, the Gender, Targeting and Mobilisation Officer will support the team in providing direct technical support to project in the development and preparation of action plans, as appropriate.

Specific duties:

- In close liaison with other SPIU staff, particularly the Nutrition Specialist, ensure adequate integration of gender in the project documents such as M&E system, Annual Work Plan and Budget and Progress reports;
- Review basic project implementation processes to provide feedback and suggestions on how to achieve the best possible project outcomes

with respect to targeting, gender equality, women's empowerment and social inclusion;

- Ensure that adequate attention is paid to gender, youth and poverty dimensions of the project in the AWPB (including specific budget allocations), quarterly and annual project progress reports and the M&E system (including capturing of gender and age-disaggregated data).
- Ensure that activities and deliverables are met on time and as per the set standards;
- Establish and maintain working relationships with the line ministries (such as Gender and Family promotion) to build synergy in gender-sensitive interventions in project activities and establish coordination mechanisms; ensure partnership with the Gender Officers or with other relevant stakeholders at the District level for the delivery of gender awareness trainings to youth cooperatives;
- Coordinate capacity building and training sessions on gender-sensitive interventions for project staff, implementers and extension workers;
- In close liaison with the SPIU staff, support the documentation of best practices and lessons learned on gender for in-country and global dissemination; ensure harmonisation between strategies and exchange of good practices and lessons learned between PRISM and the other IFAD-supported projects on gender;
- Perform other duties as required in the overall operations of the project.

Expected outputs:

- Outline of gender strategy and contents for gender-awareness training (project inception phase);
- Delivery of AWPB, Progress reports, project documentation related to gender issues and activities;
- Coordination mechanisms for the delivery of gender related activities are settled.

Qualifications:

At least a bachelor's degree in social sciences or related fields with expertise in gender issues.

3 years working experience. Having worked with an IFAD project is an advantage.

Languages:

Fluency in Kinyarwanda, English or French

Key Competencies:

Communicates effectively to varied audiences, including during formal public speaking; Able to work effectively in a multi-cultural environment; Sets high standards for quality of work and consistently achieves project goals; Translates strategic direction into plans and objectives. Analyses and integrates diverse and complex quantitative and qualitative data from a wide range of sources. Quickly builds report with individuals and groups; Identifies urgent and potentially difficult decisions and acts on them promptly; Demonstrates, applies and shares expert technical knowledge across the project.

Duration: currently employed as part of the SPIU supporting the gender strategies of IFAD-funded projects. 2 years contract renewable upon an annual performance evaluation

7. Gender Specialist - Consultant

Duties and Responsibilities:

The Gender Specialist will support the Gender, Targeting and Mobilisation Officer in the SPIU to coordinate the implementation of the gender related interventions defined in project, at national and district levels. Specifically, the Gender Specialist will support the preparation of specific contents for gender awareness trainings to be conducted at both staff level (SPIU, local service providers) and at the group level (youth cooperatives). In addition, the Gender Specialist will provide support in preparing gender sensitive project documents (e.g. progress reports, AWPB, etc.).

Specific duties:

- In close liaison with other Gender, Targeting and Mobilisation Officer, ensure adequate integration of gender in the project documents such as M&E system, Annual Work Plan and Budget and Progress reports;
- Review basic project implementation processes to provide feedback and suggestions on how to achieve the best possible project outcomes with respect to targeting, gender equality, women's empowerment and social inclusion;
- Ensure that activities and deliverables are met on time and as per the set standards;
- Draft the contents of the gender awareness training aimed at SPIU project staff and service providers, to be validated by the Gender,

Targeting and Mobilisation Officer, provide support in the organization of the training and document its results;

- Draft the contents of the gender training to be embedded into the training package aimed at young producers in cooperatives, including: content of the modules, learning objectives and expected results, and exercises;
- In close liaison with the SPIU staff, support the Gender, Targeting and Mobilisation Officer, in documenting best practices and lessons learned on gender;
- Perform other duties as required by the Gender, Targeting and Mobilisation Officer, in the overall operations of the project.

Expected outputs:

- Specific contents for gender-awareness training for SPIU project staff and local service providers are outlined;
- Specific contents for gender-awareness training aimed at youth cooperatives are outlined;
- Progress reports, project documentation related to gender issues and activities.

Qualifications:

At least a bachelor's degree in social sciences or related fields with expertise in gender issues.

At least 2 years of working experience in the preparation and delivery of gender awareness training at project and community level.

Languages:

Fluency in Kinyarwanda, English or French

Key Competencies:

Communicates effectively to varied audiences, including during formal public speaking; Able to work effectively in a multi-cultural environment; Sets high standards for quality of work and consistently achieves project goals; Translates strategic direction into plans and objectives. Analyses and integrates diverse and complex quantitative and qualitative data from a wide range of sources. Quickly builds report with individuals and groups; Identifies urgent and potentially difficult decisions and acts on them promptly; Demonstrates, applies and shares expert technical knowledge across the project.

Duration: 1 year

8. District Coordinators

Duties and Responsibilities:

- The District Coordinator is responsible for coordinating, consolidating, and ensuring smooth implementation of program and operations' activities. At the district level, the District Coordinator represents the project authority to relevant stakeholders. Typically, the District coordinator reports to the Project Operations Manager.
- Depending on the context and mission needs, the District Coordinator develops and implements the project's activities in collaboration with the respective program managers and technical team. The District Coordinator provides general support, guidance, and serves as focal point during planning, and reporting.
- The District Coordinator represents the Project at the District level including general meetings with local authorities, stakeholders' meetings, when requested by the mission coordination. The District Coordinator manages the visit of donors representatives / HQ visitors / other stakeholders whenever requested.
- The District Coordinator monitors the political, economic, and social environment in the area, assesses and analyses the risks, monitors and reports the situation and develops reports and measures relevant to the context.

Qualification:

At least Bachelor's degree in Food Science and Technology, Animal Production with a proven experience of 5 years in dairy sector or Master's degree with 3 years working experience.

Location:

He/she will be based at district level

Key competences:

- Fluent in Kinyarwanda, English or French
- Computer skills
- Milk handling, storage and transport knowledge
- Excellent communication and representative skills (written, oral, cross-cultural)

- Ability to multitask and deal with stressful situations
- Having a driving licence (At least category A)

Duration: 1 year performance-based contract with 6 months of probation period

Annex 9: Draft terms of reference of service providers

Annex 2.1: Draft terms of reference of Business Development Services Providers in charge of supporting the youth entrepreneurship in production

Scope of work

The Business Development Services Provider (BDSP) for young entrepreneurs will be engaged by PRISM to provide support to 1,530 youth (100 per targeted District in average) supported by the project to establish the following start-up businesses:

- Pig fattening: 450 units will be established. Each unit will accommodate 10 pigs and 2 batches will be fattened per year.
- Pig breeding: 50 units will be established. Each unit will accommodate 3 sows. The breeders will supply the fatteners with piglets but will also produce piglets that will be placed under the POG programme for vulnerable households under sub-component 1.1.
- Broiler production: 500 unit will be established; Each unit will accommodate 250 broilers per batch; depending on the cycle duration, they will produce 4 to 6 batches per year.
- Egg production (layers): 500 unit will be established; Each unit will accommodate 250 layers per batch and the duration of each cycle will be around 18 months.

The project will recruit 1 to 3 BDSP. One BDSP should cover at least one province and support 510 beneficiaries.

Duties and responsibilities

The BDSP will provide (i) initial technical and business management training to the 1 530 youth and (ii) continuous BDSP (coaching) to the 1530 youth during the 5 years of project implementation period

initial training: Before the reception of animals and attribution of the startup package, the beneficiaries will undergo an initial training curriculum of two weeks. Each training will gather the 8 to 12 members of the same group. The training will be organized at the District level for the theoretical part, and on selected voluntary farms for the practical aspects. The first week of the training will be dedicated to technical aspects: production itineraries, health management including hygiene and biosecurity, feeding, animal welfare, waste management, production data recording, among other topics. The second week will be dedicated to business, financial management and

social-related aspects: book keeping, financial management and planning, marketing (nutrition education and gender awareness training will also be provided by additional service provider)

Continuous coaching and provision of Business Development Services: Each group will be visited every week by a business coach, who will provide a close follow up and individual support to each beneficiary individually, and to the group. The coaching will relate both to technical issues and business management issues (the BDSP may use different staff to address different topics). The coaches will also provide feedback to the Districts staff and the project on the performance of the youth businesses.

Qualifications

The BDSP will be established private service providers (company or NGO), specialized in the provision of business development services, with experience in the domain of agriculture/livestock and with a target group of youth.

Duration and conditions of contract

- The contract will be established for one year and renewed according to performance.
- The contract will be based on a lump sum per beneficiary including the fees (staff cost) and the operating costs (transport). The project will not purchase vehicles or any other equipment for the BDSP.

Annex 2.2: Draft terms of reference of Business Development Services Providers in charge of supporting the farmers engaged in productive alliances

Scope of work

In line with activities planned under sub-component 2.1 of the PRISM project (Productive Alliances with Input Suppliers) the Business Development Services Providers (BDSPs) in productive alliances will be engaged to provide support to 450 layer farmers and 450 pig farmers supported by the project to establish the following businesses:

- Egg production (layers): 450 units will be established; each unit will accommodate 500 layers per batch and the duration of each cycle will be around 18 months.
- Pig fattening: 450 units will be established. Each unit will accommodate 10 pigs and 2 batches will be fattened per year.

The project will recruit 5 layer BDSPs and 5 pig fattening BDSPs. Each BDSP should cover at least 3 districts, preferably within the same province, and support 90 beneficiary farmers in his/her value chain (either poultry or pig). The location will be the 15 target districts of the project (to be specified) across 3 provinces (North, South and West).

Duties and responsibilities

The BDSPs in productive alliances will provide capacity building in entrepreneurship and financial literacy to the 900 farmers engaged in layer and pig fattening productive alliances. Each BDSP will report directly to the Agribusiness Specialist in charge of the coordination of activities related to productive alliances at the Single Project Implementation Unit (SPIU) for IFAD-funded projects.

The level of effort will gradually raise along the years as the project supports more and more layer and pig farmers along productive alliances, as follows:

Activity	Y1	Y2	Y3	Y4	Y5	Outputs
Recruitment of BDSPs in productive alliances						Business Development Service Providers contracted
BDSP support to layer farmers – total layer farmers to be supported under productive alliance		30	150	200	70	Total 450 layer farmers engaged in productive alliances receive additional support in entrepreneurship and financial literacy
BDSP support to layer farmers – number of farmers per BDSP in layer productive alliance		6	30	40	14	90 layer farmers supported by each BDSP in layer productive alliance
Level of effort for BDSP in layer productive alliance (man/month per BDSP)		0.8	3.2	4.8	3.3	12 man/month per BDSP involved in layer productive alliance
BDSP support to pig farmers – total pig farmers to be supported under productive alliance		30	150	200	70	450 pig farmers engaged in productive alliances receive additional support in entrepreneurship and financial literacy
BDSP support to pig farmers – number of farmers by BDSP in layer productive alliance		6	30	40	14	90 pig farmers supported by each BDSP in pig productive alliance
Level of effort for BDSP in layer productive alliance (man/month per BDSP)		0.8	3.2	4.8	3.3	12 man/month per BDSP involved in layer productive alliance

Initial training: Before the reception of animals and attribution of the investment package, the BDSP will provide an initial training curriculum of 3 days. Each training will gather 6/7 (Y2-Y5) to maximum 10 (Y3-Y4) farmers at a time. This theoretical training will be organized at the District level, and it will be dedicated to business and financial management aspects: book keeping, financial management and planning.

Once the farmers have received their investment package, the BDSP will organize for the farmer groups a 1-day session on a selected voluntary farm, dedicated to the calculation of production costs and establishment of simple, user-friendly monitoring forms that will be used by the farmers to record their expenditures and interventions on a daily basis. On this occasion, the BDSP will seek the presence of a representative of the input supplier involved in productive alliances (i.e. 'Layer Partner'; 'Pig Partner'), who will provide his insight on input-related costs.

Continuous provision of Business Development Services: each individual farmer will then be visited at least once per month over a period of 12 months (for pigs) or 18 months (for layers), to ensure close follow-up of operations and provide backstopping support where needed. Particular emphasis will be put on the cost-benefit analysis and adequation of quantities, quality and prices to the market demand. For the latter, the BDSP in productive alliance will work in very close relation with the other BDSPs (the 'Pig BDSP' and the 'Poultry BDSP') recruited for market facilitation under sub-component 2.2 of the project.

The last part of the support will be dedicated to a 1-day group session for the development of simple, bankable business plans meant to back loan applications for the renewal of the investment package (layer/pig stock) and related working capital (esp. for input-feed purchase).

Deliverables

The key deliverables of the BDSPs in productive alliances will focus around the ability of farmers engaged in productive alliances to:

- 1) Record, calculate and analyse their production costs;
- 2) Monitor their break-even point and make enlightened decisions as regards to working capital needs, selling prices, new investments, etc.;
- 3) Understand the market demand in terms of quality, volumes, timely delivery; and
- 4) Present bankable business plans to financial institutions whenever a loan is solicited.

Qualifications

The BDSPs in productive alliances will be established private service providers (company or NGO), specialized in the provision of business development services, with experience in the domain of agriculture/livestock and active engagement with private sector partners. Key competences include:

- Degree in Agribusiness, Agricultural Economics or other relevant discipline related to Business Management in the agricultural sector;

- Ability to work with rural communities using participatory methods and tools;
- Understanding of forward linkages to markets and financial institutions;
- Strong advisory skills aimed at creating on-the-job learning, mentoring and coaching in micro/small-sized agri-business enterprises;
- Willingness to travel to the field and work closely with the value chain actors;
- Ability to research, analyse and write up complex information in a simple form;
- Good command of written and spoken English and Kinyarwanda.

Duration and conditions of contract

- The contract will be established for one year and renewed according to performance.
- The contract will be based on a lump sum per beneficiary including the fees (staff cost) and the operating costs (transport, per diem, etc.). The project will not purchase vehicles or any other equipment for the BDSP.

Annex 2.3: Draft terms of reference of Business Development Services Providers in charge of market facilitation

Scope of work

402. In line with activities planned under sub-component 2.2 of the PRISM project (Market Facilitation in Small Livestock Value Chains) the Poultry, Pig and Small Ruminant¹⁶⁹ (SR) Business Development Services Providers (BDSPs) will be engaged to link the small livestock producers supported by the project with other actors of the value chains, the traders operating at farmgate and market level, the processors, the abattoirs/slaughter slabs, and the final off-takers (butchers, exporters, ...). The role of the Poultry, Pig and Small Ruminant BDSPs will thus be the one of a match-maker, able to identify the demand and propose adequate products along win-win arrangements.

The project will recruit 1 Poultry BDSP, 1 Pig BDSP and 1 SR BDSP. Each BDSP should cover all 15 target districts (xxx to be specified) across 3 provinces (North, South and West).

Duties and responsibilities

The Poultry, Pig and SR BDSPs will report directly to the Agribusiness Specialist in charge of the coordination of activities related to productive alliances at the Single Project Implementation Unit (SPIU) for IFAD-funded projects. They will undertake their work in close collaboration with (i) the BDSPs/business coaches hired under sub-component 1.2 (Support to Youth

¹⁶⁹ In the case of PRISM, the term “Small Ruminant” involves goat and sheep

Entrepreneurship in Production); (ii) the BDSPs hired under sub-component 2.1 (Productive alliances with Input Suppliers) and (iii) the TA/Consultants hired under sub-component 2.3 (Support to Financial Institutions).

The Poultry, Pig and SR BDSPs tasks will be threefold:

- 1) Develop the supplier network for off-takers among small livestock producers supported by the project across its different sub-components, i.e. young entrepreneurs, farmers involved in productive alliances and farmers vulnerable households supported through the graduation pathway;
- 2) Develop Business Plans (BPs) for private operators of abattoirs and processing units seeking to make public good related investments in essential equipment meant to improve food safety, animal welfare and climate-smart upgrading of their facilities; and
- 3) Facilitate the set up and implementation of small livestock multistakeholder fora foreseen from Y3, and develop mechanisms that will enable their self-sufficiency/sustainability beyond project life.

Deliverables

The level of effort of the Poultry, Pig and SR BDSPs will gradually raise along the years as the project supports more and more beneficiaries, with key deliverables as follows:

Activity	Y1	Y2	Y3	Y4	Y5	Outputs
Recruitment of Poultry, Pig and SR BDSPs						Poultry, Pig and SR BDSPs are contracted
Develop market for young entrepreneurs	605	575	350			1530 young entrepreneurs engaged in the production of pigs, broilers, layers and goats are linked to sustainable markets
Develop market for farmers in productive alliances		60	300	400	140	450 pig farmers and 450 layer farmers engaged in productive alliances are linked to sustainable markets
Develop market for vulnerable HH						40% of vulnerable HH supported under the graduation package are linked to sustainable markets
Development of BPs to modernize/upgrade private processing facilities	2	7	7	7	2	25 BPs to modernize/ upgrade private processing facilities are developed
Support to small livestock multistakeholder fora						Small livestock multistakeholder fora operational and sustainable at regional and national level
Level of effort for Poultry, Pig and SR BDSPs (man/month)	9	36	36	36	36	Total 153 man/month

Qualifications

The Poultry, Pig and SR BDSPs will be established private service providers (company or NGO), specialized in the provision of market facilitation

services, with experience in the domain of agriculture/livestock and active engagement with private sector partners. Key competences include:

- Degree in Agribusiness, Agricultural Economics or other relevant discipline related to Business Management and Marketing in the agricultural sector and establishment of effective market linkages;
- Demonstrated experience (at least 7 years) and practical knowledge of the broad range of livestock marketing functions and activities, such as processing, distribution, regulation, inspection, standardizing, and financing;
- Understanding of forward linkages to financial institutions;
- Ability to work with rural communities using participatory methods and tools;
- Willingness to travel to the field and work closely with the value chain actors;
- Ability to research, analyse and write up complex information in a simple form;
- Strong analytical skills with experience in presenting high quality reports;
- Good command of written and spoken English and Kinyarwanda.

Duration and conditions of contract

- The contract will be established for one year and renewed according to performance.
- The contract will be based on a lump sum per beneficiary including the fees (staff cost) and the operating costs (transport, per diem, etc.). The project will not purchase vehicles or any other equipment for the BDSP.

Annex 2.4: Draft terms of reference of national NGO providing institutional support to 3 national farmers organizations

Scope of work

The local NGO will be engaged by PRISM to provide institutional support to existing or emerging national farmers organizations of the small livestock value chain. Three farmers umbrella organizations could benefit from this support: the Rwanda Poultry Industry association (RPIA), the Rwanda Pig Farmers Association (RPFA) and a potential emerging umbrella organization for the small ruminants value chain (covering both goats and sheep).

Duties and responsibilities

The service provider will provide (i) capacity building of executives of umbrella organizations on governance, management and lobbying and advocacy (ii) organization of exchange visits with farmers' organization in the region.

Capacity building: The executives and board members of these 3 organizations will be trained on matters related to the governance and the management of their organizations, in order to ensure inclusivity, participation of smaller farmers, women and youth in the governance, and avoid elite capture. They will also be trained in financial management, with special emphasis on possible approaches to improve the sustainability of these organizations and reduce their dependency on external partners. Finally, the members will be trained on advocacy and lobbying techniques, to enhance the weight of producers in negotiation processes and policy dialogue.

Exchange visits: the NGO will support the organization of exchange visits and study tours, in priority within the East and Central African Region, to enable the three supported organizations to learn from sister organizations in the region. The role of the NGO will be preparing, organizing, accompanying and debriefing the exchange visits.

Qualifications

This activity will be contracted to a local NGO specialized in governance and support to civil society organizations, with experience in the agriculture/livestock sector.

Duration and conditions of contract

- The contract will be established for one year and renewed according to performance.
- The contract will be based on a lump sum

Annex 2.5: Draft terms of reference for the Partner or Service Provider for provision of Technical Assistance to Financial Institutions

1. Background to the assignment

1.1 Project background and context [To update as needed]

PRISM is a 5 years Project implemented by the Ministry of Agriculture and Animal Resources through the Rwanda Agricultural Board and funded by IFAD. The overall objective of the project is to reduce poverty by empowering poor rural men, women and youth to participate in the transformation of the Rwanda agriculture sector and to enhance their resilience. Specifically, the project seeks to increase competitiveness and profitability of the small livestock sector for the provision of quality products from smallholder producers to domestic and regional consumers.

The project expects to reach at least 50,000 households by 2024, representing 120,000 household members. The targeting mechanism will be based on the national Ubudehe system. The main direct beneficiary group will be the poor and food insecure rural households in Categories 2 and 3. Category 1 - most vulnerable and landless) will be targeted through social mobilization activities and for small ruminants and backyard chicken production. Category 4 "those who own large-scale businesses" could be targeted as sources of training, supplier credit of inputs or buyer credit for access to more lucrative market outlets and could as well be involved as will be involved as drivers in 4P models.

In order to improve the competitiveness of the value chain, the project will develop three groups of activities. The first group of activities will establish clusters and help VC actors from the same cluster to address the poor organization of the value chain, and the insufficient access to services and markets, through promotion of innovative value chain arrangements and improved access to finance. The second group of activities will aim at building technical and business capacities of value chain actors in order to improve the productivity of the production systems, the management of farms and service provision enterprises, as well as the sanitary conditions of slaughtering and processing facilities. The third group of activities will aim at improving the institutional framework (policy, regulations) in order to make the context more enabling for the proposed changes.

The project will help smallholder farmers, who are the primary targets, to benefit from the opportunity offered by the increasing demand for animal products, in particular those from small livestock (eggs, white meat, small ruminant meat), by helping them take an active part in this emerging value chain.

In order to play a more active role in the value chain, smallholder farmers have to improve their competitiveness and their technical and economical performance; this will be achieved through various means including in particular:

- strengthening their technical capacities to enable them to intensify the production and improve the productivity of their small stock

- strengthening their business management capacities to enable them to envisage farming as a business

The project outcome will be achieved through the implementation of 3 components:

- Component 1: Facilitating access to services, finance and market in targeted clusters
- Component 2: Supporting the competitiveness of value chain actors
- Component 3: strengthening the institutional environment

Within 'Component 2: Supporting the competitiveness of value chain actors' access to finance is being supported under the project. The project will facilitate linkage of the smallholder farmers under productive alliance¹⁷⁰ with the financial sector, to finance investments and working capital. It will also contribute to linking vulnerable households under the graduation pathway under component 1 to access formal financial services as one of the graduation indicators, and to linking youths supported under component 1 to financial institutions for the financing of their start up business and further development of the business.

1.2 Overview of the assignment

It is within this context that a specialized service provider is sought to provide technical assistance to selected financial institutions to develop adapted financial products and delivery channels for the beneficiaries the Project, with different approaches for farmers under productive alliances and other beneficiaries of the Project (vulnerable households under graduation pathway and youths).

As a result of these activities it is expected that a total of 210 financial institutions will be supported (x commercial banks, x MFIs and x SACCOs), for linkages with at least xx farmers under productive alliance, xx vulnerable households and xx youths.

2. Scope of work

The service provider shall carry out the following key activities, in close consultation with and under supervision by the Project Access to Finance Specialist:

2.1 For farmers under productive alliances

¹⁷⁰ A productive alliance is a contractual arrangement whereby a group of farmers enters into an agreement with either an aggregator, or a service provider, who guarantees access to market or services to the group, on mutually agreed conditions.

For smallholder farmers supported under the productive alliance model, the Service Provider will support private feed manufacturers and off-takers having developed or in the process of developing productive alliances with farmers to identify and negotiate with financial institutions (FI) for the financing of the farmers, and provide customized technical assistance to these institutions. One FI will be selected for each productive alliance.

Technical assistance will be provided to the FI in close consultation with the private company, for the development of adapted and affordable financial products and secured delivery channels building on the business model of the company and the farmers and modalities of their linkages.

TA will include training of relevant FI agents on poultry and / or pig farm enterprise on production, business model and cash flow, to enable them to do proper appraisal and monitoring of the loans.

A quadripartite agreement will be signed between the private company, representatives of the farmers, the FI and the Project. The agreement will specify features of the financial services to the farmers, targets and loan disbursement plan, conditions for delivery of the services and respective responsibilities of the parties for their delivery. It will in particular include specific responsibilities of the company for the loan repayments (check off procedures when feasible), and of the farmers (especially in case group joint liability for loan repayment is implemented). Project responsibilities will be specified regarding TA to the FI and support to be provided to the private company for the development or strengthening of the farmers network and to the farmers in enterprise skills and financial literacy.

The Service Provider will issue competitive calls for proposal to shortlisted banks or MFIs. SACCOs will not be targeted for this approach since they lack financial and managerial capacities to manage this kind of partnership, knowing also that their geographical coverage is restricted to one sector. Priority will be given to commercial banks and MFIs that have set up an agricultural finance unit, and have expressed interest to develop their portfolio for poultry or pig value chains. Banks and MFIs should in particular specify in their proposal conditions to finance investment and working capital for smallholder farmers, including interest rates and other fees, and what technical assistance they would require from the Project to design products and deliver the services in partnership with the company.

Selection will be made using the following main eligibility and evaluation criteria: (i) Compliance with National Bank regulations, (ii) Financial performance and financial capacity to deliver the services, (iii) Experience in agricultural lending, (iv) Operational presence in the area of operations of the company and farmers, (v) Relevance of the financial products and delivery channels proposed, including required collaterals, and interest and fees proposed, and scope of TA requested. Negotiations will be conducted

between the selected FI, the company, farmers representatives when possible and the Project before signing of the agreement.

Main activities to be conducted are summarized below:

- Conduct value chain mapping and studies for poultry and pig with focus on financing needs and gaps, lending risks and risk mitigation strategies,
- Support private companies under productive alliance to identify, recruit and negotiate with a partner FI,
- Provide TA to the FI to design adapted products and delivery channels for the farmers,
- Provide training to the FI agents on understanding of the poultry or pig farmer enterprise (on production and business model), with recourse to specialized service providers if needed,
- Support and monitor delivery of the financial services to the farmers.

2.2 For other beneficiaries of the Project (vulnerable households under gradation pathway and youths)

a) Training of financial institutions

For linkages with other beneficiaries, the Service Provider will organize training for interested financial institutions aiming at raising their appetite for small livestock value chains and supporting them to design or refine affordable products and delivery channels for different categories of beneficiaries. Training will be organized for managers and loan agents of banks, MFIs and SACCOs operating in areas of intervention of the Project. It will include presentation of value chains mapping and analysis with focus on financial needs, risks and risks mitigating strategies, and recommended product features and delivery channels for different categories of beneficiaries. It will also include a training on farm enterprise on production, business model and cash flow, to enable FI agents to do proper appraisal and monitoring of the loans.

Training sessions will be organized at district level to ensure participation of the sector based SACCOs. The Project will invite shortlisted FI based on the mapping study carried out during the inception phase (noting that regular updates should be made by the Project to include possible new entrants in the agricultural sector). Each session will last 3 days, with a maximum number of participants of 30 (between 2 and 3 participants per FI, including a manager and a loan agent). Each participating FI will be requested to specify after the training session its plan to develop small livestock portfolio, including for the Project beneficiaries.

b) Organization of fora to link beneficiaries, value chain actors and financial institutions

The Service Provider will then organize fora to facilitate linkages between farmers, value chain actors and FI that have confirmed interest to increase their engagement in the sector, and have designed adapted products following training by the Project which are ready for promotion. Insurers that have been supported by the Project to design small livestock insurance products will also be invited once products are ready for roll out. The Project will specifically invite supported beneficiaries under component 1 and private actors supported or partnering under component 2. However, the fora will be opened to the public to allow for indirect impact, and the event will be promoted in collaboration with the relevant district authorities. Value chain actors like input suppliers and offtakers will also be invited. It will be an opportunity for them to interact with farmers as potential clients or suppliers, and to interact with financial institutions for possible access to finance (assumptions being that FIs trained by the Project will also be incentivized to finance other actors than farmers in the small livestock value chains). 2 fora per district will be organized (total of x for x districts).

3. Timeline and deliverables (to be completed in line with other Project activities)

DELIVERABLE		Year 1	Year 2	Year 3	Year 4	Year 5
Inception report including proposed workplan, methodology and tools for provision of TA	15 days after signature of the contract					
TA under productive alliance						
Quadripartite agreements signed and implemented	For x Productive alliances (x agreement signed in year 1, x in year 2 and x in year 3).					
Support and monitoring for the delivery of the financial services						
TA for access to finance for other beneficiaries						

Training sessions organized for x commercial banks, x MFIs and x SACCOs					
Organization of fora	2 for a for x districts				

The Service provider will provide quarterly reports and final report under formats to be agreed upon with the Project.

4. Profile of the Service Provider

The Service provider must be a firm or NGO with relevant experience in providing support to financial institutions to develop agricultural finance products and delivery channels for smallholder farmers, including in Rwanda.

5. Annexes

- Project Design Document
- Financial sector mapping
- Rapid value chain assessments [if completed at this stage and available to share]

Annex 2.6: Draft terms of reference for the Selection of Service Provider for: Feasibility studies on small livestock insurance for smallholder development in Rwanda

1. Background to the assignment

1.1 Project background and context [To update as needed]

The overall objective of the project is to reduce poverty by empowering poor rural men, women and youth to participate in the transformation of the Rwanda agriculture sector and to enhance their resilience. Specifically, the project seeks to increase competitiveness and profitability of the small livestock sector for the provision of quality products from smallholder producers to domestic and regional consumers.

The project expects to reach at least 50,000 households by 2024, representing 120,000 household members. The targeting mechanism will be based on the national Ubudehe system. The main direct beneficiary group will be the poor and food insecure rural households in Categories 2 and 3. Category 1 - most vulnerable and landless) will be targeted through social mobilization activities and for small ruminants and backyard chicken production. Category 4 "those who own large-scale businesses" could be targeted as sources of training, supplier credit of inputs or buyer credit for access to more lucrative market outlets and could as well be involved as will be involved as drivers in 4P models.

In order to improve the competitiveness of the value chain, the project will develop three groups of activities. The first group of activities will establish clusters and help VC actors from the same cluster to address the poor organization of the value chain, and the insufficient access to services and markets, through promotion of innovative value chain arrangements and improved access to finance. The second group of activities will aim at building technical and business capacities of value chain actors in order to improve the productivity of the production systems, the management of farms and service provision enterprises, as well as the sanitary conditions of slaughtering and processing facilities. The third group of activities will aim at improving the institutional framework (policy, regulations) in order to make the context more enabling for the proposed changes.

The project will help smallholder farmers, who are the primary targets, to benefit from the opportunity offered by the increasing demand for animal

products, in particular those from small livestock (eggs, white meat, small ruminant meat), by helping them take an active part in this emerging value chain.

In order to play a more active role in the value chain, smallholder farmers have to improve their competitiveness and their technical and economical performance; this will be achieved through various means including in particular:

- strengthening their technical capacities to enable them to intensify the production and improve the productivity of their small stock
- strengthening their business management capacities to enable them to envisage farming as a business

The project outcome will be achieved through the implementation of 3 components:

- Component 1: Facilitating access to services, finance and market in targeted clusters
- Component 2: Supporting the competitiveness of value chain actors
- Component 3: strengthening the institutional environment

Within 'Component 2: Supporting the competitiveness of value chain actors' access to finance is being supported under the project. The project will facilitate linkage of the smallholder farmers under productive alliance with the financial sector, to finance investments and working capital. It will also contribute to linking vulnerable households under the graduation pathway under component 1 to access formal financial services as one of the graduation indicators, and to linking youths supported under component 1 to financial institutions for the financing of their start up business and further development of the business.

Insurance for small livestock is one tool the project will support by way of providing technical assistance to the insurance sector. The assumption is that on the supply side, appropriate insurance products could help reduce cost and risks for the financial institutions, which will contribute to further raise their appetite for the sector, and improve quality of the service for the smallholder farmers. On the demand side it will contribute to raise demand for and increase access to financial services. The specific focus for insurance technical assistance is on poultry and pig farming within the context of the target groups of the project.

1.2 Overview of the assignment

It is within this context that a specialized service provider is sought to implement all technical assistance activities relating to small livestock insurance for smallholder development in Rwanda.

Research will be conducted into the value chain risks for poultry and pig smallholders, and insurance feasibility for the target groups. This will help underpin technical assistance to two new product designs – carried out on a cost-share basis with insurers, and also training of members of the Rwanda Insurers' Association. It is expected that at least two insurance products (poultry and pig) will be developed and rolled out. As much as possible, pilot testing and roll out of these innovations will involve financial institutions that the project has contributed to link with its beneficiaries.

As a result of these activities, it is expected at least five insurers will receive support from the project - one or two will be selected for intensive product design support, and more will benefit from sector training.

2. Objectives of the study

The specific objective of the feasibility studies are to reach a conclusion as to whether insurance is feasible for the target group engaged in the identified small livestock value chains and to support the broader rural and agricultural development strategy in the project.

The outcomes of the studies should be: i. Conclusion on whether there is a need for poultry and/or pig insurance for the target group(s); ii. If there is a need, conclusion on whether it is feasible; iii. Recommendations for possible existing/new products; iv. Recommendations for possible scheme design and operation; v. If insurance is not currently feasible, then recommendations for what is needed to advance the market or what could be possible alternative mechanisms.

Any feasibility study should consider what would be required to not only meet the needs identified in the project, but also what would help support any initiative that may be implemented as a result of the study to go beyond project end, and to reach scalability and sustainability of the agricultural market in Rwanda. Therefore, the needs and interest of insurers and their related partners such as insurance intermediaries; delivery channels and aggregators, such as financial service providers, value chain actors, mobile telephone operators; the low-income market, as individuals or in groups such as producer cooperatives; and of policy makers and donors like IFAD, should all be considered.

3. Scope of work

The service provider shall carry out the following key activities:

Conduct two feasibility studies for small livestock insurance

Two feasibility studies will be carried out, one for the poultry value chain, and one for pig value chain. They should be comprised of desk research, and field visits to conduct focus groups and in-depth interviews within the project areas with target farmers, value chain operators, financial institutions, and partner organizations; as well as interviews with project staff. The studies will focus on supply and demand opportunities and constraints relative to introducing small livestock poultry and pig insurance for the target group(s) in the project.

Whilst they will consider the state-of-the-art in small livestock insurance internationally and the overall agricultural insurance context in the Rwanda, they should have a specific focus on the feasibility of small livestock insurance for the target group(s), their partners, value chains, and geographical areas within the project and help propose potential product and scheme solutions. Particular consideration should be given to poultry and pig products and schemes that can be sustainable and scalable within the market and governmental context.

The studies should analyse:

- **Production characteristics, including:**
 - Risks: main production risks and constraints within the relevant value chain(s), relevant geographical areas, and amongst target groups/partners of the project/programme, including an analysis of frequency and causes of losses.
 - Production features: type of production, average level of production, species, inputs, typical sanitary, farm- and animal management practices
- **Demand and need of different target group(s) and partners, including:**
 - Farmers and their cooperatives/groups, financial service providers, value chain actors like input suppliers, buyers etc.
 - Financial inclusion: shocks preventing access to finance and productive investment; default issues which could be mitigated with insurance
 - Income characteristics of the target group(s)/value chain(s) and any links to markets etc.
 - Impact of losses
- **Supply side, including:**
 - Analysis of the existing agricultural insurance provision in Rwanda
 - Analysis of any relevant international small livestock insurance experience for pig and poultry smallholders
 - Intermediaries and distribution channels: the links different intermediaries/distribution channels have with the target group and potential interest and capacity in playing a role in insurance scheme delivery; possible opportunities for bundling of insurance with other services
 - Government: relevant enabling/restrictive policies; legal and regulatory frameworks; roles of the government and possible gaps

- Development initiatives: other relevant existing or upcoming development initiatives
- **Supplementary requirements for successful product design, including:**
 - Any disease or loss data available or potentially available through different actors working in small livestock value chains in the country

The focus of the feasibility studies should be the constraints and opportunities relevant to poultry and pig insurance within smallholder value chains. The studies would be expected to highlight and analyse the following: country background; value chain risk assessments; agricultural and chicken/pig insurance opportunities and challenges in the country; institutional, operational and financial considerations for poultry/pig insurance; conclusions and recommendations/next steps

3. Study methodology

The feasibility study should be comprised of desk research; field visits to conduct: focus groups within the project area, interviews with relevant stakeholders and implementing partners, and project/ staff; and meetings including with relevant government and IFAD staff.

Information should be collected from both stakeholders and beneficiaries.

Field visits, interviews and meetings should be conducted after prior consultation and upon further advice from the AFS.

4. Timeline and deliverables

DELIVERABLE	DEADLINE (ON OR BEFORE) – TO FILL	ESTIMATED TOTAL DAYS (NB. <i>Dependent on available budget, location of expertise etc.)</i>
Inception report including proposed workplan, methodology and tools for feasibility research	Project Year 1	5
Two feasibility studies (one for poultry, one for pig)	Project Year 1	110 over a period between 2 to 4 months
○ Study outlines	Project Year 1	
○ Mission ToR	Project Year 1	
○ Draft feasibility studies	Project Year 1	

○ Final feasibility studies incorporating comments and feedback	Project Year 1	
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1. Service provider profile

The feasibility study should be conducted by a specialized agency or a team of qualified experts (at least two). The team lead should be an agricultural insurance specialist, and the team should further be composed of relevant expertise which should include one or more of the following specialisms: agricultural insurance; livestock; actuarial science; economist, rural finance, value chain development. At least one member of the team should be fluent in Kinyarwanda.

The team leader should possess the following expertise:

- At least ten-years working in agricultural insurance, of which at least 2 with any type of livestock insurance
- Based in or experience in Rwanda or a similar context
- Previous experience leading agricultural insurance feasibility studies
- Demonstrated capacity to carry out and analyse demand research
- Fluent in English

6. Annexes

- Project Design Document
- Financial sector mapping
- Rapid value chain assessments [if completed at this stage and available to share]

Annex 2.7: Draft terms of reference for the Selection of Service Provider for: Technical assistance to the development of small livestock insurance for smallholder development in Rwanda

1. Background to the assignment

1.1 Project background and context [To update as needed]

The overall objective of the project is to reduce poverty by empowering poor rural men, women and youth to participate in the transformation of the Rwanda agriculture sector and to enhance their resilience. Specifically, the project seeks to increase competitiveness and profitability of the small livestock sector for the provision of quality products from smallholder producers to domestic and regional consumers.

The project expects to reach at least 50,000 households by 2024, representing 120,000 household members. The targeting mechanism will be based on the national Ubudehe system. The main direct beneficiary group will be the poor and food insecure rural households in Categories 2 and 3. Category 1 - most vulnerable and landless) will be targeted through social mobilization activities and for small ruminants and backyard chicken production. Category 4 "those who own large-scale businesses" could be targeted as sources of training, supplier credit of inputs or buyer credit for access to more lucrative market outlets and could as well be involved as will be involved as drivers in 4P models.

In order to improve the competitiveness of the value chain, the project will develop three groups of activities. The first group of activities will establish clusters and help VC actors from the same cluster to address the poor organization of the value chain, and the insufficient access to services and markets, through promotion of innovative value chain arrangements and improved access to finance. The second group of activities will aim at building technical and business capacities of value chain actors in order to improve the productivity of the production systems, the management of farms and service provision enterprises, as well as the sanitary conditions of slaughtering and processing facilities. The third group of activities will aim at improving the institutional framework (policy, regulations) in order to make the context more enabling for the proposed changes.

The project will help smallholder farmers, who are the primary targets, to benefit from the opportunity offered by the increasing demand for animal products, in particular those from small livestock (eggs, white meat, small

ruminant meat), by helping them take an active part in this emerging value chain.

In order to play a more active role in the value chain, smallholder farmers have to improve their competitiveness and their technical and economical performance; this will be achieved through various means including in particular:

- strengthening their technical capacities to enable them to intensify the production and improve the productivity of their small stock
- strengthening their business management capacities to enable them to envisage farming as a business

The project outcome will be achieved through the implementation of 3 components:

- Component 1: Facilitating access to services, finance and market in targeted clusters
- Component 2: Supporting the competitiveness of value chain actors
- Component 3: strengthening the institutional environment

Within 'Component 2: Supporting the competitiveness of value chain actors' access to finance is being supported under the project. The project will facilitate linkage of the smallholder farmers under productive alliance with the financial sector, to finance investments and working capital. It will also contribute to linking vulnerable households under the graduation pathway under component 1 to access formal financial services as one of the graduation indicators, and to linking youths supported under component 1 to financial institutions for the financing of their start up business and further development of the business.

Insurance for small livestock is one tool the project will support by way of providing technical assistance to the insurance sector. The assumption is that on the supply side, appropriate insurance products could help reduce cost and risks for the financial institutions, which will contribute to further raise their appetite for the sector, and improve quality of the service for the smallholder farmers. On the demand side it will contribute to raise demand for and increase access to financial services. The specific focus for insurance technical assistance is on poultry and pig farming within the context of the target groups of the project.

1.2 Feasibility study findings and recommendations

Highlight findings and recommendations from the two feasibility studies

1.3 Overview of the assignment

It is within this context that a specialized service provider is sought to implement technical assistance activities relating to small livestock insurance for smallholder development in Rwanda.

Based on existing assessments conducted on the value chain risks for poultry and pig smallholders, and insurance feasibility for the target groups technical assistance will be provided to two new product designs – carried out on a cost-share basis with insurers, and also training of members of the Rwanda Insurers' Association. It is expected that at least two insurance products (poultry and pig) will be developed and rolled out. As much as possible, pilot testing and roll out of these innovations will involve financial institutions that the project has linked with its beneficiaries.

As a result of these activities, it is expected at least five insurers will receive support from the project - one or two will be selected for intensive product design support, and more will benefit from sector training.

2. Scope of work

The service provider shall carry out the following key activities:

2.1 Seek partner insurers

For one or two insurers, the service provider will supply technical assistance to product development and adjustment, and connection of the insurer(s) with the relevant project target group(s) at the fora organized by the project to link beneficiaries, value chain actors and financial institutions.

The service provider will support the Access to Finance Specialist (AFS) of the project to identify potential partner insurers and invite them to participate to receive technical assistance on a cost-share basis (at least 30% commitment of private sector insurer(s)).

Given technical assistance is aimed at developing one product for poultry and one product for pig, the partnership may take place with two insurers, or one insurer for both products.

Specifically, and in close cooperation with the AFS, the service provider shall:

- Map potential insurers
- Help design selection procedures
- Approach potential insurers and solicit their partnership proposals
- Support final selection of insurance partner(s)

2.2 Technical assistance to product design and adjustment

Based on the outcomes of the previously conducted feasibility studies, the service provider shall provide technical assistance to the insurer(s) to develop one product for poultry and one product for pigs.

Activities should include support to the insurer(s) in:

- Analysing data/information and create loss functions
- Modelling the impact of risk on household income and expenditures, analyse ability of smallholders to withstand smaller and larger shocks, and derive protection needs of farmers
- Developing a business case for a smallholder livestock insurance scheme linked to the project target group(s), develop market projections and financials, and design growth strategy for insurance scheme;
- Designing (or adapting existing) insurance products, outlining terms and premiums of the insurance policy;
- Design a low-cost distribution and administration model for the project target group(s), describe the consumer journey from marketing/insurance awareness to the claims pay-out;
- Support reinsurance negotiation
- Analyse product performance after one-year, providing support to product adjustments as needed

2.4 Training of the insurance sector

The service provider shall develop and deliver a five-day course on small livestock insurance small inclusive value chain development in Rwanda.

The focus for this training will be interested members of the Association of Insurers' Rwanda (ASSAR). The targets are expected to be one or two technical staff members of insurance involved or interested in being involved in agricultural insurance.

Expected activities are:

- Forge relationship with ASSAR
- Develop five-day course on small livestock insurance for ASSAR members, including:
 - International and Rwandan experience with small livestock insurance for target groups relevant to the project
 - Rwandan context for small livestock production: features, constraints and opportunities for insurance, and for the project target groups
 - Product and scheme opportunities and guidance
- Deliver the five-day course, divided into at least two sittings

3. Timeline and deliverables

DELIVERABLE	DEADLINE (ON OR BEFORE) – TO FILL	ESTIMATED TOTAL DAYS (NB. <i>Dependent on available budget, location of expertise etc.</i>)
Seek partner insurers		
Insurer shortlist and selection procedures	Project Year 1	5
1		
Technical assistance to product design and adjustment		
Two new or adjusted products (one for poultry, one for pig) and distribution/administration model	Project Year 2	110
Report detailing T.A carried out	Project Year 2	3
Product adjustments if needed	Project Year 3	40
Training of the insurance sector		
Outline of course for ASSAR members	Project Year 3	30
Draft course	Project Year 3	
Final course incorporating comments and feedback	Project Year 3	
Report about course activities	Project Year 3	

4. Service provider profile

2. The service provider shall propose a team of at least two experts composed of an agricultural insurance expert and an actuary. At least one member of the team should be fluent in Kinyarwanda.

The team leader should possess the following expertise:

- At least ten-years working in agricultural insurance, of which at least 2 with any type of livestock insurance
- Based in or experience working in Rwanda, or a similar context
- Experience in formulation, operation and management of agricultural insurance systems;

- Ability to develop sustainable business cases for agricultural insurance;
- Demonstrated capacity to develop insurance products based on clients' needs and demands;
- Proven capacity in conducting actuarial analysis and agricultural insurance product development
- Capacity to design customer journeys suited to rural settings and the living circumstances of smallholder farmers;
- Ability to form partnerships with insurance and reinsurance companies, and to create a collaborative working environment in partnerships.
- Professional knowledge of English

5. Annexes

- Project Design Document- Financial sector mapping
- Rapid value chain assessments [if completed at this stage and available to share]

Annex 10: Draft Letter of Intent with ENABEL

LETTER OF INTENT
between
INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT
and
ENABEL – BELGIAN DEVELOPMENT AGENCY

Whereas the International Fund for Agricultural Development (IFAD) is a specialized agency of the United Nations and an International Financial Institution (IFI) established to mobilize additional resources to be made available on concessional terms for agricultural development in developing Member States.

Whereas ENABEL is the Belgian development agency mandated to implement and coordinate the Belgian international development policy.

Whereas, both IFAD and ENABEL, (each a “Party” and both of them collectively the “Parties”) seek to promote the productivity of smallholder farmers, increasing their benefits from market participation, strengthening the environmental sustainability and climate resilience of their economic activities.

Whereas, the Parties are trusted partner for the Government of Rwanda and through their respective funded projects and programmes, have been contributing to the transformation of agriculture from a subsistence sector to a knowledge-based value creating sector that contributes to the national economy and ensures food and nutrition security, aligning their interventions with the Strategic Plan for the Transformation of Agriculture phase 4 (PSTA-4), 2018-2024.

Whereas, the Parties recognize the important role that an healthy growth of the small livestock sector can play to reduce poverty, enhance food and nutrition security of poor rural men, women and youth.

Now, therefore, the Parties, within the limitation of their respective mandates, intend the following:

1. Jointly support the Partnership for Resilient and Inclusive Small Livestock Markets (PRISM), a programme implemented under MINAGRI’s main implementing agency for agriculture and livestock programmes: the Rwanda Agriculture and Animal Resources Development Board (RAB).
2. Align the proposed interventions in support of the livestock sector, in accordance with their respective mandates of the agencies, their comparative advantages and their financial resources. In this regard, respective interventions will follow the below general principles:
 - At production level, IFAD-supported interventions will target preferentially smallholder livestock holdings and vulnerable households, and ENABEL will engage and support also commercial and industrial actors;
 - In terms of geographical repartition, IFAD-supported interventions will focus on Northern, Southern and Western Provinces of Rwanda, in Districts that are the most affected by poverty and malnutrition ;
 - In terms of value chains, IFAD-supported interventions will target mainly the small ruminants, pig and backyard chicken value chains, that correspond to its priority target

- groups, when ENABEL will concentrate on pig and poultry commercial value chains (also targeted by IFAD);
- ENABEL will provide support to large scale private businesses (feed manufacturers, hatcheries, processors) in the pig and poultry value chains;
 - IFAD-supported interventions will also support public investments and public institutions, in particular in the domain of veterinary public health and policy engagement.
3. Avail the necessary financial resources to support the planned activities as detailed in the respective programme design documents and approved by the respective Executive Boards (EBs).
 4. Establish joint implementation mechanisms through a single programme management team unit co-financed by both partners, and placed under the coordination of the Single Project Implementation Unit (SPIU).
 5. In line with the respective processes and procedures, establish a joint Programme Steering Committee to provide policy guidance and orientations at national level, to assess the implementation progress of the project, to approve Annual Workplan and Budget (AWPB) and progress reports and to decide on corrective measures where appropriate.
 6. Support the establishment of a Project Technical Coordination Committee (PTCC), to address technical and implementation issues, including those related to the coordination between partners and alignment between interventions.
 7. Promote continuous sharing of relevant information and jointly support evidence-based knowledge management and policy dialogue.
 8. The Parties will endeavor to undertake joint implementation support and supervision missions to identify challenges and promote corrective measures while maximizing coordination and learning
 9. The Parties will consult each other on any matters arising out of this Letter of Intent.
 10. The Parties acknowledge and recognize that this Letter of Intent will not be legally binding and the understandings set forth herein shall not constitute or create any obligation. The Parties further acknowledge that any exchange of resources shall be documented separately.
 11. Any sharing of information between the Parties will be subject to their respective policies and procedures relating to disclosure of information
 12. Each Party will designate a person or office to serve as liaison for implementing this Letter of Intent. For IFAD, the contact person will be XXXX (address: Via Paolo di Dono 44, 00142, Rome). On behalf of ENABEL, the contact persons will be XX (address:XXX).

Date: _____

International Fund for Agricultural Development

Date: _____

ENABEL

Date

Annex 11: Draft MoU with Heifer International

**CO-FINANCING AGREEMENT
(THE “AGREEMENT”)**

BETWEEN

MINISTRY OF AGRICULTURE AND ANIMAL RESOURCES (“MINAGRI”)

AND

HEIFER PROJECT INTERNATIONAL,
a nonprofit Organization formed under the laws of the
State of Arkansas, United States of America (“Heifer International”),
Carrying out its charitable work in Rwanda
by and through its branch office located there (“Heifer International Rwanda”)

(singularly referred to herein as a “Party”,
and collectively referred to as the “Parties”)

Under the terms of the present Agreement concluded on (the
“Effective Date”)

BETWEEN

MINAGRI with its headquarters at Kigali, P.O. Box 621, represented by Dr MUKESHIMANA Geraldine, on the one hand,

AND

The Non-Government Organisation HEIFER INTERNATIONAL represented by its President and CEO Mr. Pierre Ferrari, on the other hand;

WHEREAS,

- 1.1. *Through the loan agreement n°..... the INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT (IFAD) Development Fund has agreed to provide the Government of Rwanda (the "Government") with certain funding,*
- 1.2. *And the Government, by and through MINAGRI, has committed to contribute **USD 3,312,316** of such funding to Heifer International to co-finance activities of the Project for Inclusive Small Livestock Markets ("PRISM") under the conditions hereof (the "IFAD Funds");*
- 1.3. *And Heifer International has committed to contribute **USD 4,677,108** to co-finance activities of the PRISM under the conditions hereof (the "Heifer Funds");*
- 1.4. *And the IFAD Funds, will provide **USD 14,904,878** total to finance the PRISM (the "Funds") under the conditions hereof—and the Funds shall be under Heifer International's management;*
- 1.5. *More specifically, the Funds are expected to finance various activities as part of the PRISM aiming at improving food and nutrition security and incomes of poor rural households and through better performance of the targeted value chains;*
- 1.6. *Heifer International Rwanda, having presented to the Government that they have the required professional skills, personnel and technical resources, have agreed to provide the goods, services and works as defined in this Agreement.*

CONSEQUENTLY

The Parties agreed to conclude the present Agreement for the implementation of the PRSIM, according to the defined conditions below, in the following ten (10) districts of RWANDA:
[REDACTED] (the "Project Area")

CHAPTER I: GENERAL PROVISIONS

Article 1: Principles of collaboration

The objective of this Agreement is to provide MINAGRI and Heifer International Rwanda with a framework to jointly facilitate joint implementation of PRISM.

Collaboration is based on:

- Equality and understanding between the Parties involved in the implementation of the RDDR;
- Safeguarding mutual interests of various Parties; and
- Respect of reciprocal commitments.

Article 2: Purpose of the Agreement

The purpose of the Agreement is to:

- 1.1. Define methods and conditions of the fulfilment of mutual responsibilities for the PRISM within the Project Area;
- 1.2. Define, clarify and specify reciprocal commitments of the two contracting Parties; and
- 1.3. Explain the flow of the Funds between the Parties as defined in the “Flow of Funds Diagram” attached hereto as **Appendix 1** and incorporated herein by this reference.

Article 3: Objectives of this Agreement

Heifer's share of the PRISM implemntation is strengthening the capacity and asset base of participating farmers to enable them achieve a living income. Living income is defined as all the incomes of a household earned/generated or transferred whether cash or in-kind, sufficient to enable all members of the household to afford a decent standard of living. In Rwanda the benchmark for living income is \$6.08/day while the current average income in the targeted implementation zones is closer to \$3.11/day. Heifer has co-designed this intervention with IFAD and the Rwandan Ministry of Agriculture in order to help farmers diversify their incomes through smallstock value chains including poultry, swine, goat and sheep. The main direct beneficiary group of the project will be within the Northern, Southern and Western provinces and composed of 22,000 households who will receive training and livestock. The project will give priority to three categories of people: women heads of households, households with malnourished children, and young adolescent girls.

Heifer's focus on this project will be on strengthening capacity of smallholders to increase their production and productivity while connecting them to markets by prioritizing three different, but inter-related elements of the livestock production system. These are: the farmer, the animal and the resources for animal feeding and wellbeing. Heifer will employ its Values Based Holistic Community Development (VBHCD) model, which mobilizes and organizes communities and builds their capacity to stir-up their potentials for development. This helps them to harness their indigenous and accumulated knowledge with limited development resources to improve their livelihoods, reduce economic and climatic vulnerability and increase resilience. Heifer will capitalize on its existing experience and expertise in Rwanda, the Africa region and globally to ensure this project is implemented with utmost quality.

This Agreement is based on the premise of the objective of improving food and nutrition security and incomes of poor rural households and through better performance of the targeted small livestock value chains.

The following activities are designed to be implemented by Heifer in order to achieve the set objectives of the project.

Self Help Group Formation (Year 1) - SHG is the foundation for VBHCD. Heifer first helps community members to organize themselves into SHGs with one representative from each household. Each SHG is generally constituted of 20-30 members. Once the SHCs organized, Heifer continues to provide capacity building training and mentoring support to the SHGs. SHGs offer project participants opportunity to create bonds among members and enable them to think and work together for a common cause. SHGs are platforms that facilitate the full participation of individual members in project activities, such as group savings and loan, training, leadership skills development, etc. After receiving training, the SHGs establish Group Savings and Credit Funds and are put on a pathway towards graduation to form a larger platform of a Cooperative, through which they can achieve economies of scale by aggregating their agricultural goods.

Training of Farmers in Cornerstones© (Year 1)

In implementing this project, Heifer will use its VBHCD model to organize and mobilize poultry, swine, goat and sheep groups. The 12 Cornerstones©¹⁷¹ for Just and Sustainable Development are used to focus the group on the shared values of the self and community. Shared values discussed are used for group visioning and planning. This helps the group to plan for three types of key activities: activities done by SHG members (without assistance); activities done with Heifer support (e.g., Heifer project activities); activities done with outside support (e.g., local government).

¹⁷¹ The 12 Cornerstones© cover a range of shared values and principles, abbreviated in Passing on the gifts. Accountability; Sharing and Caring; Sustainability and Self Reliance; Improved Animal and Resource Management; Nutrition, Health, and Income; Gender and Family Focus; Genuine need and Justice; Improving the Environment; Full Participation; Training, Education and Communication; and Spirituality.

Training of Farmers in Agri-Business and Income Generation (Years 1, 2, 3, 4, 5)

Farmers will also undergo important trainings to develop both hard and soft skills such as basic nutrition, gender and leadership modules for men and women, Values Based Financial Literacy, and environmental management in order to build and strengthen holistic skills and capacities for long-term success in agri-business. Further, the SHGs will be introduced to income generating opportunities that exist in their communities and undergo skills assessment to determine their strengths, weaknesses, and areas of interest. Based on this assessment, farmers will be trained on skills related to potential opportunities, including small business entrepreneurship, on-and off-farm income generation, and other employment opportunities that exist along the value chains, including: production, aggregation, transportation, processing, distribution/retail, and marketing. As the project progresses, agri-business workshops and input fairs linking farmers to private sector partners will be facilitated to further sharpen the business acumen and prospects of farmers while forging stronger outlets to formal markets.

Technical Trainings on Poultry, Swine, Goat and Sheep (Year 1)

Prior to livestock placement, specific technical assistance focusing on poultry, sheep, swine and goat value chains will be provided to farmers to help increase their production and productivity. These trainings include capacity building in: breeding; husbandry; feeding, including zero-grazing, health and reproduction. Farmers also receive training in establishing a rotation scheme at the SHG level. Each SHG is supplied with at least one male animal used for breeding purposes. A carefully designed technique is employed to avoid cases of inbreeding and to increase the genetic diversity among the animals. Proper record keeping and follow up mechanisms are in place to ensure that animals that are closely related do not mate. The ratio of male to female per animal is described below:

- Swine, the boar to sow breeding ratio is 1:20
- Goats, the buck to doe ratio is 1:30
- Chicken, the rooster to hen ratio is 1:10

Provision of Training and Equipment to Community Agrovet Entrepreneurs (CAVEs) (Years 1,2)

CAVEs will be identified, trained and deployed to support animal wellbeing across all value chains. With knowledge in basic preventive and animal health care, CAVEs provide services to the community under the supervision of qualified government veterinary staff. CAVEs have a high school education and become registered service providers with the government. This model bridges the gap of government extension services, increases the animal wellbeing and productivity and generates income opportunities, particularly for women and youth. Each CAVE is trained in animal well-being and conducting basic animal care ranging from administering vaccines to simple surgeries. CAVEs are equipped with animal well-being starter kits for their businesses including: a thermometer; antibiotics, de-wormers, anticoccidials, multi-vitamins; ear-tag applicator; vaccination kit; vaccines; AI kits; surgical kits; cool box and icepacks; hoof trimmer; a motorcycle and other key supplies.

Input Provision and Passing on the Gift (Years 2, 3, 4, 5)

Once farmers have completed their training series, female animals of improved breeds will be placed at the household level. The selection criteria for households to receive livestock is described below:

- Resides in the Project Implementation Zone
- Be in the category of resource-poor
- Completed and participated in Year 1 trainings
- Constructed a modern animal shed
- Willing and committed to pass on the first-born female animal together with construction material to new a beneficiary
- Socially well integrated in community and active participation in development activities

The smallstock are placed with households in the following packages with each family receiving and specializing in one type of animal:

Animal	Poultry	Swine	Sheep	Goat
# placed per household	10	3	3	3

In addition to placement of animals, farmers will be provided initial starter packs with inputs, including: feeds of grasses and legumes; disinfectants; feed troughs; drinkers; and nests. At the household level, smallholders will be trained in building proper housing structures for their animals. After training, farmers will receive most of the materials necessary for the construction and will co-invest about 20% of the building materials. No animal will be placed before a farmer has received training and constructed an appropriate housing structure that will protect the investment of the animal from elements and pests.

Heifer's model of Passing on the Gift© (POG) represents an innovative approach that fosters sustainability and produces a multiplier effect for impact. POG© is a requirement for each Heifer program participant and involves the initial direct beneficiaries (who received the livestock) passing on the first female offspring, to another person. The group determines who receive the "pass on" animals, training and guidance. This recipient will be expected to do the same for another person. On average, Heifer gifts are passed on for four generations in Rwanda.

The table below describes the overall schedule of initial smallstock procurement, placement and pass on scheme.

TYPE	SOURCE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	Year 5	TOTAL
		ANIMA LS	ANIMAL S				
SWINE	NEW PURCHASE	0	1500	1500	1500	0	4500
	<u>POG</u>	0	0	1350	2565	3659	7574
	Swine Total	0	1500	2850	4065	3659	12074
SHEEP	NEW PURCHASE	0	2250	2250	2250	0	6750
	<u>POG</u>	0	0	1688	4641	5168	11496
	Sheep Total	0	2250	3938	6891	5168	18246
GOAT	NEW	0	2,250	2,250	2,250	0	6750

PURCHASE						
POG	0	0	1,688	5,203	5590	12480
Goat Total	0	2,250	3,938	7,453	5590	19230
POULT RY	NEW PURCHASE	0	7,500	7,500	7,500	22500
	POG	0	0	7,500	15,000	22500
	Poultry Total	0	7,500	15,000	22,500	67500

Establishing a Community Health Fund (Years 1, 2, 3, 4, 5)

Every animal beneficiary is sensitized to contribute towards the animal health insurance scheme. In this scheme, a farmer contributes between Rwf 500 and 2000 (depending on the general assembly's decision) and pays half the price of vet drugs prescribed by qualified veterinary technician. With the establishment of this scheme, animals belonging to qualified farmers are treated at a subsidized cost, thereby reducing mortality.

Provision and Training for Animal Feed (Years 1, 2, 3, 4)

Ahead of livestock placement, farmers receive inputs for fodder plots, such as grasses and legumes. Farmers will also be trained on ways to address seasonality such as post-harvest storage, which will make higher quality feed available during the dry season. Various strategies suitable for smallholders such as planted forages, silage, and improved conservation of crop residues will be included.

Fostering Robust South by South learning (Years 2, 3, 4)

Throughout the life of the project, South-South learning will be facilitated by conducting exchange visits both at the local farmer level, but also among global project staff across Heifer's portfolio. Current plans are in place to first exchange between Rwanda, Kenya, Nepal, and Cambodia so Rwanda may benefit from successful breeding and feeding models that Heifer is implementing in the region and in Asia. Each exchange visit will articulate a clear learning agenda to enhance smallstock productivity and will capture and disseminate lessons learned.

Participatory Self-Review and Planning (PSRP) (Years 1, 2, 3, 4, 5)

PSRP is a values-based participatory review and planning methodology designed for assessing project implementation progress, community participation level, and learning and planning for action. Throughout the life of the project, farmers will participate in PSRP, which takes place at the different levels and involves all project stakeholders. During this process, farmers assess their goals, development actions plans and self-monitor their progress.

Article 4: Beneficiaries

23,400 extremely poor and poor rural households (approximately 88,000 household members falling in Ubudehe category 1 and 2) amongst whom the project will give priority to women (and

among them to women heads of households), as well as to youth and households with under-nourished children. Poorest households are composed of subsistence farmers, mostly food insecure and with limited land and access to resources, have few active members and are more often headed by a single person. Women will represent at least 50% and youth 30% of the target beneficiaries.

CHAPTER II: General Responsibilities of the Parties

Article 5: Heifer International's commitments and liabilities

In the framework of the Agreement (a) Heifer International, by and through Heifer International Rwanda, will support the implementation of activities related to its area of expertise under Component 1 above, (b) Heifer International has committed to contribute the Heifer Funds towards financing PRISM activities as defined in the project design document, and (c) Heifer International shall manage the Funds.

Article 7: MINAGRI's commitment and liabilities

In the framework of this Agreement, MINAGRI has committed to contribute to Heifer International the IFAD Funds, and the IFAD Funds shall flow through Heifer International's books and accounting systems.

MINAGRI, through its portion of the Funds it has allocated thereto, is committed:

1. Be part of the review and planning of the periodic meetings and undertake any other action deemed appropriate; and
2. Conduct monitoring and evaluation of field activities under the Agreement.

Chapter III: Provisions for the implementation of the Agreement

Article 8: Organisation, procedures and execution modalities

- The implementation of technical activities under this Agreement is Heifer International Rwanda's responsibility.

Article 9: Follow up of the execution of this Agreement:

- MINAGRI's monitoring and evaluation team will work closely with Heifer International Rwanda to follow up on field activities.

- Meetings will be organized at least once per quarter to share information on PRISM. These meetings and visit sessions will generate reports that will be shared with others as agreed upon by the Parties.

Chapter IV: FINAL PROVISIONS

Article 10: Settlement of disputes

Any conflict or dispute arising between the Parties in the framework of this Agreement is subject to amicable settlement. Disputes shall be referred to the judiciary court of Rwanda if necessary.

Article 11: Termination of the Agreement

This Agreement may be terminated by a Party (the “Terminating Party”) if the other Party (the “Non-Terminating Party”) is in material breach of this Agreement, and fails to cure said material breach within thirty (30) days of Non-Terminating Party’s receipt of written notice of said material breach sent by the Terminating Party. If a material breach is the direct result of a force majeure, the thirty (30) day cure period mentioned in the preceding sentence shall be automatically extended by sixty (60) days (to ninety (90) days total).

Article 12: Validity and application of the Agreement

- This Agreement is valid for **five (5) years** from and after the Effective Date (the “Term”);
- It will come into force after its signature by all Parties;
- This Agreement contains the entire understanding of the Parties with respect to the subject matter contained herein and supersedes all prior agreements and understandings between the Parties with respect to such matters.

Done at XXXXXXXXXX as of the Effective Date.

For Heifer Project International

**For Ministry of Agriculture and Animal
Resources**

Annex 12: Draft MoU with BDF

(for support private operators of abattoirs and processing units, a similar MoU with different financing modalities will be developed for channelling support to the youth and productive alliance beneficiaries)

DRAFT MEMORANDUM OF UNDERSTANDING

Between

RWANDA AGRICULTURE AND ANIMAL RESOURCES DEVELOPMENT BOARD (RAB)
/ SINGLE PROJECT IMPLEMENTATION UNIT (SPIU) OF IFAD FUNDED PROJECTS

And

BUSINESS DEVELOPMENT FUND (BDF Ltd)

To Manage the

GRANT FACILITY FOR THE PROJECT FOR INCLUSIVE SMALL LIVESTOCK MARKETS (PRISM)

1. INTRODUCTION

1.1. Presentation of PRISM xxxx

1.2. PRISM Project is composed of three closely inter-related components and sub-components, namely:

Component 1 - Climate-smart intensification of small livestock production systems

Sub component 1.1: Social mobilization and graduation of vulnerable households

Sub component 1.2: Support to youth entrepreneurship in production

Sub component 1.3: Improve animal health status and genetic potential of small livestock

Sub component 1.4: Support climate smart innovations

Sub component 1.5: Support national producers organizations

Component 2: Support to Small Livestock Value Chain Development

Sub-Component 2.1: Productive Alliances with Input Suppliers

Sub-Component 2.2: Market Facilitation in Small Livestock Value Chains

Sub-Component 2.3: Support to Financial Institutions

Component 3: Policy support and coordination

Sub component 3.1: Policy and regulatory support

Sub component 3.2: *Project coordination*

2. PURPOSE OF THE MoU

2.1. In partnership between Business Development Fund (BDF Ltd) and RAB, the purpose of this Memorandum of Understanding is to support private operators of abattoirs and processing units to launch public good related investments in essential equipment meant to improve food safety, animal welfare and climate-smart upgrading of their facilities.

3. The Memorandum of Understanding, Parties and Goals

This MoU is made between:

3.1. The Government of the Republic of Rwanda (hereinafter referred to as the Government), represented by the Director General of Rwanda Agriculture and Animal Resources Development Board on the one hand;

And:

3.2. The Business Development Fund Ltd (hereinafter referred to as the BDF), represented by the Chief Executive Officer of the BDF, on the other hand.

All of them in the legal capacity to contract have decided to subscribe to this Agreement, under the following considerations:

ARTICLE 1: GENERAL PROVISIONS

1.1. Definitions

Unless the context requires a different interpretation, the terms and conditions defined in this Memorandum have the significance appearing there.

The Grant Facility: For up to 30% of the cost of modernization/upgrading investments, and 100% of the costs for climate-smart innovations this facility will be made accessible to private sector processors sourcing from farmers' cooperatives, farmer groups or individual farmers supported by the project in small livestock value chains.

ARTICLE II: IMPLEMENTATION ARRANGEMENTS

2.1 This grant facility is not necessarily linked to a loan: grant applicants can provide their contribution either in cash or through a loan. In the case of a loan, the financial institutions will have to be accredited as a Participating Financial Institution (PFI), as indicated below.

2.2 All financial institutions (Commercial Banks, Micro Finance institutions and SACCOs) registered in the Republic of Rwanda and licensed by the Central Bank of Rwanda can apply to the BDF-PRISM Grant Facility Fund to be accredited as a PFI. The aforementioned accreditation is founded on the examination of the request for accreditation by the BDF, on the basis of the criteria stipulated in Annex II and III of this MoU. The BDF is entitled to request from all institutions applying for accreditation any information it deems necessary to assess whether a financial institution complies with the conditions. The BDF is entitled to unilaterally terminate the Participation Agreement if a PFI did not respect the clauses laid down in the Participation Agreement.

2.2. TERMS AND CONDITIONS OF THE PERFORMANCE -BASED GRANT FACILITY

2.2.1. Specific Project Eligibility under the Grant Facility

(i) This Facility is made available for the financing of modernization/upgrading investments and climate-smart innovations in small livestock processing facilities

(ii) Grant disbursement to BDF.

The PRISM Project will allocate during the FY xxx an amount equivalent to **RWF 398,250,000** for the financing of private sector actors investing in the modernization/upgrading and climate-smart innovations of their processing facilities. This amount will be transferred in xxx tranches by the Project on a special bearing account opened by BDF in the bank, respectively **xxx%** **equivalent to RWF xxx**, for first tranche upon the immediate signature of this MoU with the request from BDF and the remaining **xxx%** as subsequent tranches will be disbursed after the use of first disbursement up to **70 %** of each tranche and upon justification with supporting documents. BDF will make a new financial request to the SPIU Coordinator for the subsequent grant tranche disbursements with report indicating how the previous tranche disbursed has been utilized.

(iii) The authorized signatories on the interest-bearing account will be: a/ the BDF Manager and b/ xxx

(iv) Investment loan applications from Project target beneficiaries will be submitted to BDF. BDF will assess the applications and ensure that all eligibility criteria and supporting documents are considered for investment committee approval.

(v) Eligible applicants

The following are eligible applicants to access PRISM grants through BDF:
Corporate bodies involved in the processing of small livestock products

An applicant can obtain support only once during the implementation of PRISM Grant Program. PRISM applicants are also entitled to obtain other forms of support in parallel once eligible, such as the guarantees provided by BDF under IFAD Funded Projects.

(vi) Activities eligible to the grant-financing mechanism include: (i) essential equipment meant to improve food safety and animal welfare (such as cold rooms/cool trucks, ventilated vans to transport live chicken, stainless steel machinery/furniture) and (ii) climate-smart upgrading of their facilities (such as bio-digesters, solar energy).

The Long and short term investment projects submitted for grant funding must meet the following eligibility criteria:

1. Project falls into one of the above three major categories and within the selected value chains in horticulture (including summer flowers);
2. Business partnership project proposal needs to have been approved by SPIU using the PRISM eligibility criteria described in this document (see Annex 1) and ultimately validated by the horticulture working group;
3. Project is technically feasible;
4. Project is financially viable;
5. Project has a projected cash-flow that will enable repayment of loan (if requested) within a maximum duration of five years;
6. Project complies with standard environmental norms and does not have any negative impact on the environment;
7. Managers of project have the required technical and managerial competence;
8. Application must include a solid business plan, including (i) a project description; (ii) an assessment of the socio-economic impact; (iii) a projection of the expected purchases from local small livestock suppliers; (iv) detailed assumptions for the planned sales/income and expenses, including a realistic assessment of the marketing prospects; (v) a realistic assessment of the sustainability of the project after the investment; (vi) an analysis of risks that may be encountered and the risk mitigation measures proposed by the applicant; (vii) a financing plan, including the investment loan (if any), equity and other contributions of the applicant.

(vii) Grant Percentage and grant ceiling amount: Once a final business plan is approved, PRISM Project will support this business partnership project by providing a grant that will be paid out as back end incentive after loan approval by participating financial institutions and the ceilings are as follows depending on the category of business plan:

- A maximum percentage of 30% grant and ceiling of up to **USD 30,000** per approved business plan essential equipment meant to improve food safety and animal welfare in small livestock processing facilities;
- A percentage of 100% grant and ceiling of up to **USD 15,000** per approved business plan appropriate meant for climate-smart upgrading of small livestock processing facilities

(viii) Total grant budget available for each category of business plan:

- USD 300,000 for investments to improve food safety and animal welfare in processing facilities
- USD 150,000 for investments in climate-smart upgrading of small livestock processing facilities

(ix) Application and Appraisal Process

Once the project proposal has been validated as a viable business plan by the SPIU, the grant application will then be submitted to BDF. Applications for grants will then be assessed by the BDF project analysts. Once they are satisfied that the application is in conformity with the grant rules and regulations, they will consider the application for approval or rejection. The application and appraisal process will contain the following steps:

- (i) Business ideas will be reviewed and recommended by the team composed of staff from RAB-PRISM-SPIU and BDF.
- (ii) The qualified business ideas will be submitted to the business development service provider for fine-tuning and development into bankable business plans
- (iii) Fine-tuned business plans will be submitted to RAB-PRISM-SPIU and BDF by the business promoters for grant application and approval.
- (iv) Grant application request will be submitted to BDF by the business promoter on a standard application form. These applications should be submitted to the BDF on an ongoing basis;
- (v) BDF will analyze if the business plans qualify with all grant eligibility criteria and recommend for approval by the Investment Committee;
- (vi) BDF sends the response to the respective business promoter;

(vii) Grant Disbursement

The disbursement of the grant will then be made in tranches according to the investment schedule provided in the business plan – payment will be made directly by BDF to equipment/machinery suppliers, upon presentation of pro-forma invoices.

ARTICLE III: OBLIGATIONS OF PARTIES

3.1. BDF

- (i) BDF will be responsible for the accreditation of financial institutions to the PRISM Grant Facility when loans are required by the business promoter.
- (ii) BDF is responsible for the signature of Participation Agreements with all selected financial institutions.
- (iii) Together with the project team at RAB/PRISM/SPIU, the BDF will be responsible for the approval and disbursement of the grant in accordance with the procedures detailed in the Manual of procedures specifically elaborated for that purpose and with the Participation Agreement.
- (iv) BDF is responsible for the financial management of the resources transferred by the Project for both the grant and the guarantee mechanisms.
- (v) BDF will submit activity and financial quarterly reports to Rwanda Agriculture and Animal Resources Development Board and copy to the Single Project Implementation Unit of IFAD Funded Projects. This report may indicate among others the progress of the approved business plans, implemented and deviated.
- (vi) BDF will conduct monitoring and evaluation activities towards the proper implementation of the supported business plans. This monitoring will be done on continuous basis.
- (vii) BDF will assign a staff from monitoring and evaluation department who will be specifically in charge of the PRISM grant facility supported business plans for proper communication, reporting and follow up the implementation of supported business plans.

3.2. RAB-SPIU/PRISM PROJECT

- (i) PRISM through SPIU of IFAD Funded Projects will disburse the allocated resources for the grant according to their respective Manual of Procedures and the demand for such financial instruments. Disbursements by the Project will be made in xxx tranches. First tranche disbursement will be made upon the signature of the MoU and the subsequent disbursement will be made after the reception and justification of use of the previous tranche transferred to BDF and a Financial Request submitted by BDF to SPIU/IFAD Funded Projects through DG RAB.
- (ii) PRISM will participate in business plan ideas identification, screening of business ideas and recommend for the next step for business plan development to access grant facility;
- (iii) PRISM will organize awareness campaigns to inform potential applicants of the launching of this new grant facility and inform them of the grant eligibility criteria, mechanisms and application process
- (iv) PRISM will participate in investment committee during grant approval.

(v) PRISM will take part in the monitoring of the supported business plans during the existence of the Project.

(vi) PRISM in collaboration with M&E specialists from SPIU-IFAD Funded Projects and BDF will conduct M&E for the proper implementation of the supported business plans.

3.3. Creation of the Investment Committee to approve the grants

Based on the required eligibility criteria and the number of submitted business plans, BDF investment committee will be held at least twice a week for grant approval. This committee will be comprised of representatives from (i) SPIU-Agribusiness Specialist; (ii) SPIU-Access to Finance Specialist and (iii) BDF staff, among which the temporary M&E staff will be included.

3.4.1. Role of the Investment Committee

- The investment Committee will be responsible for the periodic review of the business plans submitted to BDF – approve Grant Facility' applications, as well as on-the-ground monitoring and follow-up financed investments. In this investment committee, SPIU Agribusiness and Access to Finance Specialists should attend. None of the business plans should be approved by the BDF investment committee without any representative from SPIU Agribusiness and Access to Finance Specialists.
- The investment Committee will continue its periodic monitoring activity until the final disbursement of PRISM's facilities housed in BDF.

ARTICLE IV: DURATION AND ENTRY INTO FORCE

4.1. The present Memorandum of Understanding will enter into force upon signature by both Parties and shall not exceed the Project period. But where necessary, it may be amended on annual basis based on SPIU/PRISM Annual Work Plan and budget.

ARTICLE V: SETTLEMENT OF DISPUTES AND ARBITRATION

5.1. Except as otherwise provided for in this MoU any dispute between **RAB-SPIU/PRISM** and **BDF** concerning the interpretation and the performance of this MoU shall be settled by negotiation between the Parties.

5.2. If the dispute cannot be settled in accordance with paragraph 5.1. Above or by another agreed mode of settlement, the matter shall, at the request of either Party, be settled by arbitration in accordance with the procedures in force in Rwanda.

5.3. Any arbitration award rendered in accordance with paragraph 5.2. above shall be final and binding on the Parties.

ARTICLE VI: TERMINATION

6.1. RAB-SPIU/PRISM reserves the right to terminate this MoU or a part thereof (one or several activities of the AWPB) if it considers that the continued implementation of the Memorandum of Understanding is impossible or impractical for either of the following reasons:

- (i) Unforeseen causes beyond the control of **RAB-SPIU/PRISM** such as, for example, the lack of funds from the donors and the **GoR**.
- (ii) In the event of blatant or repeated default, delay or unsatisfactory performance on the part **BDF**.

6.2. If some activities under this MoU should be terminated, the following shall apply:

- (i) **RAB-SPIU/PRISM** shall complete all payments that may be due up to the effective date of termination (in particular grants for eligible loans approved before termination of the activity.)
- (ii) **BDF** shall take all reasonable actions to recover any amount due by Project beneficiaries.
- (iii) **BDF** shall transfer any amount due to the Project without any delay while the Project shall also transfer any amount due to the BDF with no delay.

6.3. Adjustments to amounts due and any claims arising from or connected to termination of this MoU or part thereof shall be dealt with in accordance with the pertinent provisions of this MoU.

6.4. Notices of Termination shall specify the reasons for termination and take effect no later than 10 (ten) days after receipt thereof by the addressee, it being understood that the provisions of this Memorandum of Understanding applicable to the winding up of the agreement, the liquidation of claims and the settlement of disputes shall remain in force for such additional period as may be necessary.

ARTICLE VII: CHANGES AND AMENDMENTS

7.1. **RAB-SPIU/PRISM** may, at any time, give written notification of:

- (i) Changes agreed between the GoR and donors with regards to activities to be executed and/or on their delivery schedule, if such

changes increase BDF's activity, involve additional expense, or reduce the time frame within which the activity must be completed.

(ii) Increase or decrease the number of inputs required due to the change of activities and adjust the AWPB accordingly.

7.2 Any claim by **BDF** related to items adjusted under this paragraph shall be asserted by **NRAB-SPIU/PRISM** within 30 days of reception of the notification of change, it being understood that the exact determination of the adjustment may, by agreement between the Parties, be postponed until the actual cost difference can be ascertained, provided, however, that no claims for adjustment shall be receivable after the date of final payment under this MoU.

7.3 Any modifications to this MoU, other than the changes provided for under paragraph 7.1 above, shall be effected by an amendment to this MoU to be mutually agreed between the Parties hereto.

ARTICLE VIII: SPECIAL PROVISIONS: MODALITIES OF COLLABORATION BETWEEN THE PARTIES

8.1. Provisions related to the Partnership Mechanisms: BDF may be called to participate to the Project National Steering Committee instituted by **MINAGRI** as well as in the Project management meeting.

8.2. The Annual Review of overall performance of BDF: The Annual Review of the overall performance of **BDF** with regards to its activity under PRISM will be carried out jointly by RAB, SPIU and **BDF** during a participative workshop to identify BDF's weaknesses and strengths. Based on this identification, **BDF** and the RAB-SPIU/PRISM will agree on measures to be taken to improve the situation or to replicate successful operations in other zones. If the performance assessment is negative, application of article 6.1 may be envisaged and agreed by the SPIU/PRISM, the MINAGRI and the International donors all together.

8.3. BDF shall submit quarterly activity and financial reports not later than 5 days after the end of the quarter.

ARTICLE IX NOTICES

9.1 Any notice affecting the rights or obligations of either party to this MoU shall be given in writing and delivered in person to the addressees given below:

For the Business Development Fund (BDF) PO. Box 966 KIGALI RWANDA

For SPIU IFAD Funded Projects P.O Box 7418 KIGALI-RWANDA

9.2 Notice shall be considered as effective as of the date of delivery to the addressee.

Article X - ANNEXES

The annexes listed below form integral components of this MoU and must therefore be adhered to during project implementation

Annex 1: Selection criteria to be used in the pre-screening of grant applications

Annex 2: CONTRACTUAL DOCUMENTS AND DOCUMENTS OF REFERENCE

Annex 3: Checklist of required documents to be submitted by business promoters applying for PRISM grant through BDF

Annex 4: Reporting, Monitoring and Evaluation of the Grant Facility

ANNEX 1 : Selection criteria to be used in the pre-screening of grant applications

Type of 4P Business Plan	Type activities to be funded for 4P partners	Sources of funding	Project contribution %	Conditions and Ceiling of project contribution ¹⁷²
i) Private sector agribusiness-led BP including contractual arrangements with producers' coop(s) or individuals	Investments in essential equipment meant to improve food safety and animal welfare (such as cold rooms/ cool trucks, ventilated vans to transport live chicken, stainless steel machinery/ furniture)	- Private sector own resources (equity) - Loan from PFI	Up to 30% of total investment	- USD 100 per coop member or individual farmer engaged in contractual relationship - Maximum amount of USD 30,000

¹⁷² Note: all investments supported by grants are not to be used as collateral for a duration of at least 5 years

Type of 4P Business Plan	Type activities to be funded for 4P partners	Sources of funding	Project contribution %	Conditions and Ceiling of project contribution ¹⁷²
ii) Support private sector agri-business led BP to cover the incremental cost of climate resilient technology/ processes	Investments in climate-smart upgrading of processing/slaughtering facilities (such as bio-digesters, solar energy).		100%	- USD 100 per coop member or individual farmer engaged in contractual relationship - Maximum amount of USD 30,000

ANNEX 2: CONTRACTUAL DOCUMENTS AND DOCUMENTS OF REFERENCE

- a. Loan Agreement N° xxx between the GOR and IFAD
- b. IFAD 's General Conditions for Agricultural Development Financing
- c. PRISM Design Report No xxx dated xxx

ANNEX 3: Checklist of required documents to be submitted by business promoters applying for PRISM grant through BDF

No	Company Business Plans
1.	Grant application letter on behalf of the client addressed to The CEO-BDF seeking PRISM grant
2.	Copy of the Business plan signed by the Promoter and stamped
3.	Bills of Quantities in case of construction
4.	Designs and Perspectives in case of construction
5.	Copy of Land title or buying contract in case of primary production activities
6.	Three Proforma invoices and catalogues for equipment, machines and Transport facilities
7.	-Company Registration Certificate. -Promoter's ID
8.	Signed minutes of the shareholders to apply for the grant in case of more than one shareholder
9.	Signed contracts of potential buyers in the Business plan
10.	Copy of screening recommendation issued by RAB-SPIU during screening process

No	Company Business Plans
11.	Any other related essential document that may be requested

ANNEX 4: Reporting, Monitoring and Evaluation of the Grant Facility

Monitoring will focus among other activities, the following:

- All Applications for grant (through the documentation to be provided by business promoter); and
- Final request for grant disbursement by business promoter.
- Status and implementation progress of the supported business plans.

The BDF will elaborate and submit to SPIU and copy to RAB-SPIU/PRISM a quarterly narrative report on the Grant and Guarantee Facility status .

1.1. Executive summary of the report

In the Executive summary section, above information shall be summarized in the tables provided below:

Table 1: Grant Facility

General information

Name of the client	Total Grant amount to be received/client	Grant Amount disbursed/client	Remaining Grant Amount to be received/ client
Client 1			
Client 2			

Performance and RIMS indicators

# of enterprises/businesses benefiting from the grant (per value chain)	# of grants rejected
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1.2.1 Reporting

At the end of each quarter, the BDF will circulate a more elaborate analytic report using most of the indicators listed below in the section "Data base". The report will be circulated by BDF in electronic format and hard copy to: (i) RAB (DG), (ii) SPIU Coordinator; and (iii) PRISM Operation Manager. In addition, the BDF will elaborate an annual monitoring and financial report of the grant operations, which will be published annually to the public on the BDF website.

The monthly statement of accounts will cover the following items:

- No. and value of grants received so far;
- No. and value of grants applications submitted;
- No. and value of grants approved (i.e. a grant agreement has been signed), by type of applicant, by geographic region, by type of project, by amount grouped), by share of grant support, and by type of PFI (bank, MFI, other FIs);
- No. and value of grants disbursed
- No. and value of grants cancelled by BDF;
- Balance of grant facility after old commitments (signature of grant agreement) and new commitments (submission to Committee, before Committee decision);

1.2.2. Data base

The BDF will maintain a data base containing up-to-date information on all relevant grant applications, approvals repayment

1.2.3. Reporting Requirements

Report Name	Kind of Report	Frequency	Deadline	Observation
Progress Report	Financial, Physical/Technical. Qualitative and Quantitative	Quarterly	15 th of every 4 th month after each quarter	BDF
Annual Report	Financial, Physical/Technical. Qualitative and Quantitative	Annual	15 ^h July of FY	BDF

Annex 13: Draft Terms of Reference of awareness raising on targeting, gender and nutrition during the project's start-up workshop

Start-up workshops represent the official launch of the project with key partners and stakeholders, including SPIU staff, implementing partner organizations, representatives of government, service providers, NGOs and the private sector. Eventually, IFAD staff from Regional Hubs, headquarters and technical experts who have worked in the project design or have specific relevant expertise on singular project areas may be also present. Project's start-up workshops can provide a good platform to raise awareness on targeting, gender and nutrition with project staff and implementing partner organizations and present implementation procedures and arrangements to ensure that nutrition will be mainstreamed throughout the project cycle.

To organize a dedicated session on targeting, gender and nutrition-related issues as part of the project's start-up workshop:

- a. Identify the main objective(s) of the session to be included in the workshop agenda;
- b. Understand the profile of the audience, in order to shape the presentations accordingly;
- c. If possible, co-share this session with other key institutional partners (e.g. Ministry of Gender and Family promotion, National Early Childhood Development Programme, Heifer International, etc.) that will have a key role in supporting the implementation of nutrition-sensitive intervention;
- d. Consider dividing the session in two parts: (1) the first part would provide an overview of the targeting, gender and nutrition-sensitive agriculture respectively, covering basic gender and nutrition concepts, the linkages with other cross-cutting issues (linkages between gender and nutrition, with climate); (2) the second part could explore the specific approach adopted by the project to address gender and nutrition-related issues, presenting the main interventions and institutional arrangements for their implementation. Suggestions for presentations on nutrition-sensitive projects are provided in the boxes;
- e. Allocate time for key institutional partners to present their experience in addressing gender and nutrition problems in the area/with the population groups targeted by the project;
- f. Dedicate enough time for Q&A and to identify knowledge gaps and technical capacity needs from the project staff and key implementing partners on gender and nutrition related issues, respectively;
- g. Finally, agree on the next steps and on a roadmap for essential follow-up actions and responsibilities.

The same process may be repeated if orientation workshops are held at regional or district levels as part of the project start-up process. A lighter format may be used at the community level.

Suggestions for presentations on nutrition-sensitive projects at start-up workshops

- Provide an overview of the different types of malnutrition and describe the

nutrition situation in the project area (prevalence rates, causes and target groups affected) relevant to the thematic focus of the project;

- Explain why addressing nutrition is relevant in agriculture development projects and how agriculture can contribute to improved nutrition;
- Explain how the project will address nutrition-related problems and how nutrition-sensitive activities are framed within the project's components;
- Explain implementation procedures and arrangements, human and financial resources available and the need to track progresses against nutrition outputs and outcomes in the M&E system;
- Present lessons learned and good practices from the on-going projects that might be applied in PRIMS.
- Identify next steps for ensuring that nutrition is fully mainstreamed in the project and renew the invitation to strengthen multisectoral collaboration to ensure that nutrition-sensitive interventions are adequately implemented.

Suggestions for presentations on gender at start-up workshop

- Describe the target group (who they are, where they are located and their livelihoods) and note specific opportunities and challenges they face that are relevant to the project;
- Describe key gender, youth and social inclusion issues that are relevant to project's components;
- Outline the main elements of targeting and gender strategies and approaches that will be used by the project to ensure project engagement with the target group, and activities to promote women's empowerment and gender equality;
- Explain implementation procedures, human and financial resources, and the need to track target groups and report sex-disaggregated data in the M&E system;
- Present lessons learned and good practices from the on-going projects that might be applied in PRIMS.

Annex 14: Integrated Risk Framework (IRF)

Risk categories	Risk Probability (H, M or L)	Risk Impact (H, M or L)	Mitigations/ comments
1. Macroeconomic	(M) Volatility of prices of raw material for feed: prices of maize and soya on regional markets are very volatile and subject to natural conditions and political crisis	(H) Feed represents 60 to 65% of production costs for monogastric animals and price volatility can affect the profitability of production	Improving the organization of supply in raw material through better coordination (bulk purchases) or storage, or importing animal feed from where it is produced in the region more competitively
	(L) Closure of export markets due to political or diplomatic crisis	(H) Considering the substantial part of the national production exported to DRC for some commodities, this would have a significant impact on prices and could lead to business bankruptcies	Diversification of markets: domestic/export (meat exports have already started to Congo Brazzaville – 25 private sector actors have now pooled to develop this market), niche markets
	(L) High imports of livestock-based products on the domestic market	(M) Negative impact on domestic market price	Improved competitiveness through compliance with food standards, Denomination of origin, Protection against imports (through lobbying and advocacy by producers organizations)
2. Sector strategies and policies	(L) overlapping activities from different DPs and different support modalities (financing in particular)	(M) waste of resources, confusion of beneficiaries	Ensure proper consultation and coordination with other DPs
3. Technical design of project or program	(L) financers withdraw or reduce their funding	(H) Impossibility to implement the project as designed	Fallback position: the project could be scaled down and implemented along the initial design
	(L) Derailing the project benefits to less vulnerable people	(L) Low bankability of small holders may lead to financing only those more fluent in the financial sector	Work with service providers with expertise in the promotion of the interests of the most vulnerable
	(L) Sanitary risk: for each of the 3 species (poultry, pigs and small ruminants), a major sanitary crisis could occur: African Swine Fever, Avian Influenza and Peste des Petits Ruminants	(H) A major outbreak of highly contagious disease could lead to the death or the stamping out of part or totality of stock, with major impact on the value chain	Prepare contingency plans and rapid response mechanisms

	are the main risks		
	(M) Animal placed by the project are sold or consumed to address emergency need instead of productive purposes	(M) Beneficiaries abandon small livestock production	Prepare and closely follow up beneficiaries of startup package and
	(M) Increased animal products struggle to find their way on the local market	(H) Smallholder producers and private sector do not realize satisfactory profits and abandon small livestock business	Increased linkage between smallholder production, livestock markets and slaughtering facilities through the rehabilitation/building of facilities, Increased access to niche markets (e.g. catering industry) through compliance with food standards (RSB certification) Intensive support by BDSPs to match supply and demand
	(H) High interest charged by the FIs will hamper/limit investment in small livestock value chains	(H) Low attractiveness of the project products	Build in the project mechanisms that allow the reduction of interest rate to the borrower.
	(M) 4Ps arrangements strengthen the monopoly of aggregators and the dependence of small holders	(M) Failure of 4P model and withdrawal of smallholders	Ensure that 4Ps arrangements are mutually beneficial Link the matching grants to conditions of outsourcing from project beneficiaries Set up partnership modalities that clearly define the obligations of each party
	(M) Risk of side-selling by smallholder producers when inputs/working capital is provided by buyer/aggregator in the scope of a 4P or productive alliance	(M) Failure of 4P model and withdrawal of aggregator	Ensure backstopping of partnerships by business coaches and BDSPs to prevent potential infringements and assist in conflict resolution
4. Institutional capacity for implementation and sustainability	(L) Weak technical capacity, governance and institutional capacities at national and district level	(L) Slow disbursement, lower project benefits as well as delays in implementation	SPIU core staff is already in place and will be backed by specific technical specialists, BDSPs, and Heifer's experience in supporting such projects. Supervision and implementation support missions, especially in years 1 and 2 will support focused project implementation.
5. Financial management	(M) The set-up of the chart of accounts (CoAs) in the IFMIS, is mainly tailored to	(M) CoA will not entirely facilitate expenditure classification that will	Office of Budget formulation & Reform in the Ministry of Finance to explore the possibility of using the

	suit government reporting requirements, And, in order to capture the project AWPB into the IFIMIS, the activity layout in the AWPB has to be re-lined to the layout of activities in the MTEF	result into additional disclosures to the financial reports required by IFAD	IFIMIS 'reporting analysis tools' to mitigate this risk, and/or project to use parallel systems (IFIMIS & TOMPRO) as is the case with RDDP
6. Stakeholders	(M) Most vulnerable households may not be able to keep animals over long periods and may be tempted to dispose them to cater for urgent and priority needs	(L) Impossibility for the project to reach this target group	Envisage strengthening social capital of groups as a preliminary, as is foreseen in graduation pathway
7. Environment and social	(L) Productive activities will increase women's workload.	(L) Women burden of labour will increase	Promotion of labour-saving technologies/ facilities for women along the targeted value chains Gender training to promote equitable share of labour at the household level
	(L) Inadequate solid and wastewater treatment facilities	(M) Environmental pollution due to increased number of animal processing plants	Integration of sewage/ solid and wastewater treatment facilities in the building codes of all animal processing and storage plants (e.g. slaughterhouses/slabs, etc.)

Annex 15 : Exit Strategy

52. The Project's Exit Strategy needs to be refined in the course of the Project, taking benefit of lessons learned on what works and what doesn't; while gradually shifting focus from sustaining Project's benefits to scaling-up and scaling-out those benefits. A draft exit strategy is detailed in Annex 10 of this document.
53. The sustainability of the project outcomes relies on its overall approach which is based in particular on the facilitation of partnerships, social mobilization and group formation, transfer of competences, institutional strengthening and durable financing:
54. **Partnerships:** facilitation of partnerships between smallholder producers and private value chain actors is at the core of the project. Through the establishment of these partnerships, smallholder farmers will gain access to services, markets, inputs and technical know how in a sustainable way. The project will ensure that these partnerships are mutually beneficial, and generate economic benefits for both parties, which will encourage partners to maintain them active, and to support part of their costs.
55. **Improved infrastructure environment:** the construction/upgrading of marketing and processing facilities at both public and private level will ensure that the increased small livestock production find its way to the market through outlets that are locally available (increased proximity) and comply with food safety and animal welfare standards that are expected to be raised by the GoR in the forthcoming years.
56. **Social mobilization and group formation:** shared initiatives have a greater likelihood of being continued, as partners keep each other committed. For a vast majority of the beneficiaries, especially the most vulnerable ones, the creation of self-help groups, youth groups, producers groups and cooperatives, will enable smallholders to access to market, services and finance in a sustainable way, which could not be the case for individuals. The project will channel most of its support and implement majority of its activities through the groups, which will contribute to strengthen the group capacities and cohesion and will ensure that groups remain active and keep delivering services to their members after the project closure.
57. **Graduation pathway for the poorest:** the graduation approach deployed with the poorest and food insecure households will enable them to move out of poverty by providing a comprehensive package, including a combination of livelihoods promotion, asset transfers, financial literacy and technical training. Combining support for immediate needs with a long-term plan would ultimately contribute to increase food and nutrition security and social empowerment of the poorest households.
58. **Transfer of competences:** the project will strengthen both public institutions and private actors in order to enable them to play their role after the project closure. The private Business Development Service Providers will be a central element of this strategy: these actors will be supported and capacitated by the project to enable them to add a real economic value to the businesses they support. This will enable them to remain in place after the project and continue to deliver their services to the commercially-oriented producers on a private basis. The Community Facilitators and Community Agro-Vet Entrepreneurs trained and established under the graduation pathway will remain in place after project end and operate as a recognized extension arm of the Rwandan veterinary services, with a particular ability to reach the most remote smallholder farmers. The project will also strengthen the national and the devolved public institutions to enable them to extend the support to communities and value chains after the project.

59. **Institutional strengthening:** public institutions will be supported to deliver their mandate in a more efficient and focused manner, in line with their mandate. The policy support provided to the Ministry of Agriculture will enable it to plan for the development of the sector in the long term. The support provided to stakeholders umbrella organizations will prioritize the development of mechanisms and activities that could contribute to income generation and thus sustainability.
60. **Sustainable financing:** the financing mechanisms put in place in the scope of the project will privilege sustainability and will be based in priority on existing and permanent financing mechanisms, either private or governmental. The project will as much as possible avoid direct financing of investments and will privilege activities aiming at reconciling the demand in financial products and the supply. To achieve this, the financial institutions will be supported to develop adapted financial services for small livestock value chains farmers and other private actors, that they are expected to sustain and scale up after closure of the Project. The key assumption being that the different models implemented to support beneficiaries will actually result in creditworthiness for the financial institutions. This in turn could allow to reduce use of matching grants for further engagement of the financial institutions, through demonstrating effect during Project implementation.
61. **Environmental sustainability:** the project will promote production and processing systems that are environmentally sustainable: the utilization of locally produced fodder and feed will be privileged, the valorization of farm effluents will be supported, as well as the utilization of renewable sources of energy (biogas; solar) and the construction/rehabilitation of infrastructure in line with GoR targets on adaptation to climate change and low carbon development.