

Balochistan Livestock Policy and Strategy

2020-2030



Government of Balochistan

Livestock and Dairy
Development Department

October 2019

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**Message from Chief
Minister Balochistan**

*Honourable Mr
Jam Kamal*

Livestock is one of the four major pillars of the economy of Balochistan and contributes more than 50 per cent of Balochistan's Agriculture Gross Domestic Produce (GDP) and more than 10 per cent of the overall Provincial Gross Domestic Produce (PGDP).

This economic performance is achieved even though the livestock sector has been neglected. The sector has not been prioritized for the rural community's socio-economic development or for the overall development of the province. However, this is changing and nowadays the Government of Balochistan acknowledges that the livestock sector can contribute much more to economic growth and development of Balochistan provided it is managed in a systematic way and the proper priorities are addressed.

Unfortunately, for many years, the sector was managed in a conservative way with farmers using outdated practices and not realizing the potential of the sector. The Livestock and Dairy sector in Balochistan can only be transformed into a modern and revenue generating sector through reforming the Government of Balochistan

Livestock & Dairy Development Department, as well as the sector, its actors, and its value chains overall.

The Government of Balochistan is delighted to launch the first ever Balochistan Livestock Policy and Strategy 2020-2030, which is a stepping stone towards: "growth, prosperity and wellbeing for the farmers, families and businesses involved in targeted livestock value chains". I am confident that, under the umbrella of this policy and the leadership of the Government of Balochistan's Department of Livestock and Dairy Development, the sector will advance and generate income and jobs for men and women in Balochistan.



Message from the Advisor
to the CM of Balochistan
for Livestock & Dairy
Development

Honourable Mr.
Mitha Khan Kakar
on behalf of the Government
of Balochistan

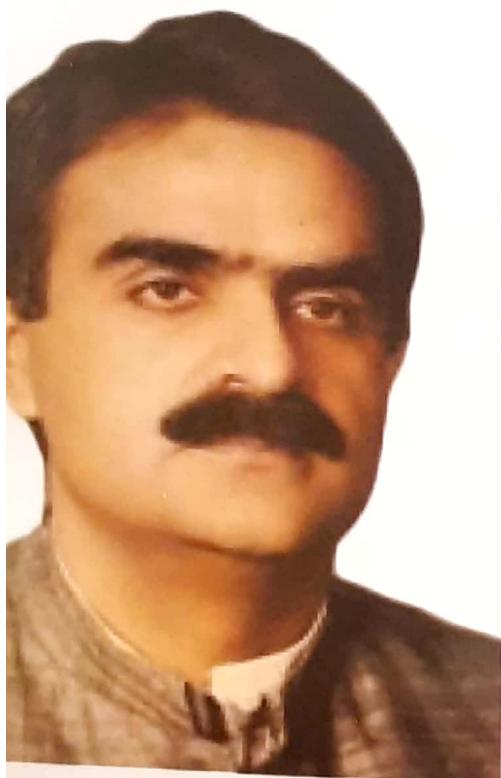
Almighty Allah has bestowed on Balochistan very precious natural resources that can be used for its development. These resources include an excellent climate, rich pastures and unique livestock breeds. These natural resources, in combination with livestock development, can be harnessed for the sustainable economic development of Balochistan and for the enrichment of its people.

However, it is noted with concern that the livestock sector in Balochistan has been neglected during the last few decades and has not lived up to its potential. Simultaneously, the Livestock and Dairy Development Department of the Government of Balochistan has not progressed the sector and its actors sufficiently. As a whole the livestock sector has the potential to contribute significantly to economic growth, poverty reduction, and reduction of food insecurity.

The current Government of Balochistan, under the leadership of His Excellency, Mr. Jam Kamal Khan Aliani has set the stage to transform the Livestock and Dairy Development Sector in Balochistan, through empowering, modernizing and transforming the Livestock &

Dairy Development Department as well as the male and female farmers and other actors across the Districts of Balochistan.

Achieving the goals as outlined in the Balochistan Livestock Policy and Strategy 2020-2030 is a top priority of the Government of Balochistan nowadays. This policy is instrumental to achieving the required changes in the livestock sector and to bring economic growth and welfare to the people of Balochistan.



Message from the
Chief Secretary Balochistan

Honourable Mr
Fazeel Asghar

on behalf of the
Government of Balochistan

Efficient and effective, governance requires a well-thought policy and strategy & framework. Government of Balochistan has embarked upon a series of policy and strategic formulation making process to improve planning and implementation of public sector development. Balochistan Livestock Policy 2020-30 is one of such initiatives. In fact, this is the first policy of Balochistan designed for advancement of livestock sector. Livestock sector is a major contributor to the economy of Balochistan, and investment, and value addition in this sector will impact the grass root levels of this society and would contribute in poverty alleviation, employment generation and empowerment of marginal sections of the society, especially women. The province has been striving to transform from primary production to commercialization and industrialization via value addition of its products.

Above in view, the BLP 2020-30 has been prepared not only to address complexities of rural economy of the province, but also to promote overall economic growth through livestock development interventions. BLP 2020-30

envisions seeing Balochistan experiencing rapid growth in the prosperity and wellbeing of its families and businesses involved in targeted livestock value chain. Setting such a long-term vision needs persistent efforts by Livestock & Dairy Development Department. Sustainable rangeland development in collaboration with Forest and Wildlife Department is yet another excellent outcome of the policy. Besides these the policy focuses on modernizing Balochistan livestock sector from foddars & farms to factories and markets.

Indeed, the BLP 2020-30 has been prepared with wisdom & professionalism as well as keeping in view the requirements of the sector in context of Balochistan for which I appreciate and congratulate the entire team engaged for this purpose.



**Message from the
Secretary of the Livestock
and Dairy Development
Department**

*Honourable Mr
Dostain Jamaldini
on behalf of the
Government of Balochistan*

Under the 18th Constitutional Amendment, responsibility for key sectors, including agriculture and livestock, now lies with Balochistan itself. The livestock sector, is not only a mainstay of our economy, but is also a way of life for many of our people and an essential part of our culture and tradition.

This Balochistan Livestock Policy and Strategy 2020-2030, prepared with the help of national and international experts, tells us that if we use our land, water, climate and livestock resources well, we can create a prosperous livestock sector that can provide employment and good incomes to many of our people. I believe that this is possible and the Government of Balochistan is obliged to make this happen by allocating sufficient public development resources for livestock development.

I would like to thank all those from inside and outside Balochistan who have helped to prepare this Balochistan Livestock Policy and Strategy. As part of the policy formulation process, a series of workshops were conducted in Quetta, as well as in the Districts of Balochistan, where the private sector, farmers, NGOs, academics, Government staff and national and international experts came together to talk about Livestock related issues

and the way forward. This is the first time that such a deep and comprehensive consultation process has been undertaken in the Livestock and Dairy Sector and the quality of the output reflects the hard work.

Now that the problems have been discussed, solutions formulated and a clear development pathway identified for the Livestock and Dairy Sector of Balochistan, it is time to move from planning to action. The Government of Balochistan (under the leadership of His Excellency, Mr. Jam Kamal Khan Aliani and the Advisor to the Chief Minister of Balochistan for Livestock & Dairy Development, Mr. Mitha Khan Kakar), is determined to achieve "Prosperity in Balochistan through Livestock Development".

The Livestock and Dairy Development Department will facilitate the required changes and will closely cooperate with the Private Sector, including farmers, Universities, Training Institutes, UN organizations such as the Food and Agriculture Organization (FAO) and Donors.

Acknowledgements

The development of this policy was led by the Government of Balochistan Livestock and Dairy Development Department (LDDD) and the Food and Agriculture Organization of the United Nations (FAO) and supported by the Australian Government (through the Australia Balochistan Agri Business Program, AusABBA Phase II).

The team who developed this Policy worked closely with the relevant Departments of the Government of Balochistan, including the Departments of Agriculture and Cooperatives, Planning and Development and Livestock and Dairy Development. The staff of these departments, both in Quetta and in the Districts, generously gave their time to support and facilitate the development of the Policy.

Special thanks must go to livestock entrepreneurs, traders, processors and livestock farmers and other value chain actors from across Balochistan and other Provinces who generously gave their time to discuss their issues and constraints and helped develop solutions that contributed to this Policy.

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Acronyms and Abbreviations

BISP	Benazir Income Support Program
CPEC	China Pakistan Economic Corridor
DoAC	Department of Agriculture and Cooperatives (Government of Balochistan)
DoFW	Department of Forest and Wildlife (Government of Balochistan)
FAO	Food and Agriculture Organization of the United Nations
FMC	Farmer Marketing Collective
GDP	Gross Domestic Produce
GoB	Government of Balochistan
GoP	Government of Pakistan
ICT	Information and Communication Technology
ILRI	International Livestock Research Institute
LDDD	Livestock and Dairy Development Department (Government of Balochistan)
M&E	Monitoring and Evaluation
MMO	Mutual Marketing Organization
MNFSR	Ministry of National Food Security and Research (Government of Pakistan)
NARC	National Agricultural Research Centre (Government of Pakistan)
NGO	Non-Government Organization (Government of Pakistan)
PARC	Pakistan Agricultural Research Council (Government of Pakistan)
PC1	Planning Commission (form 1)
PKR	Pakistan Rupee
PMIC	Pakistan Micro Investment Company
PMU	Project Management Unit
PPP	Public Private Partnership
PSDP	Public Sector Development Program (provincial and federal)
PGDP	Provincial Gross Domestic Produce
SBP	State Bank of Pakistan
SDGs	Sustainable Development Goals
SMEDA	Small and Medium Enterprise Development Authority
SPS	Sanitary and Phytosanitary (measures)
TDAP	Trade Development Authority Pakistan (Government of Pakistan)
USD	United States Dollar (1 USD = 155 PKR (dd September 15, 2019))

Executive Summary: Balochistan Livestock Policy and Strategy 2020-2030

The Balochistan Livestock Policy and Strategy 2020-2030 aims to transform the livestock sector in Balochistan over the next ten years. Livestock are an essential part of the Balochistan economy delivering both income and sustenance to over one million farming families, while meeting the needs of consumers in the province, as well as a growing consumer base across Pakistan and its regional export markets. The Balochistan Livestock Policy and Strategy 2020-2030 provides the roadmap to stimulate rapid growth in the sector and deliver prosperity and wellbeing to the families and businesses involved in its targeted livestock value chains.

The Provincial livestock flock is huge and the Livestock & Dairy Development Department (LDDD) estimates that there are 32 million sheep and goats in the Province in 2019. The total population of livestock (excluding poultry) is about 39 million. Inevitably Balochistan suffers from significant overstocking and the productivity from this huge flock is well below its potential.

Balochistan's livestock flock¹ is minimally managed with very low productivity and profitability. Furthermore, such a massive flock is unsustainable, exacerbating as it does the effects of Climate Change through direct emissions, and contributing to the significant degradation of the Province's fragile and unique rangeland ecosystems. Moreover, this rangeland degradation, combined with the increasing incidence of drought, is compromising the Province's water supply, while leading to worrying levels of biodiversity loss.

The Province is therefore facing a crisis in the livestock sector and its rangelands, but a crisis that if confronted directly and urgently, has the potential to improve the livelihoods of herder families by dramatically improving livestock productivity, while at the same time reducing flock sizes, and restoring the productivity, biodiversity and environmental services generated by the Province's rangeland ecosystems.

In the past, the livestock sector of Balochistan has been largely neglected by Government, donors, and the private sector as well. As a result, the sector has been left to expand with minimal guidance or

technological inputs and improvements. Traditional small-scale subsistence herding practices therefore still predominate in a sector that has experienced significant growth.

All stakeholders should therefore combine their efforts to introduce practices that can substantially improve flock and animal productivity and capitalize on the growing demand for meat and dairy products, while at the same time reducing uncontrolled and unsustainable grazing practices, and the resulting degradation of the Province's natural resources. This Policy aims to ensure that: Balochistan experiences rapid growth in the prosperity and wellbeing of its families and businesses involved in targeted livestock value chains.

Financial resources are finite, and the Policy cannot address all issues at once, hence the Policy focuses resources on the main sub-sectors (dairy, small ruminants and poultry). Together these three value chains cover about 80 per cent of the total livestock sector in Balochistan and these three sub-sectors also provide significant opportunity for women and men to improve their incomes and livelihood options.

Across these sub-sectors the policy aims to achieve the following, six outcomes over the next ten years, which are briefly described below:

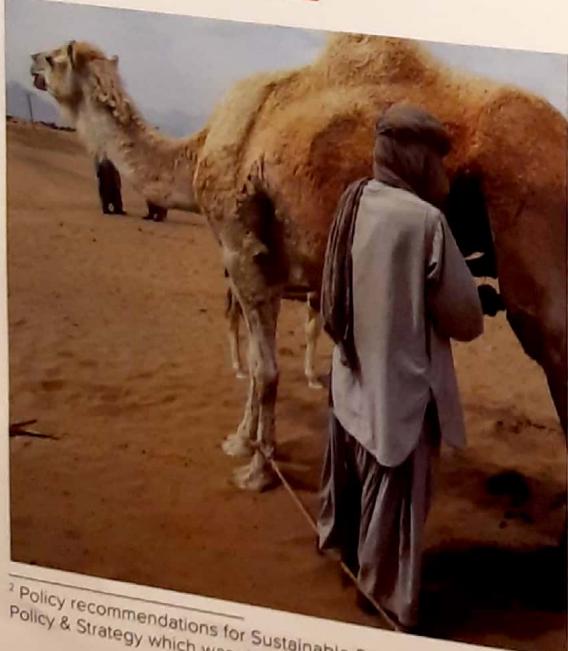
- Sustainable Rangelands productivity:** Livestock herders improve their grazing practices and enhance the sustainable productivity of degraded rangelands.
- Production and Marketing Innovation:** Balochistan's livestock families and businesses understand and work collaboratively to access and adopt production and marketing innovations.
- Business Investments:** Livestock businesses are informed, motivated and supported to invest in profitable input services and processing infrastructure.
- Diversified Markets:** Balochistan's livestock families and businesses understand and work together to comply with the necessary

¹ The Livestock and Dairy sector in Balochistan includes sheep, goat, poultry, cows, buffalos, camels and other animals. For obvious reasons this Policy will focus on some major groups of animals. Fish in all its features is not covered by this policy.

- standards to access diversified markets.
- 5. **Credit and Insurance:** Balochistan's livestock families and businesses can access credit and insurance products relevant to their needs.
- 6. **Enabling Environment and LDDD Reform:** Balochistan's livestock families and businesses benefit from an improved enabling environment and Government services for livestock production, marketing and investment.

The interdependency of these six outcomes is depicted in Figure 1, below:

Figure 1: Outcomes of the Balochistan Livestock Policy and Strategy 2020-2030

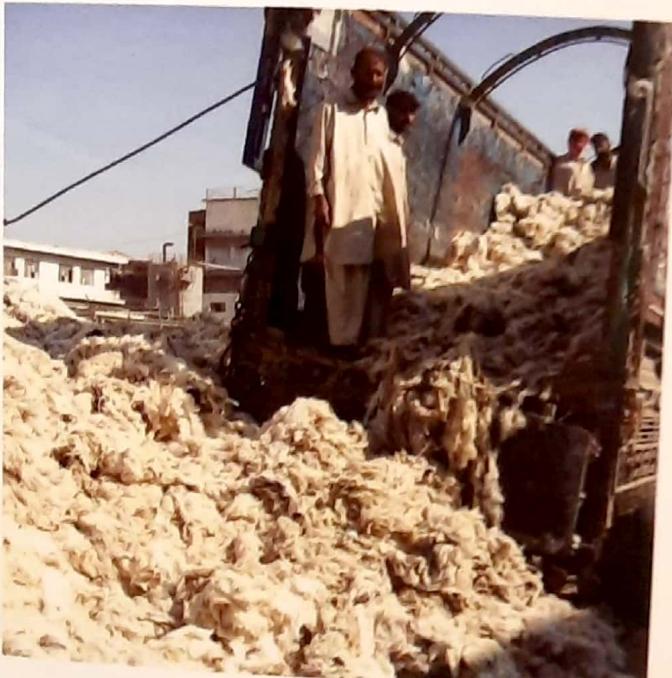


² Policy recommendations for Sustainable Rangeland Management in Balochistan which was developed by FAO and the Government of Balochistan in 2014, are also included in the Balochistan Agriculture Sector Policy & Strategy which was developed by FAO and the Government of Balochistan in 2014.

In summary, the six Policy Outcomes are characterized by the following major interventions:

1. Improving the productivity of degraded rangelands

Sustainable management of the rangelands is key to the success of the livestock sector. Hence the Livestock and Dairy Development Department (LDDD) and the Department of Forest and Wildlife (DoFW) will intensively cooperate and coordinate their activities. Rangelands must be sustainably developed by introducing better community-based rangeland management and grazing practices, as well as the introduction of new drought resistant forages².



2. Delivering production innovations and technologies

Technical innovations for enhanced quality and production efficiency will be introduced in the areas of animal breeding, husbandry, disease management, forages and natural resource use efficiency. Research, development and extension services will be focused on formal and informal farmer associations. Improved information, knowledge and skills of farmers is instrumental to achieve these outcomes and hence LDDD will focus on improving the quality of the information available and the mechanisms to improve its effective communication with farmer associations.

3. Building private sector investments

Companies will be encouraged to deliver improved inputs and services efficiently. In addition, Public Private Partnerships will focus on improving the processing and value addition for livestock products in Balochistan.



4. Building compliance for diversified markets

In the short term, both local markets in the Province and national markets across Pakistan are much more important for livestock products from Balochistan. In the longer term the sector needs to define food quality and safety standards for targeted international markets and the sector needs

to focus on a cluster of producers who can commit to the uniformity and standards required. Marketing and sales will be left to the commercial / business partners, while the Government will focus on its enabling role in collective trade facilitation and maintaining food safety and quality standards.

5. Improving access to credit

Value chain financing is a priority need. Collaboration will occur with the State Bank of Pakistan (as the main regulatory body) as well as commercial banks and other financing agencies to launch innovative credit products for the livestock sector in Balochistan. In particular, products are needed to innovatively address the lack of traditional forms of collateral held by small scale producers. In addition, practical insurance products will be investigated to cover the risks to producers and credit providers.

6. Creating an enabling environment and Government services for growth and investment

The Government will focus on creating an enabling environment that removes market distortions and policy disincentives (e.g. price capping), attracts investment in the selected sub-sectors, and reforms the services it provides.

To achieve this the previous "Vision, mission and objectives of the LDDD, 2015" will be reviewed and aligned realistically with the resources available. This revised LDDD vision will outline the systematic





and gradual reform of the LDDD to become an enabler of systemic change within the Livestock sector in Balochistan. LDDD will gradually focus its resources on public good policies and standards, research and information services, while stopping the inefficient and market distorting direct delivery of inputs. The Department will reform as a facilitator of livestock sector development and investment, partnering with the private sector, communities and farmer associations to achieve its objectives.

In conclusion, the focus of the Balochistan Livestock Policy and Strategy 2020-2030 is on male and female farmers, their families, livelihoods and emerging agri-businesses. The proposed livestock sector initiatives will not only contribute to economic growth in Balochistan, but also improve the food security and nutritional status of the population in Balochistan.

The Balochistan Livestock Policy and Strategy 2020-2030 is deemed to be both feasible and achievable, provided increased resources are mobilized by both the Government of Balochistan and its development partners. Conservative estimates show that the escalation of these and other interventions through the Balochistan Livestock Policy and Strategy could improve livestock household income by 50 per cent over the next 10 years and generate over 100 billion PKR for the provincial population and businesses.



1. Introduction

Balochistan's livestock sector is an important component of the province's economy. All together poultry, dairy, camels, sheep and goats, along with their value-added products, contribute around 50 per cent of the total provincial agricultural product.

The Chief Minister Balochistan, the Advisor to Balochistan's Chief Minister for Livestock and Dairy Development, as well as the Secretary of the Livestock and Dairy Development Department (LDDD), have emphasized that the livestock sector has struggled to advance because the sector and its agencies do not receive sufficient attention or resources from the Federal and Provincial governments, as well as from donors. Apart from investments in animal health, the livestock sector has received little support. However, given its tremendous potential to improve livelihoods, the Government plans to accord priority to the livestock sector in the future.

To establish the livestock sector more prominently within the province's development agenda, all stakeholders have collaborated to develop the Balochistan Livestock Policy and Strategy 2020-2030. This Policy is based on broad stakeholder consultation throughout the various livestock value chains and sub sectors in Balochistan. It sets out a clear agenda for the livestock sector for the next decade and focuses on the most relevant value chains, stakeholders and beneficiaries.

1.1. Development of Balochistan Livestock Policy and Strategy 2020-2030

This Policy is the result of a comprehensive, bottom up consultation process, conducted between 2016 and 2019. During the first couple of months of 2016,

the LDDD together with the Food and Agriculture Organization (FAO), conducted Focus Group Discussions with livestock farmers in all 33 districts, across Balochistan.

In March 2016, a one-day Livestock Conference was organized in Quetta with livestock farmers from all Districts, and involved the Minister for Agriculture in Balochistan, the Minister for Livestock, as well as representatives of the Federal Ministry of National Food Security and Research (MFSRN), the Pakistan Agriculture Research Council (PARC), and the International Livestock Research Institute (ILRI).

Subsequently, in 2017 and 2018, desk studies were undertaken of important sector opportunities and issues, including wool, rangelands, and meat, as well as a review of livestock investments within the Provincial and Federal Public Sector Development Programs (PSDP).

In early 2019, a team of livestock and policy experts was appointed by FAO and LDDD to compile and analyze past and current livestock project achievements, Balochistan's various acts and regulations, prominent livestock policies from other Provinces, as well as the results of stakeholder consultations.

Finally, a strategy workshop was organized in July 2019, including public and private stakeholders from the entire livestock sector. The culmination of this comprehensive consultation process and the final workshop are presented in the Balochistan Livestock Policy and Strategy covering the ten years from 2020 to 2030.

1.2.Alignment and Implementation of the Balochstan Livestock Policy and Strategy

The Balochistan Livestock Policy and Strategy 2020-2030 is complementary to and will help guide the direction of the Balochistan Comprehensive Growth and Development Plan 2020 – 2025³. The Policy will also contribute towards the:

- achievement of the livestock opportunities enabled through the China Pakistan Economic Corridor (CPEC) investment;
- achievement of the Sustainable Development Goals (SDGs) of the United Nations; and
- realization of the National Food Security Policy of the Ministry of National Food Security and Research (MNFSR).



The Balochistan Livestock Policy and Strategy 2020-2030 should guide livestock development and coordinate the interventions of the various stakeholders be they from the Provincial Government, Federal Agencies, bilateral and multilateral donors, the private sector or other livestock organizations. In particular, the Policy will also help the LDDD to refine its vision and mission. This will allow the LDDD to reform the Department and to align its services with sector needs.

Importantly, for successful implementation of the Policy, coordination and cooperation between the LDDD, the Department of Forestry and Wildlife (DoFW) and the Department of Agriculture and Cooperatives (DoAC) is essential. This will require continuous dialogue and consultation between the Departments and also with the beneficiaries and stakeholders of the targeted livestock value chains.

The LDDD will actively disseminate this policy framework among all stakeholders, organize a donor conference and will approach selected donors with customized proposals for specific parts of the Policy.

The responsibilities and timeframes to deliver the Policy outcomes will be further detailed through a five-year implementation strategy and intervention plan. The mechanisms to achieve these outcomes will be designed with donors and stakeholders through participatory, bottom up processes rather than through top down “blanket approaches”.

³ Currently in Draft.

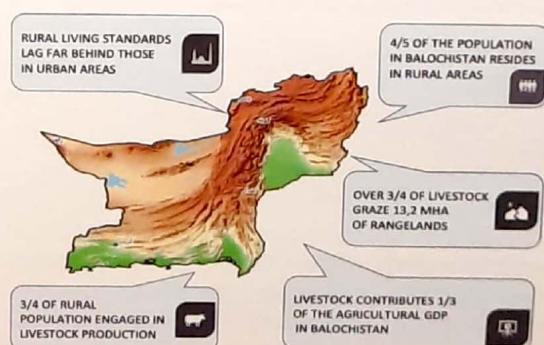


2. Livestock Sector Balochistan

2.1. Overview of Livestock Sector Balochistan

A strong livestock sector is vitally important for the development of Balochistan's economy and the wellbeing of its people. Not only does livestock production generate almost 50 per cent of Balochistan's Agricultural Gross Domestic Product (GDP), or almost 10 per cent of the overall GDP⁴ of Balochistan, but the production of livestock is also hugely heterogeneous, being driven by almost one million smallholder households and herder families⁵. Some important features of the livestock sector in Balochistan are depicted in Figure 2.

Figure 2: Status of Livestock Livelihoods in Balochistan



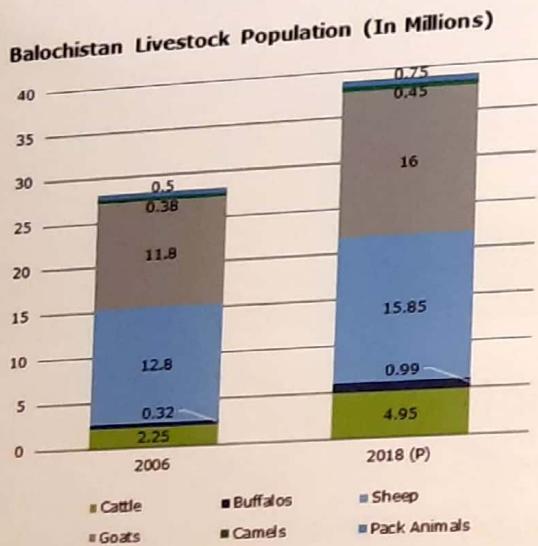
⁴ <http://documents.worldbank.org/curated/en/965761468334151857/ACS22580WPOv100UBLIC00Januray02013.docx>

Data derive from a World Bank analysis conducted in 2006 <https://openknowledge.worldbank.org/bitstream/handle/10986/8082/403450GRAY0COV1closed0Aug0281020081.pdf?sequence=1&isAllowed=y>, which itself is based on the 2006 Livestock Census. All data since 2006 is based on LDD estimates and have not been verified.

⁵ This amounts to about 8 million people.

Rural households represent around 80 per cent of the provincial population and ¾ of them depend on livestock for some or all of their subsistence and income. By far the most important livestock in Balochistan are ruminants (sheep, goats, cattle, buffalos and camels) which make up over 80 per cent of the total number of animals in the Province. In 2019 it was estimated that there were around 32 million sheep and goats (Figure 3) while cattle numbered around 5 million head. The Province also has 0.5 million horses, mules and donkeys which provide people with essential draft power and transport. Complementing the herd is the relatively small, but important contribution made by household poultry. According to the LDDD the poultry flock in the province was estimated at over 8 million birds in 2019⁶.

Figure 3: Livestock numbers in 2006 and 2018 (based on the 2006 Livestock Census and subsequent LDDD estimates).



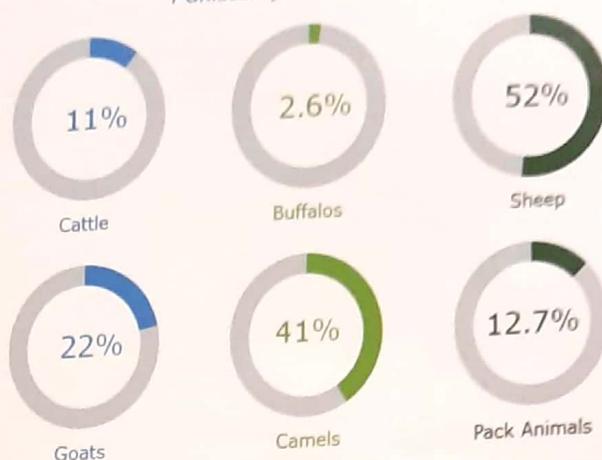
Source: Livestock Department, Government of Balochistan

Given the importance of the livestock sector it is unfortunate that there is not more accurate data available. The last formal livestock census in Pakistan was conducted 13 years ago in 2006 (Figure 3). Since 2006, the LDDD estimates that the livestock population of Balochistan has grown by 40 per cent. Unfortunately, the available data focuses on livestock numbers, which is a poor reflection of sector growth as it tends to justify overstocking (especially of small ruminants). A better alternative measure would be livestock productivity and overall production.

In terms of national importance: Balochistan's cattle,

sheep, goats and camels account for between 11 and 52 per cent of the national herd (Figure 4).

Figure 4: Balochistan's share of the livestock sector in Pakistan (2018 estimates)



Source: Pakistan Economic Survey 2017-18 and Livestock Department, Government of Balochistan

Traditionally these livestock provide the meat, milk, ghee, khrut, eggs, wool, hide & skins and draft power, essential for sustaining remote families. However, Balochistan's rural families increasingly also need to maximize the income potential from these livestock as their cash needs for education, health and consumables increase and the demand from potential urban populations both nationally and internationally grows.

The ruminant herd is largely sustained by 32 million hectares of rangelands. While this zone includes some very inhospitable areas of bare rock and sparse vegetation, the rangelands include important seasonal pastures that have the potential to support large numbers of livestock if sustainably managed.

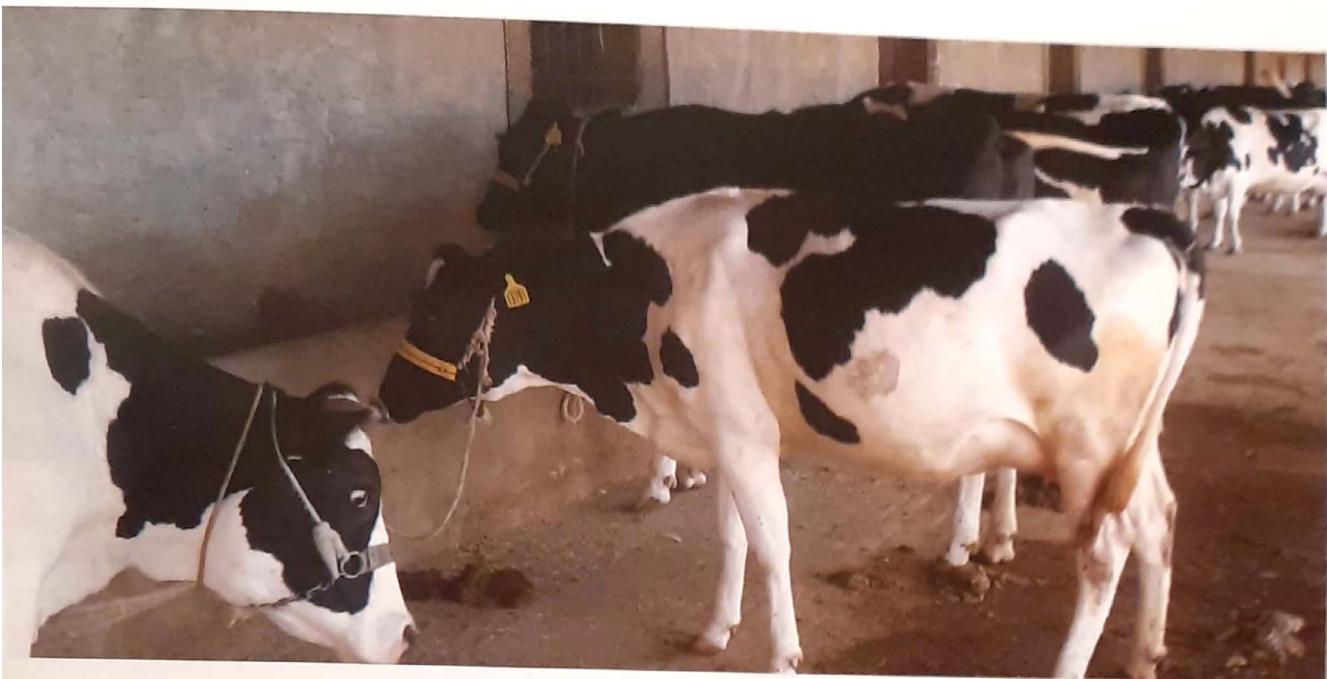
2.2. Analysis of Livestock Sector

The transition from Balochistan's traditional low-input livestock production approaches to a more commercial focus faces many challenges, such as:

1. Fragile value chains:

The current value chains for these livestock commodities are weak and struggle with aggregation, transport, processing and marketing. This results in multi-stage, very long value chains that must contend with the intermittent supply of variable, often poor-quality livestock products. These challenges make the value chain stakeholders risk-adverse and thus many of their practices can seem quite exploitative.

⁶ No reliable data on poultry in Balochistan is available



2. Poor Animal Nutrition:

Balochistan is dry and livestock depend on rainfall for pasture production across Balochistan's rangelands, as well as streams and springs for drinking water. Degradation of grazing lands, overstocking and the growing needs of communities and irrigators, have limited feed and water availability. Poor animal nutrition is now an important, seasonal constraint as illustrated in Text Box 1.

Box 1: Animal Nutrition

A 2013 study showed that small ruminants in Balochistan are facing severe feed deficiency. Rangelands provide 80 per cent feed for sheep and goats however the availability of this feed is subject to seasonal variations with critical shortages in winter and early spring.

Poor feed during this time is particularly detrimental as ewes must support fetal development. During this period, animals lose body weight, resulting in low birth weights and high lamb mortality. Overall, the performance of small ruminants is well below their genetic potential.

To increase the animal's productivity alternative forages, as well as more efficient use of available feed source is required.

3. Poor health:

Livestock diseases and parasite infestation rates remain high across Balochistan creating significant livestock morbidity and loss (see Box 2). Diseases

and parasites not only limit livestock productivity but specific trans-boundary infections and zoonotic diseases severely limit potential market access and can pose important risks to human health. The challenge with adequate treatment is that veterinary inputs and services are limited partly due to an under-developed private sector. In addition, farmers are not sufficiently knowledgeable about the cause, symptoms or remedies, and the flock is spread widely in very remote areas.

Box 2: Animal Health

Only 10 per cent to 15 per cent of sheep are vaccinated. Vaccines are not easily available in the districts, and the quality of available vaccines is often poor. In addition, there are only 374 veterinarians in animal health in Balochistan (equivalent to one "vet" for every 50,000 animals).

While farmers are aware of the major animal health issues, they typically seek veterinary assistance only after there has been an outbreak of disease. Greater awareness and availability of vaccines as a preventative treatment is needed.

Improved nutrition and health would dramatically improve fecundity, condition and productivity of all animals.

4. Farmer skills:

Lastly, the transition from subsistence to commercial livestock production requires that farmers and herders become more skilled in animal and herd

husbandry (e.g. feeding, management, disease and parasite control), breeding & selection (see Text Box 3), collective marketing, market needs and negotiation skills. Gaining these skills takes time and commitment and only some farmers are sufficiently motivated to change. Even for those who are motivated, access to market information, quality services and inputs is challenging and clearly beyond the capacity of Government to address on its own.

Box 3: Breeding

Animal breeding is haphazard in Balochistan. For example, male sheep and goats remain together in the herd throughout the year resulting in an extended and poorly planned lambing season.

Also, flocks are genetically diverse and produce mixed quality meat, milk and wool. The result is lower prices when compared with herds where breeding is more deliberately managed.

Hence, the Balochistan's livestock sector must undergo significant transformation if it is to capitalize on its comparative advantages (see Box 4), meet the needs of the population, and take advantage of the market opportunities.

Box 4: Comparative Advantages of Livestock in Balochistan

- Large concentration of sheep and goats in Balochistan.
- Conducive environment for livestock grazing, if the rangelands are well managed.
- Unique breeds of sheep and cattle, well adapted to the harsh conditions in Balochistan.
- Significant scope to rapidly improve productivity with only marginal increases in inputs.
- Good infrastructure in rapidly developing (such as deep-sea harbor in Gwadar, roads and economic processing zones under CPEC).
- Access to large consumers markets nearby.

It will not be easy, but the potential for livestock development is significant. Very simple investments by LDDD and FAO through their joint programs already show the significant gains achievable with limited investments (see Box 5).

Box 5

Examples of successful investments in Livestock

- Improved livestock fattening and marketing for Eid and other markets has increased household incomes by more than USD 700,000 (in total) for 931 households in 2018;
- Mechanical clipping and shearing of wool and associated cleaning and grading has increased returns from PKR 25 to 120 per kg wool (for 740 households) and increased market awareness, appreciation and demand for Balochistan wool;
- Household poultry production for women has increased incomes for women by almost PKR 4,000 per bird per 2 years cycle, through the sale of chicks, eggs and meat and thus significantly improved household nutrition and women's agency;
- Improved para-vet services for disease and parasite management through vaccination camps organized by LDDD and FAO has reduced mortality of sheep and goats by 10 per cent for 242 farmers in 2018.

The capture and scaling up of these and other livestock opportunities is further enhanced by the ongoing and future investments associated with the China Pakistan Economic Corridor (CPEC). Current





and planned CPEC investments will dramatically improve connectivity throughout the province. The rapidly improving road and communication network in Balochistan allows improved delivery of inputs as well as increased access to currently important provincial and national markets, as well as the future potential for increased export to China and the Middle-East. Balochistan is aiming to incentivize complementary investments for CPEC through the establishment of special economic zones focused on processing and marketing provincial products.

Conservative estimates show that the escalation of these and other interventions through the Balochistan Livestock Policy and Strategy could improve livestock household income by 50 per cent over the next 10 years and generate over 100 billion PKR for the provincial population and businesses.

This Balochistan Livestock Policy and Strategy 2020-2030 aims to establish the pathways for these changes and consolidate the contribution of all stakeholders to achieve the initiatives proposed. The Policy is a sector wide document addressing the needs of all stakeholders be they farming or herder families, input suppliers, veterinary services, aggregators, processors, wholesalers, retailers, consumers or government. Naturally the Government of Balochistan, through LDDD and other relevant Departments, is an important player, but one of many. The Government needs to focus its role on facilitation, development of effective and enabling policies as well as the creation of a conducive environment for private sector investment and sector growth.

The Balochistan Livestock Policy and Strategy 2020-2030 will be complemented by a detailed 5-year Strategy and Annual Intervention Plan that outline the specific roles expected of:

- **Investors:** Including the private sector, government and Balochistan's development partners;
- **Institutions:** Ensuring that provincial and national agencies/institutions (including academia) work together and integrate their scarce resources to meet its aims; and
- **Policy Makers:** Identifying where policy reform and change are needed to overcome current bottlenecks and build an enabling environment that ensures both economic growth and the wellbeing of the population.

2.3. Strategic Focus and Critical Cross Cutting Issues

The Balochistan Livestock Policy and Strategy 2020-2030 needs to focus on those areas where significant gains can be made and where critical issues confront the livestock sector. This section of the Policy outlines these focal areas and issues.

Small ruminants, dairy cattle and poultry are the three subsectors that comprise over 80 per cent of Balochistan's livestock value and production and present the major growth opportunities for the Balochistan livestock sector⁷. These subsectors have the scale, reach and comparative advantage to deliver prosperity and wellbeing to the majority of Balochistan's men and women. Over the next ten years these sub-sectors will be the focus of the Balochistan Livestock Policy and Strategy 2020-2030.



SECTOR FOCUS

SMALL RUMINANTS, DAIRY AND POULTRY MAKE UP OVER 80% OF BALOCHISTAN'S LIVESTOCK VALUE AND PRODUCTION

**THESE SECTORS HAVE THE SCALE, REACH AND COMPETITIVE ADVANTAGE TO DELIVER PROSPERITY AND WELLBEING TO THE MAJORITY OF BALOCHISTAN'S MEN AND WOMEN
THESE THREE SECTORS SHOULD BE THE FOCUS OF THE POLICY**

⁷ It is acknowledged that camels are a unique livestock sub sector in Balochistan and should get attention. However, the economic value and development opportunities for camels are less when compared with Dairy, Small Ruminants and poultry and hence camels are not included as priority sub sector in the policy.

2.4. Opportunities, Benefits and Constraints

The opportunities, benefits and constraints faced by the three selected sub-sectors (small ruminants,

dairy cattle and poultry) have been discussed above and are summarized in Figure 5.

Figure 5: Opportunities, Benefits and Constraints facing the selected focal sectors under the Balochistan Livestock Policy and Strategy 2020-2030

FOCAL SECTOR – SMALL RUMINANTS (SHEEP AND GOATS)



OPPORTUNITIES	BENEFITS	CONSTRAINTS
<ul style="list-style-type: none"> Largest agricultural sector in Balochistan comprising over 80% of total ruminant herd. Province has a distinct comparative advantage Strong national markets based on taste Potential international markets if SPS standards can be consistently achieved 	<ul style="list-style-type: none"> Increased economic contribution of the sector to Balochistan Core benefits for family nutrition Poverty alleviation for rural families 	<ul style="list-style-type: none"> Inconsistent breeds lead to product variability Improving the feed quality and productivity of degraded rangeland is an essential but complex issue to address Significant diseases affect productivity and export access (e.g. FMD) Weak value chain and Government policy (price capping) increases costs and limits private sector investment

FOCAL SECTOR – SMALLHOLDER POULTRY



OPPORTUNITIES	BENEFITS	CONSTRAINTS
<ul style="list-style-type: none"> Scope to increase household production significantly 	<ul style="list-style-type: none"> Core benefits for family nutrition Benefits for economic empowerment of women through sale of chicks, meat and eggs Significant contribution to family finances and poverty alleviation 	<ul style="list-style-type: none"> Significant diseases require regular vaccination

FOCAL SECTOR – DAIRY		
OPPORTUNITIES	BENEFITS	CONSTRAINTS
 <ul style="list-style-type: none"> High demand and under supply of fresh milk Scope to significantly improve inputs, production and supply chain 	 <ul style="list-style-type: none"> Core benefits for family nutrition Poverty alleviation for rural families 	 <ul style="list-style-type: none"> Significant feed constraints at times of year limits productive days Limitations of animal health and zoonotic diseases Limited storage, processing and links reduce access to national markets Government price capping limits private sector investment

2.5. Livestock and Gender

Women play an important role in livestock production. In particular, within the small ruminants, dairy and poultry sub sectors most day to day husbandry activities are conducted by women. Yet their efforts are often not appreciated, and their contribution is often overlooked or undervalued. Furthermore, women have little influence over how the products are disposed of, and often do not control any of the income generated by livestock.

Yet it is increasingly appreciated that the success of any livestock enterprise relies heavily on the effective involvement of women. Improving women's access to resources and income from

livestock significantly improves their enthusiastic engagement and the achievement of successful outcomes overall. In addition, income earned by women preferentially enhances the nutritional and educational wellbeing of children in the household.

Consequently, within the Balochistan Livestock Policy and Strategy 2020-2030, all stakeholders have agreed that greater emphasis must be placed on engaging women, across the entire livestock value chain. This will include their engagement in production technologies, innovations, access to markets and productive resources as well as ensuring their freedom to preferentially manage some of the income generated.





2.6. Livestock, Food Security and Nutrition

Livestock development will not only contribute to economic growth but also make a significant contribution to the food security and improved nutrition of rural families. This is true for both the farming families themselves, as well as for urban consumers within Balochistan and nationally.

Farming families may benefit in three different ways:

Firstly, they will have increased access to quality protein through their expanded production. This will be a particular bonus for young children and women;

Secondly, they will have greater variety of protein available through the introduction of meat, milk and egg-based products; and

Finally, they will have greater disposable income allowing them to also seek out better quality foods in the markets. This will be complemented and supported by effective training and Behavioral Change Communication (BCC) on nutrition to ensure healthy diets.

From the perspective of the urban consumer it is already apparent that the local, national and regional demand for animal proteins, notably milk and dairy products, eggs, beef, poultry meat and mutton is increasing due to population growth and an ever-increasing middle class. If well managed, improved livestock production in Balochistan will be able to benefit from this growing demand.

example, about 80 per cent of feed for Balochistan's 32 million sheep and goats comes from rangelands. In the past, traditional herding and grazing practices tended to regulate herd size and grazing rights. These traditional grazing practices have broken down over the last half century due to insecurity in Pakistan and Afghanistan and increasing climate variability. As a result, farmers and herders have exploited the fragile rangelands leading to overgrazing, pasture degradation, biodiversity loss and significant erosion. This has been exacerbated by increasing drought and climate variability resulting from Climate Change. The rangelands are now degrading rapidly and bio-diversity loss is acute.

The rangelands need to be much better managed if the livestock sector in Balochistan is to be transformed. Better rangeland management is essential if forage supply, biodiversity and environmental services (e.g. sustainable water catchments) are to be maintained and enhanced. For the Balochistan Livestock Policy and Strategy 2020-2030 to be effective, all stakeholders must acknowledge the acute stress that face the Provincial rangelands and work collaboratively with communities to reverse the trend. The Policy thus focuses on the challenges of rangelands and the need for community-based management practices to be effectively planned and implemented. Better flock management and sustainable management of the ranges will increase rangeland resilience and productivity.

2.7. Livestock, Rangelands and Adaptation to Climate Change

Balochistan's rangelands are the backbone of the livestock sector (particularly for ruminants). For



3. Vision and Outcomes Balochistan Livestock Policy and Strategy

Balochistan's livestock sector stakeholders believe that, with concerted effort and careful use of their combined resources, the following vision can be realized over the next ten years.

Balochistan will experience rapid growth in the prosperity and wellbeing of families and businesses involved in its three targeted livestock value chains: small ruminants, cattle and poultry.

Over ten years it is envisaged that the value to the province of the small ruminant, dairy cattle and poultry subsectors will grow by an average

of 4 percent⁸ per year, resulting in 50 per cent growth over the period. Similarly, due to this growth people's access to nutritious, safe and affordable meat, dairy products and eggs will increase be they members of farming families or urban consumers. Livestock opportunities will be open for all to participate but particular benefit will flow to those families and businesses that commit to, and actively collaborate to grow their chosen subsector.

Six strategic outcomes have been identified as the focus of work over the next ten years as outlined in Figure 8 and elaborated in the following paragraphs. These outcomes along with the priority activities over the next ten years that will contribute to each are discussed below. This is an initial description

⁸ 4 per cent growth is the average percentage annual growth in other provinces. It was observed that the livestock sector in Pakistan has grown faster than the crop sector in Pakistan during last couple of years.

Figure 6: Vision and outcomes (6) of the Balochistan Livestock Policy 2020-2030



and needs to be read in conjunction with Annex 2, which details the Objectives and Indicators of Success for each outcome.

3.1. Sustainable rangelands productivity

Livestock herders Improve their grazing practices and enhance the sustainable productivity of degraded rangelands

Degradation of rangeland forages is potentially the most important long-term issue for provincial livestock production and urgently requires:

- Community ownership by the villagers and nomadic herders and commitment to controlled managed grazing,

- Rehabilitation of natural grasslands, and
- Introduction of new potential drought resistant forages. In particular Atriplex species offer considerable promise.

All initiatives depend on community management and ownership of the rangelands and forests as ongoing uncontrolled grazing will lead to failure. These community agreements must involve both the villagers themselves, as well as nomadic herders. Without clear community level commitment to a rangeland management system the work to restore the rangelands will be fruitless.

The DoFW and LDDD must coordinate their activities to identify communities willing to change their practices and sustainably manage their rangelands, which is a very challenging task. Collaborative community-based management

agreements then need to be concluded between the DoFW and community organizations or traditional representative bodies. Where this commitment is in place the LDDD, DoFW and their development partners can work to introduce management regimes and species that will generate consistent fodder and resource protection.

3.2. Production and Marketing Innovation

Balochistan's livestock families and businesses understand and work collaboratively to access and adopt production and marketing innovations

Current government run livestock research and extension services, information products and communication tools are in a poor state and well behind other provinces. Research and Extension is limited, information is poorly formatted for the average user, and the use of modern Information and Communication Technologies (ICT) and electronic tools is lagging. The challenge of extension in Balochistan is significant and the LDDD needs to improve its efficacy by focusing its applied research, veterinary and extension activities on formal and informal groups of farmers.

It is inefficient and unaffordable for government livestock research, veterinary or extension services to use one to one delivery systems. As such livestock farmers will be formed into production and/or marketing associations and the scarce extension services (e.g. field assistants) will be dedicated to facilitating, supporting and improving the performance and aspirations of these groups. These formal and informal associations such as Farmer Marketing Collectives (FMCs), Mutual Marketing Organizations (MMOs) and Farmer Producer Organizations, will be the focus for all trainings, demonstrations and services (e.g. vaccination) provided by Government Agencies. Many of these groups already exist through the support of government, development partners or the communities directly. Development partners will be encouraged to support existing groups and establish new associations as required, guided by the Balochistan Livestock Policy and Strategy. Consideration should be given to the farmers' associations, meeting at least part of the operational and transport costs of their allocated extension officer (field assistant). LDDD will keep a record of the associations, their allocated extension officer and their members as well as the quality of the services and the contents of the extension



messages.

Private veterinary and input supply businesses will be encouraged to become members of these associations, deliver their services through these associations, and provide technical training and field support as required.

The emphasis within the groups will be on self-help and advocacy encouraging local resource mobilization, through cost sharing mechanisms which do not distort the market. The associations themselves will drive their agenda and the associations, along with their allocated extension officers, will help facilitate additional support, advice or market information as required.

In addition, these groups will be supported by the LDDD and will be used as the focus of on-farm research or demonstration related to:

1. Animal Breeding;
2. Animal Husbandry;
3. Disease management;
4. Forages and nutrition;
5. Natural resource use efficiency; and
6. Animal welfare.

The LDDD will run a responsive adaptive research and technology program. The associations will make their needs known and the LDDD scientists will work with the allocated extension officer and the association to undertake trials, testing, demonstrations or workshops to address their concerns.

Both knowledge dissemination and capacity building of livestock farmers play an important role in realizing the Livestock Policy outcomes. Packaging appropriate knowledge and information is required and LDDD extension services, through

livestock field assistants, will be empowered and capacitated to play a vital role in linking knowledge and services with the livestock farming communities.

At the central level the LDDD will establish an information and communication office that will



work to collate and/or package existing or new information products. Given the widespread availability and use of cellular networks, emphasis will be given to media-based mobile phone mechanisms to disseminate this information in a timely fashion. Poster, audio visual and printed material will only be provided to livestock associations and their members (and potentially at a minimal cost).

3.3. Business Investment

Livestock businesses are informed, motivated and supported to invest in profitable input services and processing infrastructure

The Government should avoid becoming a market player or introducing subsidies or incentives that compromise business profitability or distort the market.

Instead, the Balochistan Government will work with the Chamber of Commerce, the Small and Medium Enterprise Development Authority (SMEDA), local entrepreneurs, and financiers (e.g. Commercial Banks and other Financing Agencies) to promote co-investments (including Public-Private Partnerships – see Box 6) or credit guarantee arrangements that deliver significant provincial livestock business investment in either:

1. Provincial processing of livestock products (meat, milk, eggs or other byproducts), and

2. Improved access, range and quality of input products, pharmaceuticals, veterinary services or advice (particularly in district centers).

Box 6 Public Private Partnerships (PPPs)

- The Planning and Development Department (P&D) plays a pivotal role in Public Private Partnerships and the Balochistan Government has approved the PPP act some time ago.
- Public Private Partnerships are recognized as a means to accelerate the development of the livestock sector and to engage the private sector.

Preference will be given to investment options that fill missing market functions for the province or for specific districts. In particular this should focus on providing localized services wherever feasible and profitable. For example, currently significant numbers of poultry chicks are imported from hatcheries in the Punjab and Sindh. There is a significant business case for hatcheries to be established locally to meet local demand. Already, models of women run hatcheries have proven profitable and should be duplicated.

3.4. Diversified Markets

Balochistan's livestock families and businesses understand and work together to comply with the necessary standards to access diversified markets

In the short term, the national market in Pakistan is the most important for livestock products from Balochistan. Currently Balochistan is under-represented in this market. Even in key areas of strength such as sheep and goats, Balochistan only delivers 16 per cent of the national production. Significant growth in local, provincial and national markets is possible for almost all products. This will require a focus on the whole value chain to improve the production efficiency and effectiveness of the various steps. Development of these national value chains should be the focus of the government, the sector and key development projects.

Marketing and sales of livestock inputs and products should be left to the commercial / business partners. The Government should:

- a. Play a facilitating role e.g. between Livestock companies established by the Government of Balochistan (GoB), the Trade Development

Authority Pakistan (TDAP, collective trade facilitation and generic promotion), the Small and Medium Enterprise Development Authority (SMEDA) and other Agencies.

- b. Establish and ensure compliance with the necessary standards for food safety, quality, contamination and residues.

In the longer-term access to international markets will require every step of the value chain to work together to meet high product standards. SPS (Sanitary and Phytosanitary) compliance, food safety and quality standards, traceability and enhanced product quality are essential to formally access many markets such as the Middle East and China (under CPEC arrangements and fueled by rising meat prices in China). One potential market advantage of Balochistan's current low-inputs system is the ability for some producers to market products that comply with organic certification.

Balochistan will undertake a feasibility assessment of targeted international markets to identify those where the province has both potential and



comparative advantages – and thus potential for a competitive edge over other suppliers. Particular attention will be given to defining the food quality and safety standards for these markets. This study will identify the high priority compliance and quality requirements and issues that need to be addressed (e.g. disease freedom, breed uniformity, animal welfare etc) back home in Pakistan and Balochistan. The study may also identify the need for legislative reform (e.g. to allow live-animal export). This assessment will be undertaken through the LDDD in collaboration with international donors and involve the engagement of both national and international specialists.

The findings of this study will be widely communicated with the sector. If there is both potential and consensus then the LDDD and its development partners could help facilitate a cluster of producers and processors who can commit to the uniformity, standards and scale required. This may require the province to create a disease-free zone, potentially in the newly developed command areas of the Kachi canal and the Mirani dam, as well as in other areas.

3.5. Credit and Insurance

Balochistan's livestock families and businesses can access credit and insurance products relevant to their needs

Growth of the livestock sector requires families and businesses to be able to access affordable finance to support their investments, as well as some form of insurance to alleviate risk if drought or disease causes unplanned losses. Currently no commercial finance or insurance products are available to livestock farmers in Balochistan, because of the risks commercial banks face operating in the Province. However, there is a strong commitment of the State Bank of Pakistan (SBP) to make such options available.

The following three streams of work are proposed: Firstly, development partners (and particularly NGOs) will be encouraged to work with formal or informal groups of livestock farmers to develop community run savings and loan schemes suitable to fund small-scale family livestock investment. Some of these schemes could particularly target women's groups to fund poultry production or ruminant fattening. Already several indigenous schemes have proven to be successful and could be scaled up.

Secondly, the Balochistan Government will work with the State Bank of Pakistan (as a regulatory body), commercial banks and other credit providers to consider and launch innovative, reasonably priced and customized credit products for livestock families, groups of livestock producers, or small businesses looking to scale up their production through:

1. More intensive production of meat, milk or eggs;
2. Feedlot and fattening operations, or
3. Local level aggregation/processing schemes (e.g. local milk collection, wool shearing, cleaning and grading and other added value and processing activities).



Understandably, many farmers are not able to offer traditional collateral (usually fixed assets) for these loans and hence the study should consider other, innovative options (e.g. herd as collateral) to help reduce risks and make these credit schemes accessible for farmers in Balochistan.

Lastly, the LDDD will commission a study in collaboration with its development partners to investigate the options, affordability and feasibility of production insurance for the livestock sector. This study could also consider options for the Government to underwrite commercial schemes for the very poor in Balochistan.

3.6. Enabling Environment and Reform of Livestock and Dairy Development Department

Balochistan's livestock families and businesses benefit from an improved enabling environment for livestock production, marketing and investment.

A key role for the Government of Balochistan is to establish an enabling environment for the livestock sector. The two priority elements of this enabling environment are:

1. A conducive **legislative and regulatory** frame work in which businesses can invest and function confidently, transparently and effectively; and
2. Reformed **roles and functions** for the LDDD

to ensure that the priority Policy initiatives are delivered in partnership with other stakeholders.

Both are essential for the delivery of the other five elements of the Balochistan Livestock Policy and Strategy.

3.6.1. Legislative and regulatory reform

Under the post-18th Amendment, the Government of Balochistan is responsible for reviewing current livestock legislation and regulations and enacting the necessary light-touch laws and statutes needed to enhance the sector. As such, in 2014 a comprehensive study was conducted of all the current provincial livestock policies and regulations. This identified their effectiveness as well as any unintended consequences. Unfortunately, the Government currently has in place some policies that, while well intentioned, have unintended consequences for the development and growth of the livestock sector (e.g Price Capping).

Other priority matters reportedly requiring reform include:

- animal health;
- bio-risk management;
- co-operatives;
- food safety and security;
- market access;
- genetic resources; and
- rangeland management.

The results of this study will be translated into legal reforms by the LDDD. The objective will be

to consolidate the current maze of legislation and regulation into a body of law sufficient to support the policy goals.

3.6.2. Reform of Department (LDDD)

The second element of enabling environment reform relates to the roles and functions of the Department of Livestock and Dairy Development (LDDD). Currently the LDDD is underfunded and under-resourced and this is part of the reason that LDDD performance is seen as sub-optimal in core areas. LDDD must change from being predominantly a Department of Animal Health and become a Department that is able to comprehensively facilitate livestock sector development and investment, by partnering with the private sector, communities and farmer associations to achieve this Policy's outcomes.

The Balochistan Livestock Policy and Strategy 2020-2030 requires LDDD to become an enabler of systemic change within the livestock sector. LDDD must increasingly focus its resources on public good policies, market/consumer standards, as well as research and extension services.

The LDDD has such an important role, that the facilitation and delivery of this Policy may well be compromised if the LDDD is unable to fulfill its tasks. Reform of the LDDD is such an important issue that this section discusses the needs in some detail.

As the first step, a major institutional review needs to investigate the LDDD's organizational structure, performance and services. The LDDD appreciates that fundamental reform is necessary if it is to be both efficient and effective. Hence it seeks to refresh its structure and services to accommodate the increased funding necessary for it to deliver the livestock sector's Policy goals. The Government aims to increase resources to LDDD so that it can deliver this policy coherently and consistently over the next ten years.



However, this requires LDDD to develop a reorganization plan that is carefully thought through, appropriately prioritized, and realistically costed. The institutional review and reorganization plan should not only include the key public sector roles already discussed under the Policy's six objectives, but should also consider (among others):

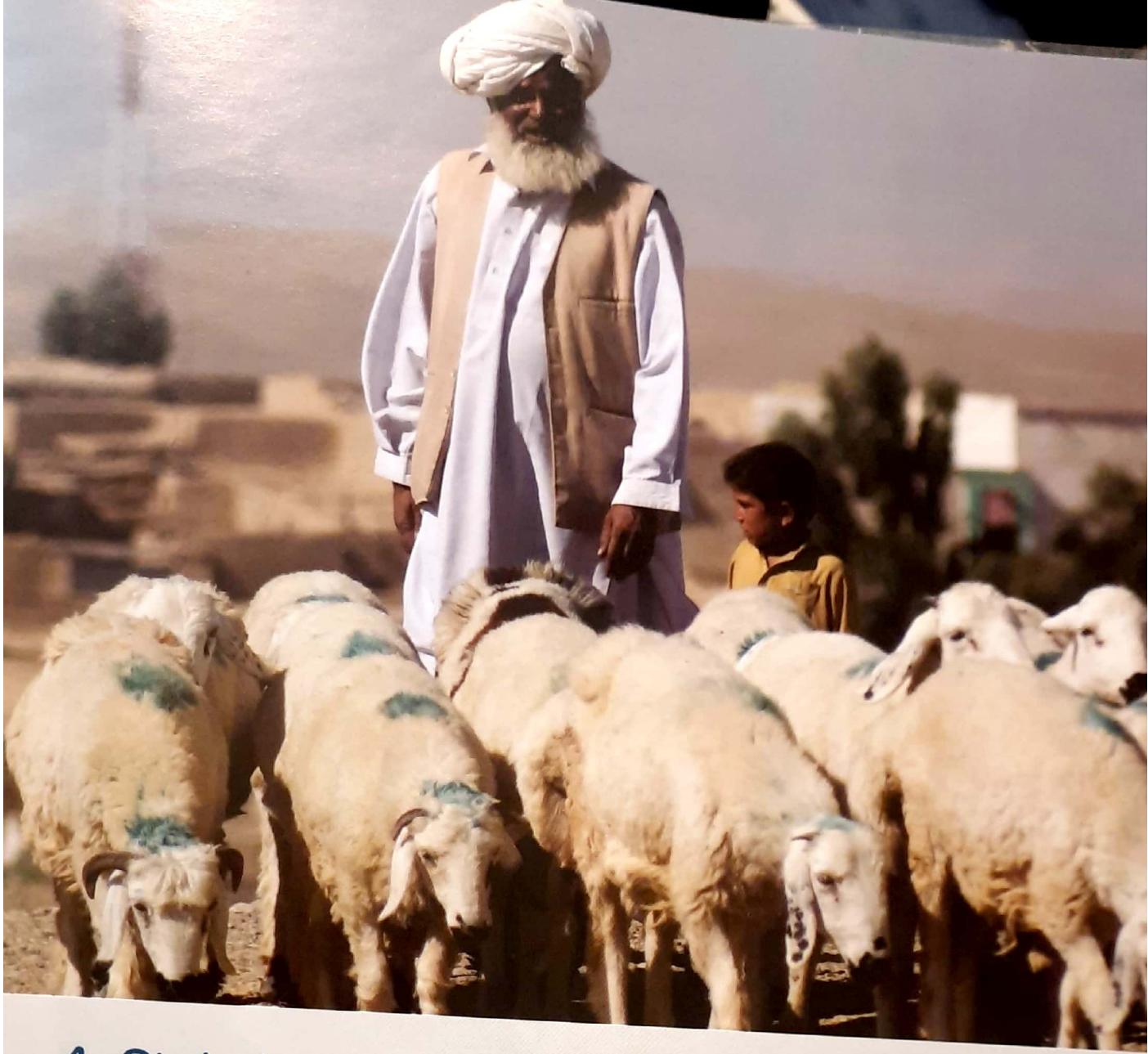
- Private Sector Investment:** The LDDD must encourage and negotiate private sector investment in priority livestock initiatives such as processing (see Section 3.3), specialized production units (e.g. to meet standards for specific markets – see Section 3.4), and animal health services. At the same time, the LDDD must avoid any action that undermines or distorts these markets. For example, LDDD's current delivery of free vaccinations and inputs will need to be reconsidered as it compromises private sector delivery of these same services. There needs to be a changed mindset within the Government and the LDDD that moves away from one-off unsustainable handouts and instead leverages the private sector, social enterprises, NGOs and communities to establish long-term, sustainable, commercially responsible solutions to their input needs. As part of this, privatization or semi-privatization of some of LDDD's current animal health services could be considered under the Balochistan Public Private Partnership Act.
- Market Access:** LDDD needs to lead the realistic assessment of Balochistan's market opportunities. As outlined in Section 3.4, this will initially focus on national markets but needs to expand to regional and international markets over time.
- Policy Oversight:** An issue that could hamper





the effectiveness of LDDD is the frequent changes of senior staff. Currently the average tenure of the departmental secretary is less than 12 months. This diminishes the deep understanding needed of the complex, technical, policy and market issues confronting the sector and could compromise the continuity of policy implementation.

4. **Links with Federal agencies:** LDDD will require strong linkages with relevant Federal Ministries such as the Ministry for National Food Security & Research (MNFSR), Ports & Shipping, the Ministry of Commerce, the Trade Development Authority of Pakistan (TDAP) and other institutions. The concerned Federal Ministries have to help Balochistan to develop networks with partners inside and outside Pakistan, and promote common learning and the adoption of best practices.
 5. **Capacity Building:** Professional and technically qualified LDDD staff are required to deliver the expectations stipulated in the Balochistan Livestock Policy and Strategy. However, this implies that the government:
 - a. will appoint and retain individuals who have relevant skills;
 - b. support both formal training and on-the-job specialization; and
 - c. establish mechanisms for coaching, mentoring and formal performance review.
- Areas where LDDD currently has limited capacity include:
- a. Regulatory and legal reform.
 - b. E-Governance and ICT applications.
 - c. Regulation and testing of labeling and quality standards for veterinary inputs (e.g. vaccines, medicines and feeds).
 - d. Inspection for the appropriate use of registered veterinary products and protocols to test for breaches of minimal residue limits (MRL).
 - e. Approved inspection and certification protocols for product purity and quality.
 - f. Certified inspection and traceability protocols for livestock export.



4. Stakeholders and Beneficiaries

4.1. Stakeholders

Multiple public and private stakeholders are engaged with, or have an economic interest in, the efficient and effective functioning of sheep, goat, dairy and poultry value chains. These stakeholders are summarized in Table 1. For the outcomes of the Policy to be achieved these stakeholders' will need to confirm:

1. Their commitment to the goal and outcomes of the Balochistan Livestock Policy and Strategy 2020-2030; and
2. Their willingness to commit their time and resources to its implementation.

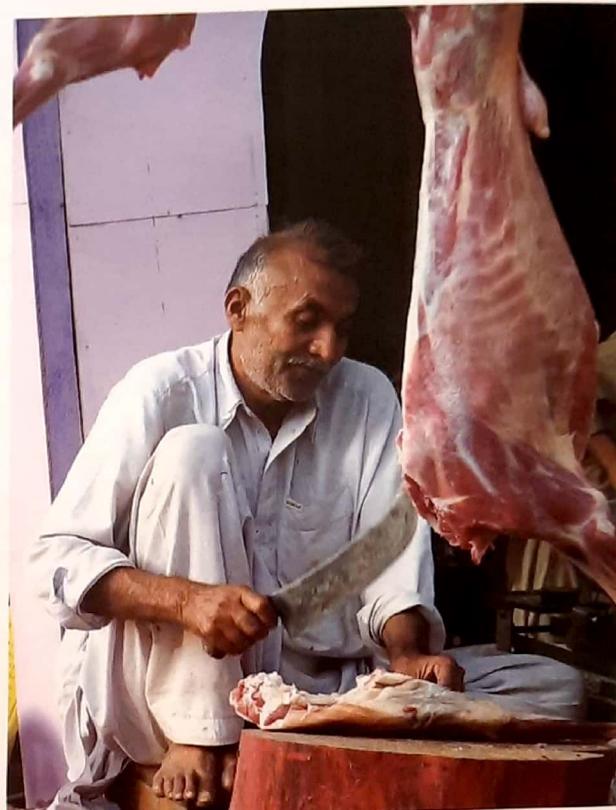
The following table lists the broad stakeholder groups considered essential to the successful delivery of the outcomes of the Balochistan Livestock Policy and Strategy 2020-2030. The main

categories of stakeholders are identified, while their roles and responsibilities related to each of the six outcomes are further discussed in Annex 2.

Table 1: Table 1. Stakeholder Groups essential for successful implementation of the Balochistan Livestock Policy and Strategy 2020 - 2030.

Stakeholder category	Organizations
Core Value Chain Actors and Partners	Livestock and Dairy Development Department, Government of Balochistan (LDDD), including Livestock Extension workers/ Veterinary Assistants and para veterinary staff Food Safety Authority / Quality Control and Certification Agencies

Stakeholder category	Organizations	Stakeholder category	Organizations
Core Value Chain Actors and Partners	Department of Forest and Wildlife (DoFW)	Core Development Funders	Government of Balochistan and Government of Pakistan
	Small and Medium Enterprise Development Authority (SMEDA)		Donors (UNDP, DFID, ADB, WB, Development Banks and Funds, DFAT, USAID, EU, JICA and others)
	Ministry of National Food Security and Research (MNFSR)		Private Sector Organizations and Companies
	Ministry of Commerce and Trade		
	Financial institutes (State Bank and Commercial Banks); Benazir Income Support Program (BISP), Pakistan Microfinance Investment Company (PMIC) and other micro finance organizations; Insurance Companies		
	Livestock (vocational) Training and Education Centers		
	Provincial Research & Development and Training Institutes		
	Private (Sector) Services Providers (e.g. veterinary services)		
	Private Input Suppliers		
	Private Processing and Packaging Companies		
	Private Logistics Companies		
	Livestock Farmer Associations (FMCs, MMOs and Cooperatives)		
	Livestock farming households and businesses		
Core Delivery Partners	Government of Balochistan Departments		
	Donors		
	Non-Governmental Organizations (NGOs)		
	Federal Government agencies such as:		
	National Food Security & Research (MNFSR);		
	Ports & Shipping;		
	Ministry of Commerce;		
	Trade Development Authority of Pakistan (TDAP).		



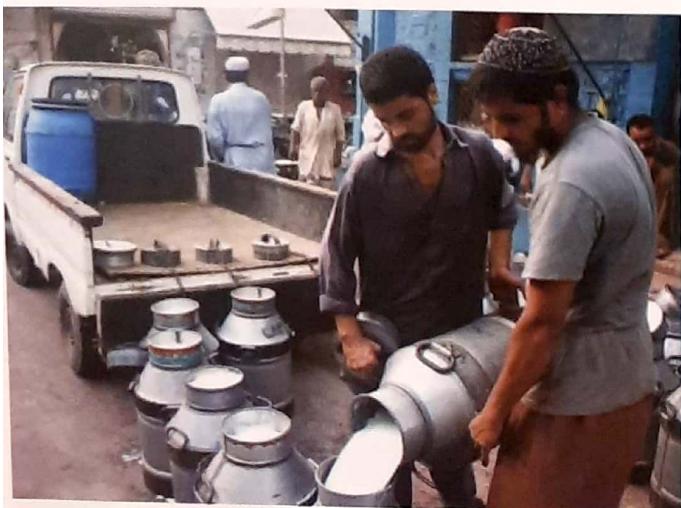
4.2. Beneficiaries

Many direct and indirect beneficiaries are engaged in the implementation of the Balochistan Livestock Policy and Strategy 2020-2030. These include:

Direct beneficiaries:

Male and female livestock farmers and their families are the direct and prime beneficiaries of a strengthened and vibrant livestock sector with diversified, healthy products and improved incomes.

But also many value chain actors, representing all facets of work such as traders, exporters,



wholesalers and retailers will directly benefit from implementation of the Policy. This group also includes some beneficiaries who warrant special mention including:

- Local producers and suppliers of tools, equipment, inputs and services (e.g. veterinary services, feed and silage, as well as advisory and certification services). In particular the small ruminant and poultry sector provide good opportunities for local agri business and cottage activities (wool processing, dying, carpet making, bird production, egg hatching etc), benefiting thousands of rural women in particular.
- Slaughter house operators, wool washing, grading and baling operators; meat, hides processors; logistical services providers; and
- New categories of beneficiaries such as

shearers, community-based animal health workers and other categories that are yet to be stimulated by the Policy interventions.

Indirect Beneficiaries:

The following categories of partners will indirectly benefit from a developing livestock sector in Balochistan:

- Advisors, consultants and researchers.
- Trainers, and business developers (through vocational training in the districts as well as business incubation centers in the vicinity of Quetta)
- The Board of Revenue and Provincial and Federal Tax Collection Departments. The livestock sector already significantly contributes to the GDP of Pakistan and with a growing livestock sector and entrepreneurs becoming more professional and registered more tax revenues will be generated.

4.3. Governance and Oversight Policy Implementation

After endorsement of the Balochistan Livestock Policy and Strategy 2020-2030 by the Cabinet, a five years' implementation strategy and intervention plan will be developed. It is envisaged that some interventions will be funded with public funds through Provincial and / or Federal Government Public Sector Development Programs (PSDP). Other interventions (particularly those with well-defined and fenced-off objectives) will be presented to





donors for either direct or joint funding with the Government.

Budgetary requirements for this Policy will be further defined during the development of the 5-year strategy and intervention plans. Inevitably, there is an expectation that the Government's budgetary allocation to the Livestock and Dairy Development Departments (LDDD) must increase significantly if the aims of the Policy are to be achieved. The LDDD appreciates that this will be a progressive process and will only escalate significantly once the LDDD demonstrates its willingness and capacity to improve the efficiency and efficacy of its services and reform its current structure and functioning. Similarly, the Policy is heavily dependent on the significant commitment of donors to its outcomes.

The Balochistan Livestock Policy and Strategy 2020-2030 will be managed by the LDDD over 10 years (5 + 5 years), and will include a



midterm evaluation (MTR). The MTR will create the opportunity for evidence-based policy implementation and adaptation as it progresses.

Strategic oversight of Policy implementation will be provided through a broad-based Policy Steering Committee (PSC), chaired by the Secretary of Livestock. The PSC will not only include Government and its development partners, but will also include representation from the sector itself (including selected private sector interests). The PSC will meet twice each year.

On a day-to-day basis, a Policy Implementation Committee (PIC) to be led by the Director General of LDDD will be established. The PIC will report to the PSC. Representatives of other Provincial collaborating agencies and donor programs will participate in the PIC.

Within the broad framework of the Balochistan Livestock Policy and Strategy, separate teams will implement project clusters or larger individual projects. Technical working groups (per cluster of projects or per outcome) will be established, meeting every 3 months to discuss operational issues and progress.

Under the six broad outcomes, specific objectives will be pursued, contributing to the outcomes and overarching goal as specified in Annex 2. Indicators of success and impact as well as delivery targets, such as increased income, reduced malnutrition, livestock farmers using innovative technologies etc. are yet to be defined as input for a comprehensive Monitoring and Evaluation (M&E) system.



5. Risks

The following risks were identified and may impact the implementation of the Balochistan Livestock Policy and Strategy:

5.1. External Risks

External risks are beyond the control of any of the stakeholders engaged in the implementation of the Policy. External risks include:

- ❑ Extreme and adverse weather conditions aggravated by the effects of climate change in the coming years;
- ❑ Insecurity in the Districts; and
- ❑ Regime changes within the Government of Balochistan.

5.2. Operational and implementation risks

Operational risks can be partly controlled by project management and stakeholders if effective mitigation measures are put in place. Risks that fall within this category are among others:

- ❑ Communities lack trust in Government, and the development partners.
- ❑ Excessive turnover of key leadership within the LDDD.
- ❑ Insufficient emphasis placed on gender equity and women's opportunity by Government, local agencies and the community.
- ❑ Market opportunities are insufficient and too fragile.

- Government of Balochistan capacities are compromised by institutional, financial, political and reputational difficulties.
- Lack of effective local delivery partners (Government, civil and private sector).
- Non level playing field and market distortion by other donors and Government of Balochistan.
- Internal resistance within the Government to reform laws, acts and Departments.

5.3. Other Risks

Another type of risk is shortage of funds for proper implementation of the Policy due to lack of interest with donors, provincial and federal Government of Pakistan and non-willingness of resource partners to financially commit over a longer period of time.



Annexes

Annex 1: References (List of Reports and Publications)

1. Balochistan Agriculture Sector Policy and Strategy 2015 – 2025 (draft), Food and Agriculture Organization (FAO) of the United Nations, 2016.
2. Report Livestock Farmers Conference March 31, 2016, Food and Agriculture Organization (FAO) of the United Nations, 2016.
3. Investment Opportunities in Livestock Sector Balochistan, Government of Balochistan (GoB), Livestock and Dairy Development Department (LDDD), 2015.
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5. Khyber Pakhtunkhwa Livestock Policy 2018, Government of Khyber Pakhtunkhwa, 2018.
6. Livestock and Dairy Development - Policy Papers – 2015. Government of Punjab, 2015.
7. Sindh Agriculture Policy 2018 – 2030, Government of Sindh, 2018.
8. Balochistan Comprehensive Development Strategy 2020 – 2030, GoB, DeLoitte (Draft), 2019.
9. National Food Security Policy, Government of Pakistan, Ministry of National Food Security and Research (MNFSR), 2016.
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12. Meat and livestock by-products value chains – Pakistan, Balochistan Perspective. Food and Agriculture Organization (FAO) of the United Nations, 2017.
13. Role of Rangelands in Wool Value Chain Development in Pakistan with Focus on Balochistan, Food and Agriculture Organization (FAO) of the United Nations, 2016.
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15. Pakistan Vision 2025, Government of Pakistan, 2017.
16. Prime Minister Initiatives on Livestock Sector (draft), Government of Pakistan, 2019
17. Long term plan for China Pakistan Economic Corridor (CPEC), 2017-30. Government of Balochistan, Department Planning and Development, 2018.
18. 100 days in Livestock Department Balochistan, Government of Balochistan, Livestock and Dairy Development Department, 2018
19. Country Programming Framework for Pakistan 2018 – 2021, Government of Pakistan, Food and Agriculture Organization (FAO) of the United Nations, 2018

Annex 2: Livestock Fully

can be pursued, contributing to the outcomes and systems we desire.

the same time. We are continuing to achieve these objectives with the fast-tracked later

Outcomes	Objectives	Responsibility	Indicators of Success
3. Business Investment (Livestock businesses are informed, motivated and supported to invest in profitable input services and processing infrastructure)	<p>3.1. Business investment in the Balochistan livestock sector grows by 50 per cent over the next ten years.</p> <p>3.2. Farmers can easily and competitively access all core inputs and services from provincially based businesses.</p> <p>3.3. Provincial value-added processing is in place and competitive for all core livestock products</p>	<ul style="list-style-type: none"> ■ The Government will avoid becoming a market player and avoid subsidies or incentives that compromise business profitability or distort the market. (see Outcome 6). ■ The Balochistan Government will work with the Chamber of Commerce, SMEDA (Small and Medium Enterprise Development Authority), local entrepreneurs and financiers (e.g. the State Bank of Pakistan) to promote co-investment (PPP) or credit guarantee arrangements that deliver significant provincial livestock business investment. ■ Donors will be encouraged to work with the private sector to build their capacity and fill missing market functions. 	<p>a. Private sector investments in Livestock Sector Balochistan enhanced</p> <p>b. Local production of birds, silage / haylage, fodder stimulated</p> <p>c. Added Value Products such as milk, meat, wool, hides and skin developed and collection / processing centers established under PPP act Balochistan, operated by private sector.</p> <p>d. Investments through Public, Private & Community Partnerships in processing of wool, skin, hide & livestock by-products.</p> <p>e. Public private partnerships operational and used for key investments e.g. slaughter houses and value-added processing.</p> <p>f. Linkages of national and multinational Companies with Balochistan farmers</p>
4. Diversified Markets (Balochistan's livestock families understand and work together to comply with the necessary standards to access diversified markets)	<p>4.1. Balochistan livestock products increase their relative contribution to local, provincial and national markets by 50 per cent over the next 10 year</p> <p>4.2. Clusters of selected producers and processors profitably and sustainable access three specialty international markets through careful feasibility assessment and attention to compliance.</p>	<ul style="list-style-type: none"> ■ Development of these national value chains should be the focus on the government, the sector and key development projects. ■ Marketing and sales should be left to the commercial / business partners and the Government should only play a facilitating role e.g. through Livestock Development company of GoB, the Trade Development Authority Pakistan (TDAP), collective trade facilitation and generic promotion, SMEDA and other Agencies. ■ LDDD will commission a feasibility assessment of targeted international markets to identify those where the province has both potential and competitive options. ■ This assessment will be undertaken through the LDDD in collaboration with international donors and involve the engagement of both national and international specialists. ■ LDDD and its development partners help facilitate a cluster of producers and processors who can commit to the uniformity and standards required. 	<p>a. Continuous and constant supply of meat and other livestock and dairy products of good quality.</p> <p>b. Organized, commercial Livestock Farmers (FMC's, MMO's and Farmers Associations) connected to National and Export Markets, complying with market standards</p> <p>c. Clustering of supply for economies of scale</p> <p>d. Balochistan livestock products promoted locally, nationally and internationally</p>
5. Credit and Insurance (Balochistan's livestock families and businesses can access credit and insurance products relevant to their needs)	<p>5.1. Smallholder livestock producers and livestock businesses expand their operations significantly due to improved access to credit and insurance.</p>	<ul style="list-style-type: none"> ■ Development partners (and particularly NGOs) work with groups of livestock farmers to develop community run savings and loan schemes. ■ The Balochistan Government works with the State Bank of Pakistan to consider and launch innovative credit products for livestock families, groups of livestock producers, or small businesses looking to scale up their production. ■ LDDD commissions a study in collaboration with its development partners to investigate the options, affordability and feasibility of production insurance for the livestock sector. 	<p>a. Livestock farmers converted to Livestock Entrepreneurs by linking them to financial institutions (FMCs, MMOs)</p> <p>b. Livestock producers, processors and traders have access to legal, business support, marketing and financial services</p> <p>c. Customized insurance schemes accessible for small scale livestock farmers</p> <p>d. Females having access to credit without collateral.</p>

LIVESTOCK FOR PROSPERITY IN BALOCHISTAN

Outcomes	Objectives	Responsibility	Indicators of Success
6. Enabling Environment Reform (Balochistan's livestock families and businesses benefit from an improved enabling environment for livestock marketing and investment)	<p>6.1. Investment and business confidence increase through enabling environment reform.</p> <ul style="list-style-type: none"> ■ LDDD (in collaboration with its development partners and the business sector) will conduct a study on current provincial livestock policy and regulations that assesses their effectiveness and unintended consequences. ■ Balochistan Government to amend policies that distort or constrains the market. ■ LDDD will undertake an institutional review or its performance and services. 	<ul style="list-style-type: none"> ■ LDDD (in collaboration with its development partners and the business sector) will conduct a study on current provincial livestock policy and regulations that assesses their effectiveness and unintended consequences. ■ Balochistan Government to amend policies that distort or constrains the market. ■ LDDD will undertake an institutional review or its performance and services. 	<p>a. Enabling business environment improved and made more conducive</p> <p>b. Restructure & reform laws, rules and procedures to support value chain actors</p> <p>c. Outdated Acts hindering development of sector repealed.</p> <p>d. Long term policies development for increasing the efficiency of sector</p>

Annex 3. Proposed Livestock Development Projects, aligned with Balochistan Livestock Policy and Strategy, 2020 - 2030

I. Provincial and Federal (Public Sector Development Program) Projects, Balochstan.¹

The following projects, aligned with the Balochistan Livestock Policy and Strategy, 2020 – 2030, have been developed by the Livestock and Dairy Development Department (GoB), for funding by the Provincial and Federal Government of Balochistan.

1	Establishment of nucleus herds of sheep and goats breeds for large scale genetic improvement of small ruminants.
2	Strengthening of Artificial Insemination network to ensure the use of only superior quality semen and genetic improvement.
3	Propagation of beef breed "Balochistan Nari Master" to enhance production at farmer level.
4	Improving management of rangelands for efficient utilization for feeding sheep, goats and camels.
5	Development of non-conventional feed resources and new varieties of fodder/ grasses.
6	Strengthening and modernization of Disease Investigation Laboratories Network and diseases surveillance.
7	Establishment of modern live animal markets at district level, including facilities for loading and unloading animals, shelter, clean water, feed/ fodder, veterinary cover and animal weighing.
8	Establishment of Business Support Organization (Balochistan Livestock Development Company).
9	Strengthening the Balochistan Livestock Production Research Institute (BLPRI).
10	Strengthening of Balochistan Veterinary Research Institute (BVRI).

11	Performance recording and dissemination of pure local breeds of livestock by establishing Breed Specific Farms as well as Livestock Gene Bank.
12	Control of zoonotic and Trans-boundary Animal Diseases.
13	Establishment of withholding center at Gwadar for export of livestock (products)
14	Develop Ostrich, Deer, Alpaca, Quail, Rabbit and Camel Farming
15	Reforming of and capacity building with Livestock and Dairy Development Department
16	Mobile veterinary clinics for better service delivery to the communities
17	Modernizing existing GoB Livestock Farms
18	Establishment of Livestock Research Institute, Quetta
19	Establishment of FMD & other Animal Disease Free Zone in Balochistan.
20	Establishment of Authority for Sanitary Measures for Animal Health & Food Safety

II. Private Sector Livestock Projects, Balochistan

The following projects, aligned with the Balochistan Livestock Policy and Strategy, 2020 – 2030, have been developed by the Livestock and Dairy Development Department (GoB) in consultation with the private sector in Balochistan. These projects will be supported and facilitated through the Public Sector, but the private sector is in the "drivers seat".

1.	Formation of (private) Farmer Marketing Collectives for Livestock; Farmer Association and Cooperatives.
2.	Establishment of Veterinary Clinics in Balochistan, quality controlled by the Government.
3.	Feed lot fattening of small ruminants and calves.
4.	Improvement of production performance of rural poultry.

¹ PSDP projects to be implemented in 2019 / 20 on livestock and the projects included in the Prime Ministers Initiative on Livestock, implemented in Balochistan and also require provincial co funding, are not included in this overview.

III. Public Private Partnership Projects

The following development projects, aligned with the Balochistan Livestock Policy and Strategy 2020 – 2030, are proposed for mixed funding by the Federal, Provincial Government and Donors. Project summaries have been prepared.

1	Capacity building of staff of Livestock and Dairy Development Department, Balochistan
2	Feed lot fattening and improved management of sheep and goats for increased production and better quality meat in Balochistan
3	Strengthening of the Wool Sector in Balochistan
4	Infrastructure for mechanical wool shearing, grading, washing and marketing of high quality wool, supervised by the Government.
5	Infra structure for Processing and other Value Addition Facilities for improved marketing of beef and mutton.
6	Development of Milk Production, Collection and Marketing With Community Participation
7	Establishment of Livestock Complexes and Zones in CPEC economic development zones.
8	Establishment of Modern Slaughter Houses and meat processing units in Balochistan
9	Rural Poultry Farming, Balochistan.
10	Rangeland management and rehabilitation (including drought mitigation)
11	Establishment of FMD & other Animal Disease Free Zone in Balochistan.
12	Establishment of Animal Feed Production Plants in Balochistan

Livestock and Dairy Development Department

GOVERNMENT OF BALOCHISTAN

