



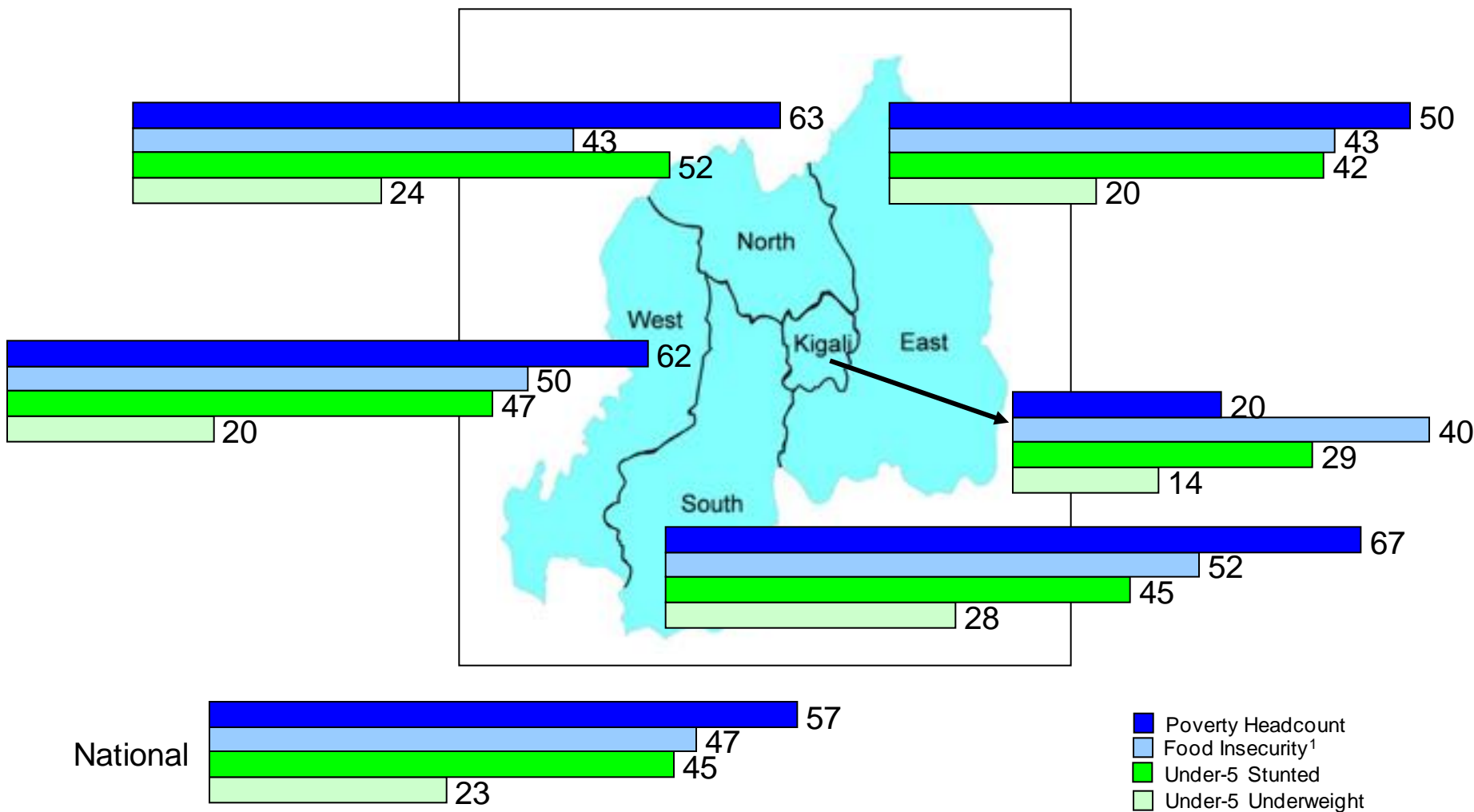
# Strategic Review

FEED THE FUTURE  
August 6, 2010

This presentation represents the preliminary strategic direction of a multi-year, whole-of-government, U.S. strategy to address food security in a Feed the Future country or region. It describes partner country progress and outlines how U.S. investments will align in support of partner country priorities. This document has not yet been approved or funded but will form the basis of a multi-year strategy in development.

- Country Context
- Country Readiness
- Strategic Choices
  - Systems Transformation
  - Innovation
  - Policy
- Alignment & Coordination

## Poverty, food insecurity, and malnutrition are strongly correlated



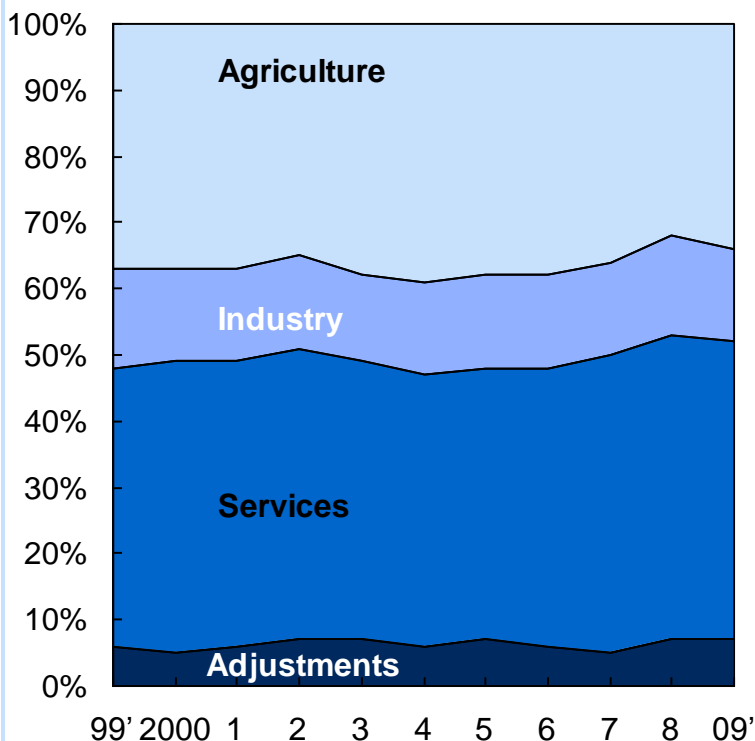
## Agriculture contributes ~34% of GDP and employs nearly 80% of all Rwandans

### Agriculture is a key component of the economy

#### Rwanda's sectoral components of GDP

Percent, USD Billions, 2006 Constant prices

100% = 1.792 3.986



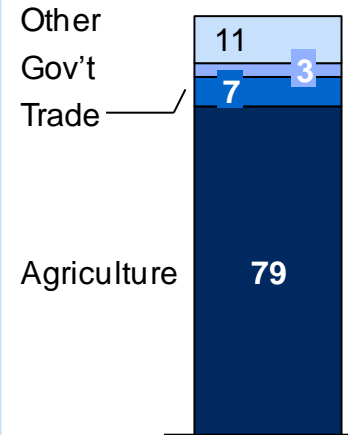
Agriculture<sup>1</sup> is a key component of Rwanda's economic activity

Services' share has grown in the past 10 years with major increase in construction, food manufacturing, beverages, tobacco and textiles

### Agriculture supports a disproportionate amount of Rwanda's workforce

#### Percent of Rwanda's adults aged 15 or above involved in agriculture, 2005/06

100% = 4.377 million employed



71% of the working population is classified as subsistence farmers – i.e., subsistence farmers constitute 90% of those making their living from agriculture

<sup>1</sup> Agricultural sector includes fishing, forestry, crop & livestock

## Strong political commitment to agricultural development & combat malnutrition

### Comprehensive Africa Agricultural Development Program (CAADP)

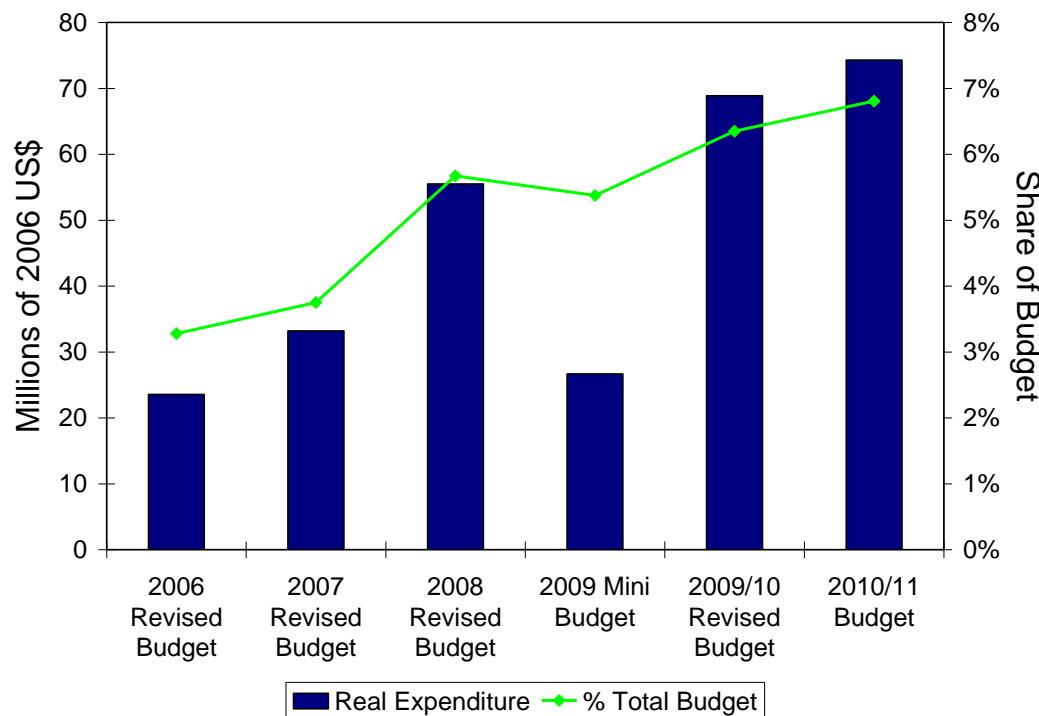
- Mar. 2007: 1<sup>st</sup> country to sign CAADP compact
- Dec. 2009: 1<sup>st</sup> country to hold high-level stakeholder meeting & investment plan technical review
- June 2010: 1<sup>st</sup> in group to receive investment from GAFSP Trust Fund

### President's Emergency Plan to Fight Malnutrition

From its launch in April 2009 to August 2009:

- ~1.1 million children aged 6-59 months screened for acute undernutrition (80% coverage)
- >77,000 cases identified & treated (~7% of screened pop.)
- Of these, >17,000 had acute undernutrition (~1.6% of screened pop.)

### GOR Agricultural Expenditure, GOR FYs 2006-10/11





## GOR has a sound agriculture development strategy supported by a detailed country investment plan

		Description	Focus	Scope
Nationally focused	Rwanda Vision 2020	<ul style="list-style-type: none"> <li>Lays out strategy to transform Rwanda's economy into a middle-income country by 2020</li> <li>Built around 6 pillars, including "productive and market-oriented" agriculture</li> </ul>	Long-term strategy	Long term
	Economic Development and Poverty Reduction Strategy (EDPRS)	<ul style="list-style-type: none"> <li>Provides medium-term framework for achieving long-term development goals</li> <li>Provides guidance for sectoral planning</li> </ul>	Medium-term strategy	Medium term (5 years)
Agriculturally focused	Strategic Plan for the Transformation of Agriculture in Rwanda (PSTA II)	<ul style="list-style-type: none"> <li>Outlines 4 major programs and 20 sub-programs as planning framework for EDPRS</li> <li>Provides cost and performance metrics</li> <li>Aligns donor partners around GOR strategies and tactics</li> </ul>	Program guidance	Medium term
	Agriculture Sector Investment Plan (ASIP)	<ul style="list-style-type: none"> <li>Lays out investment plan for Rwanda agriculture strategy</li> <li>Identifies commitments from GOR, donor partners, private sector and the investment gap</li> </ul>	Financing	Medium term (3 years)

## PSTA II has ambitious and quantifiable targets

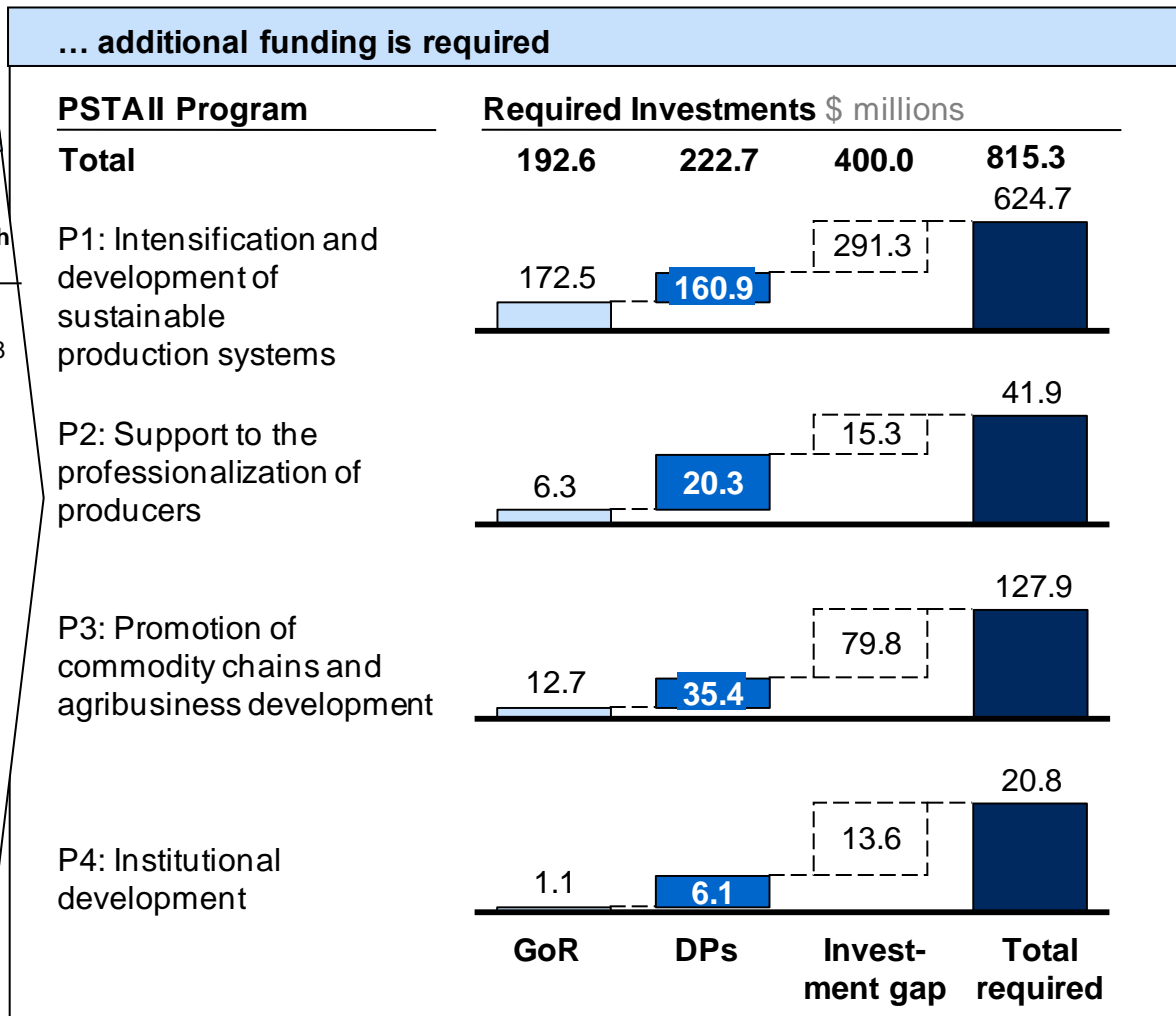
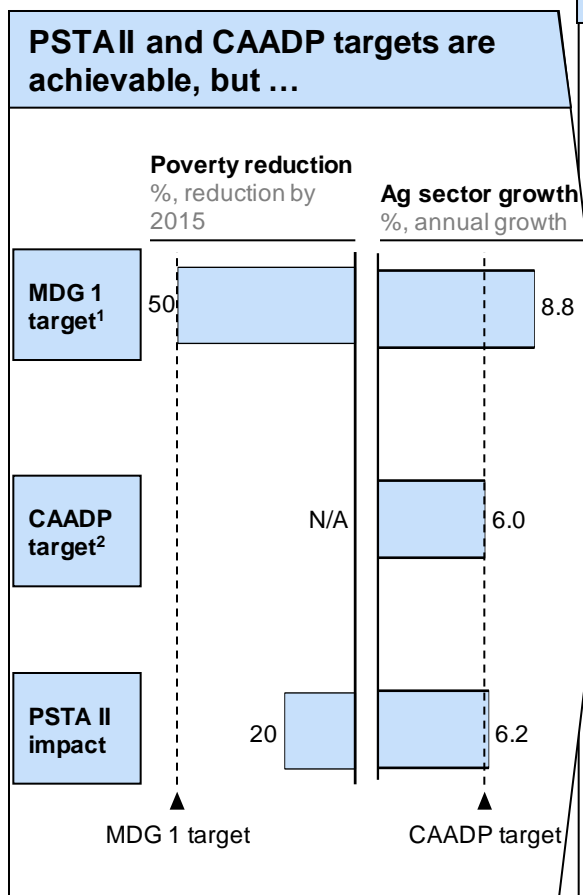
		Progress Indicator (2008-12)	Target Percent
<b>Overall objective</b>	<b>Agriculture output and incomes increased rapidly under sustainable production systems and for all groups of farmers, and food security ensured for all the population</b>	▪ Avg. annual GDP growth for all crops and livestock products	6.5
		▪ Avg. annual per capita income growth in agriculture <sup>1</sup>	4.0
		▪ Decrease in share of rural population below poverty line <sup>2</sup>	-8.0
		▪ Decrease in percent of population with less than minimum food requirement <sup>3</sup>	-10.0
<b>Specific objective</b>	<b>Increase output of all types of agricultural products with emphasis on export products, which have high potential and create large amounts of rural employment; this under sustainable modes of production</b>	▪ Avg. annual crop growth	6.0
		▪ Avg. annual livestock production growth	7.0
		▪ Avg. annual agricultural export growth	8.0

<sup>1</sup> From 2005 baseline of RWF 74,515

<sup>2</sup> From 60% to 52% incidence (starting year not indicated)

<sup>3</sup> From 28% (2006) to 18% incidence

## A significant investment gap must be closed to achieve PSTA II targets



<sup>1</sup> MDG 1 goal is to cut poverty in half by 2015

<sup>2</sup> CAADP target is to achieve overall sector growth rate of 6% by 2015

SOURCE: CAADP brochure based on IFPRI analysis Government of Rwanda Agriculture Sector Investment Plan



## GOR is also finalizing a multi-sectoral strategy to eliminate malnutrition

### Current Plan – Malnutrition Emergency Plan

Pillar	Activities
<b>Education and training</b>	<ul style="list-style-type: none"> <li>Grassroots capacity building of local health workers and communities on nutrition issues</li> </ul>
<b>Improved agricultural practices</b>	<ul style="list-style-type: none"> <li>Use extension to increase use of kitchen gardens, food storage, and distribute small ruminants</li> </ul>
<b>Food distribution</b>	<ul style="list-style-type: none"> <li>Food distribution to ultra-poor households, including ready-to-use therapeutic foods.</li> </ul>
<b>Special nutrition needs</b>	<ul style="list-style-type: none"> <li>Training, advice, and care for groups with special nutritional needs (e.g., pregnant women, HIV/AIDS patients)</li> </ul>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Impact monitoring and improved statistical data collection on malnutrition in Rwanda</li> </ul>
<b>School feeding</b>	<ul style="list-style-type: none"> <li>Implemented by Ministry of Education, feed and school gardens program in 300 schools</li> </ul>

### National Strategy to Eliminate Malnutrition in Rwanda 2010-2013. <sup>1</sup>









#### 8 new pillars, building off of emergency plan



1. Strengthen identification and management of under nutrition
2. Scale up community-based interventions to prevent under-5 malnutrition
3. Eliminate micronutrient deficiency
4. Create multi-sectoral plans at district level
5. Prevent nutrient deficiency and excess diseases
6. Behavior change communication
7. Coordinate nutrition partners
8. M&E of nutrition interventions

**Our FTF strategy can help mitigate risks to successful implementation of GOR's food security strategy**

Risk areas	Description
<b>Government capacity</b>	<ul style="list-style-type: none"><li>• Capability gaps at mid and lower-levels of government remain a significant challenge to successful implementation and evaluation of the government's agriculture development strategy</li></ul>
<b>Competitiveness</b>	<ul style="list-style-type: none"><li>• Regional production and consumption trends will impact competitiveness of Rwandan agricultural commodities</li><li>• Non-tariff barriers may limit trade flows in the near term, these same regulatory issues will limit the growth of private sector generally</li></ul>
<b>Market linkages and post-harvest challenges</b>	<ul style="list-style-type: none"><li>• PSTA II is heavily focused on production while linking supply to market demand is a growing challenge</li><li>• Private sector involvement must be strengthened to achieve sustainable growth at the scale required for staple crop production</li></ul>
<b>Investment strategy</b>	<ul style="list-style-type: none"><li>• The contribution of the private sector in Rwanda's agriculture strategy can be greatly increased</li><li>• Some PSTA II programs appear to be more cost effective than others</li></ul>









**We have comp. advantage in systems transformation, innovation, and continue to build policy**

Focus Area	Comparative Advantage	Key Considerations
Innovation		<ul style="list-style-type: none"> <li>Strong network with US based universities</li> <li>Experience and success in dissemination (e.g. SPREAD)</li> </ul>
System		<ul style="list-style-type: none"> <li>Experience and success in systems transformations</li> <li>Resource advantage compared to others</li> </ul>
Topical		<ul style="list-style-type: none"> <li>Core competency in selected topics</li> <li>Bring in topical experts to advise, execute (e.g., infrastructure)</li> </ul>
Emergency		<ul style="list-style-type: none"> <li>Ability to muster resources at scale very quickly in emergencies</li> <li>Others (e.g., WFP) are better positioned for long-term response</li> </ul>
Gov't cap.		<ul style="list-style-type: none"> <li>Some experience with Treasury, Credit Bureau, ReSAKKS</li> <li>Not as effective as Tony Blair's Delivery Unit</li> </ul>
Policy		<ul style="list-style-type: none"> <li>Whole-of-government approach more effective</li> <li>Providers of budget support are more effective</li> </ul>
Poor		<ul style="list-style-type: none"> <li>Title II programs improved livelihood for over 800,000</li> <li>Deep experience – previously up to 60% of budget</li> </ul>
Capability		<ul style="list-style-type: none"> <li>Mixed record of success – effective in some areas, not in others</li> </ul>

 Low  
 High









**Need appears most evident in innovation, systems transformation, capacity provision & voice of the poor**

INDICATIVE; NOT EXHAUSTIVE

Focus area	Donor organizations in this space	Perceived need for more investment
Innovation	  	
System	   	
Topical	       	
Emergency	(GOR has asked donors to cease emergency relief operations)	
Capacity provider	   	
Policy	      	
Voice of the poor	  	
Capability	         	

**We believe there is the highest potential impact in systems transformation, coupled with targeted investments in policy and innovation**

○ Low  
● High

Focus area	Potential impact	Key considerations
Innovation		<ul style="list-style-type: none"> <li>▪ Bottlenecks in delivering innovation to the field due to capacity</li> <li>▪ Significant opportunity to increase productivity with better inputs</li> </ul>
System		<ul style="list-style-type: none"> <li>▪ Major transformation possible if we find the right product and market opportunities (e.g., specialty coffee)</li> </ul>
Topical		<ul style="list-style-type: none"> <li>▪ Elimination of major bottlenecks in infrastructure, for example, would have significant impact on overall opportunities</li> </ul>
Emergency		<ul style="list-style-type: none"> <li>▪ Counter to GOR goals</li> <li>▪ US maintains capability without making it part of FTF strategy</li> </ul>
Gov't cap.		<ul style="list-style-type: none"> <li>▪ Provides valuable, but short term solution to capability gaps</li> </ul>
Policy		<ul style="list-style-type: none"> <li>▪ GOR will act quickly and decisively once convinced of a policy direction</li> <li>▪ Alignment with USAID/Forward objectives</li> </ul>
Poor		<ul style="list-style-type: none"> <li>▪ Despite significant investments in poverty focused programs such as Title II, gap between rich and poor continues to grow</li> </ul>
Capability		<ul style="list-style-type: none"> <li>▪ Remains a significant challenge at mid-to-low levels of government which restricts support to programs in the field</li> </ul>

**We will focus on systems transformation, delivering innovation & advocating for policy improvements**

## MODEL FOR CHANGE

Drive **systems transformation** in targeted staple and high-value crop value chains

- A Transform maize, beans, dairy, pyrethrum, and coffee by building on GOR's substantial investment in production (e.g., CIP)**
  - Support investment in post-harvest handling and storage (e.g., maize and bean warehouses, improved milk cold chain) as a focal point
  - Develop effective supplier networks by providing access to financing, technical support (quality and business focused) and extension services
- B Focus infrastructure investment to support targeted value chains**
  - Promote investment in additional processing facilities where required
  - Target infrastructure programs to value chain investment sites (e.g., roads)
- C Build nutrition and food security interventions into value chain activities**
  - Leverage agriculture implementation networks to deliver nutrition programs
  - Create value chain appropriate nutrition interventions (e.g., fortification capacity in processing centers, improved livestock feed supply)

Deliver **innovations** to enable sustainable agriculture growth, improved nutrition

- D Strengthen Rwanda's research and science base**
  - Provide competitive grants to build capacity and support research
  - Develop firm level market demand data
  - Increase capacity and effectiveness of Rwandan education and research institutions through fellowships, improved internal/external coordination

Advocate for improved food security **policy**

- E Continue advocacy to improve GOR's agriculture and nutrition policies**
  - Fund actionable research around key policy issues (e.g., climate change)
  - Lobby GOR to improve action against key policy questions
  - Implement performance-based sector budget support to build capacity of GOR and increase influence



## Focusing on market linkages for both staple and high-value crops will significantly enhance GOR's investments

### Why it matters

- GOR has prioritized market led agriculture sector growth
- A staple crop based-strategy will have the largest contribution to poverty reduction
- High population density and small land holding make investment in high-value crops / agribusiness essential to food security

### What is missing

- GOR's has made significant supply-side investments (e.g., CIP, RSSP) that do not have effective market linkages
  - Cooperatives and private sector trader networks require improved capacity
  - Success of agribusiness (e.g., commercial processors) severely limited due to lack of sufficient quality inputs, access to finance

### What to do

- Fill gaps in value chain
  - Promote investment in new storage and processing
  - Identify demand in domestic and export markets
  - Build private sector capacity
  - Improve infrastructure
  - Drive science and technology innovations that can be scaled
- In an all cases, facilitate funding, train entrepreneurs, cooperatives to own and run these investments

## Value Chain and Geographic Focus – Preliminary Selection Factors

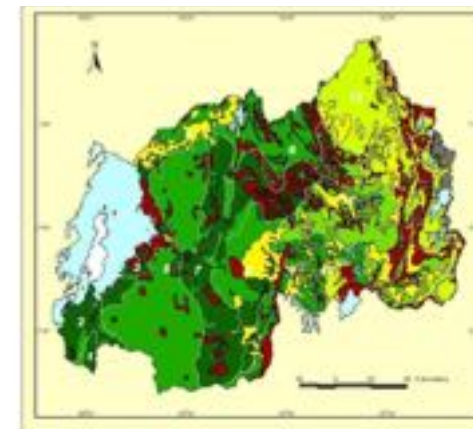
### Value Chain Selection Factors

Product	Recent USG Exp.	GOR Priority	Potential Impact		Regional Comp. <sup>3</sup>
			Poverty Elasticity <sup>1</sup>	% HHs <sup>2</sup>	
Banana			-2.05	40.0	51
Beans		CIP	-2.59	66.2	1,485
Cassava		CIP	-1.60	52.2	-139
Coffee	√	√	-1.81	11.4	44,535
Dairy	√		-1.38	10.3	-1,297
Fish			-2.11	4.2	-1,722
Flowers			-2.27	9.7	295
Fruits			-2.27	25.2	49
Maize		CIP	-2.39	66.9	-2,201
Oil crop			-2.17	24.7	-1,286
Potato		CIP	-1.40	43.0	-91
Poultry			-0.45	4.1	-6
Pyrethrum	√		-2.27	0.8	103
Rice		CIP	-1.86	4.3	-6,130
Sweet potato			-1.65	75.0	5
Tea		√	-1.63	1.4	60,247
Vegetables			-2.27	38.1	4,189
Wheat		CIP	-1.60	7.0	-106

### Beans: Climate Suitability



### Maize: Land Suitability



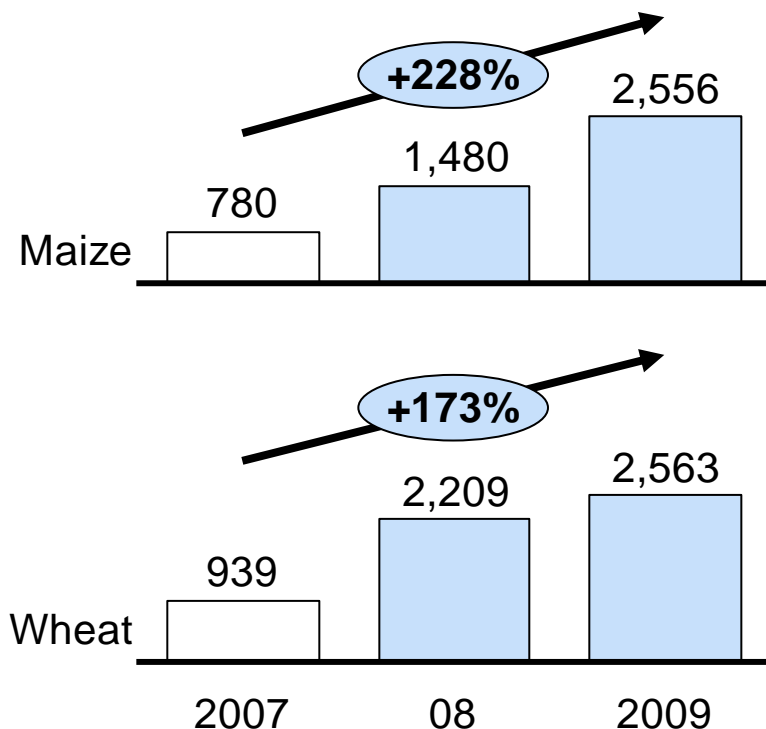
<sup>1</sup> Diao et al., IFPRI, 2009. Based on data from 2005/06.

<sup>2</sup> NAS 2008. Figures refer to the higher of seasons 2008 A & B.

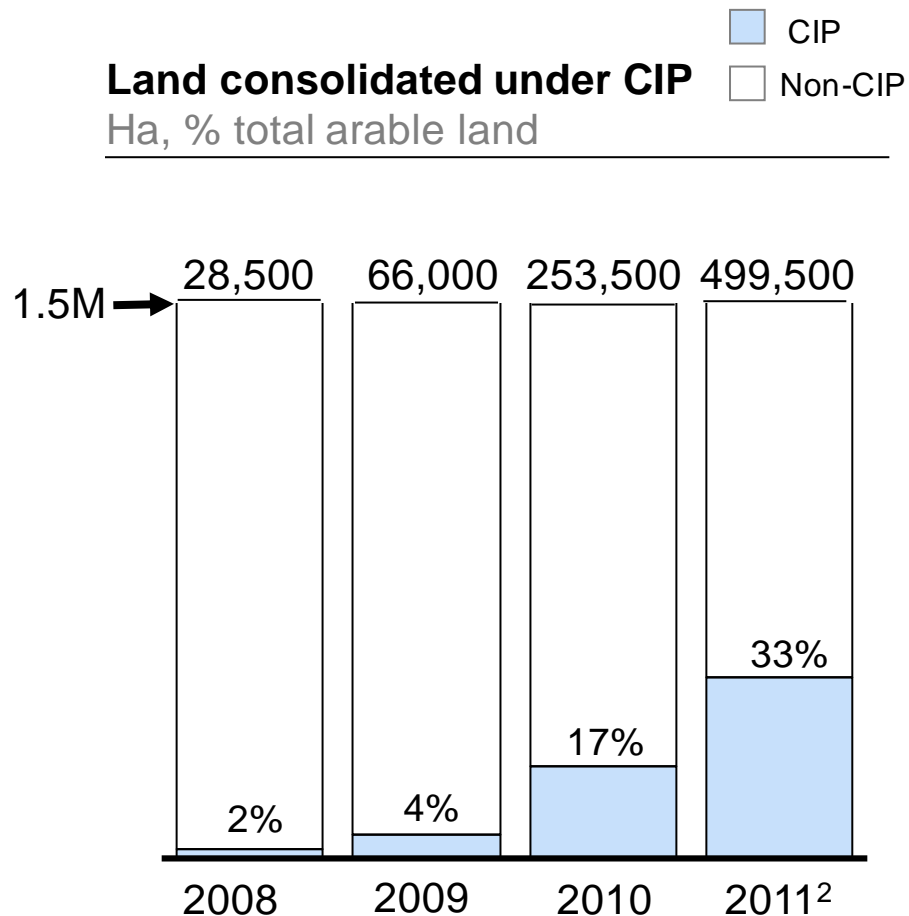
<sup>3</sup> Net exports, US\$ '000s, 3-year average, 2006-08. UN COMTRADE database.

The GOR's Crop Intensification Program (CIP) has shown dramatic results in its first 2 years and GOR plans to continue its rapid expansion

**Impact on yield over first 2-years of CIP<sup>1</sup> kg/Ha**



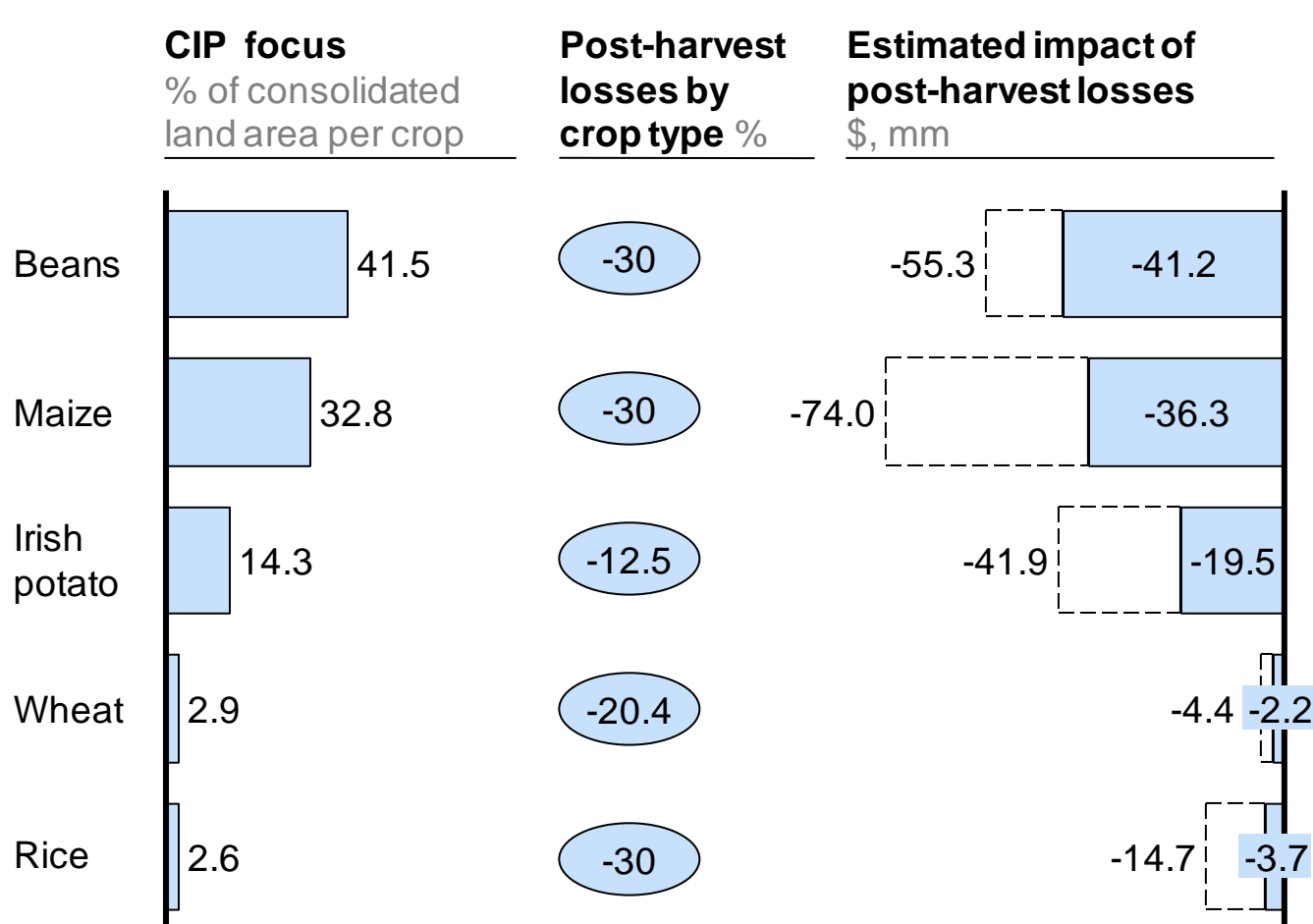
**Land consolidated under CIP**  
Ha, % total arable land



<sup>1</sup> Yields are national average

<sup>2</sup> Planned

## Post-harvest losses are a major barrier to capitalizing on CIP success



“Post-harvest and marketing are the areas where CIP has failed to deliver significantly due to insufficient resources...

...challenges are at two levels, lack of investment in storage facilities and equipment as well as limited agro-processing technologies...

— CIP evaluation

## Focus on co-ops and private investors in warehouses as primary change agents to transform maize and beans

Rationale	Theory of change	Potential for impact
<ul style="list-style-type: none"> <li>Maize, beans promise largest potential impact within CIP program</li> <li>Synergies available between the 2 crops               <ul style="list-style-type: none"> <li>Used in rotation on the same plots</li> <li>Similar storage</li> </ul> </li> <li>Rwandan bean production is competitive in the region</li> </ul>	<ul style="list-style-type: none"> <li>Warehouses will provide an effective link between increased production and existing demand</li> <li>Warehouses provide manageable number of touch points to reach large number of producers</li> <li>Promoting private investment is the most effective way to ensure sustainability over time</li> </ul>	<ul style="list-style-type: none"> <li>Rough estimates indicate that meeting the storage needs for CIP planned expansion could be achieved for ~\$5-80K per site<sup>1</sup></li> <li>Post-harvest handling and storage working group established by GOR provides opportunity to leverage other donors to broaden impact</li> </ul>

<sup>1</sup> Large range dependent on paying for full cost of building vs. financing guarantees, size and cost of warehouse facilities.

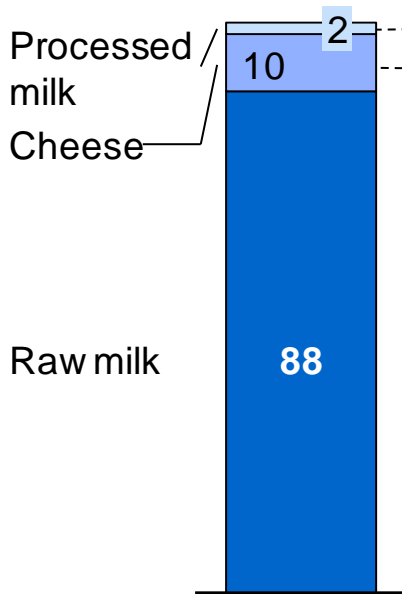
SOURCE: IFDC Crop Intensification Program Evaluation Report (2008-2009), USAID, team analysis

## Processed dairy market is poised for significant expansion, raising incomes & providing nutritional benefits

### Current use of Rwanda's daily milk production

%, liters

100% = 1,000,000



### Market conditions for processed milk

- Key market conditions recently established to incentivize expansion of processed milk production
  - New national standards for quality levels
  - Differential pricing based on milk quality at major processors
- Latent demand exists within Rwanda and region for processed milk
  - Existing processing facilities running at a little over 3% capacity (total of ~188,000L per day)
  - RARDA piloting program to purchase processed milk for 6 primary schools (up to estimated theoretic maximum ~500K L/day for all primary schools)
  - Existing export market for UHT milk estimated at 8-10 containers per day to DRC and Burundi

Approximately 60% of the 87,640 beneficiaries to date of the GOR's "One Cow per Poor Family" program are estimated to be women. Investments in the dairy value chain are likely to disproportionately help women who have acquired new livelihood assets under the program.

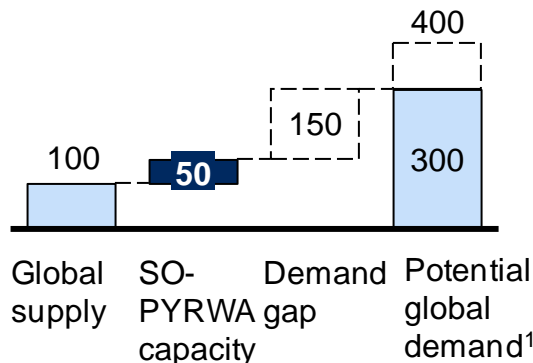


**There is a strong case for further investment in pyrethrum, however impact will be limited to a small group**

## Known market demand

- Existing world class processing facility at SOPYRWA operating at < 10% capacity
- Global demand estimates far exceed SOPYRWA's total capacity with room to grow

## Global supply, demand estimate MT processed pyrethrum



## Available supply capacity

- Ideal conditions for pyrethrum production
  - Fertile volcanic soil
  - Correct altitude, temperatures
  - Ample rainfall
  - Large farmer base
- Production expansion to meet SOPYRWA capacity would provide up to an additional ~\$22 million in revenue to small holder farmers at peak production
  - 8,000 households have ~2 Ha of production each
  - Marginal revenue of \$1,428 per Ha based on improved yields (from 200 to 1,000 kg/Ha)

## Record of success

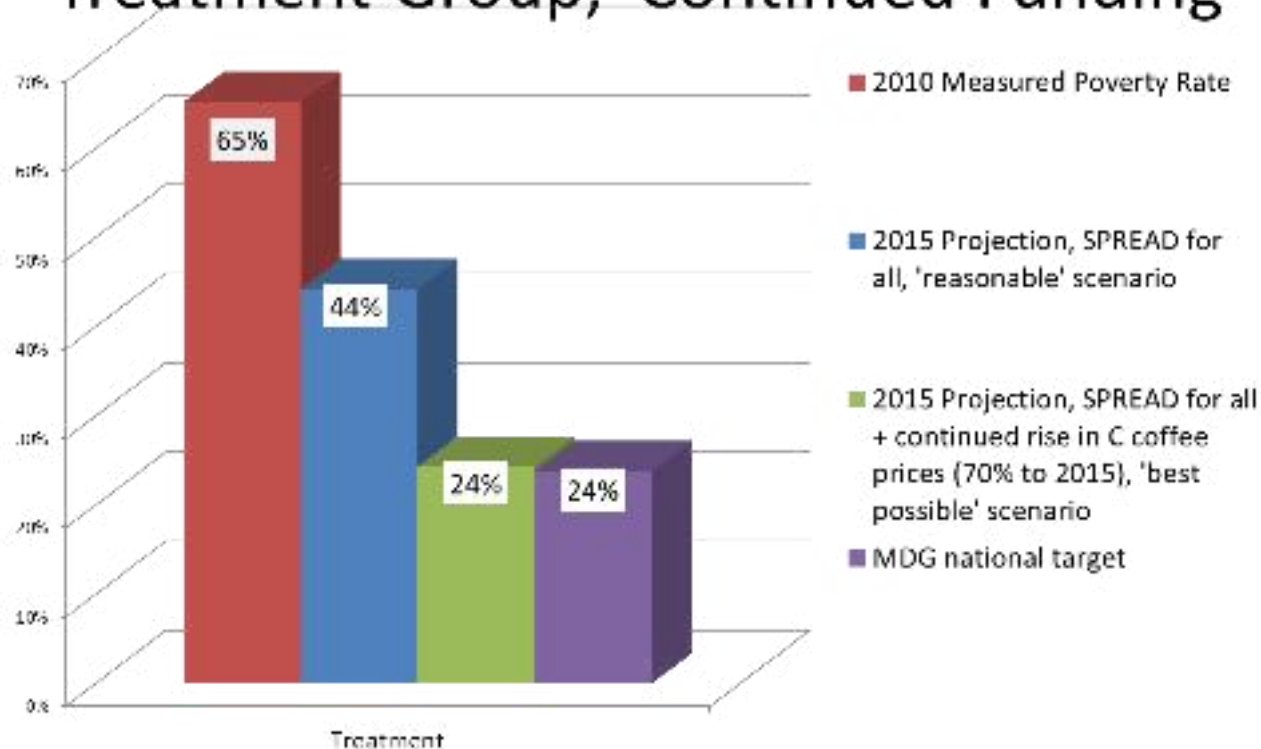
- Rwanda has supported pyrethrum processing industry since the 1970s
- Partnership model proven for market development

Relatively small scale in terms of families impacted requires promotion of additional high-value crops

<sup>1</sup> Range based on estimates from two sources: SC Johnson predicts up to 400 MT global demand, while SOPYRWA estimates up to 300 MT  
SOURCE: SC Johnson statement at CAADP Post-compact Meeting (as reported in New Times), USAID-SC Johnson GDA report, team analysis

**There is a strong case for further investment in coffee to get to the ‘tipping point’**

## Projected Poverty Rates, Current Treatment Group, Continued Funding



### Record of success

- SPREAD model proven highly effective for specialty coffee market development
- Next generation technologies
- Integrate cupping labs into value chain
- Strengthen traceability and quality control
- Build on international partnerships

SOURCE: “Sustainability and Impact of the PEARL/SPREAD Projects”, Prof. Alexandre Lyambabaje, Ph.D., Etienne Bihogo, M.Sc., Prof. Charles B Moss, Ph.D., Prof. Dave D Weatherspoon, Ph.D., Prof. James F. Oehmke, Ph.D. Presentation to USAID, February 2011. Presentation represents preliminary results of an impact evaluation.

## Focusing rural infrastructure programs in production regions for targeted crops will add significant value

### Rural feeder roads

#### Program objectives

- Connect key areas of agricultural production to local markets through construction of new feeder roads
- Restore existing rural road capacity through rehabilitation
- Build technical capacity of GOR (e.g., technical review process, environmental impact assessment)

#### Benefit to targeted value chain activities

Link CIP/RSSP sites and warehouses to local markets and regional infrastructure

### LWH<sup>1</sup> project/ Water-Agriculture- Natural Resources Management (NRM)

- Improve water related agricultural soil and water management practices, clean water access, and basic sanitation
- Promote the development of environmental services through reforestation, aquifer strengthening and protection and reduced silting through terracing

- Improve productivity of targeted production sites through better water management
- Improve health and nutrition of producers through better sanitation and water quality

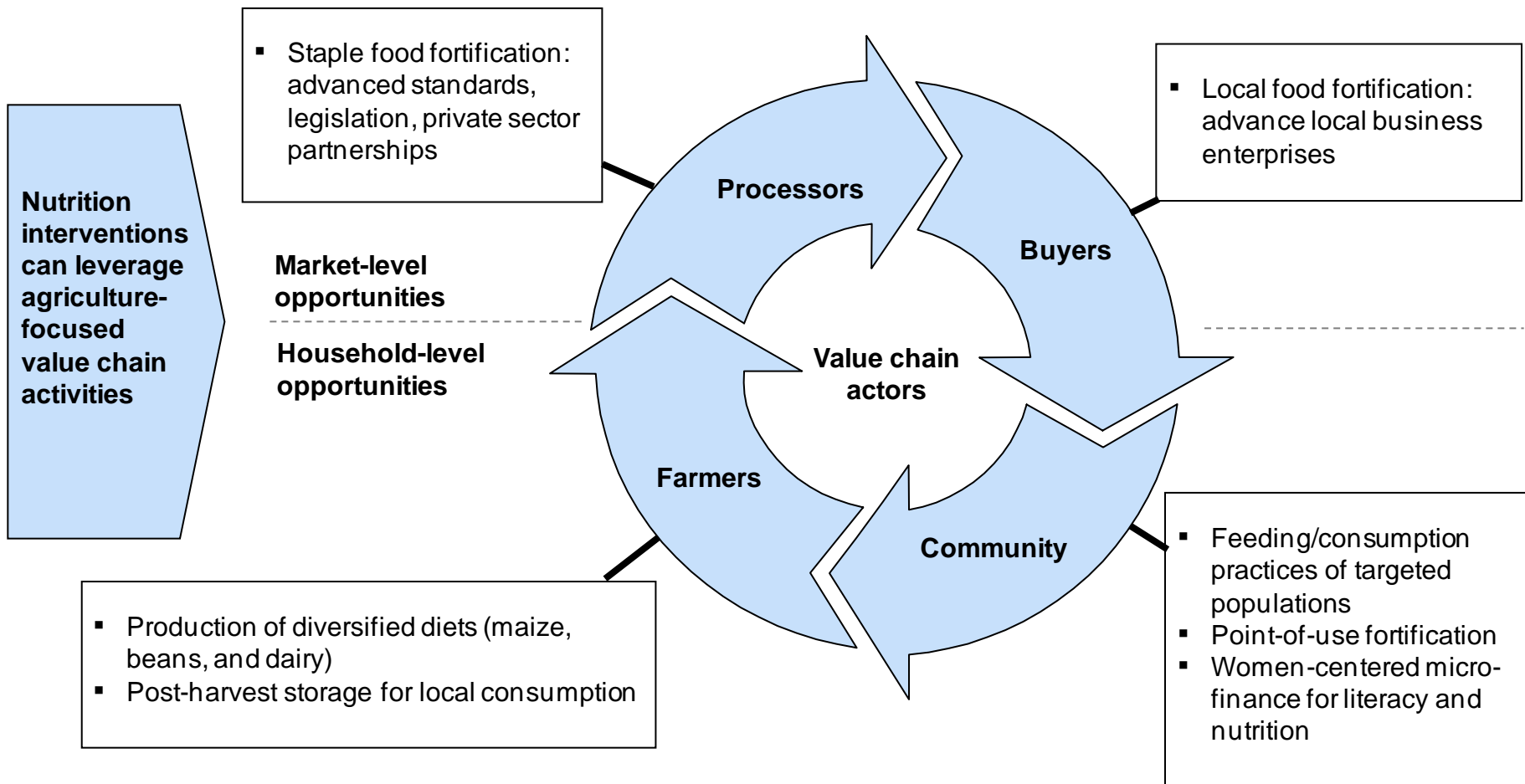
### Rural Internet Communications Technologies (ICT)

Improve farmers' access to market information

Increase efficiency of rural markets

<sup>1</sup> Land Husbandry, Water Harvesting, and Hillside Irrigation

**There are clear opportunities to link some planned nutrition activities across a value chain-focused program**



Note: Reducing malnutrition will require additional nutrition investments beyond these, including TA for district-level malnutrition plans, nutrition status monitoring, and supplemental feeding for vulnerable populations.

## Several priority research areas can address constraints to further agriculture development and improved nutrition

High priority research areas	Potential intervention and impact
Market analysis	<ul style="list-style-type: none"><li>Conduct market analysis to identify domestic and export demand</li></ul>
Crop-specific R&D	<ul style="list-style-type: none"><li>Competitive research grants to support indigenous research efforts (field trials, conferences) and capitalize on international crop science advancements</li></ul>
GOR Info-resource management	<ul style="list-style-type: none"><li>Continue to provide technical assistance and policy dialogue directly supporting GOR info-resource management</li></ul>
Nutritional behaviors	<ul style="list-style-type: none"><li>Develop innovative behavior change interventions to improve nutritional practices, particularly among rural families (e.g., performance based funding mechanism to incentivize improved practices)</li></ul>

## We will work with GOR to address several key policy issues that impact Rwanda's food security

Policy Issue	Impact on Food Security
Regional agriculture integration	<ul style="list-style-type: none"> <li>Changing price competitiveness of Rwandan commodities, customs, tariffs, non-tariff trade barriers will all impact long term sustainability of agricultural production</li> </ul>
Privatization of fertilizer industry	<ul style="list-style-type: none"> <li>Government currently purchases all fertilizer imports and distributes at subsidized rates – greater privatization required for long term sustainability</li> </ul>
Modern agricultural science	<ul style="list-style-type: none"> <li>Introduction of improved seed varieties could significantly enhance agricultural production</li> </ul>
Climate change adaptation	<ul style="list-style-type: none"> <li>Climactic change could significantly impact what remains a pre-dominantly rain-based production system</li> </ul>

### Mission's policy advocacy strategy would consist of 4 components

- Conduct **actionable policy research** on key issues to build fact base and recommended course of action
- Continue **bilateral dialogue** with GOR to inform and improve existing agriculture and nutrition policies, including better integration of these two areas (e.g., help shape PSTA III)
- Implement **sector program assistance** to become more fully integrated with GOR planning, budgeting and M&E and build capacity of GOR ministries by shifting planning, budgeting processes to GOR
- Provide **targeted capacity building** to support government's implementation of improved policy focus (e.g., public financial management)



## Sector program assistance is one of several innovative mechanisms we are pursuing, consistent with USAID/Forward procurement reform

### Sector Program Assistance: Analytical Work

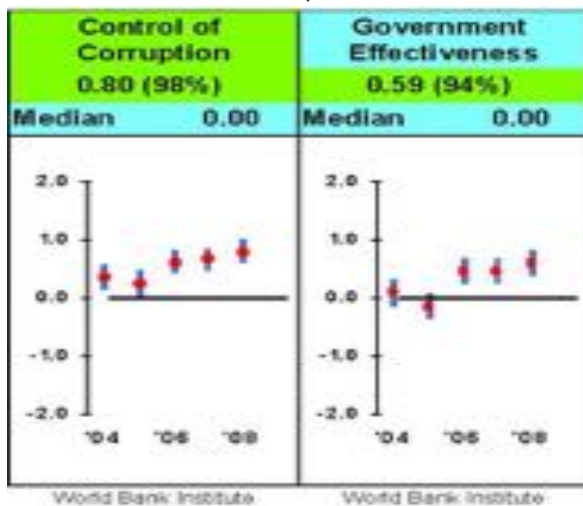
- Strengthen MINAGRI M&E function: ReSAKSS, FEWS
- Routine Public Financial Management Assessment, (completed)
- Detailed Analysis of MINAGRI financial accounting system (due early 2011)

### Other Innovative Delivery Mechanisms under Consideration:

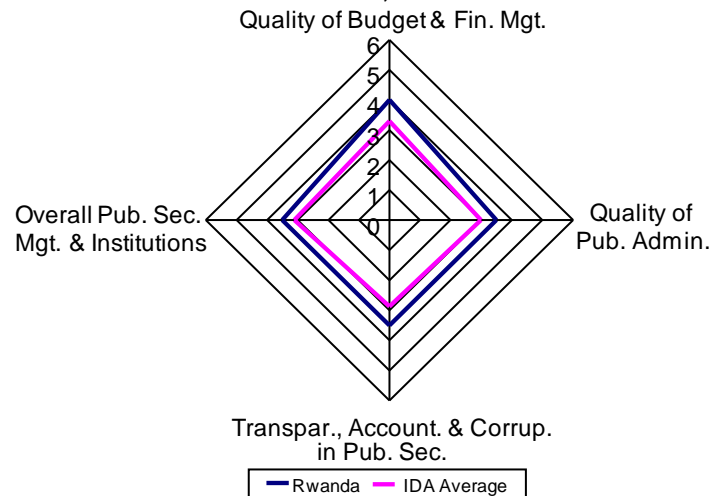
- Grants to Public International Organizations
- Fixed Amount Reimbursement Agreements
- Leveraging funds from Development Partner

### Sector Budget Support: The Governance Environment

MCA, FY10



CPIA, 2009



## Our strategy is well aligned with the Feed the Future framework

Systems Transformer	Availability	Access	Utilization
<b>A</b> Maize/beans, milk, pyrethrum, and coffee	Reduced post-harvest losses Higher quality, productivity through TA, better inputs	Links to existing domestic and export market demand Higher farmer incomes	Provides delivery mechanism to reach targeted populations
<b>B</b> Focused infrastructure	Easier access, lower costs for agricultural inputs	Physical links to markets	Improved water management, sanitation
<b>C</b> Integrated nutrition	Improved livestock production systems with better feed	Fortification of locally available foods	Behavioral change interventions targeted at producer networks
Innovation Engine			
<b>D</b> Science and technology	Improved agricultural inputs, technology	Greater understanding of market demand	More effective behavioral change nutrition interventions
Policy Advocate			
<b>E</b> Policy advocacy	More sustainable agriculture productivity investments	Better alignment with market trends	Stronger linkages between GOR agriculture and nutrition strategies

## Our strategy is also well aligned with PSTA II

### PSTAI sub-program

### USAID/Rwanda Feed the Future multi-year strategy components

<ul style="list-style-type: none"> <li>• SP1.2 Integrated systems of crops and livestock</li> </ul>	<ul style="list-style-type: none"> <li>• Promote use of increased production to improve livestock feed supply</li> </ul>
<ul style="list-style-type: none"> <li>• SP1.5 Supply and use of agricultural inputs</li> </ul>	<ul style="list-style-type: none"> <li>• Leverage available financing mechanisms for use of improved inputs and technology</li> </ul>
<ul style="list-style-type: none"> <li>• SP1.6 Food security and vulnerability management</li> </ul>	<ul style="list-style-type: none"> <li>• Support investment in post-harvest handling and storage for targeted commodities</li> <li>• Leverage other market oriented programs to increase scale of impact in targeted commodities and incorporate lessons learned</li> <li>• Leverage agriculture initiative implementation mechanisms to deliver nutrition programs</li> <li>• Incorporate fortification capacity into processing center investment schemes</li> <li>• Deliver community based nutrition interventions appropriate to targeted value chains</li> </ul>
<ul style="list-style-type: none"> <li>• SP2.1 Promotion of farmers' orgs and capacity building for producers</li> </ul>	<ul style="list-style-type: none"> <li>• Develop effective supplier networks organized around GOR investment sites</li> <li>• Provide TA focused on quality improvement, enterprise management</li> </ul>
<ul style="list-style-type: none"> <li>• SP2.2 Restructuring proximity services for producers</li> </ul>	<ul style="list-style-type: none"> <li>• Develop extension delivery models to bring innovations, information to producers</li> </ul>
<ul style="list-style-type: none"> <li>• SP2.3 Research for transforming agriculture</li> </ul>	<ul style="list-style-type: none"> <li>• Provide competitive grants to support research in agricultural productivity, nutrition</li> <li>• Establish a stronger network among Rwanda's research organizations</li> <li>• Increase capacity of Rwandan institutions by providing fellowships to degree programs</li> </ul>
<ul style="list-style-type: none"> <li>• SP3.5 Market-oriented rural infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Promote investment in additional processing facilities where required (e.g., PPPs)</li> <li>• Target infrastructure based programs to highest need areas of targeted value chain production</li> <li>• Develop firm level market demand data for both domestic and export markets</li> </ul>
<ul style="list-style-type: none"> <li>• SP4.1 Institutional strengthening and capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Implement performance based sector program assistance to improve coordination with GOR policy agenda and develop internal capacity of ministries</li> </ul>
<ul style="list-style-type: none"> <li>• SP4.2 Policy and regulatory framework for the sector</li> </ul>	<ul style="list-style-type: none"> <li>• Fund actionable research around key policy issues impacting Rwanda's food security</li> <li>• Continue bilateral dialogue with GOR on key policy issues</li> </ul>

**We will continue to work closely with GOR, developmentt partners & others to implement our strategy**

## Examples of coordination with external partners

**Drive systems transformation in targeted staple and high value crop value chains**



- Post-Harvest Working Group chaired by MINAGRI (sub-committee of ASWG) will drive investment in post-harvest handling and storage

**Deliver innovations to enable sustainable agriculture growth improved nutrition**



- Public private partnership helping improve pyrethrum production
- US education and research institutions key partners on several projects

**Advocate for improved food security policy**



- ReSAKKS project will leverage contributions of other research institutions to inform policy analysis
- Ongoing dialogue with DFID and CIDA for possible joint designs.