



Strategic Review

FEED THE FUTURE

March 4, 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.

Decades of under-investment in infrastructure, poor natural resource management and limited governance have resulted in a fragmented, underperforming agriculture sector and decreasing livelihoods.

- **Agriculture is significant to Haitian economy**, employing more than 60% of the population.
- **Yet the sector is low performing and highly fragmented**
 - Contributes only 25% of GDP, down from 40% in 1990
- **Lack of infrastructure and organization causes post-harvest losses of 35% or more, depending on the crop**
- **Environmental degradation is a serious impediment to productivity**
 - 85% of watersheds are degraded
 - Puts agriculture, people, and fishing all at risk

Agricultural productivity is dependant upon reducing environmental degradation.



Agriculture not greatly affected

- Land, farmers largely unaffected except some damages in Leogane

However...

- Ministry and Agricultural University sustained major losses.
- Some canal, and more small infrastructure damage
- 600,000 Haitians migrated from Port-au-Prince to rural areas - by June 2010, 10% remain in rural areas.
- Number of meals per day reduced from 2.48/day to 1.58/day.



Given the importance of agriculture to the economy...



Government of Haiti (GOH) sees agriculture as a central economic driver of recovery

The earthquake spurred an accelerated and robust country-led planning process that included donors, NGOs, civil society, private sector

Donors and other stakeholders endorsed Haiti's Country Investment Plan (CIP) at a high-level meeting in Punta Cana on June 2, 2010.

– Donors agreed to:

- Align their strategies with the CIP
- Commit resources ideally by Sept 1, 2010 and transparently advise ministry

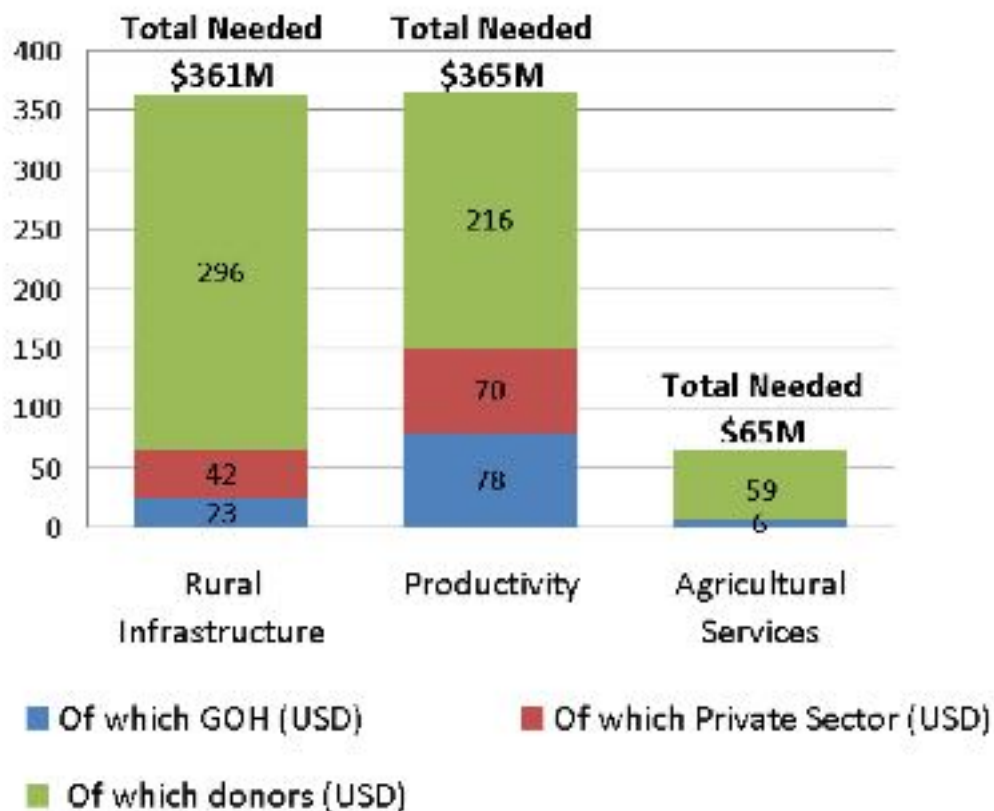
– Ministry agreed to

- Cover recurring costs
- Strive to increase agriculture as a portion of the overall national budget

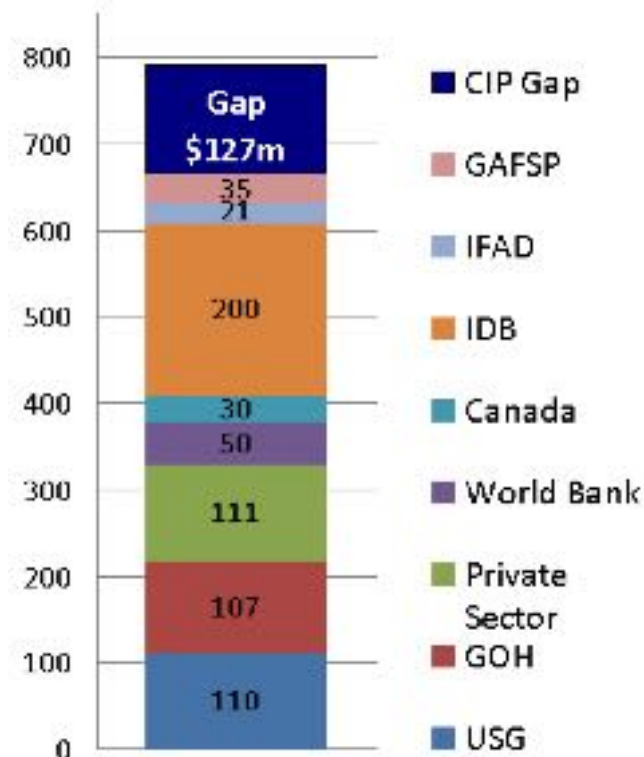
Haiti applied for and received \$35 mil in GAFSP funds.

Commitments to Agriculture Thus Far

Pledges Against CIP Investment Priorities



Total CIP Commitments



The Policy Environment

No significant tariff or non-tariff barriers to trade exist for major agricultural products.

Open Competition in the Agricultural Sector

- Inputs are not subject to tariff or non-tariff barriers.
- **Short-term:** GoH continues to subsidize fertilizer and seeds as part of the disaster response.
- **Medium-term:** GoH has committed to reducing subsidies in favor of market-based distribution within 2 years.

Agribusiness in Haiti is very challenging

- Incentives for agribusiness are limited; supply of raw goods is limited, unreliable, and expensive to aggregate.
- NGOs (and donors) compete for limited human resources with GoH
- Rural credit difficult and expensive to access
- Land tenure complicated

Tariff Levels

Corn	15%
Rice	5%
Beans	5%
Pork	5%
Poultry	5%
Sugar	3%
Plantains	0%
Sorghum	0%

Feed the Future High Level Impact

- **Change in Prevalence of Poverty**
- **Change in Prevalence of Underweight Children**

Haiti Socio-economic Indicators

- **80% of Haiti's population lives in poverty, 54% in abject poverty**
- **Under- and malnourishment are severe**
 - 40% of households are undernourished (3.8m people)
 - 45% of women are anemic
 - 30% of children suffer from chronic malnutrition

Haiti Feed the Future Strategic Goals

- **In the three target development corridors, the USG goal is to:**
 - Raise incomes for at least 100,000 rural households,
 - Double the value of exports of targeted crops, and
 - Improve nutritional status, particularly among the most vulnerable populations.

Goal is to Increase Income in Targeted Watersheds

- **The USG will achieve its goals through:**
 - Integrating agricultural production, environmental management, and nutrition in four (4) targeted watersheds
 - Strengthening value chains and promoting entrepreneurship
 - Building national capacity for improved training, extension, applied research, and market information systems, and
 - Targeting food assistance programs to the country's most under-nourished
- **Haiti Feed the Future strategy will be implemented in targeted corridors with a total population of 1.8 million.**

$$\begin{array}{rcl} \text{FtF investment} & & \text{Supplemental Funds} & & \text{Total Haiti FtF} \\ \$55\text{m/year for 5 years} & + & \$31\text{m for 2010} & = & \text{5 year Investment} \\ & & & & \$309.5\text{m} \end{array}$$

Ongoing integrated
watershed project
costs \$298 per
beneficiary

Post-quake rural family size 7.18

$$\begin{array}{rcl} \text{Haiti FTF Cost} & & \\ \text{Over 5 years} & = & \$172 \text{ per beneficiary} \\ & & \$1,235 \text{ per rural household} \end{array}$$

A Watershed Approach - The Problem and Its Effects

1 Mountainous Terrain

- 60% of Haiti has a slope greater than 20 degrees

2 Eroded Land

- Deforestation and over-farming of annual crops with erosive practices
- Haiti loses 10,000-15,000 hectares of once-fertile land to erosion every year

Degraded and Dangerous Watersheds

From 1980 to 2008 storms and floods have caused massive damage:

- Number of people killed: 8,165
- Number of people affected: 7,220,916
- Economic Damage: US\$ 824m

4 Vulnerable Floodplains

- Frequent floods destroy human lives and economic assets
- 4 storms in 2004 killed 1,000 people, destroyed 1/3 of the rice crop and 22,702 homes

3 Frequent Flooding

- Eroded hillsides cannot absorb water during heavy rains.
- From 1998 to 2008 there were 65 floods due to storm events in Haiti

A Watershed Approach - The Solution for Haiti

1 Reforested Hillsides

- Replace annual crops with income-generating perennial and/or tree crops on hillsides.

Support to agribusiness to create markets for agricultural products.

4 Productive Floodplains

- Irrigated agriculture of staple and commercial crops
- Improved canal infrastructure and governance

2 Soil Conservation

- Supporting producer groups to boost yields through soil management (contour planting, new varieties, terraces, etc.).

Investments Throughout Watershed

- Capacity building of local communities and producer groups.
- Training, extension, and farmer field schools.
- Feeder roads and market infrastructure.




3 Resource Governance

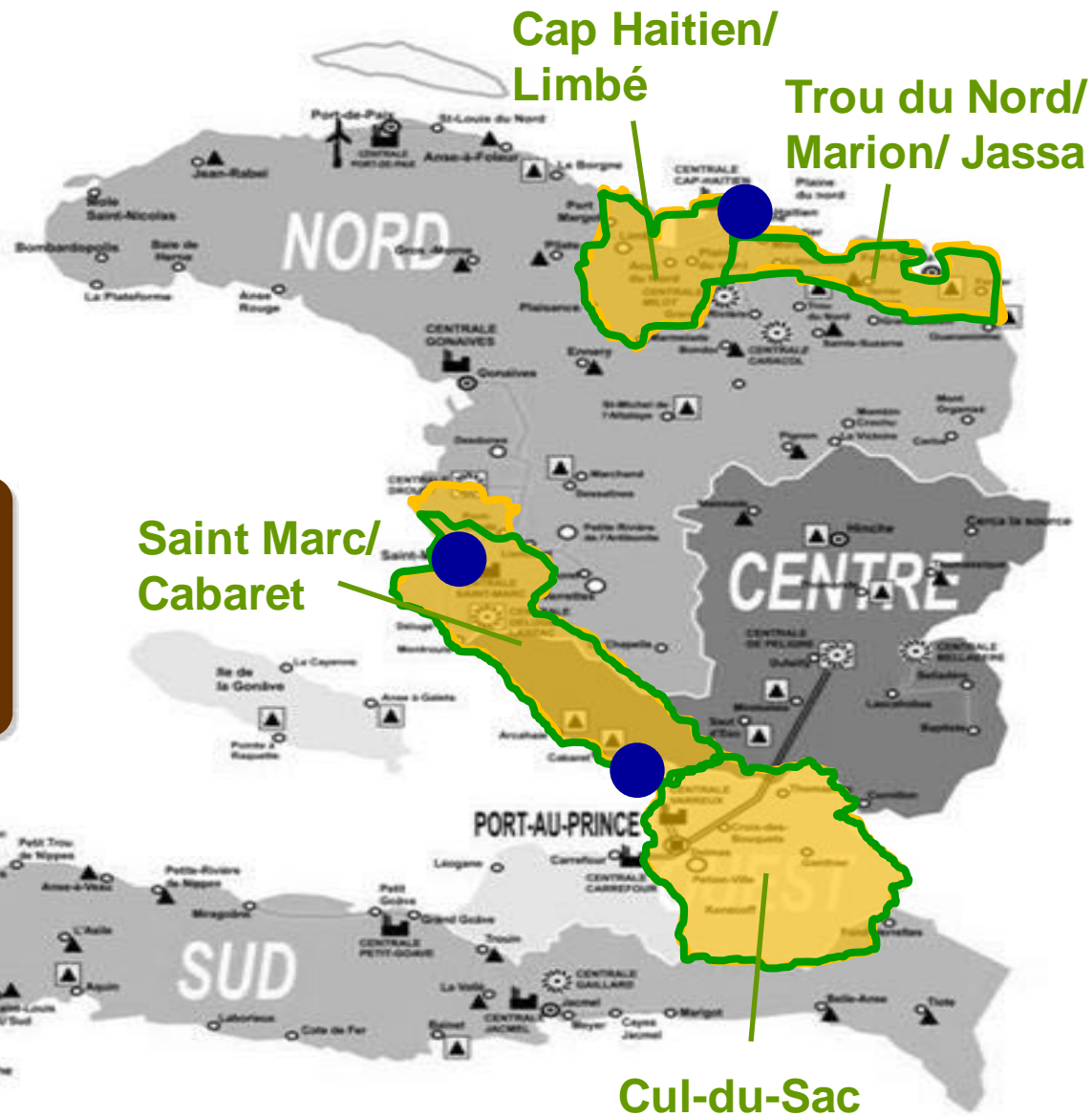
- Support local and national governments to collaborate in managing water rights

Priority Watersheds to Increase Production

Selection Criteria

- GOH/MARNDR priorities
- Agricultural potential
- Number of accessible beneficiaries
- Distance to markets
- Alignment with other donor and investments
- USAID prior experience

-  USG focus corridors: priority agricultural watersheds and growth pole areas
-  USG priority agricultural watershed areas
-  USG "Growth Pole" center






Feed the Future Investments

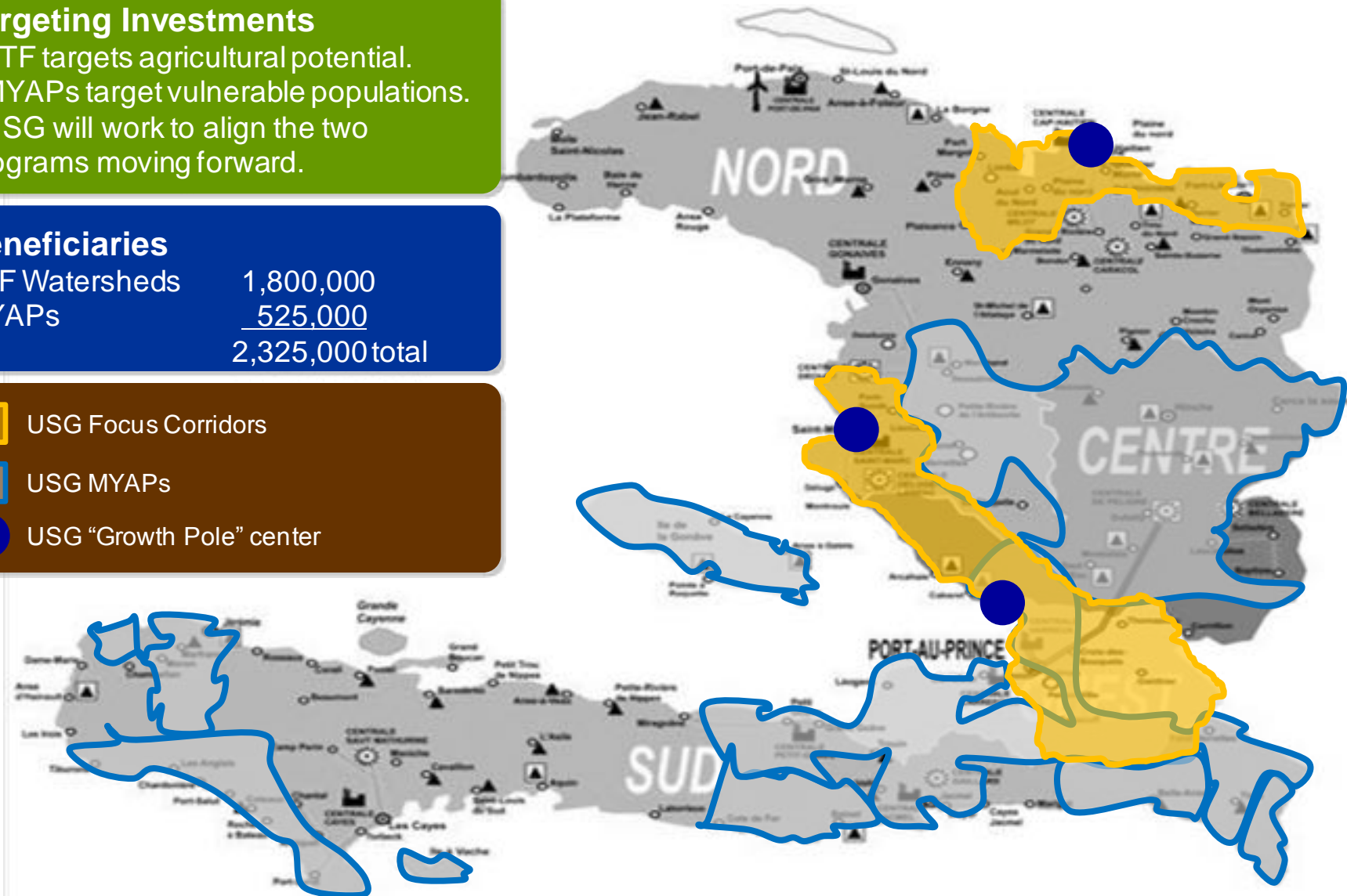
Targeting Investments

- FTF targets agricultural potential.
- MYAPs target vulnerable populations.
- USG will work to align the two programs moving forward.

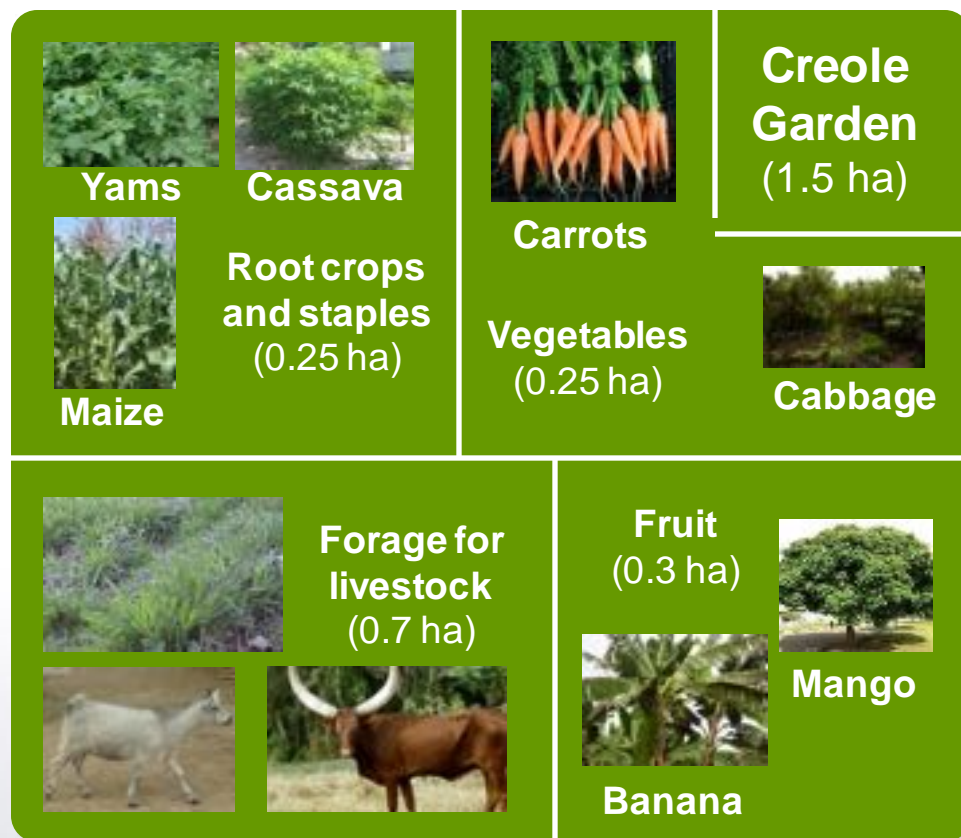
Beneficiaries

FTF Watersheds	1,800,000
MYAPs	<u>525,000</u>
	2,325,000 total

-  USG Focus Corridors
-  USG MYAPs
-  USG "Growth Pole" center



General Context on Haitian Agriculture



- Poly-culture farming complicates focusing on 2-3 value chains.
- Mountainous terrain creates micro-climates and fragments agricultural production.
- Haiti has no major “crop areas, ” with few exceptions.
- Small landholdings (avg 1.5 ha).
- Crop diversification is a risk management tool against losses.

Mango

- Single highest agriculture export
- Represents 3% of volume produced in Haiti but 20-25% of export value (\$10 ml in 2009)
- Export certification center operational with USDA – eradication of fruit flies will extend mango export season

Cacao

- International market demands not met, and demand expected to rise in next 5 years
- Price increased by 62% between 2007-09, reaching high of \$3,100/MT in 2009
- Exports in 2009 valued at less than \$3 ml

Coffee

- Coffee exports represent 3% of volume produced in Haiti and 18% of value in 2009
- Historically, Haitian coffee is of a high quality by international standards and can command a premium price in export markets
- Large informal exports to the Dominican Republic
- Exports off by 80% since 2001 due to disorganization within the sector and pests

Key Facts

- 98% of production is not exported.
- Only <100,000 small farmers households are currently involved in export value chains.
- Domestic demand is growing due to population increases
- Nascent processing industry has not met demand (snack foods, corn flakes)
- Nascent street vendor commerce

Limitations

Hillside Farmers (majority)

- Inefficient Creole Gardens
- Poor soil and high erosion
- Low investment in existing tree crops
- Low-yield/non-export varieties



Lowland Farmers (minority)

- Poor use of technology
- Very low yielding staples
- Dilapidated irrigation systems



Cross-cutting

- Poor technical knowledge
- Lack of storage facilities and access to markets
- Lack of post-harvest transformation
- Lack of market information
- Inefficient input use
- Poor seed quality
- Poor access to credit



Interventions

Promotion of commercial tree crops

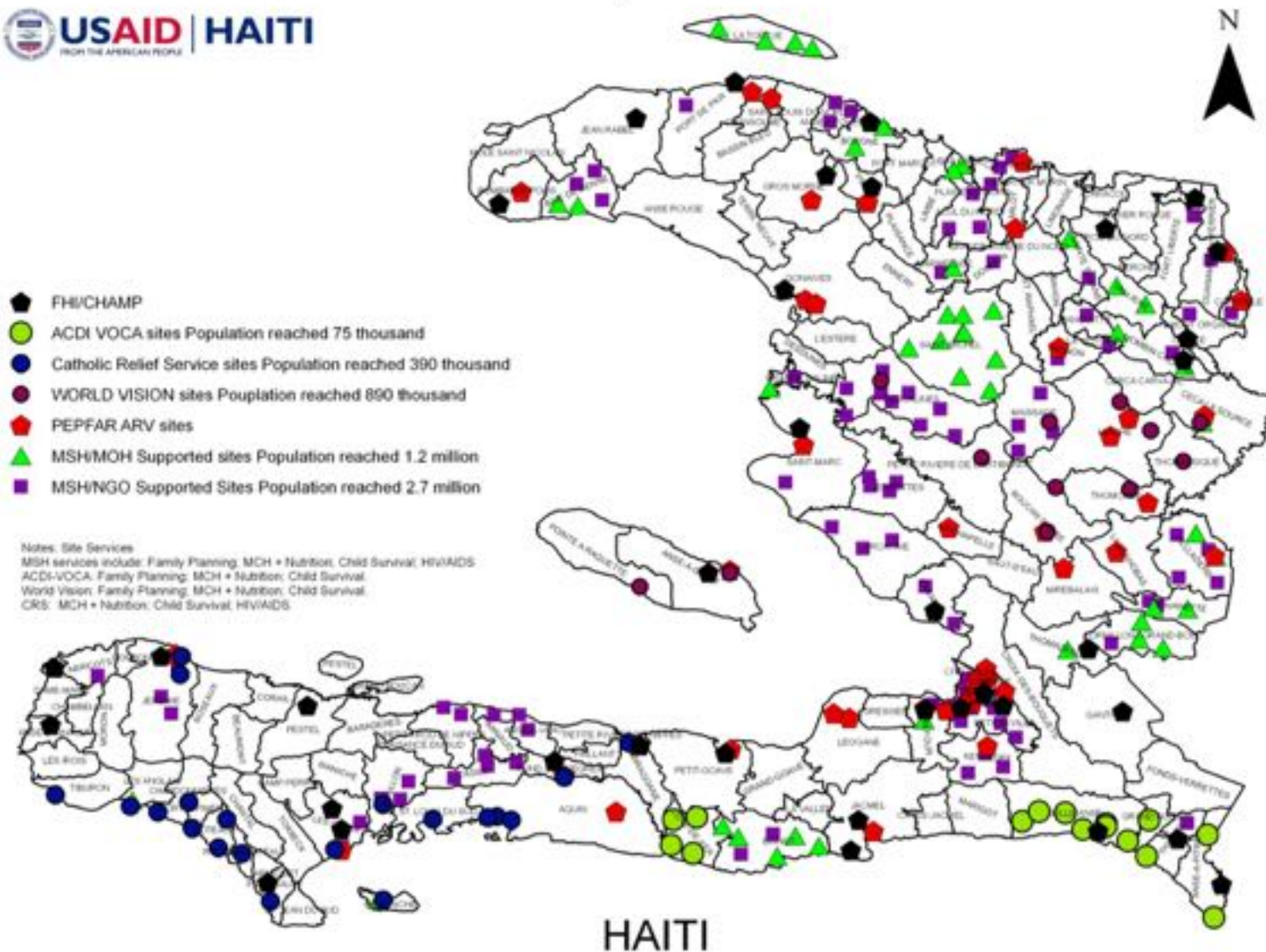
- Conservation measures to retain soil nutrients
- Investment in tree crops due to more competitive value chains
- Export variety tree crops distributed through producer groups

Promotion of targeted high-yield staple crops

- Renovated irrigation through helping producer groups to operate like businesses.
- Improved technical knowledge through master farmers, extension agents, private sector
- Construction of feeder roads
- Construction of storage and transformation infrastructure through local public-private partnerships
- Market information via SMS, extension agents, and "Madam Saras."
- Increased access to inputs through private sector dealers.
- Improved seed quality through new market channels for the private sector.
- Increased access to credit through formal banking sector



Proposed Health corridors



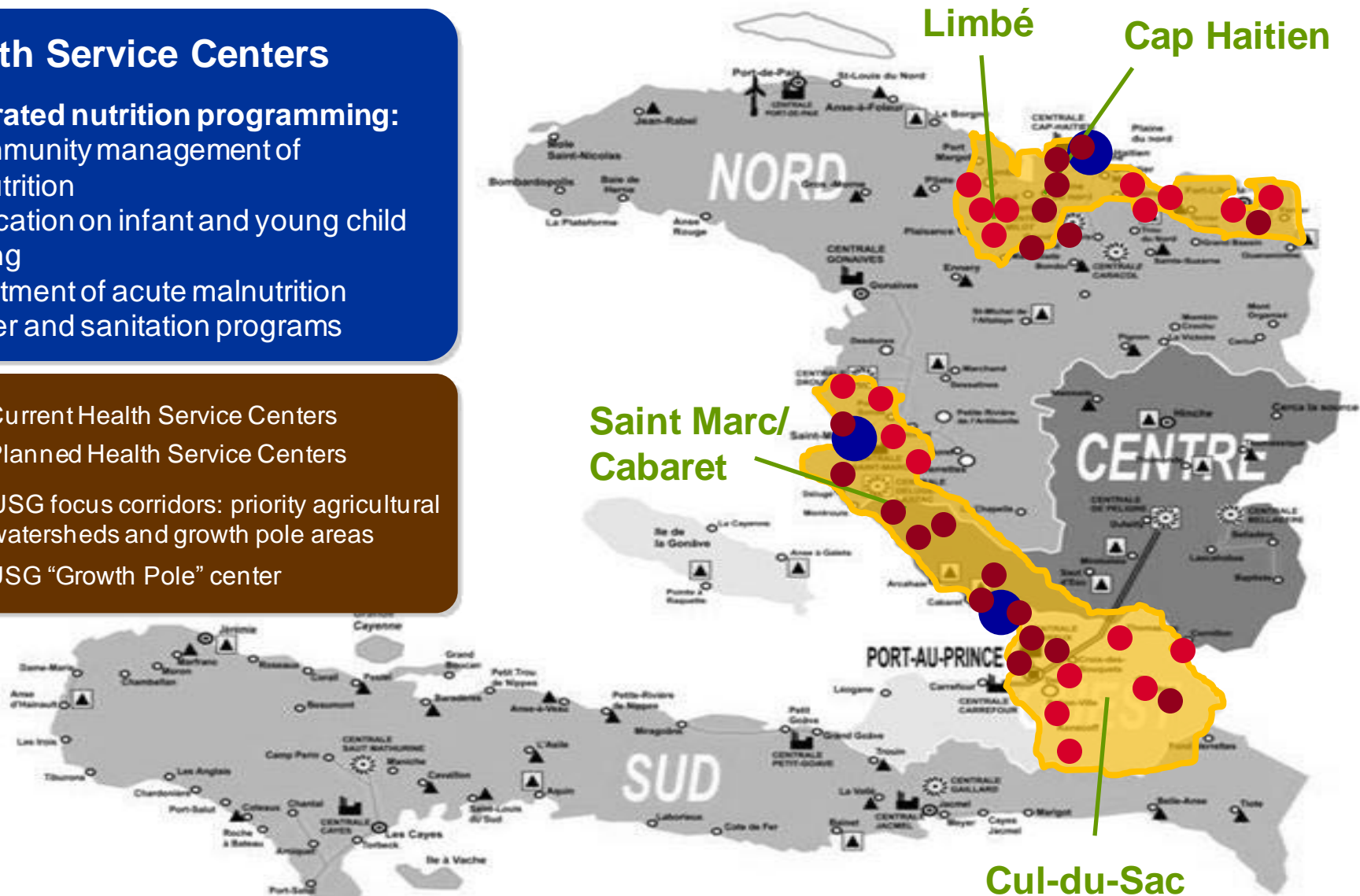
Nutrition Interventions in FTF Focus Corridors

Health Service Centers

Integrated nutrition programming:

- Community management of malnutrition
- Education on infant and young child feeding
- Treatment of acute malnutrition
- Water and sanitation programs

- Current Health Service Centers
- Planned Health Service Centers
- USG focus corridors: priority agricultural watersheds and growth pole areas
- USG "Growth Pole" center



Improved Nutritional Status in Selected Corridors

Maternal and Child Health Services

- Counseling and education of mothers and caretakers on infant and young child feeding.
- Community detection and management of acute malnutrition.
- Malnutrition treatment centers.

Addressing / Monitoring Undernutrition

- Increased production and use of nutrient-rich crops.
- Bio-fortification.
- Targeted food distribution.
- Establishment of national surveillance system for monitoring nutritional status.

Reduction of Parasite Load

- Behavior change education and communication on sanitation and hygiene practices.
- Promotion of treated water in homes and schools.
- Clinic-based and school-based de-worming programs.

Gender Considerations

Women play an active role in agricultural production and commercialization, but face nutritional challenges

- 28 percent of rural households are headed by women.
- 4 times as many male-headed households face extreme food insecurity as female-headed households.
- Women comprise a high percentage of the commercial vendors as Madam Saras who broker the sale of produce between producers and markets.
- **Illustrative gender-sensitive interventions**
 - Improvements in agricultural inputs (seeds, fertilizer) will be targeted at women.
 - Support to domestic value chains will focus on Madam Saras.
 - Train extension agents will target mothers for nutrition deficiency training programs.



Haitian Women

- Traders
- Purchasers (seeds, food)
- Harvesters
- Caretakers of small livestock

Innovations

New Technologies

- Market price information via SMS
- GPS-referenced soil testing via PDA
- On-farm storage technologies to reduce post-harvest losses of staple grains
- Hand held data collectors and transmitters for national nutrition surveillance system
- Bio-fortification, hi-protein maize, sweet potatoes with higher Vitamin A levels.

New Partners

- Implementation through a projected network of 400 community-based organizations.
- Distance education between US land grant institutions and Ministry farmer field schools
- USDA Science and Technology Innovation fund to leverage US universities, private firms, and other USG agency innovations in agriculture and nutrition.



Technological Advances

Extension agents will be able to do on-site soil analysis to provide farmers with fertilizer recommendations within minutes, and at the same time populate a geospatial database of soil conditions.

Risks

- **Physical risks (hurricanes, floods) that could:**
 - Further damage infrastructure and disrupt markets
 - Shift resources and management attention from core activities.
- **Political instability that forces greater attention to PAP and secondary cities.**
- **New administration could distance itself from the strategy developed with the Preval administration – future of Minister Gué?**
- **Need to ensure IHRC up and running to coordinate activities.**
- **Population growth, if not decreased, will challenge food availability and access.**



Whole of Government

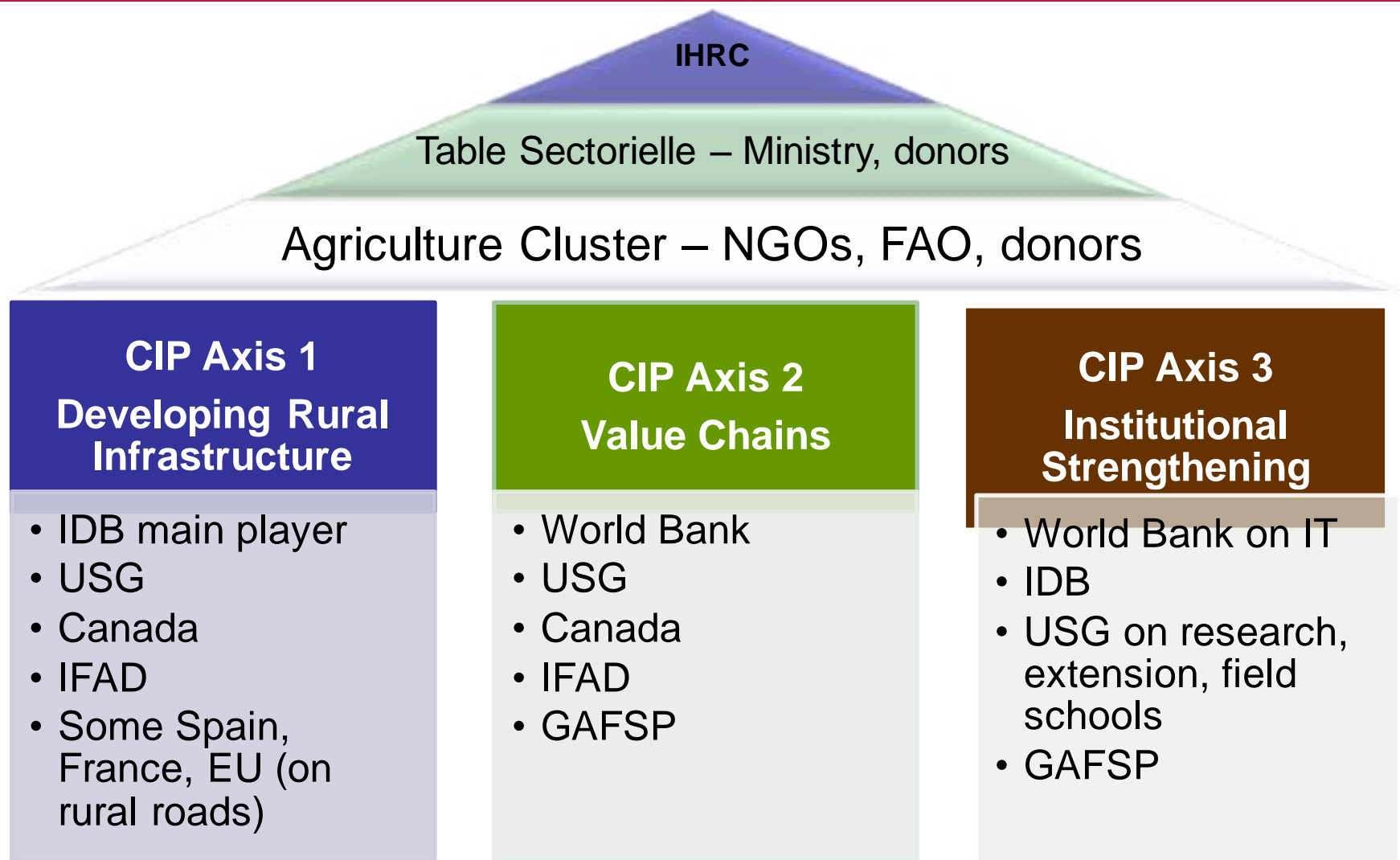


- The Feed the Future strategy is a foundational component of the USG Haiti Strategy post-earthquake.
- The FTF plan is one of four pillars of the USG Haiti Strategy plan.



- USDA will play a vital role in FTF by helping to build institutional capacity at the Ministry of Agriculture.
- Through technical assistance and long and short term training, USDA is slated to:
 - Strengthen the Ministry's ability to develop and enforce regulations in animal and plant health;
 - Improve the Ministry's ability to collect, analyze and disseminate agricultural statistics and price information; and
 - Enhance the Ministry's ability to conduct applied agricultural research and transfer skills and technology to small farmers.

Donor Coordinating Bodies Alignment around CIP



FTF Results Framework

Assistance Objective: Economic Growth and Food Security Increased

Overall Indicators:

- % Increase in beneficiary income in selected watersheds
- % Decrease in number of undernourished households
- % Decrease in the prevalence of underweight children

Intermediate Result 1

Agricultural Productivity Increased

Indicators:

- Yield increase per hectare of selected crops in targeted corridors due to USG support

Intermediate Result 2

Watershed Stability Improved

Indicators:

- % increase of hillside land under improved natural resource management due to USG support

Intermediate Result 3

Agricultural Markets Strengthened

Indicators:

- % change in agricultural exports
- % Proportion of national demand for food met by food produced in Haiti

Intermediate Result 4

Employment Increased

Indicators:

- % change in jobs retained and created in the targeted watersheds/corridors

Link to Health Assistance Objective

- Household baseline data validation (of existing survey) and expansion into new areas is a top priority for the M&E team. Mission is considering compete contract to assist in this area.
- Given the size and complexity of FTF investment in Haiti, Mission is reviewing M&E staffing needs