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AGRICULTURE SECTOR ASSESSMENT FINAL ASSESSMENT REPORT

July 2019

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AGRICULTURE SECTOR ASSESSMENT

FINAL ASSESSMENT REPORT

July 2019

Evaluation Mechanism Number: AID-521-C-17-00002
Haiti Evaluation and Survey Services (ESS) for USAID/Haiti Activity

On cover: Photo by Dr Zuri Linetsky in May 2018 in the Artibonite Valley. He was on his way to Cap-Haitien to collect data for an Aid for Trade assessment. The picture shows rice fields in preparation for sowing/transplanting, and a farmer looking over the fields apparently in a hurry to go to work.

DISCLAIMER

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ABSTRACT

The United States Agency for International Development (USAID) assistance in Haiti has traditionally focused on long-term reconstruction and development, promoting economic growth, job creation, agricultural development, providing basic health care and education services, and improving government effectiveness.

Agriculture is one of USAID/Haiti's main areas of intervention for which the current goal is to ensure that Haitians have access to nutritious, affordable food by promoting increased locally sourced food through agricultural production.

The purpose of this Agriculture Sector Assessment is to inform the design of USAID/Haiti's new agricultural activities.

This assessment consisted of three phases: a desk review, interviews with agriculture experts, and fieldwork, which included focus group discussions, key informant interviews, and direct observations.

As a result of this Assessment, we recommend that USAID focus on four main priority areas in its future programming:

1. Focus on working with the Private Sector;
2. Strategically select technical approaches;
3. Prioritize sustainability planning; and
4. Motivate the government to substantially improve the Agriculture enabling environment.

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ACRONYMS

AECID	Spanish Agency for International Cooperation and Development
AFD	Agence Française de Développement
AQ	Assessment Question
ASIrriI	Appui aux Irrigants et aux Services aux Irrigants
AT	Assessment Team
AVANSE	Appui à la Valorisation du potentiel Agricole du Nord, à la Sécurité Économique et Environnementale (Feed the Future North)
BIA	Boutiques d'intrants agricoles
CBO	Community-Based Organization
CFC	Credit for Conservation
CHASE	Collectif Haïtien pour l'Avancement du Suivi et de l'Evaluation
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
CLES	Collectif de Lutte contre l'Exclusion Sociale
CNSA	Coordination Nationale de la Sécurité Alimentaire
CPCN	Cooperative Producers Cacao du Nord
CRDD	Centers for Sustainable Rural Development
CREER	Community Reconstruction for Economic and Environmental Resiliency
CRS	Catholic Relief Services
CSO	Civil Society Organization
DCA	Development Credit Authority
DEED	Développement Économique pour un Environnement Durable
DEFI	Projet de Développement des Filières
DIA/MARND	Direction des Infrastructures Agricoles/ Ministère de l'Agriculture, des
R	Ressources Naturelles et du Développement Rural
DIME	Development Impact Evaluation
Dos	Direct Observation
DTL	Deputy Team Leader
EGAD	Economic Growth and Agriculture Development
FANTA	Food and Nutrition Technical Assistance
FAO	Food and Agriculture Organization
FFS	Farmer Field School
FGDs	Focus Group Discussion
FTF	Feed the Future
GFRP	Strengthening the Management of Agriculture Public Services
GOH	Government of Haiti
HAP	Hillside Agricultural Program
HIFIVE	Haiti Integrated Financing for Value Chains and Enterprises project
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IHSI	Institut Haïtien de Statistiques et d'Informatique
KIIs	Key Informant Interview

KOREKAFE	Consolidation de la compétitivité et la durabilité des coopératives caféières haïtiennes
LEAD	Leveraging Effective Application of Direct Investments
LOKAL	Limye ak organizasyon pu kolekyivite yo ale lwen
MARNDR	Ministry of Agriculture's Natural Resources and Rural Development
M&E	Monitoring and Evaluation
MFPA	Microcrédit Financement Production Agricole
MSME	Microfinance, Small and Medium Enterprise
MUSO	Mutuelle de Solidarité
MYAP	Multi-Year Assistance Program
NGO	Non-governmental Organization
ODA	Official Development Assistance
PACT-PV	Plan d'actions à court terme d'appui à la production vivrière
PADELAN	Projet d'appui au développement local dans les Nippes
PAPAH	Programme d'Appui à la Production Agricole en Haïti
PASAC	Programme d'Appui à la Sécurité Alimentaire et à la Création d'Emplois
PASAH	Programme d'Amélioration de la Sécurité Alimentaire en Haïti
PCR	Project Completion Report
PIA-A	Programme d'Intensification Agricole-Artibonite
PMDN	Programme de Mitigation des Désastres Naturels
PNIA	Plan National d'Investissement Agricole
PPA	Public-Private Alliances
PPI	Petits Périmètres Irrigués
QA	Quality Assurance
RACPABA	Racpaba Réseau des Associations Coopératives pour le Commerce et la Production Agricole du bas Artibonite
RESEPAG	Renforcement Des Services Publics Agricoles
SAK REP	Sac Plén Resiliency Enhancement Program
SAEF	Programme de Service d'Aide aux Entreprises et de Formation
SANREM	Research on Sustainable Agriculture and Natural Resource Management
SATAG	Societe Haitienne de Transformation Agro-alimentaire
SECAL	Projet de Sécurité Alimentaire
SI	Social Impact, Inc.
SI-HQ	Social Impact, Inc. Headquarters
SME	Small and Medium Enterprise
SOGESOL	Société Générale de Solidarité S.A.
SOW	Scope of Work
SYAP	Single Year Activity Program
SYFAAH	Système de Financement et d'Assurance Agricole en Haïti
TL	Team Leader
UN	United Nations
UNDP	United Nations Development Program
USAID	United States Agency for International Development
VTE	Vi, Tè & Eneji

WB	World Bank
WINNER	Watershed Initiative for National Natural Environmental Resources

EXECUTIVE SUMMARY

ASSESSMENT PURPOSE, USE, AND QUESTIONS

The United States Agency for International Development (USAID) assistance in Haiti has traditionally focused on long-term reconstruction and development, promoting economic growth, job creation, agricultural development, providing basic health care and education services, and improving government effectiveness.

Agriculture is one of USAID/Haiti's main areas of intervention. The current goal is to ensure that Haitians have access to nutritious, affordable food by promoting increased local agricultural production. The purpose of this Agriculture Sector Assessment is to inform the design of USAID/Haiti's new agricultural activities. The Agriculture Sector Assessment findings are intended to:

- Guide USAID/Haiti's future investments to meet key stakeholders' needs in the agriculture sector.
- Facilitate identification of approaches that the Economic Growth and Agriculture Development (EGAD) Office can choose to foster new programming to support Haitian agriculture development.

To achieve this purpose, the assessment addresses the following questions:

ASSESSMENT QUESTION 1

Which technical approaches including:

1. agricultural extension models;
2. agribusiness or industrial approaches;
3. policy and institutional framework support; and
4. other interventions supported by USAID/Haiti, other donors, Government of Haiti (GOH) agencies, non-governmental organizations (NGO) and the private sector, have demonstrated effectiveness towards attaining the following results in Haiti:
 - i. increase beneficiaries' household incomes;
 - ii. create jobs;
 - iii. improve market access at the end of a value chain;
 - iv. improve producers' resilience at the beginning of the value chain;
 - v. improve natural resource management;
 - vi. improve productivity at the farm-level; and
 - vii. improve food security?

ASSESSMENT QUESTION 2

To what extent have the technical approaches and/or interventions identified in the desk review demonstrated sustainability?

ASSESSMENT QUESTION 3

What are the benefits to the agriculture sector of the Centers for Sustainable Rural Development (French acronym CRDD) and other similar organizations?

ASSESSMENT QUESTION 4

Which policies, procedures, and institutional frameworks in the enabling environment need to be addressed to achieve the results in Question 1?

ASSESSMENT DESIGN, METHODS, AND LIMITATIONS

PHASE I: DESK REVIEW

In line with the Agriculture Assessment Scope of Work (SOW) (Annex A), the assessment team (AT) completed three key tasks during the desk review phase:

1. Provided preliminary answers to the assessment questions (AQ) with an emphasis on Questions 1, 1.1, and 1.2, including a list of technical approaches that have been implemented (Annex B).
2. Selected agriculture sector experts to be interviewed during Phase II.
3. Identified information gaps to be filled during Phase II, and lay a basis for selecting interventions to explore in Phase III.

PHASE II: KEY INFORMANT INTERVIEWS WITH AGRICULTURE EXPERTS

Following the desk review phase, the AT completed Phase II, conducting key informant interviews (KIIs) with agriculture experts. To select interventions for further study during fieldwork, the AT implemented four key steps:

1. Interviewed key agriculture experts familiar with the universe of agriculture interventions implemented in Haiti over the last 18 years;
2. Reviewed documents and information obtained during the KIIs, adding this information to the Intervention Matrix;
3. Identified the most cited interventions during the KIIs; and
4. Systematically selected following ten interventions for inclusion in Phase III of the assessment.

TABLE 1: INTERVENTIONS TO STUDY

INTERVENTION	DONOR
Renforcement Des Services Publics Agricoles (RESEPAG)	World Bank
Watershed Initiative for National Natural Environmental Resources/Feed the Future (WINNER)	USAID
Feed the Future north project (AVANSE)/Haiti	USAID
Small-scale Irrigation Development Project Phase I (PPI 1)	International Fund for Agricultural Development (IFAD)
Programme d'Amélioration de la Sécurité Alimentaire en Haïti (PASA)	UE
Project of Technology Transfer to Small Farmers (PTTA)	Inter-American Development Bank (IDB)

INTERVENTION	DONOR
Projet de sécurité alimentaire (SECAL)	Agence Française de Développement (AFD)
Lèt Agogo	VETERIMED
Projet d'appui au développement local dans les Nippes (PADELAN)	Canadian Cooperation
Agri-Supply	Private Investment

PHASE III: FIELDWORK

During the assessment's fieldwork, Phase III, the AT studied (i) the sustainability of the activities supported by each intervention and technical approach; (ii) the benefits of the CRDD and other similar organizations to the agriculture sector; and (iii) policies, procedures, and institutional frameworks in the enabling environment that need to be addressed to achieve the results identified in Question 1. The AT also attempted to confirm the validity of the recommendations made by the agriculture experts in Phase II of the assessment. The findings provided recommendations about investments needed to boost agricultural productivity and income in Haiti.

The AT conducted field assessments of all ten selected interventions (detailed case studies are presented in Annex C), which were studied for AQs 1, 2, and 4. The Watershed Initiative for National Natural Environmental Resources (WINNER) activity was the source of information to answer AQ 3 regarding CRDDs.

The AT collected qualitative data using multiple methods and sources to mitigate the biases inherent in any one data collection method and leveraged the strengths of each method. Data were collected using three primary methods:

- Semi-structured KIIs focusing on stakeholders having played a direct role in the interventions examined;
- Focus Group Discussions (FGDs) with beneficiary households¹; and
- Direct Observations (DOs) at field level.

Data from these three sources were triangulated to identify areas of divergence or convergence. The preliminary findings developed through the desk review informed the coding process for the qualitative data collected which allowed the AT to triangulate the desk review and fieldwork data into a comprehensive set of findings, conclusions, and recommendations for the final report. The extent to which multiple informational streams provided coherent findings informed the robustness of assessment findings.

In total, the AT identified seven stakeholder categories through the document review. A detailed list of respondents for each intervention is presented in Annex D. The AT also prepared sets of data collection questions for each of the AQs and associated sub-questions, which can be found in Annexes E and F.

¹ These beneficiary households could either belong - or not - to CBOs.

Given the differing experiences of women and men in Haiti's agricultural sector, the assessment attempted to collect and analyze sex-disaggregated data in accordance with USAID policy. In practice, men hold most positions of authority within the government, donor agencies, and implementing entities. While more respondents were men than women, every attempt was made to include a balance where possible. KIIs and FGDs responses have been systematically gender disaggregated, though the low rate of female participation means that women are underrepresented.

In total, the AT conducted 75 KIIs, 21 FGDs, and 28 DOs between February 1 and March 12. The fieldwork was delayed for two weeks during this period due to political unrest in Haiti and the inability to conduct interviews. Once fieldwork could resume, the AT and data collection firm Collectif Haïtien pour l'Avancement du Suivi et de l'Evaluation (CHASE) worked in parallel to complete the KIIs, FGDs, and DOs.

SUMMARY FINDINGS AND CONCLUSIONS

FINDINGS AND CONCLUSIONS FOR AQ 1

There is no one perfect approach or combination of approaches that will work for every intervention in every situation. Any approach's effectiveness depends on its appropriate combination with other approaches throughout the value chain to facilitate access to complementary services that meet community needs.

The combination of Vouchers for Inputs and Training/Technology Package plus Linking Producers to Markets seems to be an especially effective recipe. Both the fieldwork and the desk review phases indicate that when approaches are combined better results are achieved. This particular combination was implemented by several of the most effective interventions, such as RESEPAG and SECAL in the South, and Appui à la Valorisation du potentiel Agricole du Nord, à la Sécurité Économique et Environnementale (Feed the Future North) (AVANSE) in the North. This combination seems to be especially effective because it targets key inefficiencies at several points along the value chain: inadequate access to affordable inputs, a lack of technical knowledge on improved techniques, and insufficient access to markets. Another combination that was similarly effective involved providing access to irrigation water in addition to access to inputs – this combination was seen in both SECAL and Petits Périmètres Irrigués (PPI).

Working with various key members of the community, including beneficiaries, local authorities, and the private sector, assists in making projects successful. Good communication with and involvement of these actors will lead to greater contribution, ownership, and the ability to take advantage of existing connections and local knowledge to improve project quality.

Natural disasters, government bureaucracy, and poor farm-to-market infrastructure may not be within a project's ability to control but can still be planned for. Projects can anticipate these types of hindrances and plan in flexibility, resilience strategies, and alternative arrangements to be put in place in the event that the project is negatively affected by something outside of its control.

FINDINGS AND CONCLUSIONS FOR AQ 2

Most interventions exhibited a certain level of sustainability for some approaches, activities and benefits, but the only fully sustainable intervention studied in the fieldwork was by Agri-Supply. The approaches that have indicated the greatest potential for sustainability have been Vouchers for Inputs and Linking Producers to Markets, because they actively establish relationships with private sector input suppliers and buyers. The relationships can continue organically even after the activity ends because they are based on sound market-based principles and benefit all parties economically without external subsidies. Other factors for sustainability include close involvement of community members and local authorities in decision-making, with the goal of fostering ownership and motivation to continue the interventions after the activity ends. Ensuring that all links in the value chain are viable, functioning well, and not reliant on project support is another key aspect of sustainability that should be monitored throughout activity planning and implementation. Finally, as the sustainability of the operations of the private company Agri-Supply demonstrates, establishing a profitable enterprise that is managed as a business and operates in a value chain for which there is enough demand is the best way to ensure that activity's benefits continue.

Sustainability is likely the greatest challenge for donor activities. Interventions tend to be overly optimistic and unrealistic when it comes to sustainability planning. All donors and implementers understand the importance of sustainability and no donor activity is planned or implemented without some degree of sustainability planning. However, the assessment found that despite these good intentions, it is extremely difficult for donor-financed activities in Haiti to be 100 percent sustainable. Limited activity timelines and working in an environment full of inefficiencies (see the AQ 4 section for more discussion on the enabling environment) means that donor activities will always struggle with sustainability.

CONCLUSIONS FOR AQ 3

CRDDs and similar structures are a useful model that provide some - and could provide more - benefits to communities. The types of services that CRDDs are providing include access to inputs, equipment, and services; they could also supply market intelligence and market facilitation.

CRDDs and similar structures need committed managers, community and institutional involvement, and revenue-generating sources to be effective and sustainable. These factors are what set the successful, sustainable CRDDs apart from the CRDDs that discontinued certain services once the WINNER activity ended. **The CRDD model is unlikely to be sustainable in the long-term if there is not a clear designation of ownership/responsibility, capacity and/or funding to manage them.**

CONCLUSIONS FOR AQ 4

Current inefficiencies are having a significant impact on the agriculture sector by disincentivizing investments and making access to inputs and market opportunities difficult for producers, decreasing farm productivity, and farmers' opportunity to increase their incomes.

Therefore, for future activities to be effective and sustainable these inefficiencies must be addressed.

Many of the findings for AQ 4 were discussed throughout this report because the enabling environment affects every aspect of the agricultural sector, from access to water and inputs, to productivity, marketing, processing and exporting products. While there are many ways that interventions can become more effective and sustainable through selection of targeted technical approaches, good management, and strong relationships with the community, ultimately the effectiveness of any technical approach, or combination of approaches, depends as much on whether the environment is conducive to agricultural investment and profitability. The best planned interventions will continue to be limited in their effectiveness and sustainability by the restrictive and unsupportive enabling environment in Haiti. The assessment showed that the absence of an insurance system is discouraging farmers from investing in the agriculture sector, and lack of governance decreases the ownership of approaches and opportunities for coordination by the Ministry of Agriculture. These and the other inefficiencies in the enabling environment are having a negative impact on the agriculture sector and must be addressed to create a sector where interventions and their technical approaches can be more effective and sustainable, and where agriculture can be a greater contributor to the country's economic growth.

RECOMMENDATIONS

As a result of this Assessment, we recommend that USAID focus on four main priority areas in its future programming:

1. Working with the private sector;
2. Strategically selecting technical approaches;
3. Prioritizing sustainability planning; and
4. Motivating the government to substantially improve the enabling environment.

FOCUS ON WORKING WITH THE PRIVATE SECTOR

The single most important factor for sustainability the AT found was the degree to which an activity followed private sector business practices and formed partnerships with existing and profitable private sector businesses. As described throughout this report, and in full alignment with USAID's recently published Private Sector Engagement Policy, an activity's results will only be sustainable if viable, profitable enterprises are put in place or developed by the end of the activity that do not require outside funding or assistance. Existing private sector entities are generally a better target for assistance than attempting to start new businesses from scratch during a short activity timeline, as existing businesses have already identified potentially profitable spaces in which to operate, know the local landscape better than outside donors can, and have ironed out many of the barriers to business already. When targeting the production side of the value chain, especially access to inputs, USAID should avoid the temptation to see quick wins that arise from unsustainable practices, such as giving away free inputs or services, and instead look for opportunities to nurture the private sector to provide these inputs and services. It may take more time to see increases in yields and incomes, but the results are more likely to persist in the long term. In terms of access to markets, the private sector is also the

most effective place to look. In the assessment, the interventions that showed the greatest sustainability of results post-project were those where a partnership was established with a private sector buyer who continues to purchase produce, even without the facilitation of a donor-funded project. If attention is paid to ensuring that these are win-win relationships with benefits for both producers and buyers, these partnerships can continue for decades, contributing significantly more to farmers' incomes and standards of living than a short-term activity that may see benefits for only three to five years.

STRATEGICALLY SELECT TECHNICAL APPROACHES

The findings sections presented a few technical approaches that seemed particularly effective. In particular, the specific combination of Vouchers for Inputs with Linking Producers to Markets, and a Training/Technology Package appeared to be the most effective. The most important thing, however, is that USAID strategically select approaches that make sense for a given situation and value chain. The technical approaches should target specific weaknesses in the value chain for a targeted area, set of results, and be complementary to ensure that the entire value chain functions smoothly. In addition, when selecting an approach or combination of approaches, USAID should anticipate the effects on the value chain, watershed, or community as a whole, and incorporate complementary additional technical approaches to mitigate any negative impacts, or take advantage of any potential opportunities for having an even greater impact. For example, accounting for changes in market prices if production increases significantly or anticipating water shortages if irrigation-dependent crops are being targeted. If an irrigation activity is planned, other water management or environmental conservation approaches are likely relevant and important to include.

PRIORITIZE SUSTAINABILITY PLANNING

It was surprising to find just how unsustainable the nine donor projects turned out to be (all of which looked very promising in the desk review). Unsustainable donor projects present an enormous missed opportunity to improve producers' situations. USAID needs to make sustainability planning a top priority for all projects. Projects need to ensure a well-developed and viable private sector supply of affordable inputs and services (providing inputs for free or with subsidies during the activity will lead to short-term, not long-term, improvements in productivity). Activities also need to develop reliable marketing options that will continue even without the activity's involvement. Finally, even though natural disasters cannot be controlled, activities should have contingency plans specifically in the case of natural disasters, so that the activity can continue to provide benefits even when the weather does not cooperate. Sustainability planning is especially applicable to the CRDDs. Although generation of money through service provision and fundraising was planned to sustain the CRDDs, in most cases, this strategy was only stated at the end of the activity and has not generated enough revenue, leaving the CRDDs financially unsustainable. Therefore, we recommend that USAID better supervise the implementation of similar exit strategies to ensure the sustainability of its intervention.

MOTIVATE THE GOVERNMENT TO SUBSTANTIALLY IMPROVE THE ENABLING ENVIRONMENT

The enabling environment will continue to be a hindrance to the effectiveness and sustainability of donor activities and private investment in agriculture. USAID should consider how it can use its influence in Haiti to incentivize the government to make substantial improvements in the enabling environment, such as improved trade policies, or maintenance funds for roads. Based on this assessment, the key priority areas that could substantially improve the enabling environment for all agricultural enterprises are the following (see AQ 4 for more detail):

1. Governance and coordination at the sector level, including a state-sponsored focus on research and extension;
2. Harmonization of government interventions in the markets for fertilizer and other essential inputs;
3. Pass and implement the law on irrigation infrastructure management so the transfer of responsibilities to manage public agriculture infrastructure by water user associations is effective;
4. Increasing government capacity, including lowering staff turnover rates in the ministries responsible for overseeing donor activities, and improving management of procurement processes to allow for more efficient implementation of interventions;
5. Development of an Agricultural Insurance Industry;
6. Improvement in public farm-to-market infrastructure, especially roads; and
7. Improving the business environment, especially trade policy and access to credit.

ASSESSMENT BACKGROUND

CONTEXTUAL BACKGROUND

The United States Agency for International Development (USAID) works to build a stable and economically viable Haiti. United States' assistance focuses on long-term reconstruction and development; promoting economic growth, job creation, and agricultural development; providing basic health care and education services; and improving government effectiveness.

To boost agricultural output and increase farmers' income, USAID, through the Feed the Future (FNF) initiative, focuses on increasing agricultural productivity, improving watershed protection and strengthening agricultural markets. To accomplish its goals, USAID has introduced better inputs, new technologies, integrated natural resource management, and linked farmers directly to end-buyers. With USAID support, farmers doubled and quadrupled yields in targeted key crops. In partnership with the Haitian Government, USAID is also implementing a nutrition focused safety net program to combat food insecurity amongst the poorest communes.²

HAITI'S AGRICULTURE CONTEXT

Agriculture is central to the Haitian economy. It employs approximately 60 percent of the population and serves as the primary source of rural incomes.³ The agricultural sector contributed 20.5 percent to gross domestic product in 2017⁴ (Institut Haïtien de Statistiques et d'Informatique [IHSI], 2017) with a clear downward trend, while the sector remains the main income source in rural areas. National agricultural production accounted for only 50 percent of food availability in 2011 (Ministry of Agriculture's Natural Resources and Rural Development [MARNDR], 2013), complemented by commercial imports (45 percent) and food aid. In the early 1980s, these imports accounted for only 19 percent of the food supply. Agricultural exports have decreased over time, mainly due to the inability to compete in the global market for sugar cane, and the decrease in timber exports due to unsustainable levels of deforestation.⁵

Some of the key factors affecting the development of agricultural production in Haiti include: low access to credit and quality agricultural inputs, absence of an effective agricultural extension system combined with low levels of literacy among farmers, inadequate agricultural policies, limited budget⁶, inadequately coordinated state-led interventions, acceleration of land degradation, and natural disasters.

As a result, the average agricultural yield in Haiti is among the lowest in the Latin America and Caribbean region. Post-harvest losses are significant and range between 50 percent and 60 percent of production⁷ depending on local conditions, contributing to lower farmer incomes.

²https://www.usaid.gov/sites/default/files/documents/1862/FINAL_Haiti_Country_Profile_March_2017_0.pdf

³ According to different sources, including the World Bank and the Institut Haïtien de Statistique et d'Informatique (IHSI)

⁴ http://www.ihsi.ht/produit_economie_comptes_na_pib.htm

⁵ <http://countrystudies.us/haiti/51.htm>

⁶ Between 2010 and 2016, budget received by MARNDR was around 4 percent of the national budget (MARNDR, 2017).

⁷ <https://www.copenhagenconsensus.com/publication/haiti-priorise-post-harvest-losses-theodat>

Rapid population growth (1.3 percent in 2016)⁸ combined with inappropriate farming practices resulted in pressure on natural resources and acceleration of land degradation.

The removal of tariff and non-tariff barriers has made Haiti's agriculture sector the least protected in the Caribbean Region.⁹ Haiti is now one of the countries with the highest level of food insecurity; 51.8 percent of the population is chronically undernourished.

GOVERNMENT OF HAITI'S KEY AGRICULTURE-RELATED POLICIES AND STRATEGIES

The Government of Haiti's (GOH) agriculture sector policies, strategies, programs, and plans are presented in a series of documents, of which, the "MARNDR/Politique de Développement Agricole, 2011 is considered the centerpiece.¹⁰

In line with the country's growth and poverty reduction strategy, the GOH's overall agriculture policy objective is to contribute in a sustainable manner to meeting the Haitian population's food needs and the country's socio-economic development. Specific objectives are to: (i) increase the coverage rate of domestic consumption by domestic production from 45 to 70 percent; (ii) ensure that the agricultural sector provides a decent income to about 500,000 farms; and (iii) increase the coverage of imports by agricultural exports from five percent (2009 figure) to 50 percent in 2025.¹¹

Haiti's agricultural development policy¹² favors (i) a territorial approach based on the potential and specifics of Haiti's different agro-ecological zones and seeking alignment and complementarity among the different actors, (ii) a watershed approach from the summit to the sea, and (iii) a sector approach gathering the GOH, non-governmental organizations (NGO), private sector, and producer organizations around the same table.^{13 14}

THE AID LANDSCAPE IN HAITI'S AGRICULTURE SECTOR

With approximately 100 USD per inhabitant per year, Official Development Assistance¹⁵ (ODA) transfers to Haiti are relatively large. In 2015, Haiti ranked 35 among countries receiving the most ODA per inhabitant.¹⁶

⁸ <https://data.worldbank.org/indicator/SP.POP.GROW>

⁹ Tim Josling, Three Interventions in the Rice Market in Haiti. Haïti Priorise, Copenhagen Consensus Center, 2017. License: Creative Commons Attribution CC BY 4.0.

¹⁰ Other important policy documents include the Programme Triennal de Relance Agricole, 2013; Plan Directeur de Vulgarisation Agricole, 2011; Plan National d'Investissement Agricole (PNIA), 2010; Plans Stratégique et Programmatique 2014-2019 pour la Modernisation des Services de Protection Agro-phytosanitaire et d'Innocuité des Aliments, 2013; and Plan Directeur de la Formation Professionnelle Agricole, 2013.

¹¹ Politique de développement agricole 2010-2025.

¹² Politique de développement agricole 2010-2025.

¹³ Les axes prioritaires de l'administration Moïse, 2018-2022 and Politique de développement agricole 2010-2025.

¹⁴ Feuille de route du Ministère de l'Agriculture and Les axes prioritaires de l'administration Moïse, 2018-2022.

¹⁵ ODA is defined by the OECD as, "Flows of official financing administered with the promotion of the economic development and welfare of developing countries as the main objective, and which are concessional in character with a grant element of at least 25 percent (using a fixed 10 percent rate of discount). By convention, ODA flows comprise contributions of donor government agencies, at all levels, to developing countries ("bilateral ODA") and to multilateral institutions. ODA receipts comprise disbursements by bilateral donors and multilateral institutions."

¹⁶ <https://www.indexmundi.com/facts/indicators/DT.ODA.ODAT.PC.ZS/rankings>

Major donors currently active in the Haitian agriculture sector include the Inter-American Development Bank (IDB), USAID, the European Union, and the World Bank (WB).¹⁷ Only a limited number of programs and projects are jointly funded by these donors. While the main donors meet on a regular basis to coordinate their interventions, the sector coordinating forum (Table Sectorielle Agriculture) is currently inactive.

Aid fragmentation in Haiti, along with a lack of institutional memory, and limited availability of evaluation reports, raises questions about the effectiveness of many projects executed in the agriculture sector during the last two decades. It also poses challenges in identifying the most successful approaches implemented in the agriculture sector.

ASSESSMENT PURPOSE AND AUDIENCE

The purpose of the Agriculture Sector Assessment is to inform the design of USAID/Haiti's new agricultural activities by learning from existing best practices and approaches. The Agriculture Sector Assessment findings are expected to guide the Mission's future investments to meet key stakeholders' needs in the agriculture sector.

Primary audiences for this assessment are USAID/Haiti, particularly the Economic Growth and Agriculture Development (EGAD) Office, key GOH institutions, and USAID/Washington. Other potential users may include relevant international donors working in the agriculture sector in Haiti including, but not limited to, WB, IDB, and Agence Française de Développement (AFD), the French Development Agency.

ASSESSMENT QUESTIONS

To achieve its purpose, the assessment seeks to answer the following assessment questions (AQ) and accompanying sub-questions:¹⁸

ASSESSMENT QUESTION 1

Which technical approaches including:

1. agricultural extension models;
2. agribusiness or industrial approaches;
3. policy and institutional framework support; and
4. other interventions supported by USAID/Haiti, other donors, GOH agencies, NGOs, and the private sector have demonstrated effectiveness towards attaining the following results in Haiti:
 - i. increase beneficiaries' household incomes;
 - ii. create jobs;
 - iii. improve market access at the end of a value chain;
 - iv. improve producers' resilience at the beginning of the value chain;
 - v. improve natural resource management;
 - vi. improve productivity at the farm-level; and

¹⁷ Aide-memoire meeting with The Technical staff of the Ministry of Agriculture on April 4, 2018.

¹⁸ SOW including the assessment questions and sub-questions is presented in Annex A.

- vii. improve food security.

Sub-Questions:

- 1.1 To what extent and how have approaches or interventions been combined to generate greater results?
- 1.2 What project and non-project related factors—such as the development corridors in the North and West under the post-earthquake strategy—have enabled or constrained the effectiveness of the approaches and/or interventions toward achieving results?

ASSESSMENT QUESTION 2

To what extent have the technical approaches and/or interventions identified in the desk review demonstrated sustainability?

Sub-Question 2.1: What factors have enabled or constrained sustainability?

ASSESSMENT QUESTION 3

What are the benefits to the agriculture sector of the Centers for Sustainable Rural Development (French acronym CRDD) and other similar organizations?

Sub-Questions:

- 3.1 What factors determine success/weakness of CRDDs and similar organizations?
- 3.2 In what sorts of functions should those centers specialize?
- 3.3 What have been the impediments to the GOH and other donors making full use of the CRDDs' services?

ASSESSMENT QUESTION 4

Which policies, procedures, and institutional frameworks in the enabling environment need to be addressed to achieve the results in Question 1?

Sub-Question 4.1: How and to what extent are these policies, procedures, and institutional frameworks currently affecting agriculture activities and actors, including private sector success?

ASSESSMENT METHODS AND CHALLENGES

ORGANIZATIONAL STRUCTURE

Haiti Evaluation and Survey Services (ESS) assembled a three-person assessment team (AT) that reflected a complementary mix of agriculture sector, policy assessment, private sector development, and capacity building expertise, as well as methodological knowledge. The Team Leader (TL), Cynthia Berning, is an Agriculture Specialist and an expert in evaluation. She was

assisted by two Deputy Team Leaders (DTL), Jean Chariot Michel and Jempsy Fils-Aimé, who each have two decades of experience working in the Haitian agriculture sector.

In the field, Mr. Wesner Antoine, the Haiti ESS Senior Evaluation Specialist, supported the AT. Mr. Antoine is an agriculture expert and brings over 20 years of experience in quantitative and qualitative data analysis experience in the Haitian context. He provided logistical and assessment support.

Subcontractor Collectif Haitien pour l'Avancement du Suivi et de l'Evaluation (CHASE), a local research firm, supported qualitative data collection from focus group discussions (FGDs) and key informant interviews (KIIs). Working closely with the AT as described below, the subcontractor conducted all the FGDs, 14 of the direct observations (DOs) and 38 of the KIIs. The AT directly conducted the rest of the KIIs and DOs.

ROLES AND RESPONSIBILITIES

ASSESSMENT TEAM¹⁹

The TL led the data collection, analysis, and reporting components of the Assessment. During the field phase, the two DTLs conducted the most critical KIIs and oversaw the FGD data collection, in collaboration with ESS and CHASE. After data collection concluded, the AT synthesized all information obtained, analyzed the data, and wrote this report.

SOCIAL IMPACT HEADQUARTERS STAFF

SI's headquarters (SI-HQ) team managed the assessment and ensured its quality. To ensure delivery of a high-quality final product, the HQ Project Director reviewed all assessment deliverables—particularly the draft and final reports—against SI's internal quality assurance (QA) procedures, Evaluation, Quality, Use, and Impact® (EQUI®).

SOCIAL IMPACT FIELD OFFICE STAFF

The ESS field office staff operated as the central connection between the AT, SI-HQ, and USAID/Haiti. Maintaining frequent communications ensured that the Mission's vision for this assessment was realized throughout the process. The field office staff also addressed logistics and other in-country related needs.

DATA COLLECTION FIRM

ESS subcontracted CHASE, which coordinated with ESS, SI-HQ staff, and the AT on the KIIs and FGDs design, planning, and implementation. The AT was responsible for developing the data collection instruments in coordination with CHASE and training CHASE team members so that they could collect the data as planned. The AT also ensured QA by attending a selection of KIIs and FGDs CHASE conducted, and reviewing the KII and FGD reports CHASE submitted.

¹⁹ Qualifications of the Assessment Team can be found in Annex J

CHASE (i) planned data collection in the field, and mobilized skilled interviewers, experienced facilitators, and notetakers for the training the AT conducted; (ii) translated into Creole and pre-tested approved data collection instruments; (iii) planned data collection implementation and logistics by mobilizing FGD and KII participants; (iv) conducted FGDs and KIIs using approved data collection instruments, recorded discussions, and gave refreshments to participants when necessary; and (v) prepared and submitted reports to the AT and ESS.

ADJUSTMENTS TO THE SCOPE OF WORK

Following the November 7, 2018 discussion with USAID, the AT adjusted the original two-phased approach to include a third phase. In this new approach, the list of interventions to explore in the fieldwork phase (now Phase III) were determined following a series of KIIs with agriculture experts (now Phase II) to ensure that the selection of approaches and related interventions to explore was not biased by the availability of written documents. This three-phase approach is described below:

PHASE I: DESK REVIEW

The objectives of Phase I were to i) identify and define the technical approaches followed in Haiti over the past 18 years and identify the universe of interventions that follow each of these approaches, ii) identify preliminary findings for AQ 1, and iii) identify gaps in the information available that would be the focus of Phases II and III. This section first describes the three steps that the AT used to complete the desk review. A more detailed summary of the Phase I methodology and findings from the desk review is presented in the Inception Report.

In line with the Comprehensive Agriculture Assessment Scope of Work (SOW) and the decisions made during the November 7 meeting with USAID, the AT pursued the following four key objectives during the desk review phase:

1. Determine the universe of agricultural interventions that have been implemented in Haiti over the past 18 years (2000-2018);
2. Identify and define the main technical approaches that have been used in agriculture interventions in Haiti over the past 20 years;
3. Organize the universe of interventions (to the extent existing information allows) into groups according to technical approach; and
4. Begin to explore
 - i. which approaches have been the most effective in the sector,
 - ii. the sustainability of the approaches,
 - iii. the benefits to the agriculture sector of the CRDDs and other similar organizations, and
 - iv. the policies, procedures, and institutional frameworks in the enabling environment that need to be addressed to achieve the results in Question 1.

The AT completed Phase I in three steps:

1. **Collecting Information:** This included identifying, as exhaustively as possible, all agricultural development interventions²⁰ implemented in Haiti over the period 2000-2018, collecting documents, including completion, mid-term, and evaluation reports, and gathering other background information. The team also collected analytical reports on the agricultural sector. Ultimately, the AT identified 474 interventions, and divided them into two groups: 113 interventions for which enough information was available to understand the technical approaches that the intervention followed, and 363 interventions for which the AT was unable to find enough information to judge the technical approach.
2. **Defining Key Technical Approaches:** Following an initial review of the assembled documents, the AT identified 25 Technical Approaches implemented in the agriculture sector, organized into six categories or “blocks,” that one or more of the documented interventions followed. The AT then developed definitions for each Technical Approach in the Haitian context, based on the documented interventions.
3. **Construction of an “Intervention Matrix:”** The team summarized the information collected in an “Intervention Matrix” developed specifically to categorize the interventions first according to Technical Approach, and also by donor, intervention size, geographic area, and year. The AT developed this Matrix based on the 25 technical approaches²¹ and the other selection criteria that the AT used to select interventions to visit and explore in depth in Phase III (described in the “Next Steps” section of this report).

PHASE I - CHALLENGES AND LIMITATIONS ASSOCIATED WITH THE COLLECTION OF RELEVANT DOCUMENTATION

It is important to note that the AT faced several challenges collecting relevant documentation, notably:

- The fragmentation of aid in Haiti and lack of a coordinating body or effort. As indicated above, the “Table Sectorielle Agriculture” is not currently active so could not be used as a central information source. Also, while NGOs have made some efforts at coordinating their work through initiatives such as the NGO Aid Map²² and the United Nations (UN) Civil Society Organization Haiti, (CSO Haiti)²³ these websites contain data for only a fraction of the NGOs active in Haiti.
- Although it varies across organizations,²⁴ the information necessary for this assessment is rarely publicly available. This finding is consistent with several reports reviewed citing problems obtaining enough data and information.²⁵
- Incomplete institutional knowledge: a central public institution like MARNDR does not have a functional aid evaluation unit/repository and was only able to assemble a limited number of project reports.

²⁰ Agriculture is defined here in its broader sense. It encompasses crop production, livestock, fishing, watershed management, irrigation, etc.

²¹ This matrix is presented in Annex A

²² <https://haiti.ngoaidmap.org/>

²³ <http://csohaiti.org>

²⁴ The USAID / DEC was extensively consulted and is a notable exception

²⁵ Disaster Accountability Project, (2010), ‘One Year Follow Up Report on the Transparency of Relief Organizations Responding to the 2010 Haiti Earthquake’ [online]. Available at: <http://www.scribd.com/doc/46320380/OneYear-Followup-Report-Transparency-of-Relief-Organizations-Responding-to-2010-Haiti-Earthquake>

- Few reports provided information regarding participation of men and women in the approaches implemented by projects, their level of access and control, and influencing factors, such as community norms and social hierarchies (e.g. family/community forms, cultural practices, religious beliefs, training, and education).

To mitigate the above, the AT's outreach efforts were broad, including consultation with 127 organizations.

Phase I resulted in the construction of a list of 25 technical approaches that have been pursued in agriculture projects in Haiti over the past two decades. These are listed below and defined in detail in Annex B.

TABLE 2: NUMBER OF INTERVENTIONS FEATURING EACH APPROACH

CATEGORY	TECHNICAL APPROACH	NUMBER OF INTERVENTIONS FEATURING THIS APPROACH
Approaches related to Agricultural Extension	1. Farmer-to-Farmer/Model Farmer Training and demonstration	4
	2. Farmer field schools	13
	3. Technology Inputs and training	21
	4. Establishing Research Centers/Labs for crop production	1
	5. Multiplication and breeding centers for small animals	6
Agribusiness and Market-focused Approaches	1. Business development training/services or other support for processors/exporters/distributors	21
	2. Value chain integration - linking producers to processors/exporters, including through trade fairs, other marketing support, and producer business groups	20
	3. Small scale training on value-added products and improving quality for producers/producer groups, including seed and input production	13
	4. Setting up service centers/input centers/collection centers with infrastructure to serve rural areas	10
	5. Animal Husbandry and livestock market infrastructure and marketing support	2
Policy/Institutional Strengthening Approaches	1. Strengthening the Ministry of Agriculture at central and local level/Direct support to gov't institutions - software, equipment, training, buildings	4
	2. Support to government to draft new agricultural policies and strategic plans – i.e. irrigation, decentralization, etc.	6
	3. Support to local organizations - i.e. regional development institutions, irrigation management groups	27

	4. Support to local authorities (CASEC, ASEC, Mayor)	4
Access to Finance Approaches	1. Vouchers for Inputs	7
	2. Supporting financial institutions to expand to rural areas - loan guarantees	11
	3. Create/support community-based financial institutions (VSLA, Mutuelle de Solidarité [MUSO], CREP)	6
	4. Working with diaspora remittances to invest in rural agriculture	1
Watershed and Environmental Management Approaches, Agro-ecology and Climate Smart Agriculture	1. Reforestation and physical erosion control to protect waterways, flood control	11
	2. Training on sustainable agricultural techniques	14
	3. Participatory community environmental management planning	13
	4. Development of technology packages such as Early Warning Systems (EWS) to improve Watershed management	3
	5. Credit for Conservation (CFC) approach	2
Agricultural Infrastructure Approaches	1. Irrigation infrastructure	18
	2. Farm-to-market road infrastructure	7

PHASE II: INTERVIEWS WITH KEY AGRICULTURE EXPERTS

The goal of Phase II was to obtain more information on the interventions that were covered in the desk review, as well as those that may have been overlooked because of lack of information. Phase II involved meeting with key agricultural experts in Haiti to discuss the technical approaches outlined in Phase I, and obtain insights and recommendations for interventions to explore in more detail during the Phase III fieldwork. Phase II resulted in a selected list of ten interventions to explore in Phase III (case studies are presented in Annex C), the Design Report that detailed the results of the interviews with agricultural experts, a description of the process by which the Phase III interventions were selected, and a detailed plan for the Phase III fieldwork, including the gaps to be filled and the data collection instruments that will be used to fill these gaps.

To arrive at the proposed list of ten interventions to explore in Phase III, the AT followed the steps listed below. Each step is described in greater detail in the next sections:

1. Conducted KIIs with 15 experts in the Haitian Agriculture sector;
2. Reviewed any documents or information obtained during the KIIs, adding this information to the Intervention Matrix;
3. Analyzed the information gained during the KIIs using a tally sheet approach; and
4. Created a short-list of approaches and related interventions referenced most by experts during the KIIs and ensured that the list meets as many of the selection criteria as possible.

PHASE II TASKS

Task 1 - Select Haitian Agriculture Sector Experts

The List of Interviewees presented in Annex D identifies participants contacted for KIIs. The AT selected the list of experts with the goal of reflecting the sector's diversity of opinions and experiences. The chosen experts are well known and have accumulated a great deal of experience in the agricultural sector during the study period. The key informants were purposively chosen to include a variety of the following characteristics:

1. High level of responsibility for sector coordination (Minister, Director General, Minister's Office, Division or Project Director)
2. Knowledge of key agricultural fields including crop cultivation, livestock and animal health, irrigation, natural resources management, capacity building, gender integration, agriculture finance, fisheries, irrigation infrastructure, etc.;
3. Knowledge of key geographic areas: North, Artibonite, South, and Centre;
4. Worked at a policy level;
5. Extensive experience in a variety of agricultural projects and approaches; and
6. A representative proportion of men and women.

Calling upon their knowledge of the main actors in the agricultural sector and reaching out to the relevant agencies to obtain the names of the most appropriate people, the team first assembled a list of 39 potential interviewees. This was narrowed down to 15 priority participants, whose influence in the sector is especially important, as well as eight alternative interviewees, in case any of those on the priority list were not available.

Task 2 - Conduct Key Informant Interviews

The AT conducted 15 KIIs, attempting to meet as many of these experts in person as possible. When this was impossible due to scheduling conflicts or absence from the office, the AT conducted phone interviews instead, or the person was replaced by another available person from the alternate list. Of the 15 people in the original targeted list, nine were available. The other six were replaced by alternates. In total, the AT conducted ten interviews in person and five by phone or Skype.

The main topics discussed during these KIIs were:

- Interventions and approaches that are known to have been effective, and causes for their success;
- Sustainability of the interventions and approaches; and
- Recommendations for approaches and related interventions to study in Phase III.

The complete set of protocols for the Phase II KIIs, including the full questionnaire and informed consent statement, can be found in Annex E.

Task 3 - Review Documents or Information obtained during the KIIs

Some of the KIIs resulted in new information or documentation that allowed the team to fill gaps in the Intervention Matrix. In this case, the AT reviewed the documents or information received (including verbal descriptions of interventions) and added this to the Interventions Matrix. A total of nine additional documents collected and analyzed have been added to the bibliography. Forty additional interventions were added to the matrix.

Task 4 - Analyze Interventions Noted by Respondents using a Tally Sheet Approach

During the interviews, the AT took careful notes of the approaches and related interventions referenced by each key informant. Using these notes, the AT constructed a tally sheet of approaches and related interventions that were referenced. This tally sheet served as preliminary indication to select interventions and related approaches to explore in Phase III.

Task 5 - Analyze the Short-list of Interventions for Phase III

Based on the following selection criteria, the AT prepared a short list of interventions to be explored in Phase III:

- Together, touch on as many of the 25 technical approaches that were identified and defined in Phase I as possible.
- Represent the following categories of funding sources:
 - o USAID;
 - o Other International bi-lateral donors;
 - o International multi-lateral donors;
 - o Universities; and
 - o NGOs.
- From each of the following size categories:
 - o Interventions under USD 1 million
 - o Interventions between USD 1 and 10 million
 - o Interventions between USD 10 and 100 million
 - o Interventions larger than USD 100 million
- Are geographically distributed, including:
 - o All three geographic regions (North, Central, South)
 - o All four agro-ecological areas (Humid Mountains, Dry mountains, irrigated plains, and dry plains.)
- Total between eight and 15 interventions

The result of Phases I and II was the following list of ten interventions to be studied in more depth in Phase III.

TABLE 3: INTERVENTIONS AND APPROACHES FOR FIELDWORK

INTERVENTION DETAILS	MAIN TECHNICAL APPROACHES
RESEPA- Renforcement Des Services Publics Agricoles • \$50M • Donor: WB • Implementer: MARNDR	• Agriculture Extension Models: Providing technology package including inputs in combination with training, Farmer-to-Farmer/Model Farmer, Training and demonstration; Training on sustainable agricultural techniques • Policy/Institutional Approaches: Support local authorities (CASEC, ASEC, Mayor), and local associations • Agribusiness/Industrial Approaches: Value chain integration - linking producers to processors/exporters, including through trade fairs, other marketing support and producer business groups • Access to Finance Approaches: Vouchers for Inputs • Policy/Institutional Approaches: Strengthening the Ministry of Agriculture at central and local level/Direct support to gov't institutions - software, equipment, training, buildings
WINNER-Watershed Initiative for National Natural Environmental Resources/Feed the Future • \$127M • Donor: USAID • Implementer: Chemonics	• Agriculture extension approaches: Providing technology package including inputs in combination with training, Farmer-to-Farmer/Model Farmer Training and demonstration, Farmer field schools (Introduces higher-yield crop varieties and cultivation techniques for strategic crops) • Agribusiness/Industrial Approaches: Small scale training on value-added products and improving quality for producer's/producer groups, including seed and input production • Watershed/Environment Approaches/Agro-ecology and climate smart agriculture: Training on sustainable agricultural techniques • Agricultural Infrastructure Approaches: Irrigation infrastructure • Agribusiness/Industrial Approaches: Setting up service centers/input centers/ collection centers with infrastructure to serve rural areas
AVANSE- Feed the Future north project (AVANSE) /Haiti • \$87.8M • Donor: USAID • Implementer: DAI	• Agriculture Extension Models: Providing technology package including inputs in combination with training; Farmer-to-Farmer/Model Farmer Training and demonstration, Farmer field schools (Introduces higher-yield crop varieties and cultivation techniques for strategic crops) • Access to Finance Approaches: Vouchers for inputs • Policy/Institutional Approaches: Support local authorities (CASEC, ASEC, Mayor), and local associations • Agricultural Infrastructure Approaches: Irrigation infrastructure • Watershed/Environment Approaches/Agro-ecology and climate smart agriculture: Participatory community environmental management planning
PPI 1- Small-scale Irrigation Development Project Phases I and II • \$34M • Donor: IFAD and OPEC • Implementer: MARNDR	• Agricultural Infrastructure Approaches: Irrigation infrastructure • Policy/Institutional Approaches: Support local authorities (CASEC, ASEC, Mayor) and local associations • Policy/Institutional Approaches: Support to local organizations - i.e. regional development institutions, irrigation management groups • Agribusiness/Industrial Approaches: Small scale training on value-added products and improving quality for producer's/producer groups, including seed and input production

PASAH-Programme d'Amélioration de la Sécurité Alimentaire en Haïti • 20M Euro • Donor: EU • Implementer: MARNDR	• Policy/Institutional Approaches: Support local authorities (CASEC, ASEC, Mayor) and local associations • Agribusiness/Industrial Approaches: Setting up service centers/input centers/collection centers with infrastructure to serve rural areas; Small scale training on value-added products and improving quality for producer's/producer groups, including seeds and input production, Animal Husbandry and livestock market infrastructure, and marketing support • Agriculture Extension Models: Farmer to Farmer; Providing technology package including inputs in combination with training • Access to Finance Approaches: Vouchers for Inputs • Watershed/Environment Approaches/Agro-ecology and climate smart agriculture: Participatory community environmental management planning
PTTA- Project of Technology Transfer to Small Farmers • \$25M • Donor: IDB	• Access to Finance Approaches: Vouchers for Inputs, providing a technology package that included inputs in combination with training; • Watershed/Environment Approaches/Agro-ecology and climate smart agriculture: Training on sustainable agricultural techniques such as reforestation and physical erosion control to protect waterways and prevent flooding
SECAL-Projet de sécurité alimentaire • 16.2M Euro • Donor: AFD • Implementer: MARNDR	• Agricultural Infrastructure Approaches: Irrigation infrastructure • Policy/Institutional Approaches: Support local authorities (CASEC, ASEC, Mayor) and local associations • Access to Finance Approaches: Vouchers for Inputs, supporting financial institution to expand to rural areas - loan guarantees
Lèt Agogo • Implementer: Oxfam, Veterimed, others	• Agribusiness/Industrial Approaches: Establishing network of small business groups; Animal Husbandry and livestock market infrastructure and marketing support, Small scale training on value-added products and improving quality for producers'/producer groups, Value chain integration - linking milk producers to processors/buyers, including through trade fairs, other marketing support, and producer business groups
PADELAN-Projet d'appui au développement local dans les Nippes • \$7.6M (CAD) • Donor: Canadian Cooperation • Implementer: Oxfam-Québec	• Agriculture extension approaches: providing technology packages including inputs in combination with training • Watershed/Environment Approaches/Agro-ecology and climate smart agriculture: Agroforestry, Participatory community environmental management planning • Policy/Institutional Approaches: Support local authorities (CASEC, ASEC, Mayor) and local associations
Agri-Supply • Private funding	• Access to Finance Approaches: Creating funds to support producers and their community • Agribusiness approach: Value chain integration - linking producers to processors/exporters • Watershed/Environment Approaches/Agro-ecology and climate smart agriculture: Agroforestry: Training on sustainable agricultural techniques to avoid soil erosion

PHASE III: FIELD DATA COLLECTION

The objective of Phase III was to collect additional data that could be used to fully answer the AQs, filling in the gaps presented in the Design Report through KIIs, FGDs, and DOs. This section describes the methodology the AT followed to complete the fieldwork.

The AT completed the fieldwork over a period of approximately nine weeks, including three weeks of data collection and three weeks of data analysis. The fieldwork was delayed by approximately two weeks due to political unrest in Haiti that prevented meetings from being planned or conducted. Data collection responsibility was shared between the AT and CHASE. A summary of the specific responsibility allocation between the AT and CHASE is described below.

To overcome the biases inherent in any one data collection method, and to leverage the strengths of multiple methodologies, the AT collected data using three primary methods (see the Data Collection section below for a more detailed description):

1. Semi-structured KIIs focusing on stakeholders having played a direct role in the selected interventions;
2. FGDs with beneficiary households; and
3. DOs at field level (CRDDs and other infrastructure projects).

This assessment took place in a diverse and varied context, with different approaches and numerous stakeholders. Within the limitations of time and SOW, the field level assessment was rapid, but with the aim of achieving saturation. Saturation was reached when all questions had been thoroughly explored and no new concepts or themes emerged in subsequent interviews. Though not every beneficiary or project representative could be interviewed within the time and budget allocated to this assessment, the team is confident that saturation was reached with 75 KIIs, 21 FGDs, and 28 DOs.²⁶

PHASE III DATA COLLECTION METHODS

Each method has strengths and weaknesses, including time and resource requirements as well as varying degrees of bias. To the extent possible, similar data was collected across various methods and informants to better facilitate triangulation. The data collection tools are presented in Annexes E and F.

To facilitate access to informants, the AT received a letter from USAID/Haiti to assure respondent availability. This was found to be especially pertinent for GOH respondents.

Table 4 below presents the number of KIIs, FGDs, and DOs completed by location.

²⁶ The basis for these numbers is indicated in Annex II, intervention by intervention.

TABLE 4: NUMBER OF KIIS, FGDS, AND DOS

DATA COLLECTION METHOD	NUMBER COMPLETED BY LOCATION	TOTAL COMPLETED
Key Informant Interviews	North: 11 Northeast: 8 South: 15 Center: 1 West: 33 Southeast: 3 Nippes: 3 Artibonite: 1	TOTAL: 75
Focus Group Discussions	North: 3 Northeast: 8 North-east: 1 South: 3 Southeast: 3 Nippes: 2 Northwest: 1 West: 3	TOTAL: 21
Direct Observations	North: 7 North-east: 6 South: 6 Nippes: 3 Artibonite: 1 West: 5	TOTAL: 28

Key Informant Interviews

KIIs or in-depth, semi-structured interviews were conducted face-to-face with representatives of GOH, donors, main implementing agencies, partner implementing agencies, community-based organizations (CBO), managers and staff of CRDDs and similar organizations, and other key informants. KIIs with stakeholders provided data on their perspectives about the ten interventions selected. Although a valuable source of information, KIIs were cross checked, triangulated, and analyzed together with other available data. Informants were drawn from the respondent categories shown in Annex D. Based on this list, the team worked with USAID/Haiti as well as key informants to gather contact information for as many individuals and organizations listed as possible. Initial assistance from USAID/Haiti (and other donors) to generate a list of interview subjects, as well as collect contact information for relevant respondents, was critical to completing the data collection. In cases where respondent names and contact information could not be obtained through these channels, the AT used snowball sampling, in which existing respondents recommended additional respondents with whom to speak, to ensure the team was able to collect adequate data. The team conducted a total of 75 KIIs. These were divided between the AT and CHASE.

Focus Group Discussions

FGDs, in turn, are in-depth, semi-structured, and moderated discussions conducted face-to-face with small groups of approximately six to twelve participants. FGDs were vital for gathering beneficiaries' perspectives on the value of the selected interventions. CHASE, a local firm specialized in conducting Agriculture Sector data collection, conducted FGDs with CBO members that benefited from each of the ten interventions assessed and provided the AT with detailed summary notes for each FGD. Informants were drawn from conversations with relevant

local stakeholders, especially the Bureau Agricole Communal recommended by the Minister of Agriculture; as discussed below, a convenience sample was used to identify FGDs participants. The AT conducted 21 FGDs as part of the fieldwork phase. They involved representatives of CBOs (farmers' associations, water users' associations, women's associations), individual beneficiaries, enterprises managers, and local authorities (CASEC, ASEC).

The AT first obtained beneficiary lists by contacting the interventions' executing/implementing partners. For each FGD, the AT purposively selected eight to 12 beneficiary households from the lists obtained. When beneficiary lists could not be obtained, the AT selected FGDs participants with the support of the main Representative of the Ministry of Agriculture in the field (Bureau Agricole Communal). In speaking with beneficiary households, the AT attempted to speak with both men and women, separately where appropriate. This often proved impossible, as few women agreed to participate in the FGDs.

Though every attempt was made to select beneficiary households purposively, the AT found that some beneficiaries were not readily available at the time needed for the data collection. Thus, adjustments to the selected sample were made based on respondent availability. Additionally, snowball sampling, which involved asking respondents for recommendations of additional respondents with whom to speak, was sometimes necessary.

CRDDs were selected using a purposive sampling approach. The AT selected a sample of five CRDDs out of the seven the Watershed Initiative for National Natural Environmental Resources (WINNER) activity created. The sampling allowed the team to assess a diverse cross-section of CRDDs across different agro-ecologies. The team selected CRDDs in Bas Boen, La Tremblay/Croix-Des-Bouquets, Wynn farm in Kenscoff, SHOHADERK in Kenscoff, Montrouis, and Duvivier CRDDs.

The AT developed FGDs guides to ensure that respondents understood the questions, that the questions elicited valuable and necessary data, and that the interview protocols (e.g., duration, informed consent, notetaking, etc.) were well adapted to the local context. CHASE staff led all FGDs, with one team member asking questions and another taking notes. The team took notes by hand and then transferred them into Microsoft Word or typed directly into an electronic format.

Direct Observations

The AT and CHASE conducted DOs alongside the KIIs and FGDs. DOs were visits to physical sites or facilities representing key achievements of the selected interventions. The teams conducted DOs at CRDD sites/facilities to enable the AT to make observations related to AQ 3 and visited other agriculture-related infrastructure that the relevant interventions built or improved. These included irrigation infrastructure sites and community collection centers. The DOs section of Annex F contains the master list of questions asked at each of the CRDD DOs site visits. The CRDD DOs provided insight into the relative success of these facilities' activities or lack thereof, particularly in terms of operations and service delivery. The DOs were short visits (no more than 30 minutes) to allow the data collection team to visually verify and validate the information heard in the KIIs and FGDs. DOs ended up being as important as the other data collection methods, if not more so. A short visit to the site of a completed intervention revealed

more in some cases than a long interview. In a few moments, the team could see whether the infrastructure was in use, being maintained, and sustainable. A site that clearly had not been used in some time or was in disrepair is difficult to mask. In this way the AT ensured that what was said in KIIs and FGDs was not overexaggerated to give a positive impression of the intervention when in reality it was not sustainable. In few cases, the AT combined the DOs with KIIs by inviting the interviewees or FGD participants to the location in question. In this way, the team was able to observe the operations of the CRDD or other infrastructure at the same as they conducted the KIIs without requiring additional time to complete the DOs.

PHASE III DATA ANALYSIS APPROACH

The AT used a variety of data analysis techniques to support the development of assessment findings, conclusions, and recommendations. The AT coded, collated, and interpreted data captured through notes collected from KIIs and FGDs, employing a data analysis strategy in which qualitative data (i.e. KIIs and FGDs) were first analyzed independently, then in parallel. Findings from each data source informed and substantiated findings from other data types using triangulation. Team members coded data and used a tally sheet—an analysis method useful for identifying patterns in qualitative data in a systematic and replicable manner—to elucidate emergent themes, contextual factors, and trends. The team disaggregated the interview and discussion group data by respondent group to capture differential outcomes among groups.

Data from different sources were compared against one another to determine whether findings were divergent or convergent. The preliminary findings developed through the desk review process informed the coding process. This allowed the AT to triangulate the desk review and fieldwork data into a comprehensive set of findings, conclusions, and recommendations for this final report.

Quality Assurance

At all stages of the assessment, ESS applied SI's EQUI® approach, which entailed five rigorous QA checkpoints and collaborated closely with USAID and other stakeholders to promote utilization. Through EQUI®, SI provided the TL and team members training and resources that cover problem-solving tactics, project management tools, and tips for effective communication. Lastly, to ensure technical quality, the ESS Project Director employed the five QA checkpoints to assess and review each draft and final contract deliverable, including this final report, making sure that they addressed USAID/Haiti's needs and effectively account for and integrate gender and social analysis at each stage.

Dissemination and Utilization

ESS is committed to ensuring the assessment report's utilization. Ultimately, this assessment is only useful if USAID/Haiti can put its findings into practice for future interventions. To ensure that the assessment is addressing the Mission's needs and is in a format that is as usable as possible, the team has engaged USAID/Haiti and other stakeholders in thoughtful, evidence-based dialogue at multiple points during the assessment to ensure that the team understood and addressed the key concerns and nuanced aspects of the AQs.

This final report will be uploaded to USAID's Development Experience Clearinghouse website to ensure that it is available for future project planners. USAID/Haiti and ESS plan to organize a one-day workshop to share the assessment results, inviting key stakeholders in the agriculture sector including the Ministry of Agriculture, key donors, and NGOs. This workshop will be an opportunity to discuss and validate the findings and consider to what extent the findings can be used in future programming to seek synergy and promote the sector.

ESS also plans to participate in USAID/Haiti's After-Action Review to learn whether the report is being used as originally planned, and if not, whether there are ways that SI can make future reports more useful to the Mission.

PHASE III - CHALLENGES AND MITIGATION STRATEGIES

In this section the AT details the challenges and limitations encountered in the fieldwork phase of this assessment, their implications for the assessment, and how the team attempted to mitigate them.

Sampling Limitations

Snowball sampling may have elicited sampling bias because it relied on personal recommendations; people may have recommended like-minded people. Also, some people may have been hesitant to recommend other participants for confidentiality reasons. To address this challenge, the AT asked participants to nominate other participants who do not share similar views and made sure they knew that we would guarantee respondent and recommender anonymity.

Secondly, convenience sampling may also have introduced a systematic bias because it did not provide for representative sampling of an entire organization or group (CBOs for instance). It only gathered data from people who were available to be included or who volunteered. Thus, it may have arbitrarily excluded some voices, thereby limiting the representativeness of the data collected by organization and/or occupation. Given that this is a known form of bias, all findings generated from the FGDs have been explicitly caveated to highlight this bias and note that these findings are unlikely to represent an entire organization, group, or company.

To avoid sampling biases, the AT attempted where possible to use complete lists of stakeholders from which a sample could be selected. This was not always possible.

Gender Biases

As mentioned previously, the AT and CHASE attempted to include as many women as possible in the KIIs and FGDs. In practice, this turned out to be more difficult than anticipated, as few women were in leadership positions within the CBOs, government ministries, or donor agencies. In addition, though CHASE made every effort to emphasize the importance of female participation in the FGDs, when they arrived to conduct them, very few women were in attendance. CHASE was able to organize two FGDs exclusively with women, though the others were mixed. Though CHASE reported that women FGD participants were equally vocal as the male participants, bias could still be introduced as a result of self-censorship in the presence of men or of a reluctance to disagree with someone seen as holding a higher position of authority.

Recall Bias

The AT understands that the more time that has passed since an intervention or activity was implemented, the more difficult it is to remember precise details. Because the various interventions were implemented and completed at different times over the past 18 years, it is likely that those that were completed longer ago were more difficult to remember than the ones completed more recently or still underway. Though the data analysis did not reveal any major differences in the types of responses given in discussions of older interventions, such as Petits Périmètres Irrigués (PPI 1), and PADELAN, as compared to more recent ones, such as RESEPAG, Projet de Sécurité Alimentaire (SECAL), and Appui à la Valorisation du potentiel Agricole du Nord, à la Sécurité Économique et Environnementale (Feed the Future North) (AVANSE), it is possible that recall bias would result in more accurate and detailed descriptions and recollections for the more recent interventions.

Effects of Other Interventions

In many cases, the AT found that similar interventions had been implemented in the localities visited. Though in all cases beneficiaries appeared to understand which specific intervention the AT was asking them about, previous interventions may have added to the impact of the intervention in question, making it difficult to disaggregate results that arose from one intervention versus another. **Mitigation:** The AT included specific questions in the KIIs with Bureau Agricole Communal staff and CRDD directors to determine activities that were in operation during or before the intervention analyzed that could impact results. In the focus groups, the facilitator spent the first part of the discussion asking about the beneficiaries' recollections of the intervention in question. The AT cross-referenced these descriptions with project documentation during the data analysis to ensure that everyone was referring to the correct intervention.

Statistical Limitations

The qualitative nature of this assessment and small sample size of interventions the AT explored in Phase III means that the results presented in this report are not statistically representative. The AT's conclusions are based on patterns, trends, and specific anecdotes from the responses heard in interviews and focus groups and what was observed in the field. The relationships the AT has drawn between technical approaches, other factors, effectiveness, sustainability, and specific results are only illustrative and cannot be used to determine causality.

FINDINGS AND CONCLUSIONS

AQ 1 FINDINGS AND CONCLUSIONS

AQ 1: Which technical approaches have demonstrated effectiveness?

AQ 1 FINDINGS FROM PHASE I – DESK REVIEW

The desk review, Phase I, revealed that 25 agriculture technical approaches were practiced in Haiti from 2000 to 2018 (these approaches are defined in Annex B).

Based on the available information analyzed, the AT grouped the 113 interventions for which information was available into the following four categories²⁷:

- Effective at achieving the majority of results (>66 percent)
- Somewhat Effective (achieved 25-64 percent of targeted results)
- Ineffective (achieved <25 percent of targeted results)
- Unknown

Below is the breakdown of interventions by effectiveness category:

TABLE 5: INTERVENTIONS BY EFFECTIVENESS CATEGORY		
LEVEL OF EFFECTIVENESS	NUMBER OF INTERVENTIONS	PERCENT OF INTERVENTIONS
Effective	26	23%
Somewhat Effective	9	8%
Ineffective	5	4%
Unknown	73	65%

To determine whether some technical approaches were more likely to result in effective achievement of targeted results, the AT analyzed the breakdown between effectiveness levels and technical approaches.

The following graph shows the distribution of interventions that featured each technical approach among the varying levels of effectiveness, but with the interventions for which the effectiveness was unable to be categorized removed.

²⁷ Of the 113 interventions for which information could be obtained on the technical approaches followed, only 40 contained information that allowed the AT to assess whether the intervention could be considered effective at achieving targeted results. Note that this is not the AT's assessment of effectiveness, but rather is based on assessments made in the available reports, websites and documents regarding the effectiveness of approaches and the achievement of targets.

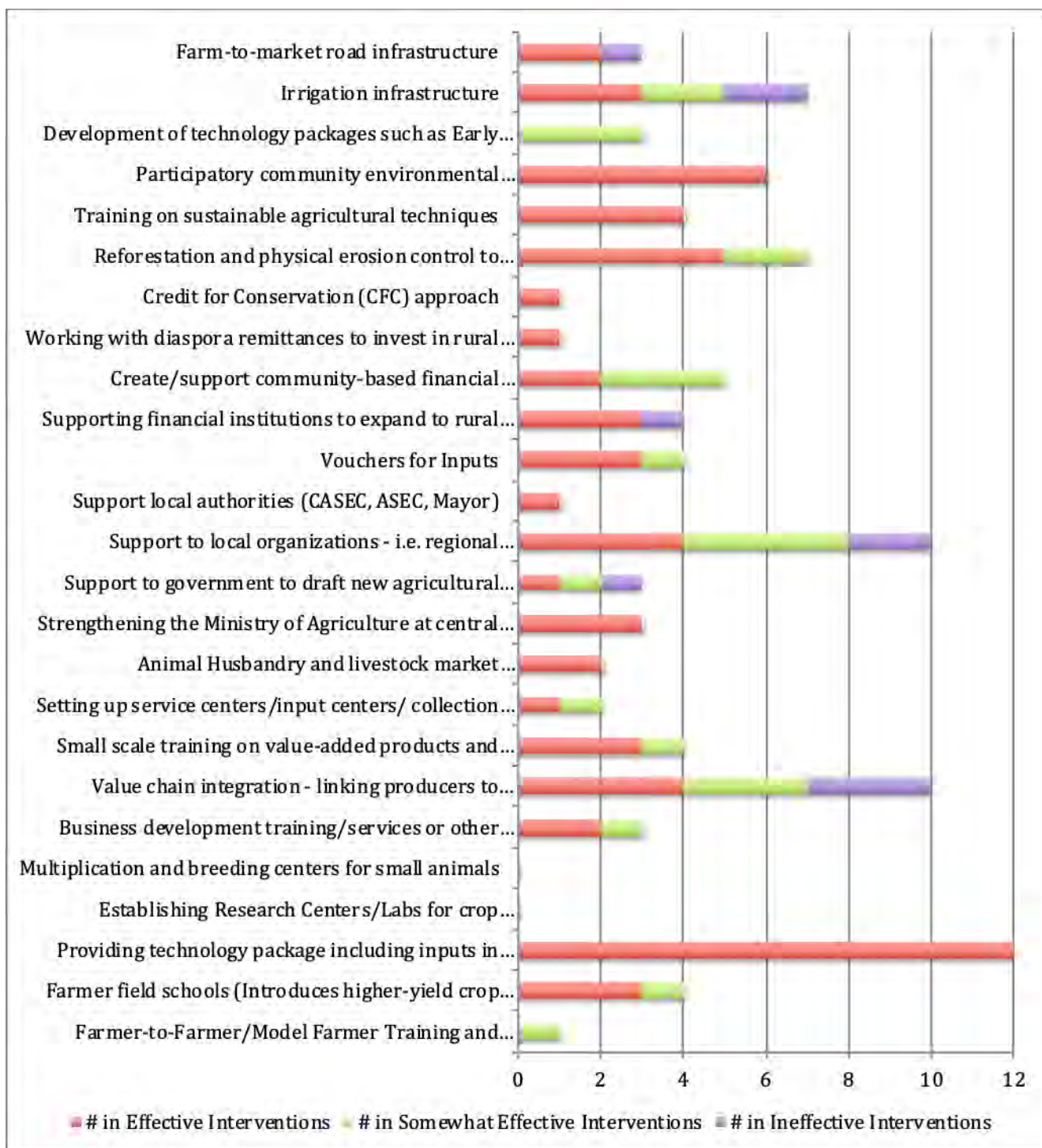


Figure 1: Approach Effectiveness

The following approaches appeared, from Figure 1, to be the most effective at achieving the targeted results, according to the Phase I desk research:

- Technology Inputs and Training;
- Participatory Community Environmental Management; and
- Sustainable Agriculture Training.

Types of Results Achieved

As noted above, there was often a difference between the results described in project reports and those listed in AQ 1 of the SOW. AQ 1 asks which technical approaches have demonstrated effectiveness towards attaining the following results in Haiti:

- Increase beneficiaries' household incomes
- Create jobs
- Improve market access at the end of a value chain
- Improve producers' resilience at the beginning of the value chain
- Improve natural resource management
- Improve productivity at the farm-level
- Improve food security

In terms of the result types achieved, “improved productivity,” “improved incomes,” and “improved resilience” were the most frequently cited in the reports that discussed results. However, the definition of resilience varies substantially for each intervention. In most cases, improved resilience at the household level referred to improvements across several livelihood components being strengthened simultaneously, for example, incomes, assets, social capital, savings, nutrition, etc. In other cases, resilience referred to improvements of multiple factors at the community level that affect the farmers. For instance, the Développement Économique pour un Environnement Durable (DEED) intervention strengthened natural resources management at the community level, while also improving the policy environment affecting the local community, elaborating watershed management plans based on community participation, and having extension groups that were community based. The community gained better knowledge and abilities as well as social capital in the form of CBOs, which was intended to reduce its need for further assistance.²⁸

Job creation was also a commonly reported outcome and particularly common for interventions that aimed to strengthen or encourage the creation of micro and small businesses in the agriculture sector. Improvements in market access were reported for several of the interventions analyzed. Two main approaches have led to reported improvements in market access: (i) value chain approaches that typically address marketing of agricultural products, such as WINNER, DEED, Sac Plén Resiliency Enhancement Program (SAK REP), Multi-Year Assistance Program for Haiti (MYAP), and Consolidation de la compétitivité et la durabilité des coopératives caféières haïtiennes (KOREKAFF); and (ii) interventions in support of micro and small businesses in the agriculture sector, such as Leveraging Effective Application of Direct

²⁸ Développement économique pour un environnement durable (DEED) : performance évaluation 2013, Final Evaluation Report.

Investments (LEAD), Vie, Tè & Eneji, Phase II (VTE II), and Haiti Integrated Financing for Value Chains and Enterprises project (HIFIVE).²⁹

Though food security was mentioned as a goal of more than a third of the interventions with adequate approach information, very few interventions reported achievements in terms of improving food security. This may be explained by the fact that this type of result is difficult to measure.

AQ 1 FINDINGS FROM PHASE III – FIELDWORK

The fieldwork confirmed the findings from Phases I and II that the most effective projects included multiple approach types, and that project effectiveness was the result of the interaction of these multiple approaches rather than due to one specific approach. Most respondents agreed that many factors contributed to a project's effectiveness. At the same time, they indicated that too many approaches that are disconnected from each other can cause confusion and a lack of focus that can reduce the intervention's effectiveness. This appears to have been the case in PADELAN and PASAH – interviewees involved in implementing these two interventions mentioned that the activity attempted too many different interventions in a short time with limited budget. The important thing for effectiveness was not the number of approaches used, but rather the project's ability to select approaches strategically to meet a specific need and then integrate them into a cohesive set of interventions that mutually reinforced each other.

While most beneficiaries consulted in Phase III had participated in only one of the ten interventions, a few did mention experiences with earlier donor projects that had taken place in their areas. Some of the input suppliers and other private sector actors interviewed said that they were actively involved in more than one of the ten interventions, as well as other donor and government programs that were not part of this study. This echoes the finding from Phases I and II that approach effectiveness also lies with the ability to build on previous interventions implemented in the same area.

During fieldwork, the AT asked interviewees and focus group participants about the effectiveness of each of the technical approach identified in the desk review for each intervention. The following table presents all 15 of the technical approaches identified in the desk review as being followed by one or more of the ten interventions studied in Phase III and indicates the positive results respondents cited as being connected to each approach. The size of the check mark in each cell illustrates the relative frequency that each result was cited during the fieldwork.³⁰

²⁹ Vie, Tè & Eneji, Phase II (VTE II), final report, February 2017.

HAP - support to Haiti's microfinance, small and medium enterprises sector (HAITI MSME). USAID funded program implemented by DAI from January 2001-March 2007.

Support to Haiti's microfinance, small and medium enterprises sector (Haiti MSME), Access to finance for Haiti's agricultural value chains: programming options, April 2007.

Performance evaluation USAID/Haiti Feed the Future West/Watershed Initiative for National Natural Environmental Resource, November 2015.

HIFIVE (Haiti Integrated Financing for Value Chains and Enterprises project), Final Evaluation report, 2016.

³⁰ Small check mark means the relationship between the approach and the result was cited between 1 and 3 times in our fieldwork. Medium check mark means 4-9 citations. Large check mark means 10+ citations.

TABLE 6: RELATIONSHIP BETWEEN TECHNICAL APPROACHES AND RESULTS

	INTERVENTIONS USING THE APPROACH	INCREASE INCOME	CREAT E JOBS	IMPROV E MARKET ACCESS	IMPROVE RESILIENC E	IMPROVE NATURAL RESOURC E MGT	IMPROVE PRODUCTIVITY	IMPROVE POLITICAL ENV. ³¹	IMPROVE FOOD SECURIT Y
Farmer-to-Farmer/Model Farmer Training and demonstration	PASAH	✓					✓		✓
Farmer field schools	AVANSE	✓			✓		✓		
Providing technology package including inputs and training	RESEPAG AVANSE WINNER	✓	✓	✓	✓	✓	✓		✓
Linking producers to processors/exporters, including through trade fairs, other marketing support and producer business groups	Lèt Agogo Agri-Supply	✓	✓	✓		✓	✓		✓
Small scale training on value-added products and improving quality for producers/producer groups	WINNER PPI	✓		✓	✓		✓		✓

³¹ This result was found during the fieldwork and was added to the seven results mentioned in the Scope of Work.

Setting up service centers/input centers/ collection centers with infrastructure to serve rural areas	WINNER PASA Lèt Agogo Agri-Supply	✓	✓	✓				
Animal Husbandry and livestock market infrastructure and marketing support	Lèt Agogo PPI	✓	✓	✓	✓	✓	✓	✓
Strengthening the Ministry of Agriculture at central and local level	RESE PPI						✓	
Support to local organizations - i.e. regional development institutions, irrigation management groups	RESE PPI PADELAN						✓	
Support local authorities (CASEC, ASEC, Mayor)	RESE AVANSE PPI PASA SECA PADELAN		✓	✓				✓
Vouchers for Inputs	RESE AVANSE PASA PTTA SECA	✓	✓	✓	✓	✓	✓	✓

Reforestation and physical erosion control to protect waterways, flood control	PADELAN							
Training on sustainable agricultural techniques	WINNER PADELAN							
Participatory community environmental management planning	AVANSE PASAH							
Irrigation infrastructure	WINNER AVANSE PPI SECAL							

As mentioned in the limitations section, with this small sample size and the qualitative nature of this assessment, as well as the many confounding factors cited above and throughout this report, it is impossible to say with certainty that the use of a particular technical approach is what caused a project's success or lack thereof. However, according to beneficiaries, project representatives, and government representatives interviewed for this assessment, the following five approaches contributed the most to interventions' effectiveness:

- Providing a Technology Package that Included both Training and Inputs;
- Linking Producers to Markets;
- Vouchers for Inputs;
- Irrigation infrastructure;
- Animal Husbandry and Livestock Market Support; and
- Training on Sustainable Agriculture Practices.

Additional details on each intervention studied in Phase III, including specific examples of the results achieved and factors that influenced these results, can be found in the Case Studies in Annex C.

AQ 1.1 To what extent and how have approaches or interventions been combined to generate greater results?

AQ 1.1 RESULTS FROM THE PHASE I DESK REVIEW

As noted above, the majority (62 percent) of the 113 interventions with available documentation used more than one approach. Of those that were judged to be effective, 85 percent used more than one approach. Due to the small number of interventions with information related to effectiveness, no statistical analysis could be performed to determine which approach combinations led to the greatest likelihood of effectiveness – there were too few cases of each combination. Literature review showed that the more approaches were explicitly integrated, the more likely they were to generate results in terms of increased income, productivity, resilience, food security, and natural resource management improvement. For instance, the success of the World Vision Sac Plen Resiliency Enhancement Program (SAK REP) relied on the combination of agriculture extension and agribusiness improvements; Agridev supported World Vision in developing a high-volume partnership with Whole Foods Market in the US for mangos. To meet Whole Food's contract requirements, the program also delivered a range of integrated activities targeting the mango value chain including training in improved agricultural techniques and seed grafting, business and marketing of the improved mangos, and harvesting and storage techniques.³²

The IDB Ennery-Quinte Agricultural Intensification Project integrated extension and agribusiness components in their watersheds approach, which contributed to increased incomes and productivity. The 2015 Project Completion Report (PCR) indicated that the, "project guiding principles was a close articulation between commercial, agronomic, environmental and social component aiming at agricultural intensification and watershed protection."

³² Linking market development and livelihood support for a more integrated approach, project examples from a case study competition, Report No. 18, June 2015.

USAID's WINNER project maximized the increase in household incomes by the combined effect of agricultural extension and agribusiness approaches in a framework encompassing capacity building and economic actors networking.³³

However, it is important to remember that it is not simply the number of approaches; too many different approaches without a cohesive integration strategy is not beneficial either. The approaches must be strategically selected and designed to mutually support each other.

AQ 1.1 RESULTS FROM PHASE II – INTERVIEWS WITH EXPERTS AND PHASE III - FIELDWORK

Respondents described successful interventions as having multiple different, complementary approaches that when combined led to greater results. Beneficiary respondents agreed that prior to the interventions there were multiple problems throughout the agricultural value chains that inhibited the implementation of agriculture technical approaches in their communities and that projects needed to address as many of these as possible to be successful. For example, many focus group participants spoke of both the difficulty they face in accessing inputs, such as fertilizers and quality seeds, and the challenge of accessing reliable markets for their products. In the fieldwork, the AT found that some interventions studied focused on the inputs/production side of the value chain (e.g. RESEPAG, PPI, SECAL, and PTTA) and other projects emphasized both production and marketing (e.g. WINNER, PASAH, Agri-Supply, and Lèt Agogo).³⁴ When the input/production side was the main focus, beneficiaries noted that because no efforts were made to improve their marketing opportunities, benefits were limited even though production increased, sometimes significantly. Respondents cited more benefits from a project when it included approaches that targeted both ends of the value chain. A combination of approaches that was frequently cited as being particularly effective was Vouchers for Inputs, combined with one of the training-based approaches (Farmer Field Schools and Farmer-to-Farmer), combined with efforts to link producers to markets, through facilitating relationships with private sector buyers and/or organizing producers into groups. Additionally, the AT found that adding access to irrigation to all approaches maximized results.

AQ 1.2 What project and non-project related factors—such as the development corridors in the North and West under the post-earthquake strategy—have enabled or constrained the effectiveness of the approaches and/or interventions toward achieving results?

Two categories of factors influenced the effectiveness of the interventions and approaches: Project related factors and non-project related factors.

AQ 1.2 RESULTS FROM THE PHASE I DESK REVIEW

In completing the desk review, the AT found two project related factors and three non-project related factors that enabled and/or constrained the effectiveness of the approaches and/or interventions: access to markets, integrated activities involving several approaches, product demand, natural disasters, and political turbulence.

³³ Performance evaluation USAID/Haiti Feed the Future West/Watershed Initiative for National Natural Environmental Resource, November 2015.

³⁴ While there are likely many cases of interventions in Haiti that focused mainly on the marketing side without production-related activities, none were included in our fieldwork sample.

SAK REP developed a high-volume partnership with Whole Foods Market in the US for mangos. Agridev, a local firm, initially facilitated the relationship between producer groups, the exporting agency, and Whole Foods that resulted in the sale of over 45,000 dozen mangos for HTG 2,608,638 (USD \$60,666) in Fiscal Year 2013. All the groups working with the exporters at the end of the activity remained engaged a year later³⁵. The DEED intervention registered a 20 percent increase in household income in target areas because of improvements in agriculture, marketing, and off-farm employment³⁶.

As noted under Sub-Question 1.1, the AT also found that the use of integrated approaches contributed positively to achieving results. For instance, the WINNER project implemented a multi-dimensional approach integrating agriculture extension, access to markets, and institutional framework approaches. In the WB's Strengthening the Management of Agriculture Public Services (GFRP), combining agriculture extension and agri-business, the voucher-based subsidy program strengthened the demand for inputs and services and has increased the sales (and profits) of private service providers³⁷. The effectiveness of the Feed the Future north project (AVANSE) lies in its ability to successfully integrate (1) protecting soil against further degradation, (2) increasing land productivity, and (3) strengthening agriculture markets and local organizations.

Non-project factors enabling and/or constraining effectiveness include demand for services or products, natural disasters, and political turbulence. Demand for Haitian coffee or mangos fluctuates over time, which then affects prices and farmers' ability to sell produce. In the case of the SAK REP intervention, the existence of a clearly identified and stable market for mangos encouraged producers to invest in production and maintain the productivity of their mango orchards.³⁸

Natural disasters, in contrast, had a negative impact on several interventions. For example, a series of natural shocks adversely affected food security for the most vulnerable in the MYAP areas and throughout the country from 2008 to 2012: a hurricane in 2008; floods and storms in 2008 and 2009; a devastating earthquake and a cholera epidemic in 2010; and a hurricane and a food crisis in 2012³⁹. Additionally, several reports stated that the political turmoil that occurred during and after the 2010 earthquake limited the effectiveness of the approaches promoted by many interventions. This period coincided with significant political turbulence associated mainly with elections.

AQ 1.2 RESULTS FROM THE PHASE III FIELDWORK

Project-related Factors⁴⁰

³⁵ [Linking market development and livelihood support for a more integrated approach, project examples from a case study competition, June 2015.](#)

³⁶ Développement économique pour un environnement durable (DEED), Final Evaluation Report, August 2013.

³⁷ Strengthening the Management of Agriculture Public Services (GFRP), 2015.

(<http://documents.worldbank.org/curated/en/606371468274770000/pdf/ICR32870P113620IC0disclosed03030150.pdf>)

³⁸ [Linking market development and livelihood support for a more integrated approach, project examples from a case study competition, June 2015.](#)

³⁹ The Haiti Title II multi-year assistance program (MYAP): Final Evaluation Report, 2014. (https://pdf.usaid.gov/pdf_docs/pa00kc7k.pdf)

⁴⁰ Project-related factors are those over which the project has ultimate control. These include how the project was planned, the approaches used, the interactions with the community and other stakeholders, the sequencing of activities, management arrangements, etc.

In the fieldwork phase of this assessment, the AT found that the factor that was most cited as enabling project effectiveness was the extent to which the project involved the community and key community actors in both planning and execution. Beneficiaries of every intervention except PPI mentioned that one reason for interventions' effectiveness was that they were involved in decision-making and in many aspects of project management throughout implementation. The PASAH and PADELAN interventions were particularly noted as having effectively engaged with the community, specifically targeting vulnerable groups and working with CBOs in a participatory fashion.

In addition to the involvement of the beneficiaries, inclusion of local authorities and community leaders was cited as being an enabling factor in project effectiveness. Most project beneficiaries and implementers described some level of involvement of these authorities and attributed project effectiveness to this close relationship. For example, in the RESEPAG project, the local Agriculture Bureau, an arm of the Ministry of Agriculture, was involved in selecting project beneficiaries, communicating project details with them, and organizing several trainings and other activities. This inclusion of the local government representatives in the day-to-day functioning of the project facilitated a feeling of ownership within the Bureau, eased decision-making, and boosted their support for activities, implementation, and monitoring.

The third group that was cited frequently as an enabling factor was the Private Sector. These actors include input suppliers, processors, and service providers that serve agricultural producers. These private sector representatives are often very knowledgeable about the issues facing producers and about the broader agricultural markets and market trends and can be a rich source of information for project planners. In addition, they often have well established supply chains and relationships with other important actors in the relevant value chains. When an activity can benefit from existing relationships, it can save time and money and avoid "reinventing the wheel." For example, in the PASAH intervention, Lèt Agogo partnered with, Racpaba Réseau des Associations Coopératives pour le Commerce et la Production Agricole du bas Artibonite (RACPABA), a local organization that was processing rice, to link project producers with these already established market opportunities. Thanks to AVANSE, Novella Enterprises and other fermented cacao exportation institutions now have a direct connection with farmers, eliminating two middlemen from the chain: the retailers and speculators. Novella provided technical assistance to farmers that helped improve the quality of the cacao that they then purchased from the farmers. They also helped establish Marketing Groups, allowing Novella to be better able to show traceability, with the aim of selling with an "organic" label. As a result, the price will increase, which is in everyone's interest, including the farmers. The Cooperative Producers Cacao du Nord (CPCN) was able to continue this partnership with Novella.

Non-Project-Related Factors

Non-project-related factors are those over which the project does not ultimately have control. All the most frequent factors cited in the fieldwork were factors that negatively affected projects and inhibited success rather than environmental, political, or environmental conditions that facilitated the project's implementation. This is natural, as people are more likely to notice and remember when the weather, environment or local government did not cooperate and are less likely to comment on environmental factors when everything worked smoothly as planned.

The factor cited by most respondents in all categories and for all projects was natural disasters. These included the January 2010 earthquake in areas surrounding Port-au-Prince; Hurricane Matthew in 2016, which mainly affected the South and the Grande Anse; and an extended drought season beginning in 2015 and continuing until the time of this writing mainly affecting the Northern region. For the PPI project, the 2010 earthquake caused a huge disruption, including damage to project sites, significant staff turnover, and long delays. During implementation of the SECAL project and several years after the completion of the PADELAN project, Hurricane Matthew caused extensive damage to the fields and demonstration plots, resulting in loss of an entire growing season, and in some cases more than one season. Several activities in the North, including AVANSE, Lèt Agogo, and PASAH, have felt the effects of the drought, noting that many livestock received through the project have died and it was difficult to continue to cultivate some crops that were the focus of technical trainings due to a lack of water. In most cases, while the projects clearly had no control over the natural disaster itself, they could have put in place one or more mitigation strategies to offer some degree of resilience and allow activities to continue, such as water management strategies, alternative small-scale water capture systems, and drought resistant crop varieties.

A second frequently cited factor that hindered the effectiveness of several interventions and approaches was slow GOH bureaucracy, especially in the case of interventions and approaches directly managed by the Ministry of Agriculture, such as PPI and PASAH. In the PPI intervention, the project formed water users' associations to manage water distribution through the newly constructed irrigation infrastructure, but faced so many delays and obstacles while trying to register these associations that the project was significantly delayed and unable to complete a significant portion of the planned activities. While projects have limited control over many mechanisms within the Haitian government, establishing a positive working relationship with key government officials, involving the government in the planning and execution of parts of the intervention, and planning for extra time and flexibility when it comes to government approvals could have helped interventions avoid these debilitating delays.

The third non-project related hindrance mentioned frequently in the fieldwork was the poor quality of roads, public transportation, and other farm-to-market infrastructure. This factor will also be discussed in the section on findings related to the Enabling Environment, but it is worth noting that in several interventions, including PTTA, PASAH, and PPI, beneficiaries noted that even though the project resulted in increased production or the production of value-added goods, it was so difficult or costly to deliver these goods to markets that there was little or no opportunity for profit. Poor road infrastructure also impairs producers' access to inputs and services and deters the creation of private-sector suppliers and service-providers from operating in rural areas.

Geographic Location

The projects analyzed can be grouped geographically into three main areas: Northern (North, Northwest, and Northeast), Western, and Southern (Nippes and South). While there were effective and less effective examples of interventions in all three, the AT observed that, in general, interventions implemented in the West and South were more effective at achieving the targeted results than interventions implemented in the North. It is impossible to say for certain, however, whether geographic location was a deciding factor on effectiveness rather than a host

of other differences among interventions. The AT considered geographic location a “non-project factor” because, while a project does have a choice in the geographic region it will operate in, once it chooses target locations, the project no longer has control over all the regional differences that could impact it.

This difference in effectiveness among interventions in different regions can be explained in several ways. One difference among these areas is the prevalence of irrigation infrastructure. The North in general is less irrigated compared to the West and South. Although there are some small-scale irrigation infrastructures in the North built by PPI and previous interventions, most are not fully operational due to inadequate maintenance and drought. According to respondents in the North-east, this affected the effectiveness of the voucher programs being implemented in those areas, because many farmers decided that it was not economically beneficial to continue purchasing inputs for crops that were dying due to a lack of water. Those that did use the vouchers for purchasing inputs did not see the kinds of increases in yield that they could have expected were the drought not an issue.

The West boasts higher levels of human capital than the North and South, mainly because most of the highly qualified human resources live in the center, in Port-au-Prince, especially in the West Department due to availability of jobs and educational opportunities.

Another difference is the occurrence of natural disasters. As discussed above, the Northern region was more affected by drought than the West and South during the last three years. The North was also more vulnerable to flooding, which sometimes destroyed crops. The South was drastically affected by Hurricane Matthew in 2016 - as was the North, but to a lesser extent. The West was the main region affected by the 2010 Earthquake.

Finally, a third differentiator is access to markets. Because of the distribution of wealth and infrastructure, the West and North which have both international ports and airports have better access to markets than does the South, which does not have even a national port and a functional local airport⁴¹. The Port-au-Prince metropolitan area has the greatest concentration of wealth in the country, giving the West Department a significantly higher income and purchasing power compared to the other areas of the country⁴². The departments to the North of Port au Prince have the next largest market share and populations and serve as the crossroads to the Dominican Republic, which is one of Haiti’s primary trade partners⁴³. Instead of encouraging investment, however, the easy access to the Dominican Republic has likely inhibited agricultural development because Haitian producers have a hard time competing with lower-cost Dominican products, according to several beneficiaries we spoke with in the North. This competition with Dominican agricultural products may explain in part, among other factors such as terrain, why our fieldwork found that adoption of improved agricultural technologies and approaches was lower in the North than in other regions. Inadequate roads to market were cited as leading to significant post-harvest losses among the PASAH beneficiaries in the Northwest, while beneficiaries of the same project in Artibonite were not as affected by this impediment.

⁴¹ <http://opendata.investhaiti.ht/xoiyk/a%C3%A9roports-et-ports-d-haiti?object-type=I000000&lang=fr>

⁴² http://www.ihsi.ht/pdf/ecvmas/ecvmas_seuil/METHO_I_Seuil%20de%20pauvret+%C2%AC.pdf: Pauvreté à Haïti: Juillet 2014

⁴³ <https://atlas.media.mit.edu/en/profile/country/hti/>

AQ 1 CONCLUSIONS

There is no one perfect approach or combination of approaches that will work for every intervention in every situation. The effectiveness of any approach depends on its appropriate combination with other approaches throughout the value chain, to facilitate access to complementary services that meet community needs. For example, interviews indicated that the Vouchers for Inputs Approach showed different levels of effectiveness in different places and when implemented by different projects. Interviews with beneficiaries of the voucher programs in the South, where RESEPAG and SECAL implemented this approach, revealed greater results than interviews with beneficiaries in the Northern region, where it was implemented by RESEPAG, PTTA, and AVANSE. This difference is likely due to other barriers to production, such as lack of irrigation water and access to markets, as well as other methodological, logistical, and technical issues associated with the specific interventions.

The combination of Vouchers for Inputs, Training/Technology Package, and Linking Producers to Markets seems to be an especially effective recipe. Both the fieldwork and desk review phases indicate that when approaches are combined better results are achieved. This combination of approaches was implemented by several of the most effective interventions such as RESEPAG and SECAL in the South and AVANSE in the North. It seems to be especially effective because it targets key inefficiencies at several points along the value chain: inadequate access to affordable inputs, a lack of technical knowledge on improved techniques, and insufficient access to markets. Another combination that similarly addressed several needs within the value chain using different approaches involved providing access to irrigation water in addition to access to inputs; this combination was seen in both SECAL and PPI.

Working with various key community members, including beneficiaries, local authorities, and the private sector assists in making projects successful. Good communication with and involvement of these actors will lead to greater contribution, ownership, and the ability to take advantage of existing connections and local knowledge to improve project quality.

Natural disasters, government bureaucracy, and poor farm-to-market infrastructure may not be within a project's ability to control, but can still be planned for. Projects can anticipate these types of hindrances and plan in flexibility, resilience strategies, and alternative arrangements that can be put in place if the project is negatively affected by something outside of its control.

AQ 2 FINDINGS AND CONCLUSIONS

AQ 2: To what extent have the technical approaches and/or interventions identified in the desk review demonstrated sustainability?

AQ 2 RESULTS FROM THE PHASE I DESK REVIEW

In reviewing the documentation available, the AT found little information about whether and to what degree the results attained were sustainable; though sustainability was referenced in planning documents, only a few interventions had written discussions about whether the results were sustained post-project. This lack of information on actual sustainability outcomes is the reason why most of the analysis, findings, and conclusions for this question have come from

Phases II and III of the Assessment, especially the intervention visits. The following examples are two of the few references to sustainability found in the literature review.

In one illustrative example, the SAK REP project reported that all the tree nurseries developed and managed by the project's producer groups remain operational several years after their establishment with the help of the project⁴⁴. In a second example, the Korekafe evaluator anticipates that access to credit would be sustained after the end of the project since the reimbursement capacity of the participating cooperatives was improved by the project.⁴⁵

The Mercy Corps VIE, TÈ & ENEJI project used an approach that evolved to improve sustainability. Over time, they phased out subsidies and set up a "credit for conservation (CFC)" mechanism, which is expected to enhance sustainability⁴⁶. For the IDB funded "Ennery-Quinte Agricultural Intensification Project," the most promising element reported by the final report in terms of sustainability was the strengthening of the regional agricultural services' (Direction Départementale de l'Agriculture de l'Artibonite) institutional capacity by providing substantial material support and through on-site personnel training⁴⁷. Additionally, MARNDR has budgeted for continued support to the organizations that were created with the help of the project. This could help in guaranteeing continuity in the activities developed by the program and to build upon what has been gained.

AQ 2 RESULTS FROM THE PHASE III FIELDWORK

In project documentation, sustainability is cited as an important part of project planning, but these plans did not play out in practice.

Sustainability was discussed in every interview and FGD conducted during the fieldwork. In all of the interviews with project implementers and donors, respondents acknowledged the importance of planning for sustainability, and mentioned some of the ways in which sustainability had been considered and planned for in their projects. Sustainability and its importance were not new concepts to any interviewees. Some of the examples of sustainability measures cited in project planning included:

- Working with government both at central and local level, especially the Ministry of Agriculture;
- Empowering community-based organizations, such as farmer associations, solidarity mutual, and irrigation user associations, so that they have the capacity to continue activities at the end of projects;
- Strengthening microfinance institutions to increase and improve availability of credit to farmers;
- Increasing and professionalizing agriculture services providers; and
- Establishing partnerships between organized farmers and buyers.

⁴⁴ Linking market development and livelihood support for a more integrated approach, project examples from a case study competition, June 2015.

⁴⁵ Projet « Consolidation de la compétitivité et la durabilité des coopératives caféières haïtiennes-Korekafe » (ATN/ME-13110-HA). Rapport d'évaluation finale. 2015.

⁴⁶ Vie, Tè & Eneji, Phase II (VTE II), final report, February, 2017.

⁴⁷ Strengthening agriculture public services project, Implementation completion and results report, WB, Feb. 2015.

No donor-funded projects in the sample were 100 percent sustainable.

Despite finding significant evidence that interventions were successful in achieving many of the key results described in the previous section, and despite the fact that all projects had considered and planned for sustainability in some way, interviews, focus groups and DOs all demonstrated that none of the donor-funded interventions in the Phase III sample were 100 percent sustainable. The team heard the following examples of aspects of interventions that were sustained post-project and other aspects that were not:⁴⁸

- WINNER – Three of the five CRDDs visited appeared sustainable. For the other two, the AT's DOs showed that some demo plots were not being cultivated, some buildings were not well used or maintained, and few agricultural tools were still in good condition and being used.
- AVANSE – Six sites that the AT visited were still operating well, with well-maintained facilities and demonstration plots, while four appeared to be in various states of disuse or poorly-maintained.
- PPI – Beneficiaries stated that most of the livestock provided through the project had died, and while some parts of the irrigation system were still in use, many parts were not functioning and had not been maintained.
- PASAH – Rice processing infrastructure put in place in Saint-Michel de Lattalaye is currently not in use, said one key informant during the field work in Artibonite. According to interviewees involved in project implementation, there was not a clear exit strategy. Infrastructure was built by the project and given to beneficiaries, who have not continued its operations.
- PTTA – Drought has prevented people from growing rice, which the project encouraged. No drought-resilient strategies like water catchment were included in the activities.
- SECAL – Maintenance was not done on irrigation infrastructure post-project, and many people stated that they had stopped obtaining inputs because they could not afford to buy them.
- PADELAN – Hurricane Matthew stopped all project activities and beneficiaries have not had the capital to restart them. Several beneficiaries said the project ended too soon to create real change.
- Lèt Agogo (not a donor project, but still not sustained) – For beneficiaries interviewed in the Northeast, drought made it impossible for them to feed the livestock and there was no drought resilience strategy, so some of the dairies are no longer operating.
- Agri-Supply, as a private enterprise that processes and exports products made from the plant Vetiver, appears to be sustainable. The business is operating, and the structures are clean, well maintained, and in use. Beneficiaries stated that they are continuing to grow Vetiver and engage in profitable business with the company. The AT appreciates that this is a different model from donor-funded projects and is subject to different dynamics, but it still illustrates that projects are only sustainable if they create or develop profitable enterprises.

⁴⁸ See Annex C for additional details related to sustainability presented in case studies for each intervention

Being private sector led versus donor-led affects sustainability

Donor-funded and private sector projects exhibit two main differences that affect their sustainability outcomes. First, donor-funded interventions have a short lifetime of three to five years, which, in a volatile and seasonal sector such as agriculture, does not provide much opportunity for systemic change. Because of these short timelines, donors are incentivized to produce “quick wins” rather than long-term change, which leads to decisions like handing out free inputs to increase productivity quickly rather than slowly building up the existing input suppliers and having farmers gradually invest in inputs they can afford. When the project ends, these “quick wins” usually disappear because they were not founded in solid business structures. Private sector projects or businesses, on the other hand, do not have a fixed duration. Consequently, it is easier to sustain them over time since their learning curve is longer and managers have more time to generate resources to sustain projects. The longer-term vision of private sector companies also leads them to make small, incremental changes and ensure that their input suppliers and relationships are solid and reliable, because they know that they will need these far into the future.

Second, the objective of private sector activities is, first and foremost, to generate wealth. Even if the companies also pursue social goals, as Lèt Agogo did by prioritizing women's empowerment, and Agri-Supply does by supporting farmers' children's access to schooling and medical support, they are guided by business principles and make decisions based on economics. In contrast, most donor-funded projects have other objectives and priorities, in addition to increasing productivity or income. They tend to place more focus on creating social change and their financial incentive is often to get money out the door as quickly as possible, with less attention paid to making sound economic decisions that may not pay out until the long term. It is a well-accepted fact of life that people make different decisions when they are spending their own money versus spending money that comes from someone else, whether they are beneficiaries, implementers, or governments. Implementers who have received grants from donors will focus the use of that funding on reaching the milestones that are directly tied to payments rather than on strategic investments that will yield long-term results. This is not an indication of any ill intentions on implementers' part, but rather reflects the incentive structures in place in the donor-funded international development industry. Government recipients of donor funding are likely to have similar incentives as implementers – to deliver the products and activities that will keep donor funding flowing, even if these activities do not necessarily follow a cohesive long-term strategy for the agriculture sector.

The sustainable elements that were observed and discussed in the fieldwork are connected to a few specific technical approaches.

While none of the nine donor projects were 100 percent sustainable, as noted above, most interventions displayed some sustainable components. The AT noted the following sustainability patterns:

- *Knowledge and skills obtained during trainings and farmer field schools were cited as the most likely intervention element to continue post-project.* Respondents said that this is because, for the most part, they recognized the effects of these techniques and could implement them at little or no cost.

- *Agroforestry investments continue to be productive post-project.* The goals of agroforestry projects are two-fold: environmental and income-producing. So even if producers are unable to continue with the level of care post-project that would lead to maximum productivity, the trees are still providing environmental benefits, such as preventing erosion, and are usually providing some level of production for the farmers.
- *When reliable buyers such as schools or private companies are connected to producers, benefits to farmers are likely to be sustainable.* When farmers know that they can reliably and profitably sell what they produce, they are most likely to continue investing time and resources into the improved varieties, inputs, and techniques that will produce the greatest yields and highest quality.

AQ 2.1: What factors have enabled or constrained sustainability?

AQ 2.1 RESULTS FROM THE PHASE I DESK REVIEW

In reviewing the available documentation for each intervention, the AT identified the factors that enabled or constrained sustainability: provision of credit (as opposed to subsidies), involvement of local organizations, implementation timing, insufficient engagement with the GOH, insufficient intervention duration, natural disasters, and political turbulence. These factors are analyzed below.

Factors that Enabled Sustainability

Among the factors that have enabled sustainability, evaluation reports indicated that provision of credit (as opposed to subsidies) was a factor for improving the likelihood of sustainability. In fact, credit mechanisms have been seen to continue after interventions end, while subsidies are provided only during project implementation. For instance, credit begun during the USAID's Hillside Agricultural Program (HAP) - support to Haiti's microfinance, small and medium enterprises sector (HAITI MSME) implemented by DAI from January 2001-March 2007 continues after the guarantee program's end, though at lower volumes than when it was piloted.

A second supporting factor is the involvement of local organizations (such as "caisses populaires" and "agriculture cooperatives") for service delivery as opposed to delivering services through temporary project teams. In this regard, the Mercy Corps VIE, TÈ & ENEJI intervention experience is worth mentioning, as the implementer end-of-project trainings with local NGOs and Ministry of Agriculture officials for integrating very poor producers into value chain development to ensure sustainability⁴⁹. Community participation and ownership contributed to the success of the IFAD (2001-2011) Haiti: Food Crops Intensification Project - Phase II. The intervention was very effective in strengthening community organizations that continue to add to the intervention outputs after project completion and succeeded in spreading among farmers the notion of working together to overcome limits to economic development. It also effectively strengthened communities' social capital and strengthened their local organizational capacity

⁴⁹ Vie, Tè & Eneji, Phase II (VTE II), final report, February, 2017.

(ability to manage a budget, conduct meetings more efficiently, seek funding from a variety of sources, and manage grants)⁵⁰

The implementation timing period affected the sustainability of some interventions. For instance, the 2010 post-earthquake situation increased the relevance of the HIFIVE Project (2009-2015), increasing the participation and ownership of the interventions by its beneficiaries. The microfinance institutions that benefited from the intervention were eager to receive the technical assistance provided.⁵¹

Factors Constraining Sustainability

In terms of constraints to sustainability, insufficient engagement with the GOH was highlighted in several reports as posing a significant risk that could have been avoided. In that respect, the USAID-DEED intervention evaluation noted that the intervention should have better prepared the GOH institutions (e.g. MARNDR, Mayor Office) to take over at the end of implementation.⁵² Also, the final WINNER performance evaluation recommended “increase[ing] collaboration with GOH and develop[ing] more formal interactions with MARNDR at all levels to leverage their experience and presence as a way to ensure sustainability⁵³.” Engaging adequately with public institutions was not the only factor affecting sustainability, however. The lack of public funding was also cited as an important constraint to sustainability. For example, the lack of recurrent public funding to maintain the early warning and hydrological monitoring systems set up by several projects, such as USAID-funded MYAP Program⁵⁴, and the IDB-funded PNAP-Programme national d'alerte précoce, was anticipated as a constraint to sustainability (systems maintenance), which would also affect results (which were aimed at reducing losses in property and casualties in the event of high intensity rains).⁵⁵

Linked to the above, another constraint to sustainability was insufficient intervention duration. Building local capacity to follow up the outputs after the interventions' completion takes a considerable amount of time in a context like Haiti. Local actors often need time to develop strong ownership of project outputs and many times the interventions' duration (one to five years) was too short. This arose in the watershed management and flood protection component of the Ennery-Quinte project.⁵⁶ The WB intervention RESEPAG I faced a similar challenge regarding the sustainability of its results⁵⁷. The intervention had a large capacity building component that laid the groundwork for MARNDR's improved capacity for policy formulation, reporting on results, and transparent use of resources. However, the completion report noted that more work was needed for the above-mentioned capacities to be sustainable since such

⁵⁰ Food Crops Intensification Project - Phase II. 2012. (project completion digest).

<https://www.ifad.org/documents/38711644/40046424/Haiti%20-%20PCR%20Digest%20Food%20Crops%20II%20-OP%20Id%20003-196-1240.pdf/ba2aa80f-4ab2-4c77-b1ab-8c13d1f197b4?1517969916373>

⁵¹ Final performance evaluation of the Haiti integrated financing for value chains and enterprises (HIFIVE) project 2016, Final Evaluation Report.

⁵² Développement économique pour un environnement durable (DEED): performance évaluation 2013, Final Evaluation Report.

⁵³ Performance evaluation USAID/Haiti Feed the Future West/Watershed Initiative for National Natural Environmental Resource, November 2015.

⁵⁴ The Haiti Title II multi-year assistance program (MYAP): Final Evaluation Report, 2014.

⁵⁵ Une étude exhaustive et stratégique du secteur agricole/rural haïtien et des investissements publics requis pour son développement. CIRAD-BID, 2016.

⁵⁶ “With regard to the « watershed management and flood protection» component, in spite of the significant results [...], advances remain fragile. The watershed management committees and sub-committees are functional but need to be strengthened.” Source: Ennery-Quinte Project Completion Report.

⁵⁷ PROJET DE RENFORCEMENT DES services publics agricoles (RESEPAG I), final report, December 2014.

processes generally require many years to generate sustained results. To address this, a follow-on project (RESEPAG2) was quickly initiated.⁵⁸

Natural disasters had a negative impact on several interventions. For example, a series of natural shocks adversely affected food security for the most vulnerable in the MYAP areas and throughout the country from 2008 to 2012: a hurricane in 2008; floods and storms in 2008 and 2009; a devastating earthquake and a cholera epidemic in 2010; and a hurricane and a food crisis in 2012⁵⁹. Additionally, several reports stated that the political turbulence that occurred during after the 2010 earthquake limited the effectiveness of the approaches promoted by many interventions. In the evaluation of its interventions in Haiti between 2011-2015, the IDB noted that political instability created high turnover of government officials, which had a negative impact on the implementation of its program⁶⁰.

AQ 2.1 RESULTS FROM THE PHASE III FIELDWORK

Interview and focus group respondents cited several factors as having contributed to or constrained interventions' sustainability of the results and activities. These confirmed many of the factors first identified in the Desk Review Phase.

Factors enabling sustainability

Community buy-in – Respondents noted that when activities and results were sustained post-project, this was usually the result of high levels of support from the community, local institutions, and very motivated leaders. When the project ended, if the community was organized and empowered to continue to carry out the activities introduced, they were more likely to continue. For example, in the Lèt Agogo case, beneficiaries and project leaders all agreed that the community was very motivated to continue to operate the dairies and earn income after Veterimed helped them to create these enterprises. For the CRDD in Bas Boen, the management structure is composed of several types of stakeholders (e.g. universities, producer associations) working in close collaboration with certain MARNDR executives. The vested interest of the Bas Boen and Wyn farm⁶¹ in Kenscoff CRDD managers demonstrated by the number of innovative projects they have taken on and the seriousness with which they have developed well thought out business plans will help to guarantee their durability. For the CRDD in Bas Boen, a local organization (FONHDAD) took on the management and operations role and continues to implement the same types of activities that the WINNER project began, partnering with several US universities. The Robin CRDD owned and managed by SOHADERK is also providing services to farmers. However, the provision of its services is limited by the absence of irrigation water during the drought, which has continued for the last two years.

Private sector relationships – The second factor that was most frequently cited as leading to increased sustainability was the establishment and development of win-win relationships between producers and private sector actors, especially buyers and processors. In these cases, a business relationship that was formed or developed during an intervention continued to function post-project, allowing producers to continue to profitably market their produce. The

⁵⁸ Document du projet de relance de l'agriculture : renforcement des services publics agricoles - phase II, October 2011.

⁵⁹ The Haiti Title II multi-year assistance program (MYAP): Final Evaluation Report.

⁶⁰ IDB, Évaluation du Programme de Pays 2011-2015, Haïti.

⁶¹ Wynn farm functions differently than the other CRDD. It is like a private sector business.

AVANSE intervention developed a very successful and sustainable relationship between cocoa producers and cocoa processor NOVELA. A similar experience was observed in Agri-Supply, where the enterprise has not only continued to purchase vetiver grown by the community, but has actually engaged in training activities and producer group organization, ensuring the continued production of high-quality vetiver.

Factors hindering sustainability

Beneficiaries provided different explanations for why certain approaches and benefits have not continued post-project. These explanations included several project-related factors such as poor management, low community involvement, or lack of consideration of key links in the value chain, as well as non-project-related factors including natural disasters, poor infrastructure, and issues with the government. In fact, these factors were frequently the same or similar to those discussed above as factors that hinder project success – clearly project effectiveness and sustainability share many similar factors, including:

Lack of a viable plan for ensuring continued access to inputs and markets – For an intervention to be sustainable, the enterprises that were established or supported through the intervention must be profitable and able to continue to effectively operate even without project facilitation. This includes a way to access affordable inputs and services. Beneficiaries of several projects, including WINNER, PASAH, SECAL, and PTTA, stated that when the project ended, the availability of inputs and the number of input providers decreased. As a result, it became more difficult for producers to obtain inputs, such as quality seeds and fertilizers. For this reason, working with established service providers was likely to lead to greater sustainability as they have the capacity to work without project support. Similarly, if an intervention does not develop a viable marketing opportunity, producers will not be able to continue to benefit from the increased production that they may have experienced during project implementation. As described previously, the PASAH intervention ended before a private sector buyer could be found or developed, leaving the producers with nowhere to sell their value-added products. Not having a viable and profitable market will disincentivize producers to invest in improved inputs once they must pay full price for them, which will reduce the productivity gains and income that the project may have encouraged. This seems to be the case in the SECAL project, where producers stated in the focus groups in the South department that selling products outside the village was not worth the cost, and, therefore, most no longer invest in the improved inputs that would enable them to increase their production.

Lack of a back-up plan in case of natural disasters – As discussed above, natural disasters cannot be predicted, prevented or controlled, but it is possible for projects to consider their effects during project planning and implementation and put mitigation strategies in place. Resilience is a key objective of USAID and other donor's projects in Haiti, which frequently experiences extreme weather events and natural disasters of several kinds. Resilience in the face of natural disasters is an important aspect to consider in project planning. During interviews and focus groups, no respondents mentioned contingency plans that would go into effect in case of a natural disaster, and in most cases, one of the key reasons cited for lack of sustainability was a natural disaster. In Lèt Agogo, drought was mentioned as the reason the otherwise successful dairies closed in the northeast department. Milk producers could not sell milk to the dairies as before. In PTTA interventions in the North, some people have stopped growing rice, after an otherwise successful project taught them improved techniques for growing and processing rice, because drought has made rice growing impossible. In both interventions,

if the project had incorporated some water catchment infrastructure or water management activities as a contingency plan, the benefits might have continued into the drought. In the case of Lèt Agogo, if the community we spoke with in the northeast had been able to find and manage enough water to keep the cows alive – even if milk production decreased – the benefits could have continued much more easily once the drought ended. In the South, the SECAL intervention was affected by Hurricane Matthew. It destroyed an entire agricultural season's efforts for the producers as well as the demonstration plots. A natural disaster mitigation plan could have introduced options for hardier crops or discussed flood management strategies.

AQ 2 CONCLUSIONS

Most interventions exhibited a certain level of sustainability for some approaches, activities, and benefits, but the only fully sustainable intervention studied in the fieldwork was Agri-Supply. The approaches indicating the greatest potential for sustainability were Vouchers for Inputs and Linking Producers to Markets, because they actively work and establish relationships with private sector input suppliers and buyers. The relationships can continue organically even after the project ends if they are based on sound, market-based principles and benefit all parties economically without external subsidies. Other factors for sustainability included close involvement of community members and local authorities in decision-making, with the goal of fostering ownership and motivation to continue the activities after the project ends. Ensuring that all links in the value chain are viable, functioning well, and not reliant on project support is another key aspect of sustainability that should be monitored throughout project planning and implementation. Finally, as the sustainability of Agri-Supply demonstrates, establishing a profitable enterprise that is managed as a business and operates in a value chain for which there is enough demand is the best way to ensure that a project's benefits continue.

Sustainability is likely the greatest challenge for donor projects – interventions tend to be overly optimistic and unrealistic when it comes to sustainability planning. All donors and implementers understand the importance of sustainability and no donor project was planned or implemented without some degree of sustainability planning. However, the AT found that despite these good intentions, it was extremely difficult for donor-financed projects to be 100 percent sustainable. Limited project timelines and working in an environment with no shortage of inefficiencies in the enabling environment (see the AQ 4 section for more discussion of the enabling environment) means that donor projects will always struggle with sustainability.

AQ 3 FINDINGS AND CONCLUSIONS

AQ 3: What are the benefits to the agriculture sector of the CRDD and other similar organizations?

AQ 3 RESULTS FROM THE PHASE I DESK REVIEW AND PHASE II EXPERT INTERVIEWS

The desk review indicated that the CRDDs and similar organizations are essentially training and experimentation centers. They have been promoted in Haiti by the GOH and several interventions, including the WINNER project. According to KIIs with USAID, the CRDDs were introduced by WINNER to contribute to the modernization of the Haitian agricultural sector through the dissemination of new agricultural practices and improved crop varieties, as well as modern equipment. These structures are supposed to test and introduce innovative techniques

and equipment. The extension services provided are in principle tailored to the specific geographic areas where each CRDD operates. Some centers were also equipped with the material and personnel to perform soil analysis. Interviews with key experts in Phase II confirmed this background information.

AQ 3 RESULTS FROM THE PHASE III FIELDWORK

Although the structure is not uniform, in the fieldwork, the AT found that most of the CRDDs include: a small office, a soil laboratory, a conference room, a warehouse, an agricultural farm for experimentation and demonstration, irrigation infrastructure, farming equipment, and greenhouse facilities. Similar organizations such as Ferme Levi and Savanne Zombi that are managed by the Ministry of Agriculture, with fewer facilities, generally are made up of: a small office, a conference room, a warehouse, an agricultural farm for experimentation and demonstration, irrigation infrastructure, and farming equipment. Some have laboratories, while others do not. Compared to the CRDDs they have very limited staff and most of their equipment is old and not operational.

FGDs and DOs revealed that CRDDs and other similar organizations are serving several primary roles in their community:

- Providing greater access to inputs and services;
- Providing training on improved techniques; and
- Facilitating access to markets.

For example, the CRDD in Bas Boen, which is one of the most effective CRDDs visited, produces seeds, provides laboratory services (soil and plants), offers trainings (conducted by specialists from member universities), and provides other agricultural extension services. Another successful CRDD, managed by Solidarité Haïtienne pour le Développement Rural de Kenscoff (SOHADERK), is leading greenhouse production of vegetables as a demonstration farm, as well as connecting producers to buyers, such as hotels, coffee exporter Sélecto, and donor projects operating in the area. Another CRDD in the same area, Wynn Farm, also successfully grows flowers that are sold commercially. All these CRDDs have managed to find profitable markets for their products and services, and while they are not yet completely autonomous or self-financed, they are much more successful than other CRDDs, such as the CRDD of Duvier, which has not been as successful at finding ways to generate its own revenue stream.

AQ 3.1 What factors determine success/weakness of CRDDs and similar organizations?

The Desk Review Phase found that one of the key factors that contributed to the success of these centers is the fact that they are decentralized and, therefore, able to provide a range of services locally (notably seeds and soil testing services). Before initiating the CRDDs, soil samples had to be sent to the State University of Haiti, in Port-au-Prince, or to the United States, for analysis. The services the CRDD provided are for smallholders as well as commercial farms. Currently, these services remain heavily subsidized for small farmers. Our field work revealed that the most successful CRDDs are those that were established before WINNER and whose operational and management capacities were progressively built up.

In speaking with beneficiaries and CRDD leadership, as well as the observations of CRDD facilities and activities in the Fieldwork Phase, it was clear that the most successful CRDDs shared three key characteristics.

- ***High involvement of both local institutions and beneficiaries in decision-making*** – The management structures of the CRDDs in Bas Boen and Montrouis comprise several types of stakeholders, including universities and producer associations, in close collaboration with certain local MARNDR directorates. These CRDDs chose training modules in collaboration with the producer associations, who know the needs and interests of their members. In this way, the CRDDs ensure that they are offering training that is relevant and useful to the producers in their intervention areas.
- ***High commitment and capacity of manager(s)*** – The level of engagement and motivation of the individual leaders of each CRDD was not an element that the AT originally set out to measure, but it was clear in interviews and observations that this was one of the most important factors that determined CRDD success. The leader of the Bas Boen CRDD, for example, has managed the CRDD well. He has undertaken a lot of projects, including developing a business plan to diversify revenue streams. Importantly, he does not work alone, but has a team of equally motivated partners. Likewise, the Wynn Farm CRDD is managed by a woman who has demonstrated a vested interest in the promotion of smart agriculture in the Kenscoff area. The CRDD has put in place innovative strategies, such as agri-tourism, to increase its income. While not an official CRDD, the MARNDR-supported Farm of Savane Zombi is managed by a particularly committed team of managers, as shown by their enthusiasm during the DO visit, and confirmed by beneficiaries in the FGDs carried out in Thiotte. In contrast, the CRDD Duvier had managers who appeared less committed and were often “one-man-shows” without the support of a dynamic team.
- ***Revenue sources including services that producers were willing to pay for*** – The third factor that set successful CRDDs apart from those that were less successful was the establishment of revenue sources that allowed the CRDD to be at least partially self-supporting. As mentioned above, the Wynn farm CRDD in Kenscoff grows and sells cut flowers to generate income. SOHADERK has developed relationships with hotels and other local buyers to secure markets for its producers. Figuring out what services a CRDD can offer producers at a price is a difficult endeavor in areas where producers have low levels of disposable income to spend on these services, but the Bas Boen CRDD has managed to provide soil analysis and other extension services, such as research on seeds and training, for which local producers have been willing and able to pay.

AQ 3.2 In what sorts of functions should those centers specialize?

In the focus groups with CRDD beneficiaries, the AT asked about the current CRDD services they most appreciated, as well as the types of services that they are not currently receiving, but would like to receive. The most frequently cited services beneficiaries desired were:

- **Helping producers access inputs** – Access to inputs was a critical barrier discussed by nearly all respondents throughout the fieldwork. Several CRDDs set up input “boutiques” that could sell inputs to producers at a subsidized rate.
- **Providing access to agricultural equipment and services** – Equipment for irrigation, plowing, and harvesting is expensive and impractical for small, subsistence-level farmers. Many producers said that they would be interested in having a way to rent equipment or hire services to be performed on their parcels, if these services were available at a reasonable cost. For example, CRDD Bas Boen has put in place a service that analyzes soil samples, allowing producers to be precise in their fertilizer applications.
- **Sharing market intelligence** – A third service that CRDDs are well-poised to be able to provide is basic market information and intelligence. This could include market prices for various key crops as well as larger trends in successful and profitable crops or varieties, either shared via text message or in public forums. The AT did not learn about any CRDDs that offered this type of service, but the CRDD in Bas Boen has started to explore this possibility.
- **Facilitating relationships with private sector buyers** – Another key constraint to profitable farming that was raised in nearly every data collection event was the difficulty of finding reliable and profitable markets. Individual producers do not have the knowledge or resources to seek out national or international buyers or negotiate with large companies. A CRDD that serves an entire community, however, could play the role of facilitator and researcher. When an interested buyer is found, the CRDD could help to organize the producers into groups or cooperatives and even set up a collection center to meet buyers’ demand and requirements. The CRDD in Kenscoff managed by SOHADERK has facilitated relationships between its beneficiaries and coffee buyer Sélecto and has also helped producers forge relationships with hotels in Petion-Ville that to buy local produce.

AQ 3.3 What have been the impediments to the GOH and other donors making full use of the CRDDs’ service?

Though the CRDD plan for sustainability was to have each one develop independent revenue-generation activities, it was also suggested by those involved with the project that USAID had anticipated that other donors and the GOH would find the CRDDs a useful mechanism for implementing other interventions in these communities and add on complementary activities. From interviews and observations during the fieldwork, it was clear that the GOH and other donors are not making full use of, or managing the CRDDs following the end of the WINNER funding. GOH, CRDD leadership, and donor respondents cited several reasons why the government has not taken on this role.

- **Lack of involvement and ownership** – In interviews, the AT heard from many GOH representatives that they were not particularly involved in the planning or implementation of the WINNER project and, therefore, did not feel a strong ownership or responsibility for the CRDDs.
- **CRDDs are not part of a broader national research and development strategy** – One reason cited by several donor respondents was the fact that the Ministry of Agriculture does not have a national strategy for agricultural research. One MARNDR official spoke of the creation of the national research funds (Fonds national de recherche et développement (FONRED)). However, there is no available funding source to operate the Fund, which would provide resources to oversee the CRDDs at a high level.⁶²
- **Lack of funding that is not tied to projects** – The third reason that was frequently cited by respondents was a lack of funding within the Ministry to support of these centers throughout the country. This is an issue in many countries that are dependent on donor funding in the agriculture sector – support to the Ministry of Agriculture and the sector, in general, comes in the form of project packages, without enough discretionary funds to support the management of a set of centers like the CRDDs.

AQ 3 CONCLUSIONS

CRDDs and similar structures are a useful model that provide some - and could provide more - benefits to communities – As described above, the types of services that CRDDs are providing include access to inputs, equipment, and services. They could also afford market intelligence and market facilitation.

CRDDs and similar structures need committed managers, community and institutional involvement, and revenue-generating sources to be effective and sustainable – These factors are what set the successful, sustainable CRDDs apart from those that discontinued certain services once the WINNER project ended.

The CRDD model is unlikely to be sustainable in the long-term if there is not ownership, capacity and/or funding to manage them – This management could come in the form of GOH support and funding, leadership by other existing community-based organizations, income generation activities, or private sector partnerships that enable them to be self-supporting.

AQ 4 FINDINGS AND CONCLUSIONS

AQ 4: Which policies, procedures, and institutional frameworks in the enabling environment need to be addressed to achieve the results in Question 1?

It was clear from both desk research and fieldwork that the current enabling environment in Haiti is a major barrier to the success and sustainability of agriculture projects. Phases I and II

⁶² <https://www.lenouvelliste.com/article/159057/appui-a-la-recherche-agricole-et-au-developpement-en-haiti-de-lusaid-qui-fait-quoi-comment-et-pourquoi>.

highlighted the following four categories of policies, procedures, and institutional frameworks that are currently hindering the development of the agriculture sector:

1. Insufficient governance and coordination at the sector level;
2. Lack of harmonization of government interventions in the markets for fertilizer and other essential inputs;
3. Incomplete legal frameworks, such as for the transfer of responsibilities to manage public agriculture infrastructure by water user associations and other farmers' associations; and
4. Low government capacity, including high turnover rates, and weak management of procurement.

The fieldwork not only confirmed the four policies, procedures, and institutional frameworks in the enabling environment that need to be addressed to achieve the results in Question 1, but also provided three additional ones:

1. Lack of an Agricultural Insurance Industry;
2. Poor public farm-to-market infrastructure, especially roads; and
3. Weak business environment, especially trade policy and access to credit.

Each of these seven points is discussed in more detail, including examples of how each of these inefficiencies is currently affecting the agriculture sector, in the following section.

AQ 4.1: How and to what extent are these policies, procedures, and institutional frameworks currently affecting agriculture activities and actors, including private sector success?

Insufficient governance and coordination at the sector level

In countries with well-developed agriculture sectors, the Ministry (or Department) of Agriculture acts as an organizing force for the sector at a national level, setting a direction for growth and establishing investment priorities, including, in many cases, a focused research and extension strategy. This is not the case in Haiti, where a national strategy for agriculture does not exist and changes with each new Governmental administration. Additionally, as in many countries with high levels of development assistance, investment focus is determined by ever-changing donor priorities. This inadequate governance affects the sector by reducing opportunities for coordination among the main actors in the sector, causing a lack of synergies and complementarity. Ultimately, a lack of unified focus decreases the effectiveness and sustainability of interventions, as the end of one project and the beginning of a new one often sees significant changes in direction, targeted value chains, and sometimes technical approaches. Changes in governmental administration can make these changes even greater. Agricultural research, which requires dedicated investment and focus over many years or even decades, cannot contribute meaningful findings or develop useful technologies in this kind of political environment. This lack of clear direction was highlighted mainly by government officials, but also by some donors, who agreed that the Ministry of Agriculture does not have complete leadership in the sector. It is unclear whether this lack of leadership is caused by low initiative on the part of the government or deliberate exclusion on the part of donors, or likely both. Some donors bypass the Ministry altogether when planning and implementing projects, while others ask for a rubber-stamped approval, but expect no substantial discussion or involvement. For

example, one government official indicated that the Ministry was insufficiently involved in the implementation of the CRDD approach, which explains why they have not taken over more of the CRDD management post-project. Additionally, Ministry officials noted a lack of coherence in the actions of the various implementing agencies within the government.

The Ministry is aware of, and has attempted at various points, to address this weakness. To put more order in their operations, in the 2000s the Ministry of Agriculture created a coordination body at departmental level call “Table de coordination sectorielle” where all actors at the departmental level, including officials of the Ministry of Agriculture, town mayors and other authorities, and farmers’ organizations met monthly under the leadership of the Departmental Director of the Ministry. By ensuring a better coordination among actors in the sector, the sectoral agriculture tables aimed to enable actors to direct their activities in line with the development policy defined for the country by the government, avoid duplication of activities, and help local authorities (Mayors, CASECs, etc.) to participate in decisions concerning interventions in their areas. This structure existed for some time at the central level as well. However, these roundtables stopped meeting with a change in administration.

While direct implementation of donor-funded projects demonstrates a positive level of engagement by the Ministry, this can also lead to a blurring of roles. Several respondents argued that the Ministry of Agriculture should focus on governance and coordination instead of direct implementation. It is difficult for the government to play its governance and coordination role when it is focused on directly implementing projects and when the Ministry of Agriculture has currently no coordination mechanisms at the sector level.

Lack of harmonization of government interventions in the markets for fertilizer and other essential inputs

Historically, the GOH’s agricultural fertilizer subsidy and seeds scheme has been a pillar of its agricultural policy. This subsidy contributes to providing inputs at low prices to some farmers. International experience shows that this system can weaken private sector performance because it creates distortion that discourages entrepreneurs from investing in the agriculture sector. While several large multilateral institution funded programs have taken important steps towards reforming this policy and substituting it with a market-driven approach focused on a smart subsidy program, two main obstacles reported remain: (1) existing input subsidization programs are insufficiently harmonized,⁶³ and (2) the fact that the externally funded input voucher programs are still perceived as IADB/WB/USAID programs rather than MARNDR activities. In effect, Vouchers for Inputs is a technical approach promoted mainly by the EU through the PASAH project, the IDB via PTТА, the WB through RESEPAG, and USAID via AVANSE. While the approach has the same goal of improving farmers’ access to inputs, it is managed differently by each implementing agency and there is no systematization of lessons learned at a sector level that would lead to approach harmonization. To continue achieving and improving the results described in AQ 1, namely increasing productivity, improving market

⁶³ Several development partners have sponsored voucher programs implemented – or not - by the GOH, notably the WB, IDB, USAID-AVANSE, and AFD.

access, and ultimately raising incomes, Haiti would benefit from a unified strategy for interventions in the input and fertilizer markets.

Incomplete legal frameworks

Within the irrigation sub-sector, the laws regarding irrigation management date from more than 60 years ago (the law of September 1952 and the Rural Code of 1962). These laws specify that water is the property of the State and established the State's control over and responsibility for the systems' management as well as on infrastructure construction. However, there has been success, in Haiti and in many other contexts, transferring the management responsibility to water users' groups. That was the situation in all irrigation infrastructure projects the AT visited: SECAL in the South, PPI and PASAH in the northwest, and WINNER in the West. Based on these results, the Government has systematically tried to transfer this responsibility to the irrigation users' associations⁶⁴. A law is prepared to legalize this practice; however, it has not yet passed congress. When it is passed, the new policy will allow appropriate and legal management of irrigation infrastructure, but the government will likely require some support to put the new regulations into practice fairly and efficiently. These changes are critical to boost agricultural productivity since there are currently 250 irrigation systems in Haiti that irrigate only 90,000 hectares, representing 58 percent of the potentially irrigable surface (154,000 hectares)⁶⁵.

The Ennery-Quinte completion report highlights the fact that since the legislation on the transfer of irrigation management to local user associations had not been passed at the time the project was completed, the results the project achieved in terms of strengthening water user associations were at risk of being unsustainable. The same project put in place a hydro-meteorological monitoring system. However, it was reported that its effectiveness and sustainability directly depend on institutional reforms (fusion of water and meteorological services), which were still being discussed at the end of the project.

A second example is in the Haitian seed sector. MARNDR, together with the UN Food and Agriculture Organization (FAO), organized a workshop to validate a draft seed law accompanying the National Seed Policy⁶⁶, drafted in early 2017. This regulation involves the production, marketing, quality control, and certification of seeds and aims to regulate this sector by implementing legal instruments that are adapted to the new challenges that confront this sub-sector. However, this law has also not yet been passed by congress.

Low government capacity, including high turnover rates and insufficient procurement and monitoring strength

Weak institutional capacity, including both technical capacity and insufficient human and financial resources, for supervision and follow-up on completed interventions has been flagged as a serious constraint to project effectiveness in the agriculture sector. Although MARNDR is present in all ten of the country's geographic departments, the local offices lack human resources and vehicles to not only supervise projects, but also sustain outputs (e.g. irrigation systems, CRDD, etc.) after project completion. This has limited the long-term effectiveness of

⁶⁴ **Politique d'irrigation du MARNDR 2012, June 2012.**

⁶⁵ <https://agriculture.gouv.ht/view/01/2-Irrigation->

⁶⁶ <http://www.fao.org/haiti/actualites/detail-events/fr/c/896478/>

projects and approaches not directly implemented through GOH institutions. For interventions such as PPI and SECAL that GOH institutions implemented, the challenges the GOH faced in supervising the implementation of the irrigation infrastructure activities included long delays in procurement and frequent staff turnover. To address this issue PPI provided additional funds to the United Nations Development Program (UNDP) to implement an administrative capacity building sub-project for MARNDR, but this has not been enough to completely solve the problem.

Lack of agricultural insurance

The absence of an agricultural insurance system makes it difficult for farmers to cope with natural disasters or climate change. Agriculture is an inherently risky sector, so not having a way to mitigate this risk decreases private sector investment, encourages many farmers to continue to practice subsistence agriculture instead of investing in more valuable crops, and even causes some to abandon the agricultural sector altogether. This issue was flagged by all respondent categories in the fieldwork. For instance, after Hurricane Matthew, most farmers lost their crops in the southern department as well as in the Nippes. Some of them had to restart their agricultural activities from scratch. In the north, extended drought has decreased the effectiveness of AVANSE and caused the failure of Lèt Agogo's dairy program, with farmers losing significant levels of investment. Farmers would be more apt to take risks that could lead to higher profits if they knew that there was some type of safety net.

The Agriculture Insurance Financing System project, *Système de financement et d'assurances agricoles en Haïti (SYFAAH)*, insured 3,600 agro-entrepreneurs⁶⁷, especially rice growers in Artibonite and banana producers in Arcahaie. This system prepared the groundwork for a nationwide agriculture insurance system. The program ended in March 2019, but a guarantee fund continues to operate for the agriculture sector, managed by the Industrial Development Funds (*Fonds de Développement Industriel-FDI*). However, there is no indication of a possible national roll out of the SYFAAH developed insurance system, in the meantime, most farmers in Haiti are not covered when disasters strike.

Poor public farm-to-market infrastructure, especially roads

Haiti's rural road network is notoriously bad. This barrier was cited in nearly every interview and focus group as a major impediment to the growth of the agriculture sector. For example, farmers supported by the PASAH project in the northwest had high post-harvest losses every year because the road network that connects them to regional markets is inadequate. Transport conditions were the main handicap for marketing mangos in the country, which otherwise could be a potentially profitable export industry for Haiti. Poor roads undermined the effectiveness of several projects that supported this value chain, such as USAID's HAP project and IDB/MIF's funded mango projects. According to mango producers in Artibonite, a significant amount of their production (40-50 percent according to some) is lost just during transport to market because rural roads are effectively non-existent and after harvest it is up to producers to deliver these mangos to processing and export centers. Being able to deliver goods to market before they spoil, and to travel easily to cities or towns to buy inputs or obtain information, are major

⁶⁷ <https://lenouvelliste.com/article/199810/le-syfaah-confie-officiellement-au-fdi>

game-changers in the farming business. Not having this infrastructure keeps farmers cut off from the larger economy and prevents investments of all types in rural areas.

Macroeconomic climate that disadvantages poor farmers, especially in trade policy, access to credit, and knowledge

Three aspects of the macroeconomic climate in Haiti appear to be particularly relevant to the beneficiaries interviewed during the fieldwork: trade policy, access to finance, and access to research. Government officials and most other respondents recognize that one of the greatest obstacles to the advancement of poor farmers is Haiti's macro-economic environment. Haiti currently has the lowest import tariff on agricultural goods in the region. These policies favor imported agricultural goods and render them cheaper than locally produced agricultural goods. This situation leads to decreased income for small farmers and, therefore, discourages them from investing in the agriculture sector.

Access to finance was cited frequently as another major barrier for small farmers. Contrary to the reality of the period before the 2000s, thanks to the support of key actors, including USAID and the IDB, there are now more financial institutions interested in the agricultural sector, such as savings and credit unions, microfinance institutions, and even commercial banks that have rolled out special programs to finance agriculture. However, farmers' overall access to these financial products has not improved. For example, interest rates range from 20 to 48 percent per annum⁶⁸. There is almost no long-term financing. As a result, there is very little investment, especially because the risks due to natural disaster, climate change, and political instability are on the rise.

The third impediment to small farmers' increased productivity and income is a lack of continuous access to knowledge, especially technological innovations. Although Ministry of Agriculture has made efforts to pilot a research and development strategy, there is still a need for a national research and development strategy to guide agricultural production in the country. The experiences accumulated through the various voucher systems the AT explored in the fieldwork, the CRDDs, and the SYFAAH program are positive models that could be employed to design this strategy. This system would help strengthen interactions among actors, stimulate institutional development and change to support interaction, learning, and innovation, and help to create a more agriculture-friendly enabling environment.

AQ 4 CONCLUSIONS

Current inefficiencies are having a significant impact on the agriculture sector by disincentivizing investments and making access to inputs and market opportunities difficult for producers, decreasing farm productivity and farmers' opportunity to increase their incomes. Therefore, future projects cannot be effective and sustainable if these inefficiencies are not addressed.

Many of the findings for AQ 4 have been discussed throughout this report because the enabling environment affects every aspect of the agricultural sector – from access to water and inputs, to productivity, marketing, processing, and exporting products. While there are

⁶⁸ Interview with Government officials

many ways that interventions can become more effective and sustainable through selection of targeted technical approaches, good management, and strong relationships with the community, ultimately the effectiveness of a technical approach, or combination of approaches, depends as much on whether the approach being applied is in an environment that is conducive to agricultural investment and profitability. The best-planned interventions will continue to be limited in their effectiveness and sustainability by the restrictive and unsupportive enabling environment in Haiti. For example, the absence of an insurance system is discouraging farmers from investing in the agriculture sector and the lack of governance decreases the ownership of approaches and opportunities for coordination by the Ministry of Agriculture. These and other enabling environment inefficiencies discussed above are having a negative impact on the agriculture sector and must be addressed to create a sector where interventions and their technical approaches can be more effective and sustainable, and where agriculture can be a greater contributor to the country's economic growth.

ADDITIONAL FINDINGS RELATED TO CROSS-CUTTING THEMES

In addition to findings related to each of the four AQs, the following four cross-cutting themes were raised in all three phases of this assessment.

Gender integration

The desk review conducted preliminary analysis on gender integration. Overall, the AT found that men dominated the agriculture sector due to the cultural norms that prevail in Haiti where men tend to be the leaders of households and hold positions of authority in government and business. Even though in the law women have equal rights to property, in practice, men tend to hold legal ownership of land and are the primary decision-making authority. Women generally play a significant role in post-harvest sale in the agricultural trade sector, but have limited knowledge of or access to extension services or business support services. Despite many donor project efforts as well as government initiatives to encourage equality, traditional gender roles persist, especially in rural areas. To offer a few examples, the percent of DEED project beneficiaries who were women varied between just 21 and 30 percent. Similarly, in the EU-funded Programme Microcrédit Financement Production Agricole, there were more men than women on the boards of the credit unions supported. The AFD-funded project Appui aux Irrigants et aux Services aux Irrigants (ASIrri), gave no specific attention to women in the management of the board structures even though women were involved in irrigated agriculture.

During the fieldwork, deeper analysis on the level of access and control over resources and benefits between women and men revealed that women had free access to farmer associations and other community groups, but are generally not equally represented. Overall, their social role as housekeepers has been a barrier to their participation in agriculture activities on the same level as men. As a result, men dominated agricultural decision-making. When asked about women's participation in the projects studied, beneficiaries declared that women were included equally in project activities, and enjoyed the same benefits as men, even though it was clear from focus group attendance and from questions about the gender makeup of CBOs and other leadership structures that women were less represented than men.

To address women's inadequate integration, some interventions such as RESEPAG tried to encourage their participation by imposing a minimum quota of 30 percent in all activities⁶⁹. Others, such as WINNER and Lèt Agogo, organized specific activities to promote women's empowerment. The "manman bef" sub-project implemented by Veterimed was an effective way to allow women an opportunity to generate their own income. To help level the playing field, the program granted cows to women so that they became owners and milk producers like men.

Access to finance

Financial services are an essential part of agricultural development because they can empower low income farmers to increase their wealth and food production. At the same time, financial services support larger agriculture investments and agriculture-related infrastructure that require long-term funding⁷⁰. Without access to finance, investment in agriculture at all levels is limited. Starting a business requires a source of capital that is difficult to raise independently, especially if you are a poor subsistence farmer. Having the ability to borrow money at a reasonable interest rate to invest in a new endeavor allows potential entrepreneurs to seize opportunities to better their own situations.

⁶⁹ In Haiti, the principle of the quota of 30 percent of women, to all decision-making positions of the national life, in particular in the public services, was recognized, in 2012 in the amended version of the constitution of 1987, in its article 17-I.

⁷⁰ <http://www.worldbank.org/en/topic/financialsector/brief/agriculture-finance>

In Haiti, there are very few options for agricultural finance for poor farmers. Commercial banks have not branched out into most rural areas, and often the only credit options come from informal money lending sources that can charge up to 100 percent in interest. According to the Microfinance Census report published by DAI/USAID in 2018, productive sectors including agriculture received less than 14 percent of microfinance loans, which were the main source of financing for agriculture in Haiti during the period covered by the present study. According to the WB, lack of credit for production penalizes potential agro-entrepreneurs and market concentration in imported products accelerates.

The desk review indicated that 27 interventions included a specific focus on access to finance. USAID was the donor in many of these, financing 40 percent of the interventions while each other donor supported two to three interventions. Some of the interventions consisted mostly of supporting financial institutions to allow them to expand outreach to agriculture and rural areas, including USAID's HIFIVE project from 2009-2015, the EU's Programme Microcrédit Financement Production Agricole (MFPA) - Haïti, and FAO's Projet de Développement local dans les communes de Marmelade et de Plaisance – Phase II (2005-2011). Other interventions, including the USAID funded MYAPs, promoted self-help savings and loan mutual solidarity groups (MUSOGs). Members of these groups have been able to initiate several small economic ventures adding to their household incomes and overall food security. Other interventions adopted very innovative strategies, such as the Development Assistance Program-Agricultural and Natural Resources Management Component PL480- Title II (2007), which provided seeds on credit to help increase farmers access to seeds. The farmers had to give back the seeds to reconstitute the stock, which will be available to farmers for future agricultural campaigns. The LEAD project developed innovative approaches for capturing a greater portion of the Diaspora remittances by financing projects in areas preferred by Diaspora. The most innovative approach may be that implemented by Vie, Te & Eneji, Phase II (VTE II) in Arcahaie under CFC. This approach transitioned VTE's emphasis from grants to microcredit to incentivize conservation work by making loans available to farmer solidarity groups (such as "gwoupman") that implemented natural resource management activities. CFC followed an annual credit cycle based on the agriculture calendar with two planting and harvest seasons, so the loan is provided in two installments – the first installment allowed investments in basic needs to execute conservation activities and the second installment was paid after the implementation and verification of natural resource management activities.

Most of the loans given through these interventions were directed to finance agriculture campaigns that lasted four to twelve months because the partnering financial institutions were reluctant to provide long-term financing due to the high risk associated with the agriculture sector. Although loan guarantee funds were provided to encourage financial institutions to take more risks, few took advantage of this instrument.

Project beneficiaries agreed in almost all focus groups that access to finance was one of the biggest impediments to developing their farms. For most, the current credit options do not meet their needs. Credit is relatively expensive and does not correspond to the cycle of their activities. Government officials and donor representatives suggested that there are now more financial institutions interested in the agricultural sector such as savings and credit unions, microfinance institutions, and even commercial banks that rolled out special programs to finance

agriculture. However, people's access to financial products has not improved. They especially pointed out interest rates that range from 20 to 48 percent per annum⁷¹ and the fact that there is almost no long-term financing in the market.

Environmental management

Environmental management is a critical issue in Haiti and was, therefore, not surprisingly a frequent topic discussed throughout this assessment. The desk review revealed that 26 interventions had a specific focus on natural resource management. Some interventions conducted watershed development by implementing reforestation and soil conservation efforts to stabilize hillsides and keep rivers and canals flowing downstream. They established gully plugs, dry wall terracing, contour plantings, and contour ditches to control soil erosion. These efforts often complemented the water-for-irrigation efforts to dredge irrigation canals, widen waterways, and protect riverbanks in the valleys. Other interventions such as the MYAP introduced early warning systems, especially to prevent flooding. The PNAP-Programme national d'alerte precoce established a network of 54 hydrometeorology stations to provide data on quantity of water collected to predict flooding. The AT identified two additional notable innovations in the desk review phase. The first, which was developed by the Projet de Mitigation des desastres naturels (PMDN): Phase 1, consisted of developing technology packages to improve watershed management. These technological packages encouraged farmers to grow coffee and cacao to increase the forest cover. The VTE project developed a socio-economically driven watershed rehabilitation program, which simultaneously addressed the underlying factors that drive environmentally destructive practices and increased food security in agriculture households. The CFC approach VTE implemented aimed to incentivize conservation work by making loans available to farmer solidarity groups (such as "gwoupman") that implemented natural resource management activities.

Fieldwork indicated that environmental management was critical to achieving results and sustaining technical approaches implemented in the agriculture sector. To be effective, irrigation infrastructure-focused projects such as PPI and SECAL had to work both downstream and upstream of the watersheds where they intervened. Overall, through these and other interventions, significant levels of funding were invested to protect the environment. However, according to donor representatives and government officials, the environment is still becoming more and more fragile, with more frequent droughts and significant losses in soil fertility. Recent massive deforestation, especially in the mountains, has provoked soil erosion and decreased agriculture productivity. Therefore, natural resource management should be an important component of upcoming interventions in the agriculture sector.

Private sector development and engagement

The desk review indicated that, during the period of 2000 to 2018, interventions have promoted private sector development in agriculture in many ways. Some interventions provided business development services consisting mainly of training and coaching to entrepreneurs operating in this sector. In addition to support provided for financial inclusion, HIFIVE financed business development services to enterprises within the selected value chains. The IDB-funded Programme de Service d'Aide aux Entreprises et de Formation (SAEF) provided business

⁷¹ Interview with Government officials

development services to enterprises operating in agribusiness. Some other interventions supported the development of input stores often called Boutiques d'intrants agricoles (BIA), supplying needed inputs (seeds, fertilizer, and equipment) to rural areas in an effort to increase productivity. Other strategies consisted of linking farmers' associations and cooperatives to private sector distributors, processors, and exporters to foster value chain integration and boost farmer income. A vibrant example is Agri-Supply in the South Department, where farmer cooperatives sell vetiver to the local processing plant. Also, SAK REP developed a high-volume partnership with Whole Foods Market in the US for mangos. Agridev initially facilitated the relationship between producer groups, an exporting agency, and Whole Foods that resulted in the sale of over 45,000 dozen mangos for HTG 2,608,638 (US \$60,666) in FY13. Food processing (mainly cereal, coffee, cacao, peanut, and fruits) was also another way to foster private sector development. This strategy helped not only to add value to products, but also to diversify farmers' income.

Marketing support was provided through training in commercialization and participation in trade fairs, as well as post-harvest value support, including storage, processing, and packaging. The project Kore Kafe focused on marketing to position Haitian coffee within the high-end coffee market in Europe, Japan, and the US. Marketing support included two study tours in Columbia with the collaboration of "Federacion nacional de cafeteros." The HAP - Support to Haiti's Microfinance, Small and Medium Enterprises sector (HAITI MSME) supported CBOs operating in the cacao, mango, and coffee value chains. HAP successfully promoted export markets for mangos, coffee, and cacao, and tested markets for non-traditional exports including pumpkins, yams, and chili peppers. Other projects, such as Lèt Agogo, supported livestock production and enterprises for livestock derived products.

In terms of innovation, the franchise business model created by Veterimed under the Lèt Agogo project was a new model in the Haitian agriculture sector. This organization built a robust national network of dairies that transformed local producers' milk into yogurt, sterilized/pasteurized milk, and cheese, and then sold these finished goods for profit in various sites across Haiti. Another innovation was the recent dissemination of market information via text message to farmers by AVANSE. In the past it was difficult to inform farmers about critical market information, such as coffee or cacao stock prices on international markets. Now, farmers have better exposure to the macro economic situation that affects their livelihoods.

In addition to these findings, our field visits revealed other innovations, such as integrating corporate social responsibility and public-private partnerships into business operations. In the South, Agri-Supply provides agriculture extension support to vetiver cooperatives. It assigns agronomists to support vetiver growers. A vetiver producer and focus group participant of Massey, in Les Cayes stated, "We were given training sessions on contouring techniques, to avoid landslides. The techniques (planting on contour lines, time weeding all year round, etc.) have allowed us to increase our yield. So, we make more money." The company creates loyalty among its suppliers by providing a refund at the end of the production season. It also grants scholarships to young people and builds schools for the children of producers. Mobile clinics are periodically organized under the guidance of doctors to meet producers' health needs. Recently, in collaboration with its international European partners, the company invested in small rural electrification and drinking water projects in the Massey area in Les Cayes. In the Northeast, the

CPCN was able to develop a partnership with Novella. Another kind of public-private partnership is the relationship established between farmers and Collectif de Lutte contre l'Exclusion Sociale (CLES) consisting of providing extension services to farmers and facilitating their access to market by processing and buying their products.

Though donor-led projects are still large drivers of the Haitian agriculture sector, they are not the only players in town; a host of new private investments in the agriculture sector have recently emerged. Before the earthquake Ti Malice was mainly created to process and commercialize rice in the Artibonite Valley. This company has a capacity to transform 20 metric tons per year. After the Earthquake, Haiti broiler, a joint venture between Jamaican and Haitian business partners, launched operations in Haiti. It specializes in agro-processing with operations in livestock, poultry, fish, prepared meats, convenience foods, animal feeds, and an ethanol processing plant. Through a public-private partnership and with the support of US partners, a group of agronomists created Societe Haitienne de Transformation Agro-alimentaire (SATAG) to process breadfruit into a variety of products. A new rice processing plant of 20 metric tons was recently created in the Artibonite valley. In the livestock sub-sector, the AT identified 25 private companies currently operating throughout the country. These experiences show that there are real opportunities for profitable ventures in the Haitian agriculture sector.

Throughout the three assessment phases the AT saw that market-based approaches are effective and sustainable. Therefore, private sector engagement is one effective vehicle that can be used to make interventions more effective, efficient, and sustainable in the agriculture sector. It is a promising way to unlock the full potential of the agriculture sector and to sustain interventions, given that private sector actors have capital, markets, technologies, and can design business models that are profitable both for themselves and farmers. The WB recommends the same idea, saying, "Haiti has to attract the private sector. Only the private sector can really accelerate growth with great investment for Haiti." The gap to be filled now is to create an enabling business climate so that the sector can appeal to private entrepreneurs and investors.

RECOMMENDATIONS

As a result of this Assessment, the AT recommends that USAID focus on four main priority areas in its future programming:

1. Working with the private sector;
2. Strategically selecting technical approaches;
3. Prioritizing sustainability planning; and
4. Motivating the government to substantially improve the enabling environment.

FOCUS ON WORKING WITH THE PRIVATE SECTOR

The single most important factor for sustainability the AT found was the degree to which a project followed private sector business practices, and the degree to which it formed partnerships with existing and profitable private sector businesses. As described throughout this report, and in full alignment with USAID's recently published Private Sector Engagement Policy⁷², a project's results will only be sustainable if viable, profitable enterprises are put in place or developed by the end of the project that do not require outside funding or assistance. Existing private sector entities are generally a better target for assistance than attempting to start new businesses from scratch during a short project timeline, as existing businesses have already identified potentially profitable distribution channels in which to operate, know the local landscape better than outside donors can, and have ironed out many of the barriers to business already. When targeting the production side of the value chain, especially access to inputs, USAID should avoid the temptation to see quick wins that arise from unsustainable practices, such as giving away free inputs or services, and instead look for opportunities to nurture the private sector to provide these inputs and services. It may take more time to see increases in yields and incomes, but the results are more likely to persist in the long term. In terms of access to markets, the private sector is also the most effective place to look. In the assessment, the interventions that showed the greatest sustainability of results post-project were those where a partnership was established with a private sector buyer who continues to purchase produce even without the facilitation of a donor-funded project. If attention is paid to ensuring that these are win-win relationships with benefits for both the producers and buyer, these partnerships can continue for decades, contributing significantly more to farmers' incomes and standards of living than a short-term project that may see benefits for only three to five years.

SPECIFIC RECOMMENDATIONS:

1. Ensure that all projects prioritize working with the private sector, and specifically ensure that project activities and approaches are not undermining existing private sector entities or distorting the markets in an undesired way.
2. Identify and support existing companies that have identified a viable business opportunity instead of attempting to create new businesses from scratch.
3. Look for consistent and long-term buyers as part of the access to markets strategy for every project – including schools, other government institutions, large exporters/processors, and other entities that will continue to exist after the project ends.

STRATEGICALLY SELECT TECHNICAL APPROACHES

The findings sections presented a few technical approaches that seemed particularly effective. In particular, the specific combination of Vouchers for Inputs with Linking Producers to Markets, and a Training/Technology Package appeared to be most effective. The most important thing, however, is that USAID strategically select approaches that make sense for a given situation and value chain. The technical approaches should target specific weaknesses in the value chain for a particular targeted area and set of results, and should be complementary to ensure that the entire value chain functions smoothly. In addition, when selecting an approach or combination of

⁷² https://www.usaid.gov/sites/default/files/documents/1865/usaid_psepolicy_final.pdf

approaches, USAID should anticipate the effects of those approaches on the value chain, watershed, or community as a whole, and incorporate complementary additional technical approaches to mitigate any impacts, or take advantage of any potential opportunities for having an even greater impact. For example, accounting for changes in market prices if production increases significantly, or anticipating water shortages if irrigation-dependent crops are being targeted. If an irrigation activity is planned, other water management or environmental conservation approaches are likely relevant and important to include.

SPECIFIC RECOMMENDATIONS:

1. Ensure that project plans include approaches that address at a minimum access to inputs, access to markets, and where appropriate, access to water.
2. Conduct a value chain analysis prior to, or as part of, the project planning process, to ensure that all inefficiencies in the targeted value chain are identified and incorporated into project planning.
3. Capitalize on the successes, learnings, skills, and relationships established in previous projects, to ensure some continuity among beneficiaries and avoid having to reinvent the wheel for every new intervention.
4. Plan flexibility into whatever technical approaches are selected – different types of beneficiaries may have different needs at different times.

PRIORITIZE SUSTAINABILITY PLANNING

It was surprising to find just how unsustainable the nine donor projects turned out to be (all of which looked very promising in the desk review). Unsustainable donor projects present an enormous missed opportunity to improve producers' situations. USAID needs to make sustainability planning a top priority for all projects. Projects need to ensure a well-developed and viable private sector supply of affordable inputs and services (providing inputs for free or with subsidies during the project will lead to short-term, but not long-term, improvements in productivity). Projects also need to develop reliable marketing options that will continue even without the project's involvement. Finally, even though natural disasters cannot be controlled, projects should have contingency plans specifically in the case of natural disasters, so that the project can continue to provide benefits even when the weather does not cooperate.

Sustainability planning is especially applicable to the CRDDs. Although generation of money through service provision and fundraising was planned to sustain the CRDDs, in most cases, this strategy was started at the end of the project and has not generated enough revenue to maintain the regular activities, leaving the CRDDs financially unsustainable. Therefore, we recommend that USAID better supervise the implementation of similar exit strategies to ensure the sustainability of its intervention.

SPECIFIC RECOMMENDATIONS

1. Ensure that all projects have as their primary objective to leave in place viable, profitable agricultural enterprises that can continue to function without project support.

2. When infrastructure is included as part of a project, sustainability planning is especially important and challenging – money must be set aside from the beginning to ensure maintenance of the infrastructure.
3. When planning for sustainability, ensure that sustainability plans include contingencies in the case of natural disasters and the impacts of climate change.
4. Ensure that demonstration projects, facilitation of access to inputs, and farmer trainings cover more than just one agricultural season to allow for beneficiaries to be convinced of the benefits and make the application of improved techniques a habit.
5. If the sustainability strategy for an intervention is that a government agency will assume ownership and responsibility for management, carefully assess whether this is realistic before beginning the intervention and look for other solutions if this is a risk.
6. Seek out and develop motivated, creative, and hard-working community leaders and entrepreneurs to manage the CRDDs – the CRDD's success depends in large part on the intrinsic motivations of individual leaders.

Work with other donors to support the Haitian Government in the strengthening of its research and extension system. The Assessment revealed that the Haitian agriculture research and extension system is not suitable to develop the sector. The Government agriculture farms created to support research and extension are not fully operational and the CRDDs are not yet integrated in the system. The specific characteristics of agricultural research commands that basic research be treated as a public good. Therefore, central government is likely to maintain a regulatory role in agricultural research and also a financing role for some types of research, particularly basic research and non-saleable research products⁷³. However, the assessment indicates that the Ministry of Agriculture does not have funds to even properly maintain its farms. The recently FONRED created to boost research is not yet included in the national budget. During the field work, several donors manifested their interest to support research and development, as well as foreign US universities. The strengthening of the agriculture **research and extension system can involve, among other things, the following aspects:**

- I. Institutional
 - Revamp the national farms in term of planning, strategy, equipment, staffing, etc.
 - Integrate the CRDD into the system
 - Integrate the Agriculture universities into the system
- II. Technical
 - Production and diffusion of improved basic seed
 - Oversee and coordinate research in different parts of the country and in different value chains
 - Extension of research results

⁷³ <http://www.fao.org/3/y2006e/y2006e0a.htm>: reform and decentralization of agricultural services: a policy framework, fao, 2001.

MOTIVATE THE GOVERNMENT TO SUBSTANTIALLY IMPROVE THE ENABLING ENVIRONMENT

The enabling environment will continue to be a hindrance to the effectiveness and sustainability of donor projects and private investment in agriculture. USAID should use its leverage to encourage the government to make substantial improvements – many donors make funding or projects conditional on specific improvements in the enabling environment, such as improved trade policies, maintenance funds for roads, etc. USAID should consider how it can use its influence in Haiti to incentivize the government to make changes. Based on this assessment, the key priority areas that could substantially improve the enabling environment for all agricultural enterprises are:

1. Governance and coordination at the sector level;
2. Harmonization of government interventions in the markets for fertilizer and other essential inputs;
3. Improving currently incomplete legal frameworks, such as for the transfer of responsibilities to manage public agriculture infrastructure by water user associations and other farmers' associations;
4. Increasing government capacity, including lower turnover rates, and improve management of procurement;
5. Development of an Agricultural Insurance Industry; and
6. Improvement in public farm-to-market infrastructure, especially roads.

SPECIFIC RECOMMENDATIONS

1. Realistically assess a community's access to inputs and markets, especially in terms of road infrastructure, and account for these barriers when planning interventions.
2. Use available influence to motivate the government to address issues such as poor infrastructure, lack of coherent governance of the sector, and gaps and weaknesses in laws and policies.
3. Consider focusing a future intervention on the development of a private-sector agricultural insurance system.
4. Serve as a leader among donors to include the Ministry of Agriculture in all project planning and discussions, attempting wherever possible to encourage the Ministry to take the lead in organizing agricultural donors and interventions, establishing mechanisms for donor coordination and providing general direction to the Agriculture Sector.
5. Encourage the Ministry of Agriculture to develop a long-term agricultural strategy for the country and to the extent possible, encourage other donors to plan their interventions within the framework of this strategy.

ANNEXES

ANNEX A: ASSESSMENT STATEMENT OF WORK

Haiti Comprehensive Agriculture Assessment

PURPOSE OF THE ASSESSMENT

The assessment's purpose is to inform the design of USAID/Haiti's new agricultural activities, building upon the successes of Feed the Future and other successful activities by learning from existing best practices and approaches. Results of the assessment will guide the Mission's future investments to meet the needs of key stakeholders in the agriculture sector.

To this end, the assessment will:

- Examine the success (based on a set of criteria elaborated below in the first technical assessment question) of the various technical approaches and interventions in Haiti supported by donors, including USAID/Haiti, Government of Haiti (GoH) agencies, non-governmental organizations (NGOs), and the private sector to identify best practices and approaches;
- Identify which of the agricultural activities that were deemed 'successful' have been most sustainable; and
- Identify which approaches including: 1) agricultural extension models; 2) agribusiness or industrial approaches; 3) policy, procedures and institutional framework approach, and 4) other approaches need to be addressed to attain sustainable results.

The assessments will inform understanding of:

- Geographical advantages/disadvantages and key agro-ecological regions to identify opportunities or constraints to growth;
- Why certain interventions work (key ingredients for success) and how they can be sustained; and
- Farmers' perception about interventions successes and approaches.

The assessment will ultimately lead to identifying approaches from which the Economic Growth and Agriculture Development (EGAD) Office can choose the interventions it will foster through new programming aimed at supporting Haitian agriculture development.

BACKGROUND

Agriculture is central to the Haitian economy, employing 60 percent of the population although generating only 25 percent of gross domestic product. The sector represents the main economic activity in rural areas, through subsistence farming, sale of cash crops, and income generation through seasonal farm labor. Nonetheless, agricultural productivity is so low that Haiti imports between 48 and 52 percent of its food needs, of which between three and five percent is food aid. Agricultural productivity in Haiti has systematically declined in the last three decades. A shift to annual cropping on steep slopes has caused erosion and exacerbated flooding that affects the slopes, as well as the productive plain areas. As a result, the country experiences frequent floods, erosion, a lack of ground water for irrigation and depletion of basic soil nutrients. Reversing these trends is the challenge facing both the GoH and the donor community.

USAID/Haiti has been supporting agriculture development in Haiti for years, and interventions have experienced measured success. At the same time, USAID/Haiti is interested in exploring

new opportunities and methodologies to improve programming in agriculture and agro-business. The EGAD Office has recently implemented several agriculture projects in Haiti, including AVANSE, Chanje Lavi Plantè, WINNER, SMASH, etc. EGAD is now in the process of designing new agricultural activities and would like to build on lessons learned from both USAID/Haiti funded projects, as well as activities managed by other donors, the GoH, NGOs, and the private sector.

ASSESSMENT QUESTIONS

The assessment data collection will be implemented in two phases: (1) A scoping phase, based on an in depth desk review with the objective to capture major successes in approaches and interventions from the donor, implementer, private sector, NGOs, and beneficiary perspectives, will inform (2) a field phase, collecting primary data with the objective of examining the level of sustainability of interventions, the most efficient and effective model for the provision of extension services, and the stakeholders' perspectives on the enabling environment.

Questions and sub-questions for each phase are:

Phases	Questions	Sub-questions
I. Desk Review Phase	1. Which technical approaches including: 1) agricultural extension models; 2) agribusiness or industrial approaches; 3) policy and institutional framework support; and 4) Other interventions supported by USAID/Haiti, other donors, GoH agencies, NGOs and the private sector have demonstrated effectiveness towards attaining the following results in Haiti: • Increase beneficiaries' household incomes • Create jobs • Improve market access at the end of a value chain • Improve producers' resilience at the beginning of the value chain • Improve natural resource management • Improve productivity at the farm-level • Improve food security	1.1. To what extent and how have approaches or interventions been combined to generate greater results?
		1.2. What project and non-project related factors—such as the development corridors in the North and West under the post-earthquake strategy—have enabled or constrained the effectiveness of the approaches and/or interventions toward achieving results?
II. Fieldwork Phase	2. To what extent have the technical approaches and/or interventions identified in the desk review demonstrated sustainability? 3. What are the benefits to the agriculture sector of the Centers for Sustainable Rural Development (French acronym CRDD) and other similar organizations?	2.1 What factors have enabled or constrained sustainability?
		3.1 What factors determine success/weakness of CRDD and similar organizations? 3.2 In what sorts of functions should those centers specialize?
		3.2. What have been the impediments to the GoH and other donors making full use of the CRDDs' service?

	4. Which policies, procedures, and institutional frameworks in the enabling environment need to be addressed to achieve the results in Question 1?	4.1. How and to what extent are these policies, procedures, and institutional frameworks currently affecting agriculture activities and actors, including private sector success?
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ASSESSMENT TEAM COMPOSITION

The assessment team will be composed of a Team Leader (TL), an Assistant Team Leader and two data collectors.

The team leader should have extensive experience working with agricultural programs in the developing world, preferably with experience in Haiti and/or Africa. S/he should have demonstrated experience in monitoring and assessment of agriculture, food security and watershed management projects. He/she will be responsible for planning the assessment, coordinating the implementation of the assessment, assigning assessment responsibilities and tasks to other team members, and authoring the report which will include the findings, conclusions and recommendations. The Team Leader must be fluent in written English.

The ATL should be an agronomist with in depth knowledge of Haitian agriculture. The ATL should demonstrate expertise that can complement the TL's profile for this assessment. The Assistant Team Leader shall have experience in designing, implementing and analyzing qualitative research methods such as Focus Groups, Key Informant Interviews in the agriculture sector or in any relevant development related sector.

The required qualification for the two consultants includes:

1. Advanced degree (master's or above) or equivalent in agriculture, economics and/or assessment related field.
2. Demonstrated experience in conducting assessment and/or evaluation
3. Experience in interacting with developing country governments, international organizations, other bilateral donors, civil society representative

The two data collectors will assist the other team members in collecting the data. The data collectors should be fluent in French and Creole and demonstrate experience in conducting interviews and focus groups.

All team members will be required to provide a signed statement attesting to a lack of conflict of interest or describing any existing conflict of interest.

The assessment team shall demonstrate familiarity with USAID's assessment policies and guidance included in the USAID Automated Directive System (ADS) in Chapter 200.

ASSESSMENT SCHEDULE

Proposed Timeline

Events	Due date	Notes
Final SOW completed	December 15	
Work plan submitted	January 12	20 business days after receiving final SOW
Work plan approved	January 26	Two weeks after submission
Inception/Desk Review Report	February 16	Two weeks of data collection and one week for writing
Inception/Desk Review approved	March 2	Two weeks after submission and fine-tuning questions for fieldwork
Design Report submitted	March 9	One week after desk review approval
Field data collection begins	February 19	Field mission will last three weeks
Field work completed	March 30	
Findings Presentation	April 13	Two weeks after completion of data collection
Draft report submitted	April 20	One week after data presentation
Feedback from USAID/Haiti on report	May 4	Two weeks after submitting report
Final report completed	May 18	Two weeks after receiving feedback

FINAL REPORT FORMAT

The assessment final report should include an abstract; executive summary; background of the local context and the strategies/projects/activities being evaluated; the assessment purpose and main assessment questions; the methodology or methodologies; the limitations to the assessment; findings, conclusions, and recommendations. For more detail, see “How-To Note: Preparing Assessment Reports” and **ADS 201mah, USAID Evaluation Report Requirements**. An optional evaluation report [template is available in the Evaluation Toolkit](#).

The executive summary should be two to five pages in length and summarize the purpose, background of the project being evaluated, main assessment questions, methods, findings, conclusions, and recommendations and lessons learned (if applicable).

The assessment methodology shall be explained in the report in detail. Limitations to the assessment shall be disclosed in the report, with particular attention to the limitations associated with the assessment methodology (e.g., selection bias, recall bias, unobservable differences between comparator groups, etc.)

The annexes to the report shall include:

- The Assessment SOW;
- Any statements of difference regarding significant unresolved differences of opinion by funders, implementers, and/or members of the assessment team;
- All data collection and analysis tools used in conducting the assessment, such as questionnaires, checklists, and discussion guides;
- All sources of information, properly identified and listed; and
- Signed disclosure of conflict of interest forms for all assessment team members, either attesting to a lack of conflicts of interest or describing existing conflicts of.
- Any “statements of difference” regarding significant unresolved differences of opinion by funders, implementers, and/or members of the assessment team.
- Summary information about assessment team members, including qualifications, experience, and role on the team.

In accordance with ADS 201, the contractor will make the final assessment reports publicly available through the Development Experience Clearinghouse within three months of the assessment's conclusion.

CRITERIA TO ENSURE THE QUALITY OF THE ASSESSMENT REPORT

Per **ADS 201maa, Criteria to Ensure the Quality of the Assessment Report**, draft and final assessment reports will be evaluated against the following criteria to ensure the quality of the assessment report.⁷⁴

- Assessment reports should represent a thoughtful, well-researched, and well-organized effort to objectively evaluate the strategy, project, or activity.
- Assessment reports should be readily understood and should identify key points clearly, distinctly, and succinctly.
- The Executive Summary of an assessment report should present a concise and accurate statement of the most critical elements of the report.
- Assessment reports should adequately address all assessment questions included in the SOW, or the assessment questions subsequently revised and documented in consultation and agreement with USAID/Haiti.
- Assessment methodology should be explained in detail and sources of information properly identified.
- Limitations to the assessment should be adequately disclosed in the report, with particular attention to the limitations associated with the assessment methodology (selection bias, recall bias, unobservable differences between comparator groups, etc.).
- Assessment findings should be presented as analyzed facts, evidence, and data and not based on anecdotes, hearsay, or simply the compilation of people's opinions.
- Findings and conclusions should be specific, concise, and supported by strong quantitative or qualitative evidence.
- If assessment findings assess person-level outcomes or impact, they should also be separately assessed for both males and females.
If recommendations are included, they should be supported by a specific set of findings and should be action-oriented, practical, and specific.

OTHER REQUIREMENTS

All quantitative data collected by the assessment team must be provided in machine-readable, non-proprietary formats as required by USAID's Open Data policy (see ADS 579). The data should be organized and fully documented for use by those not fully familiar with the project or the assessment. USAID will retain ownership of the survey and all datasets developed.

All modifications to the required elements of the SOW of the contract/agreement, whether in technical requirements, assessment questions, assessment team composition, methodology, or timeline, need to be agreed upon in writing by the COR. Any revisions should be updated in the SOW that is included as an annex to the Assessment Report.

⁷⁴ See ADS 201mah, USAID Evaluation Report Requirements and the Evaluation Report Review Checklist from the Evaluation Toolkit for additional guidance.

ANNEX B: LIST AND DEFINITION OF THE 25 TECHNICAL APPROACHES

Note: This table includes those of the additional 40 interventions identified during Phase II for which information regarding technical approaches could be obtained. Note also that most interventions used more than one technical approach (some up to five approaches.)

NUMBER OF INTERVENTIONS USING EACH APPROACH		
CATEGORY	TECHNICAL APPROACH	NUMBER OF INTERVENTIONS FEATURING THIS APPROACH
Approaches related to Agricultural Extension	1. Farmer-to-Farmer/Model Farmer Training and demonstration	4
	2. Farmer field schools	13
	3. Technology Inputs + training	23
	4. Establishing Research Centers/Labs for crop production	1
	5. Multiplication and breeding centers for small animals	7
Agribusiness and Market-focused Approaches	1. Business development training/services or other support for processors/ exporters/ distributors	21
	2. Value chain integration - linking producers to processors/exporters, including through trade fairs, other marketing support and producer business groups	21
	3. Small scale training on value-added products and improving quality for producers/producer groups, including seed and input production	14
	4. Setting up service centers/input centers/ collection centers with infrastructure to serve rural areas	11
	5. Animal Husbandry and livestock market infrastructure and marketing support	4
Policy/ Institutional Strengthening Approaches	1. Strengthening the Ministry of Agriculture at central and local level/ Direct support to gov't institutions - software, equipment, training, buildings	4
	2. Support to government to draft new agricultural policies and strategic plans – i.e. irrigation, decentralization, etc.	6
	3. Support to local organizations - i.e. regional development institutions, irrigation management groups	28
	4. Support to local authorities (CASEC, ASEC, Mayor)	4

Access to Finance Approaches	1. Vouchers for Inputs	7
	2. Supporting financial institutions to expand to rural areas - loan guarantees	11
	3. Create/support community-based financial institutions (VSLA, Mutuelle de Solidarité, CREP)	6
	4. Working with diaspora remittances to invest in rural agriculture	1
Watershed and Environmental Management Approaches, Agro-ecology and Climate Smart Agriculture	1. Reforestation and physical erosion control to protect waterways, flood control	14
	2. Training on sustainable agricultural techniques	15
	3. Participatory community environmental management planning	13
	4. Development of technology packages such as Early Warning Systems (EWS) to improve Watershed management	3
	5. Credit for Conservation (CFC) approach	2
Agricultural Infrastructure Approaches	1. Irrigation infrastructure	18
	2. Farm-to-market road infrastructure	7

1. APPROACHES RELATED TO AGRICULTURAL EXTENSION

Agriculture extension is the delivery of information to farmers.⁷⁵ This delivery of information can take many forms and can focus on any number of topics, but all agriculture extension has the goal of increasing farmers' knowledge and/or skills to improve their productivity, food security, and livelihoods.

The agricultural extension approaches practiced in Haiti during the last 18 years are based on a history of agricultural practices that goes back to around 1915, with the introduction of improved seeds and new techniques through the education of farmers and the demonstration of new techniques. Extension agents relied on educational materials (booklets, leaflets) to disseminate a set of modernizing (supposedly universal) technical packages adapted to the network of experimental farms of the Ministry of Agriculture.

In the mid-1970s the Research-Development-Training approach was launched, with the creation of the Madian-Salagnac Center, which is under the Ministry of Agriculture. The promoters of this public center decided to start with a diagnosis of the problems, of their constraints, and to identify the existing opportunities. The actions and interventions of the Madian-Salagnac Center revolve around three major axes: Research, Training, and Development. In terms of impact, the Center's interventions allowed the introduction and directly contributed to the development of

⁷⁵ Anderson, JR & Gershon, F 2007, 'Chapter 44: Agricultural Extension' Handbook of Agricultural Economics, vol. 3 pp. 2343-2378

market-gardening income generating crops in the Plateau du Rochelois, which now supplies the Port-au-Prince market with cabbages, carrots, and yams.

The AT identified the following four approaches to Agricultural Extension that have been used in Haiti in the past 18 years. Each is defined and described in more detail below:

- Farmer-to-Farmer/Model Farmer Training and demonstration
- Farmer Field Schools
- Technology/Inputs + Training package
- Establishing Research and Extension Centers/Labs for crop production and/or animal reproduction

A. Farmer-to-Farmer/Model Farmer Training and demonstration

Definition: The Farmer-to-Farmer or Model Farmer approach is characterized by the use of local farmers as models and instructors for the other farmers in their immediate vicinities. In this approach, the intervention recruits willing farmers to serve as models for their community and helps these farmers to set up a demonstration plot that showcases the new technology, crop varieties, or agricultural techniques that the intervention is hoping to spread. These farmers agree to open their fields for visits and trainings for other farmers, agree to follow the guidance of the intervention staff, and serve as advisors to their neighbors who may be interested in making similar investments. This approach allows farmers who may be hesitant to try something new to see the innovation in practice by their peers before having to make the decision for themselves. In addition, even after the intervention has finished, the model farmers remain in the community to continue to serve as advisors and de-facto extension agents for their neighbors.

Examples of Interventions that illustrate the Farmer-to-Farmer Approach:

- o USAID's Multi-Year Assistance Program for Haiti (MYAP)
- o Switzerland Cooperation's SDC Programme d'Appui à la Production Agricole en Haïti (PAPAH)

Preliminary Assessment of Effectiveness:

The effectiveness of this approach was assessed in only one report. In the MYAP intervention, it appears to have contributed to increasing resilience, food security and natural resources management. These questions will be addressed in-depth in Phases II and III.

B. Farmer Field Schools

The Farmer Field School provides training to farmers on new technologies, new high-value crop varieties or cultivation techniques much like the Farmer-to-Farmer or Model Farmer approach. The Farmer Field School Approach was developed nearly 25 years ago by FAO in Southeast Asia as an alternative to the top-down extension method that was previously used, particularly during the Green Revolution.⁷⁶ Farmer Field School Farms normally operate with a group of 20 to 25 farmers who meet once a week under the supervision of a qualified facilitator. This group is divided into subgroups of five farmers who observe and compare two parcels during an entire cropping season. One plot is managed using traditional techniques, while the other is used to

⁷⁶ <http://www.fao.org/agriculture/ippm/programme/ffs-approach/en/>

test what might be considered "best practices" promoted by the project. Based on the observations made, they present their conclusions at the end of the weekly meeting. Finally, they conduct discussions and planning activities for the coming weeks. The Farmer Field School offers participants the opportunity to discuss, modify and even bring new ideas. This participatory method encourages experimentation, organization and group decision-making, allowing farmers to "own" and adopt improved practices.

Examples of Interventions that illustrate the Farmer Field School Approach:

- o FAO's Renforcement de la résilience aux changements climatiques et réduction des risques des catastrophes en agriculture pour améliorer la sécurité alimentaire en Haïti après le séisme
- o USAID's Développement économique pour un environnement durable (DEED)

Preliminary Assessment of Effectiveness:

Four interventions had reports that could provide information about the effectiveness of this approach. Across these four interventions, this approach contributed to increasing farm productivity leading to increased incomes among the farmers who adopted the targeted approaches. Job creation, increased food security, increased resilience and improved food security were also mentioned as results of these interventions, though the AT does not know if this approach (rather than others that were also followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions.

C. Technology/Inputs + Training Package

Many of the interventions the AT is researching used an approach that combined free or subsidized inputs, equipment or genetic materials in addition to training on how to make use of them. The general idea behind this approach is that it removes the barrier to entry that often comes with the introduction of new technologies or crop varieties by providing this initial investment free to farmers who participate in the training. A certain level of participation in training is generally required, to ensure that the farmers know how to use the inputs or technology correctly and will be more likely to see success than if either the training or inputs were provided independently of the other.

Examples of Interventions that illustrate the Technology/Inputs + Training Package approach:

- o World Bank's Relance de l'Agriculture : Renforcement des Services Publics Agricoles - Phase II
- o USAID and World Vision's, Sac Plen Resiliency Enhancement Program (SAK REP)

Preliminary Assessment of Effectiveness:

Of the interventions following this approach, 13 had information about achievement of results. All seven of the targeted results were achieved in one or more of these interventions, though the AT does not know if this approach (rather than others that were also followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions.

D. Establishing Research and Extension Centers/Labs for Crop Production and/or Animal Reproduction

Establishing research centers, labs, or animal breeding centers is an important part of improving the agricultural sector in a country, as it can, if successful, help to modernize the agricultural economy through the introduction and propagation of improved animal husbandry and plant crop varieties. Research centers can continually improve the genetics of local plant and animal races, allowing local producers to benefit from improved yields, greater resilience to natural disasters and respond to market demand locally rather than relying on higher-cost, imported genetic material.

Examples of Interventions that illustrate the Research and Extension Centers/Labs Approach:

- o North Carolina State University and Christianville Foundation's Haiti Goat Project
- o PASF, American Red Cross and Heifer International's Food Security Northwest Haiti Project

Preliminary Assessment of Effectiveness:

None of the interventions following this approach had documents that assessed the effectiveness at achieving the targeted results. Phases II and III will attempt to find answers to these questions.

2. AGRIBUSINESS/MARKET SYSTEMS APPROACHES

A primary goal of many agricultural investments is to improve the profitability and efficiency of agricultural markets. The following approaches focus on improving the agricultural markets at various stages in the value chain – including collection, transformation, distribution, and marketing of agricultural products.

The AT has identified the following five approaches to Agribusiness/Market Systems that have been used in Haiti in the past 18 years. Each is defined and described in more detail below:

- Value chain integration - linking producers to processors/exporters, including through trade fairs, other marketing support and producer business groups
- Small scale training on value-added products and improving quality for producers and producer groups, including seed and input production
- Business development training/services or other support for processors/exporters/distributors
- Setting up service centers/input centers/collection centers with infrastructure to serve rural areas
- Animal Husbandry and livestock market infrastructure and marketing support

A. Value Chain Integration - linking producers to processors/exporters, including through trade fairs, other marketing support and producer business groups

This approach is often simply referred to as the “Value Chain Approach” and includes an examination of the various steps between production of a specific agricultural product and its eventual sale at market, then attempting to link the producers to markets through a variety of methods. These methods could include trade fairs to introduce producers and producer groups to distributors/exporters/processors, bringing international buyers to the country to meet with growers and encourage the signing of production contracts, and organizing producers into producer groups to attract larger-scale buyers.

Examples of Interventions that illustrate the Value Chain Integration Approach:

- o IDB's PIA-A-Programme d'intensification Agricole-Artibonite
- o The Agence Française de Développement (AFD) and IDB's KOREKAFE - Consolidation de la compétitivité et la durabilité des coopératives caféières haïtiennes

Preliminary Assessment of Effectiveness:

Ten of the interventions following this approach had information pertaining to achievement of results. All seven of the targeted results were achieved in one or more of these interventions, though the AT does not know if this particular approach (rather than others that were also followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions.

B. Small Scale Training on Value-added Products and improving quality for producers and producer groups, including seed and input production

The value-added products approach focuses on helping small producers to increase their revenues and profitability by encouraging them to transform their production into higher-value products through improved packaging, preservation or switching to higher-value, niche products. Examples include starting a small cooperative that dries or preserves produce, makes cheese from milk, or switches to organic practices to reach a niche market. Several interventions in this category encourage farmers to grow seed-quality produce (production is used as seeds instead of as food), which commands a higher price and generates more income than commodity-quality production.

Examples of Interventions that illustrate the Value-Added Products Approach:

- o USAID's Hillside Agricultural Program (HAP) - SUPPORT TO HAITI'S MICROFINANCE, SMALL AND MEDIUM ENTERPRISES SECTOR
- o USAID, Coca-Cola and Technoserve's Haiti Hope project

Preliminary Assessment of Effectiveness:

Only four interventions that used this approach had information about effectiveness. WINNER, HAP, Development Assistance Program and MYAP, all USAID interventions, were all deemed effective or somewhat effective in achieving their results. All seven of the targeted results were achieved in one or more of these interventions, though the AT does not know if this approach (rather than others that were also followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions.

C. Business Development Training/Services or other support for Processors/Exporters/ Distributors

An essential part of most agricultural value chains is the processor, distributor and/or exporter, who buys raw agricultural products from farmers and transforms them into higher-value products or serves as a link to international markets. Many farmers lack access to these agricultural goods purchasers, and therefore, have limited market options. Interventions that focus on these intermediary services may include grants to small businesses to purchase processing equipment, business competitions that offer start-up funding to entrepreneurs who want to start an agricultural processing business in a rural area, or providing training and

advisory services to small businesses to help them expand and better attract both high-quality products from farmers and find more profitable markets for their finished goods.

Examples of Interventions that illustrate the Business Development for Processors/Exporters/Distributors Approach:

- o USAID's Leveraging Effective Application of Direct Investments (LEAD)
- o IDB's Programme de Service d'Aide aux Entreprises et de Formation (SAEF)

Preliminary Assessment of Effectiveness:

Only three interventions that used this approach had information about effectiveness. USAID's LEAD intervention and the Mercy Corps VTE intervention both were very effective at achieving their targeted results, while IDB's SAEF intervention only achieved one out of three of its targeted results. All seven of the targeted results were achieved in one or more of these interventions, though the AT does not know if this approach (rather than others that were also followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions.

D. Setting Up Service Centers/Collection Centers with Infrastructure to serve rural areas

Often the difference between a profitable farmer and an unprofitable one is the farmer's access to a market for his or her products. Many rural areas are isolated far away from towns where markets exist. Transportation to those urban areas can be difficult and too costly to be worthwhile for a small farmer with limited production. When multiple farmers can collect their products together in one place, there is a greater chance that a buyer will decide it is worthwhile to make the trip to the area to purchase that production. The establishment of collection centers gives producers a place to take their produce and aggregate it into a quantity that is attractive to potential buyers. This eliminates the need for farmers to individually transport their small quantities to market, saving time and transportation costs. Several interventions have worked to set up this type of collection center in rural areas and have organized communities to manage them. These collection centers can focus on one commodity or may allow for the aggregation of several commodities. They can be managed as a cooperative, an association, or as a small business.

Examples of Interventions that illustrate the Service/Collection Centers Approach:

- o USAID's Grant for Société Générale de Production Agro-Industrielle (SOGEPA)
- o Conseil Départemental des Hauts-de-Seine /Agence Française de Développement/Doen, Solidaridad et Progreso Foundations - Consolider un réseau de 7 coopératives de petits planteurs pour la production et la commercialisation d'un cacao fermenté de qualité

Preliminary Assessment of Effectiveness:

Only two interventions that used this approach had information about effectiveness – AFD's ASIRRI intervention and FAO's intervention in Marmelade and Plaisance. Between these two interventions, the following targeted results were achieved: increased productivity, increased markets, increased household income, improved natural resources management, and job creation. However, the AT does not know if this approach (rather than others that were also

followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions.

E. Animal Husbandry and Livestock Market Infrastructure and Marketing Support

Most Haitian agriculture investments focus on plant crops, but livestock interventions do occur as well from time to time. Many of these interventions include construction or upgrading of livestock markets and processing facilities including slaughterhouses, accompanied by training in how to market animals and animal products more profitably both locally and abroad. This training may include how to meet international standards for the export of animal products, could connect local sellers or processors with outside markets, or may include organization of regular livestock market days to serve the region.

Example of an Intervention that illustrates the Livestock Market Approach:

- o USAID, World Vision and Catholic Relief Services (CRS) - Development Assistance Program Agricultural and Natural Resources Management Component

Preliminary Assessment of Effectiveness:

In the USAID intervention that used this approach, effectiveness was noted in achieving job creation, improved market access, improved resilience, improved productivity and improved natural resource management. However, the AT does not know if this approach (rather than others that were also followed by this intervention) led to the achievement of these results. Phases II and III will attempt to find answers to these questions.

3. POLICY/INSTITUTIONAL STRENGTHENING APPROACHES

The policy and institutional environment affect every piece of the agriculture sector. Confusing, dated, or biased policies can inhibit investment and market development. Cumbersome procedures and processes can discourage participation in the above-board economy and fuel an underground economy. Many interventions in agriculture recognize that without improvements in the political and/or institutional environment, other efforts to boost productivity or develop markets will be unlikely to see sustained results. The following four approaches have been pursued in Haiti over the past 18 years:

- Strengthening the Ministry of Agriculture at central and local level
- Support to government to draft new agricultural policies and strategic plans
- Support to local and community-based organizations
- Support local authorities

A. Strengthening the Ministry of Agriculture at Central and Local Level/Direct Support to Government Institutions - software, equipment, training, buildings

Many donors have recognized the need to improve the regulatory environment that surrounds the agriculture sector and streamline the government bureaucracies that serve the sector. Several interventions over the past twenty years have attempted to address issues within the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). These interventions have provided training for government officials, modern technology including

equipment and software, and financed the modernization of MARNDR office spaces at both the national and the regional level.

Examples of Interventions that illustrate the Strengthening the Ministry of Agriculture Approach:

- o World Bank's Strengthening the Management of Agriculture Public Services (GFRP)
- o FAO's Renforcement de la résilience aux changements climatiques et réduction des risques des catastrophes en agriculture pour améliorer la sécurité alimentaire en Haïti après le séisme

Preliminary Assessment of Effectiveness:

Only three interventions that used this approach had information about effectiveness. All three of these interventions (World Bank's GFRP, IDB's PMDN, and FAO's intervention listed above) were very effective, surpassing their targets. All seven of the targeted results were achieved in one or more of these interventions, though the AT does not know if this approach (rather than others that were also followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions.

B. Support to Government to Draft New Agricultural Policies and Strategic Plans

In this approach, interventions provide legal assistance to the Haitian government agencies in the form of assistance in analyzing inefficiencies in the existing legislation and regulatory framework, and in drafting new legislation that will improve the business environment and address these inefficiencies. Over the past twenty years, interventions employing this approach have provided legal and regulatory support in the drafting of legislation around irrigation and water users associations, the government's approach to mitigating climate change, and the decentralization of several government procedures.

Examples of Interventions that illustrate the Support in Drafting New Agricultural Policies Approach:

- o The Spanish Agency for International Cooperation and Development's (AECID) Projet de Renforcement de la Pêche Maritime dans le Département du Sud-est
- o HELVETAS' Eau et protection des forêts

Preliminary Assessment of Effectiveness:

Only three interventions that used this approach had information about effectiveness (two USAID interventions and one International Fund for Agricultural Development [IFAD]/OPEC intervention). The USAID DEED project was effective at meeting all six of the results that it targeted. The other two interventions were less effective – achieving only one of the targeted results each. Phases II and III will attempt to better understand the apparent differences in effectiveness between interventions that followed this approach.

C. Support to Local and Community-based Organizations - i.e. regional development institutions, irrigation management groups

Local community-based institutions are pivotal in the smooth running of an agricultural system. In Haiti, community-based organizations (CBOs) often manage irrigation systems, organize producers into groups to facilitate purchasing inputs and marketing their products, and organize community-improvement projects such as rural road maintenance, flood control, community

events and assistance to the poor. Many interventions have focused on strengthening CBOs, providing training in business and negotiation skills, helping set up irrigation management systems for new irrigation infrastructure, and facilitating the creation and implementation of local development plans.

Examples of Interventions that illustrate the Support to Community-Based Organizations Approach:

- o AFD's PROJET « ASIRRI » APPUI AUX IRRIGANTS ET AUX SERVICES AUX IRRIGANTS
- o USAID's limye ak organizasyon pu kolekyivite yo ale lwen (LOKAL)

Preliminary Assessment of Effectiveness:

Ten interventions that used this approach had information about their effectiveness. Among these, all seven targeted results were achieved, however there were significant differences between the interventions in terms of percentage of targeted results achieved. Some interventions, such as the USAID AVANSE intervention and the World Bank GFRP intervention achieved all their targeted results. Others such as USAID's LOKAL intervention and IFAD's PPI-2 intervention achieved only one of the many targeted results. Phases II and III will attempt to better understand the apparent differences in effectiveness among interventions that followed this approach.

D. Support to Local Authorities (CASEC, ASEC, Mayor)

Another essential piece of the institutional puzzle is the landscape of local authorities who help keep the peace, resolve agriculturally-focused disputes and promote good citizenship and social capital. When these local institutions function well, a community is better poised to take advantage of resources and opportunities to develop their agricultural economy and work together in mutual support. A few interventions over the past twenty years have worked with local institutions such as the Mayor's office, the CASEC, and ASEC to train them in conflict management and good leadership techniques as well as to provide them with specific technical and legal information that they can share with their constituents.

Examples of Interventions that illustrate the Support to Local Authorities Approach:

- o FAO's Projet de Développement local dans les communes de Marmelade et de Plaisance – Phase II
- o IFAD/IAICA's Small Irrigation and Market Access Development Project in the Nippes and Goavienne Region

Preliminary Assessment of Effectiveness:

The only intervention with information regarding effectiveness was FAO's Marmelade and Plaisance intervention. This intervention was effective in increasing household income, improving market access, improving productivity and improving natural resource management. However, the AT does not know if this approach (rather than others that were also followed by this intervention) led to the achievement of these results. Phases II and III will attempt to find answers to these questions.

4. ACCESS TO FINANCE APPROACHES

Financial constraints can be a formidable barrier for small farmers trying to improve their production. Modern technology, improved plant material and processing equipment may be a way for a farmer to capture greater value for his or her production, but these investments are out of reach for many rural Haitians. To address this constraint, the following four approaches to improved access to agricultural finance have been tried in Haiti:

- Vouchers for Inputs
- Supporting rural expansion of financial institutions through loan guarantees
- Support to Community-Based financial institutions
- Attracting diaspora remittances for Agricultural Investment

A. Vouchers for Inputs

As an alternative to providing cash to farmers or handing out seeds and other inputs, several interventions have used a voucher approach to encourage the use of improved genetic materials, technology or inputs. This approach helps local input and service providers by establishing the connection between the farmers and input provider, a relationship that will hopefully continue after the end of the intervention. If an intervention gives out inputs free to beneficiaries, the local seller of these inputs is often undermined or undercut – a voucher approach maintains his or her role in the community and the agricultural value chain and allows him or her to benefit from the intervention as well. The voucher approach also helps prevent the use of funds for non-agricultural purposes.

Examples of Interventions that illustrate the Vouchers for Inputs Approach:

- o IDB's Project of Technology Transfer to Small Farmers (PTTA)
- o AFD's projet de SÉCURITÉ ALIMENTAIRE (SECAL)

Preliminary Assessment of Effectiveness:

Three of the interventions that used the vouchers approach had information about effectiveness – AVANSE and PL-480 by USAID and AFD's SECAL. All three of these interventions had relatively high levels of target achievement – each one either met all its targeted results or all, but one. All seven of the targeted results were achieved in one or more of these interventions, though the AT does not know if this approach (rather than others that were also followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions and determine whether this approach is as effective in practice as it appears to be in reports.

B. Supporting Financial Institutions to Expand to Rural Areas - Loan Guarantees

Rural areas in Haiti are often underserved by financial institutions, meaning that rural Haitians have fewer opportunities for accessing credit than their urban counterparts. Financial institutions are often reluctant to issue loans to poor farmers because they are afraid that the farmer will default, and many farmers have nothing to offer as collateral. To help mitigate this challenge, several interventions have attempted to encourage financial institutions to expand to rural areas and to offer credit to previously un-banked producers. Obtaining credit can allow a farmer to shift from farming in a traditional, less profitable way, to improving their profitability by making an investment in a modern piece of equipment or improved crop varieties.

Examples of Interventions that illustrate the Supporting Financial Institutions for Rural Expansion Approach:

- o European Union's Programme Micro-crédit Financement Production Agricole (MFPA)
- o USAID's Development Credit Authority (DCA) Guarantees to Micro-Credit Capital and SOGESOL

Preliminary Assessment of Effectiveness:

Of the interventions following this approach, only four had information about effectiveness. These four had a wide range of success in achieving their targeted results – the USAID and FAO interventions achieved a majority of the targeted results, including increasing household income, improving market access, improving resilience, and creating jobs, while the EU intervention did not achieve any of its targeted results. Phases II and III will attempt to better understand the apparent differences in effectiveness between interventions that followed this approach.

C. Create/Support Community-based Financial Institutions (VSLA, MUSO, CREP)

One approach to helping rural farmers access credit is to help set up community-based financial institutions. In Haiti, these include Village Savings and Loans Associations (VSLA), Mutuelles de Solidarité (MUSO), and Rural Credit and Savings Centers (CREP). This approach organizes community members into savings groups that facilitate regular saving of small sums of money and issues small loans to members on a rotating basis. This allows rural communities that do not otherwise have access to credit to support each other in their small business goals and to hold each other accountable for loan repayments.

Examples of Interventions that illustrate the Community-based Financial Institutions Approach:

- o USAID's Project Kore L'Avni Nou. Food Voucher Programme implemented by CARE in Grande-Anse
- o UK Cooperation's Farming Family Resilience in Grande-Anse

Preliminary Assessment of Effectiveness:

Three intervention reports discussed the effectiveness of this approach. All seven targeted results were achieved by one or more of the interventions, however there were significant differences among the interventions in terms of percentage of targeted results achieved. The USAID MYAP intervention only achieved 50 percent of its targeted results, while the Kore L'Avni Nou intervention, also by USAID, achieved all its targeted results and then some. The IFAD Food Crop Intensification intervention also achieved all its targeted results. Phases II and III will attempt to better understand the apparent differences in effectiveness between interventions that followed this approach.

D. Working with Diaspora Investment in Rural Agriculture

Though only one intervention followed the approach of targeting diaspora investment in rural agricultural enterprises, the AT decided to include this as its own approach because it is innovative and particularly interesting. More than a third of Haiti's gross domestic product comes

from remittances sent home by Haitians living abroad.⁷⁷ And Haiti has received significant diaspora investment during the last two decades. This flow of money can have positive impacts on the Haitian agriculture sector, if invested strategically. This approach includes reaching out to the diaspora to connect them with agricultural investment opportunities and facilitating the investment of remittances in local rural economic pursuits.

Example of an Intervention that illustrates the Diaspora Remittances for Rural Investment Approach:

- o USAID's Leveraging Effective Application of Direct Investments (LEAD)

Preliminary Assessment of Effectiveness:

This intervention was the only one that followed this approach. Documentation suggests that it was effective at achieving job creation and improved food security, the only two results that were targeted from the list of key results in the assessment SOW. If this intervention is studied in Phases II and III, the AT will attempt to learn whether the intervention was successful in achieving increased rural investment and other relevant results.

5. WATERSHED/ENVIRONMENT APPROACHES/AGRO-ECOLOGY AND CLIMATE SMART AGRICULTURE

Given Haiti's history of deforestation and resulting erosion of agricultural land, as well as the island's susceptibility to natural disasters, environmentally-focused interventions that attempt to improve watershed management have become a major priority for international donors and local organizations alike. The following five approaches to watershed management and climate-smart agriculture have been seen in Haiti over the past 18 years:

- Reforestation and physical erosion control to protect waterways, flood control
- Training on sustainable agricultural techniques
- Participatory community environmental management planning
- Development of technology packages such as Early Warning Systems
- Credit for Conservation

A. Reforestation and Physical Erosion Control to Protect Waterways, Flood Control

Many interventions attempted to mitigate erosion and flooding issues in Haiti by physically changing the environment. This includes planting trees, hedgerows and grasses, and building physical earthworks and other infrastructure to prevent erosion and manage water runoff. These interventions can be implemented in a variety of ways – the intervention might pay community members to provide labor, may contract out the labor to local NGOs or community-based organizations, or may hire a construction firm to complete the work in the most efficient manner.

Examples of Interventions that illustrate the Reforestation and Physical Erosion Control Approach:

- o IDB's PROGRAMME DE MITIGATION DES DÉSASTRES NATURELS (PMDN)

⁷⁷ Orozco, Manuel. Remittances to Latin America and the Caribbean in 2017. <https://www.thedialogue.org/wp-content/uploads/2018/01/Remittances-2017-1.pdf>

- o USDA's Community Reconstruction for Economic and Environmental Resiliency (CREER)

Preliminary Assessment of Effectiveness:

Six of the interventions that followed this approach had information regarding effectiveness in achieving targeted results. Among these, all seven targeted results were achieved, however, there were significant differences among the interventions in terms of percentage of targeted results achieved. IDB's PMDN intervention achieved more than 100 percent of the targeted result. Others such as USAID's MYAP intervention achieved only half of the many targeted results. Phases II and III will attempt to better understand the apparent differences in effectiveness among interventions that followed this approach, and whether the achievement of these results (or lack thereof) can be attributed to this approach or to other approaches that were also followed in these interventions.

B. Training on Sustainable Agricultural Techniques

Training on sustainable agricultural techniques could be categorized with the Agricultural Extension Approaches, but because the focus here is on watershed protection and environmental management rather than strictly agricultural productivity, the AT categorized it as a Watershed Approach. In these interventions, farmers are trained in appropriate crops to plant on hillsides to prevent erosion, soil conservation techniques such as correct positioning of crop rows or construction of hedges in contour of level, no-till planting techniques, concentration of fertility upstream of complex hedgerows, which assume both a conservation role and a productive role and techniques for growing crops on degraded land.

Examples of Interventions that illustrate the Sustainable Agriculture Training Approach:

- o USAID's DEED
- o FAO's RENFORCEMENT DE LA RESILIENCE DE LA PRODUCTION AGRICOLE AUX ALÉAS CLIMATIQUES EN HAÏTI

Preliminary Assessment of Effectiveness:

Four of the interventions that used the Sustainable Agriculture approach had information about effectiveness. All four had very high levels of target achievement – each one either met all its targeted results or exceeded them. All seven of the targeted results were achieved in one or more of these interventions, though the AT does not know if this approach (rather than others that were also followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions and determine whether this approach is as effective in practice as it appears to be in reports.

C. Participatory Community Environmental Management Planning

Water is often a shared resource that no one is explicitly charged with protecting and managing. For this reason, these resources are often not managed in a way that will promote the long-term health and productivity of the watershed. Erosion, pollution, flooding and soil degradation are all results of poor watershed management in Haiti. Several interventions address this issue through facilitation of watershed management planning activities, including education of community members on the importance of watershed management and protection, community-led

brainstorming of solutions to environmental issues affecting the watershed, and the organization of a system of incentives and self-policing efforts to encourage responsible behaviors by all community members.

Examples of Interventions that illustrate the Community Environmental Management Approach:

- o IDB's Protection du Bassin Versant de la ville du Cap-Haitien
- o Affaires Mondiales Canada - Gestion Communautaire des Ressources Naturelles et Développement Agricole

Preliminary Assessment of Effectiveness:

Six of the interventions that used the Sustainable Agriculture approach had information about effectiveness. All six had very high levels of target achievement – all, but one either met all its targeted results or exceeded them, and the one intervention that did not, achieved all, but one. All seven of the targeted results were achieved in one or more of these interventions, though the AT does not know if this approach (rather than others that were also followed by these interventions) led to the achievement of these results. Phases II and III will attempt to find answers to these questions and determine whether this approach is as effective in practice as it appears to be in reports.

D. Development of Technology Packages such as Early Warning Systems (EWS) and other Hydro-meteorological Infrastructure to Improve Watershed Management

Floods and other natural disasters can be catastrophic for a rural community's agriculture sector. Often a rural community has no means of learning about an impending flood event, drought or hurricane that could devastate their crops, and, therefore, cannot prepare for or prevent the disaster from occurring. There have been a few interventions over the past twenty years that have attempted to put in place technology that monitors meteorological events and water levels to alert affected communities before the disaster strikes. An early warning system can allow community members enough time to organize labor to prepare for a flood, move agricultural products or livestock to a higher, safer place, safely evacuate the area or make other arrangements.

Examples of Interventions that illustrate the Technology Packages such as Early Warning Systems Approach:

- o IDB's PNAP-Programme national d'alerte précoce
- o USAID's Multi-Year Assistance Program for Haiti MYAP

Preliminary Assessment of Effectiveness:

Only the two interventions mentioned above had information about their effectiveness in achieving targeted results. Both interventions had mixed results – achieving 50 percent of the targeted results. Phases II and III will attempt to better whether this mixed achievement of these results can be attributed to this approach or to other approaches that were also followed in these interventions.

E. Credit for Conservation

The Credit for Conservation (CFC) approach encourages farmers to experiment with crop diversification, soil conservation, tree planting and agro-ecological practices. The CFC approach addresses environmental degradation, resilience to climatic shocks, low profitability of agricultural activities, the lack of extension services (information) and the lack of financial services available to upland farmers by providing small amounts of credit to farmers who commit to making climate-smart agricultural investments.⁷⁸

Examples of Interventions that illustrate the CFC Approach:

- o Mercy Corps' Vie, Tè & Eneji, Phase II (VTE II)
- o Ministère des Relations Internationales du Québec et Affaires Mondiales Canada - Les Savoirs des Gens de la Terre en Haiti

Preliminary Assessment of Effectiveness:

The only intervention that followed the CFC approach and had documentation as to its effectiveness was the Mercy Corps VTE intervention. This intervention set out to achieve all seven targeted results, and in the end successfully achieved all, but one (the intervention did not create as many jobs as it had hoped to). Phases II and III will attempt to better understand whether the achievement of these six results can be attributed to the CFC approach or to other approaches that were also followed in this intervention.

6. AGRICULTURAL INFRASTRUCTURE APPROACHES

The Haitian agriculture sector has seen significant investment in infrastructure related to agricultural production and marketing. Irrigation infrastructure can help with flood control, can extend the agricultural growing season and can allow for higher-value crop production. Farm-to-market roads can help alleviate the barrier that many rural farmers face in accessing markets for their production. Though infrastructure investments can often be part of value chain interventions as well as watershed management projects, due to the relatively high dollar amount of infrastructure interventions, the AT decided to categorize these two main infrastructure approaches (Irrigation Infrastructure and Farm-to-Market Roads Infrastructure) in a category of their own.

A. Irrigation Infrastructure

Irrigation infrastructure includes both the construction of new large-scale and small-scale irrigated perimeters and the maintenance, rehabilitation or improvement of existing irrigation infrastructure. These interventions may also include upgrading a system with modern equipment. Interventions that implement irrigation infrastructure are often accompanied by a component on the management by user associations, which are intended to ensure sustainability.

Examples of Interventions that illustrate the Irrigation Infrastructure Approach:

- o IFAD and OPEC's Irrigation: Small-scale Irrigation Development Project Phase II (PPI-2)

⁷⁸ <https://haiti.ngoaidmap.org/projects/14193>

- o Centre de Gestion des Fonds locaux de la Coopération Canadienne en Haïti-CGF -
Project de Réhabilitation et de Valorisation du Système d'Irrigation de Maury dans le
Département de l'Artibonite

Preliminary Assessment of Effectiveness:

Seven of the interventions that followed this approach had information regarding effectiveness in achieving targeted results. Among these, all seven targeted results were achieved, however there were significant differences between the interventions in terms of percentage of targeted results achieved. USAID's AVANSE intervention achieved all seven of its targeted results. Others such as IDB's Parc Macaya intervention or IFAD's PPI-2 intervention were less effective - achieving only one of their many targeted results. Phases II and III will attempt to better understand the apparent differences in effectiveness among interventions that followed this approach, and whether the achievement of these results (or lack thereof) can be attributed to the irrigation infrastructure or to other approaches that were also followed in these interventions.

B. Farm-to-Market Road Infrastructure

Haiti is known for having particularly bad rural roads, especially in the mountainous regions of the country. The World Bank estimates that more than 60 percent of Haiti's population lives in areas where road access is impossible during the rainy season.⁷⁹ Poor rural roads mean that rural populations and rural farmers are isolated from markets, and difficult roads result in high levels of post-harvest losses and transportation costs eat away at a farmer's potential profits. USAID has estimated that reducing spoilage that results from poor roads has the potential for increasing gross farm income by between ten and 30 percent and contributes to greater food security. In addition to agricultural benefits, improved roads can also increase school attendance and visits to health facilities.⁸⁰ For these reasons, investments in rural roads are often included in agriculture sector interventions.

Examples of Interventions that illustrate the Farm-to-Market Road Infrastructure Approach:

- o IFAD's Programme d'Appui à la Sécurité Alimentaire et à la Création d'Emplois dans les zones rurales touchées par le Séisme du 12 janvier 2010
- o USAID's Single Year Activity Program (SYAP) Agricultural Recovery in the Commune of Gros-Morne Artibonite Department

Preliminary Assessment of Effectiveness:

Only three of the interventions that followed this approach had information regarding effectiveness in achieving targeted results. Among these, all seven targeted results were achieved, however there were significant differences among the interventions in terms of percentage of targeted results achieved. USAID's SYAP and Development Assistance Program achieved most of their targeted results. On the other hand, IDB's Parc Macaya intervention was less effective - achieving only one of its many targeted results. Phases II and III will attempt to better understand the apparent differences in effectiveness among interventions that followed

⁷⁹ <http://documents.worldbank.org/curated/en/871201522975474915/text/Project-Information-Documents-Integrated-Safeguards-Data-Sheet-Haiti-Rural-Accessibility-Resilience-Project-PI63490.txt>

⁸⁰ <https://2012-2017.usaid.gov/news-information/frontlines/economic-growth/haitis-road-less-traveled>

this approach, and whether the achievement of these results (or lack thereof) can be attributed to the road infrastructure or to other approaches that were also followed in these interventions.

ANNEX C: CASE STUDIES

CASE STUDY #1: RENFORCEMENT DES SERVICES PUBLICS AGRICOLES (RESEPAG) or Relaunching Agriculture: Strengthening Agriculture Public Services II Project

INTERVENTION DETAILS

- Donor: World Bank
- Budget: \$50 million
- Years of intervention: 2011-2019
- Implementation areas: South: Cayes, Camp-perrin; Centre: Baptiste, Hinche; Southeast: Thiothe; Artibonite
- Main implementing agency: Ministry of Agriculture Natural Resources and Rural Development (MARNDR)

BACKGROUND

RESEPAG has been implemented by the MARNDR in two phases. RESEPAG I, which was a pilot project and RESEPAG II, which was adapted from the first phase following the January 2010 earthquake. The project's progress was significantly impacted by Hurricane Matthew which struck the country on October 4, 2017. In the aftermath of the hurricane, the attention of the Haitian government and the World Bank shifted to actions needed to support recovery in the South department. These involved the financing of emergency activities to save winter and spring planting campaigns and the cleaning of irrigation canals and access routes. The intervention was implemented through partners selected through a competitive call for proposals.

OBJECTIVES AND COMPONENTS (RESEPAG II)

The development objectives of the project were to:

- a) reinforce the capacity of the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR) to provide or facilitate access to services in the agricultural sector;
- b) increase market access to small producers and food security in Selected Areas; and
- c) provide financial assistance in the case of an Agriculture Sector Emergency.

The intervention included four components.

Component 1: Agricultural Support Services: This included training through a model farm approach as well as the provision of vouchers that could be exchanged for inputs and services; Component 2: Direct Support to producers and associations. This component helped producers organize themselves in cooperatives;

Component 3: Emergency Response Contingency Reserve;

Component 4: Institutional Strengthening, Monitoring and Evaluation, Project Management and Studies. This last component focused on working with local authorities, especially the Communal Agriculture Officer and facilitated their relationships with producers

KEY FINDINGS (based on USAID's Agriculture sector assessment)

Effectiveness

The evaluation report of the first phase indicates that in addition to the strengthening of MARNDR (creation of a Monitoring and Evaluation System, a customized accounting software called SYSCOP, the establishment of the MARNDR Procurement Unit, etc.), the project allowed the establishment of a national farmers' register and a register of suppliers. It provided support for the realization of four agricultural campaigns in the plain of Les Cayes, and in Thiotte

through the vouchers provided to farmers, leading to an increase in the yield of maize and bean crops. Overall, the expected results were achieved at satisfactory levels.

Beneficiaries consulted through focus group discussions stated that the main benefits they received from the RESEPAG project were learning new production techniques and receiving vouchers that they could exchange for seedlings, inputs and services to care for their plants. These benefits resulted in increased production as well as increased income. In the North, a significant amount of abandoned land was replanted as improved coffee trees, which is having a positive environmental impact. In the South, production of beans and corn increased as a result of the project. Job creation, both among producers and input suppliers, as well as improved food security were also cited among the results of the project. Most of the respondents said that women were included equally in the project benefits and the cooperatives that were formed, though some noted that this was not enough to make up for women's disadvantaged role in Haitian society.

According to the beneficiaries, the approaches that were most used by the project were: Vouchers for inputs, providing technology packages, including inputs in combination with training, training on sustainable agricultural techniques, and Farmer-to-Farmer/Model Farmer Training and demonstration.

The evaluation report indicates that the project had to face many difficulties, affecting in particular Component 2, including the absence of suppliers of quality seeds, occasionally limited availability of fertilizers in the areas of intervention (in quantity and quality), the higher than expected increase in fertilizer prices, as well as the low cash capacity of input suppliers – these all resulted in insufficient stocks to meet the demand of farmers.

Beneficiaries also cited some negative aspects of the RESEPAG project, including poor communications in Thiothe at the beginning of the project around how the vouchers could be used, resulting in some misunderstandings, confusion and delays among the banks, beneficiaries and service suppliers. Poor communication around the end of the project also resulted in some confusion and frustration among beneficiaries in this commune. In an attempt to link the coffee producers in the North with a market, the project facilitated a contract between producer cooperatives and an international coffee buyer. However, the quality produced was not high enough and the contract was cancelled, forcing the cooperatives to buy all of the coffee, offering producers a low price. In the South, the increase in corn production led to a collapse of the local price of corn, resulting in lower-than-anticipated incomes. The program did not include marketing aspects to deal with this issue. Some input suppliers at times could not keep up with the increased demand from producers, due to their own inability to access enough capital to purchase a sufficient quantity of inputs, which resulted in beneficiaries being unable to purchase as much fertilizer as they had vouchers for and sometimes lower quality seeds. Also, farmers were disappointed by the delays in the delivery of the services associated with the vouchers, which had a negative impact on harvests and yields. Furthermore, payment of input suppliers was also often delayed.

Sustainability

Beneficiaries stated that they are still practicing the skills and techniques that they learned in the trainings and are still seeing positive results, however, in the sites without irrigation infrastructure, prolonged drought has made the plants less productive than they should be and they do not have access to alternative irrigation structures such as retention ponds or pumps. In addition, a new coffee buyer has not been found so the producers are still receiving a low price for their production. Both the beneficiaries and the implementers stated that the project was too short and that producers did not have enough time to see enough results to encourage them to continue using the improved practices post-project. Respondents stated that the input suppliers, agronomists, and other private sector actors who received training and business development support are still operating and have benefited from the increased exposure of their services to the population. Many input suppliers have gone on to supply other agriculture projects with

inputs as well. The coffee cooperatives are still operating effectively and are successfully producing coffee saplings as a source of revenue. The project is currently being completed so it is difficult to say for certain whether the results will be sustainable. However, the project's work with the private sector, which has led to new input suppliers coming into the targeted areas, has led to optimism among the implementers that many results will be sustainable.

Enabling Environmental Factors

Both beneficiaries and project implementers cited the negative impacts of Haitian trade policy on the profitability of the agriculture sector – producers feel they cannot compete with imports in this business environment. The absence of an insurance system has jeopardized the achievements of the project as well as the absence of a national research and development strategy to provide new technology packages to keep the voucher approach thriving. The evaluation report indicates that the project had to face many difficulties, including the lack of suppliers of quality seeds, sometimes obliging the project not to finance this crucial operation. Sometimes fertilizers were not available in the areas of intervention (in quantity and quality) and the increase of fertilizer price was higher than expected.

LESSONS LEARNED

- **Providing incentives for farmers through vouchers is an innovative strategy for agricultural finance.** Instead of interventions subsidizing input prices, the voucher approach supports a local market for inputs instead of undermining one. Because it is a new concept to most producers, projects must pay particular attention to good communications with all parties directly involved – producers, banks and suppliers.
- **The incentive system put in place through the vouchers should be flexible.** The project began without technical assistance but saw and responded to the farmers' specific demands to improve the approach by providing technical assistance.
- **Different categories of beneficiaries need different levels of support in terms of finance** – the poorest beneficiaries need more subsidized inputs at first, but there should also be a way to transition people to accessing credit instead of subsidized inputs.
- **The three technical approaches: technical packages, field-schools and the voucher system, mutually supported each other and resulted in a more efficient intervention.** Addition of a water management or irrigation component could have made the intervention even more effective and sustainable, especially in the face of drought.
- **It is necessary to work in parallel with the supply of goods and services:** agronomic research, strengthening of the seed sector, strengthening of the network of suppliers of agricultural goods and services, and extension.
- **Good anticipation of agricultural campaigns is necessary to prevent administrative blockages** (timely issuing of vouchers, payment of suppliers in the required time) which are crucial for proper functioning of the system
- **Technical support for proper use of the inputs provided is necessary** to increase more significantly the agricultural production and the income of beneficiary producers.
- **Interventions should take care to not create market distortions by focusing on a single value chain.** Targeting a variety of value chains prevents price collapses and increases Haitian farmers' resilience.
- **Supporting agro-forestry is very promising in the Haiti context.** The combination of perennial crops and annual crops helps to ensure short-term and long-term income for families and increases resilience to natural threats.

CONCLUSIONS

Though the second phase has not been completed at the time of this writing, RESEPAG shows great promise in terms of both effectiveness and sustainability. The project's success can be attributed to the application of multiple technical approaches that complement each other in filling specific gaps in key value chains that were selected to satisfy specific needs of farmers in

each intervention area. In terms of sustainability, working with private sector input and service providers could lead to sustainability, but on the other hand, a lack of sufficient focus on marketing aspects as well as resilience in the face of natural disasters could negatively impact the project's sustainability. Even without knowing the final outcomes, the intervention teaches us several important lessons: provision of incentives to farmers through vouchers is a good model for increasing access to inputs, combining technical approaches can lead to greater results, promoting a variety of value chains and focusing on market opportunities can help avoid market distortion, and finally supporting agro-forestry can help ensure short-term and long-term income for families and increase their resilience to natural threats.

SOURCES CONSULTED

Documents:

- **Implementation Status & Results Report Relaunching Agriculture: Strengthening Agriculture Public Services II Project (GAFSP - IDA) (P126744), World Bank, 2017**
- **Rapport final evaluation RESEPAG I**

People Consulted:

- Focus Groups with beneficiaries
- Representatives of the Implementing organization
- Involved MARNDR and local government Representatives
- Participating Input suppliers
- Donor Representatives

CASE STUDY #2: WINNER

INTERVENTION DETAILS

- Type of financing: Donor
- Donor: USAID
- Budget: \$127 Million
- Years of intervention: 2009-2016
- Implementation areas: Port-au-Prince, St. Marc, Gonaives, and Plaine du Cul de Sac
- Main implementing agency: Chemonics

BACKGROUND

WINNER was originally designed to protect watersheds by preserving hillsides, stabilizing waterways, and building non-farm livelihoods options. It was redesigned⁸¹ based on the (i) the post-earthquake strategy of the US Government to address the government of Haiti's commitment to watershed management and food self-sufficiency, and (ii) the Feed the Future initiative rolled out by President Obama. After the redesign, some aspects of the original program remained, such as continuing to rehabilitate watersheds and enhance farmer incomes through increased agricultural productivity. However, the focus of the project shifted from watershed stabilization to food security and agricultural productivity, establishing a geographic zone of intervention (ZOI), and targeting smallholder farmers rather than all individuals living in targeted watersheds.

OBJECTIVES AND COMPONENTS

The objectives of the WINNER project were to

- Improve livelihoods in selected watersheds through agriculture & other improved critical infrastructure,
- Strengthen watershed governance,
- Establish public-private partnerships, and
- Enhance earthquake recovery.

⁸¹ Performance evaluation, 2015

The main areas of focus for the project were watershed management to reduce pressures on natural resources, food security, and agricultural productivity to increase incomes.

KEY FINDINGS (based on USAID's Agriculture sector assessment)

Effectiveness

The performance evaluation report specifies that the WINNER project was effective in several aspects. During the implementation, participating farmers achieved modest increases in crop yields for beans, corn, and plantains, while rice yields increased by more than 50 percent. The project also contributed to improving natural resources management and access to markets. The provision of subsidized pesticides and fertilizers, and the introduction of improved corn and bean seeds contributed to improving productivity, as did improving farmers' access to water for agriculture. The evaluation findings confirmed that the CRDDs⁸² were one of the WINNER project's flagship products and an effective mechanism for training farmers and technology dissemination.

Beneficiaries consulted during field work through interviews and focus group discussions confirmed the evaluation findings. The most frequently stated results were improved resilience, increased productivity and income, and facilitated access to markets. Income increased as a result of reducing expenses for inputs, providing capital, improving product quality, and promoting highly demanded value chains such as coffee, potatoes, banana, and vegetables. Improved market access resulted mainly from linking farmers and cooperatives to buyers. Improved producers' resilience at the beginning of the value chain was driven by the provision of capital for production to farmers, access to inputs that became affordable as well as agricultural technology promoted by the CRDDs. Most of the respondents said that women enjoyed the same benefits as men.

Interviews and direct observations conducted revealed that CRDDs are providing greater access to inputs such as improved seed and fertilizer, and services such as soil analysis, and training on improved techniques. For example, the CRDD in Bas Boen, which appeared to be one of the most effective CRDDs, produces seeds, provides soil analysis services, and offers training and agricultural extension services. Wynn Farm and SOHADERK, two CRDDs in Kenscoff, are engaged in greenhouse production of flowers and vegetables in a demonstration setting. Thanks to the CRDDs, farmers have fewer problems accessing markets because most of the CRDDs have started to connect them with buyers such as hotels, wholesalers, processors, and NGOs.

To achieve these results, respondents attested that WINNER worked well with local communities and institutions as well as with private sector entities. They described the technical approaches that were the most effective as: Providing technology package including inputs in combination with training, Farmer-to-Farmer/Model Farmer Training and demonstration, Farmer field schools, and Establishing Research Centers/Labs for crop production. In this endeavor, WINNER combined Farmer field schools with Farmer-to-Farmer training and also Providing a technology package including inputs in combination with training brought through its CRDDs.

Sustainability

Our desk review and field research revealed that the WINNER project is not fully sustainable. The performance report consulted indicates that "with the termination of WINNER support and subsidies, constraints in labor and input markets (fertilizer, seed, and credit) make it difficult for farmers to continue the full range of best practices disseminated by WINNER." Despite the popularity of the improved seeds provided by the project, government officials interviewed for the evaluation were disappointed that the National Seed Service (SNS) was not involved in the planning and design of any activities related to seeds. In addition, in some cases, input stores (BIAs) reported that during their participation in WINNER they were unable to sell items included

⁸² Although the structure is not uniform, most of the CRDDs have: a main building, including a small office, soil laboratory, a conference room, a warning center, a warehouse, an agricultural farm for experimentation and demonstration, irrigation infrastructure, farming equipment's, green house facilities, etc.

in the grants that they received due to a lack of demand. While the BIAs continue to function following the close of WINNER, they often encounter operational and seasonal challenges. Respondents revealed that the irrigation canals rehabilitated by the project have not been maintained on a regular basis.

Direct observations revealed that many CRDD benefits continue after project end. Four CRDDs are still operational, providing a technology package including inputs in combination with training. Beneficiaries stated that they are still practicing the skills and techniques that they learned in the trainings and are seeing positive results. However, in the sites without irrigation infrastructure, prolonged drought has made the crops less productive. Of a total of 5 CRDDs visited in February, three appeared sustainable and another one is well on its way to becoming sustainable. The partially sustainable CRDDs had found ways to continue to generate revenue post-project (offering soil analysis for clients, organizing training for partners, or selling agriculture products to buyers). These three CRDDs are helping to secure sustainable markets by developing relationships with private sector buyers such as local supermarkets and with service providers. Finally, a real challenge is to keep CRDDs thriving in a country where the majority of farmers cannot afford agricultural services, and where a weak Government does not have the capacity or funding to take on ownership and operations of them after project end.

Enabling Environmental Factors

Both beneficiaries and project implementers cited the negative impacts of the lack of ownership and governance in the agriculture sector. Inadequate governance affects the sector by inhibiting coordination, causing a lack of synergies and complementarity between the WINNER project and other projects implemented by the ministry of agriculture and other actors, and thereby decreasing the impact of the otherwise successful technical approaches. Government officials indicated that they were insufficiently involved in the implementation of the CRDDs, which explains why they haven't taken over management post-project. The absence of an insurance system to cope with natural disasters has undermined some achievements of the project as well as the absence of a national research and development strategy that would integrate with and provide a broader vision and direction to the CRDDs. In the absence of a national phytopathology and zoo-pathology extension system to combat pests/diseases, harvest and post-harvest losses are increasing. These inefficiencies all lessened the benefits of the increases in productivity achieved by the project.

LESSONS LEARNED

- **Government-supported research and agricultural extension system are critical for sustaining innovation in Haiti.** WINNER approaches (CRDD, extension farmers and farmers for results dissemination) were effective at achieving results over the life of the project. However, their sustainability is limited by the lack of a nationally-supported research and agricultural extension system.
- **CRDDs need committed managers, established institutional partnerships, and revenue-generating sources to be effective and sustainable.** The most sustainable CRDD are those managed by organizations that existed prior to WINNER and have committed managers who collaborate with other institutions, while finding ways to generate revenue.
- **CRDDs are a useful research and development model** for providing greater access to inputs (seed and fertilizer), services such as soil analysis, and training on improved techniques. However, they could provide more benefits to communities such as equipment rental services, market intelligence to disseminate information on market opportunities, and facilitation of more relationships with private sector actors.

CONCLUSIONS

WINNER was described in the fieldwork as a particularly successful intervention whose effectiveness lay in the application of multiple complementary technical approaches that filled specific gaps in key value chains selected strategically for each of its intervention areas. Its

sustainability is mainly hindered by an inadequate post-project follow-up mechanism that would continue to provide the services put in place by the intervention. It is also hindered by the inexistence of a national research and development strategy to offer direction and guidance to the CRDDs. Nevertheless, the intervention can teach us several important lessons: CRDDs can serve as a useful research and development model for providing benefits to farmers; CRDDs need committed managers, institutional partnerships, and revenue-generating sources to be effective and sustainable; and a lack of a Government-supported research and agricultural extension system is severely limiting agricultural innovation in Haiti.

SOURCES CONSULTED

Documents:

- Performance evaluation report

People Consulted:

- Donor representatives
- DOs on 5 CRDDs
- Project beneficiaries
- Input suppliers
- Involved government representatives

CASE STUDY #2: Feed the Future North project (AVANSE) /Haiti—Appui à la Valorisation du potentiel Agricole du Nord, pour la Securite Economique et Environnementale (AVANSE)

INTERVENTION DETAILS

- Type of financing: Donor
- Donor: USAID
- Budget: 87.8\$M
- Year of intervention: 2013-2018
- Implementation areas: North and North East department
- Main implementing agency: DAI

BACKGROUND

After the January 2010 earthquake, Agriculture was considered as a key driver for economic recovery and employment opportunities by the Government of Haiti (GOH). USAID/Haiti developed the Feed the Future North (FTFN) Project named AVANSE to help achieving this goal in the northern corridor. AVANSE incorporated two U.S. Government priorities. First, the Feed the Future (FTF) initiative launched in 2009 by the Obama Administration to address global hunger and food security challenges around the world. By supporting country-driven approaches, the Presidential Initiative sought to address the root causes of hunger and poverty and find long-term solutions to under-nutrition and chronic food shortages by helping Haiti transform its own agricultural sectors to grow enough food sustainably to feed its citizens. The second priority was USAID Forward, also known as Local Solutions, an ambitious reform agenda consisting in building the capacity of local organizations to directly implement USAID-funded projects.

OBJECTIVES AND COMPONENTS

The objective of the project was to increase agricultural incomes in Haiti's Northern Corridor for at least 21,500 rural households⁸³. To achieve this goal, the project formulated the following three hypotheses:

⁸³ <https://www.usaid.gov/haiti/fact-sheets/feed-future-north-0>

The project encompasses three components: Agricultural Productivity Increased, Watershed Stability Above Selected Plain Improved, and Agricultural Markets Strengthened Value Chains Strengthened.

KEY FINDINGS (based on USAID's Agriculture sector assessment)

Effectiveness

The performance evaluation report discloses that the AVANSE project was effective on several aspects. During the implementation, the project reached out to farmers across the Northern Corridor through the Farmer Field School (FFS) approach to popularize improved techniques and technologies aiming at increasing the productivity of cultivated plots. Farmers received training, inputs, and services through the voucher program. Technologies were generated and disseminated to increase productivity in the three targeted value chains: Rice, Cacao and Plantain/Banana. Rice farmers learned Intensive Rice System (System de riziculture intensive in French) production from FFS, and have access to equipment and inputs via FFS to implement the technology on their fields. Cacao farmers learned new techniques (how to establish new plantations and how to regenerate old ones) to improve cacao production through FFS through pruning. The project built networks of FFS to establish local nurseries, favoring the establishment of new plantations. Plantain/banana producers learned management practices to increase productivity in plots in the FFS. They benefited from subsidized plowing, fertilizers, free manure and free suckers. Better yielding plots were established through FFS in the project area. As far as natural resource management is concerned, AVANSE contributed to the improvement of forest cover by granting seedlings: pineapple, sugar cane, elephant grass, acacia, cedar, mangoes, plantain, yam, pineapple, beans, corn, nuts, coconuts, citrus, oak, avocados, oranges, cassia, moringa, etc, resulting in increased income derived from sustainable natural resource management and conservation. The voucher program strengthens institutions involved in agriculture. AVANSE's voucher program (SIBA) has enrolled and supported five agricultural input stores and several microcredit outlets for vouchers. The project connects agricultural inputs stores to the importer COMAG to receive AVANSE promoted fertilizers directly and avoid a shortage on the market. The voucher program allowed farmers to use inputs that increase productivity in their field.

Although the project has achieved the results described above, information collected from the desk review, and field work suggests that it failed to fill many gaps that would broaden its effectiveness. Both the field visits and the performance evaluation report disclose that the project has not contributed yet to the improvement of irrigation systems in the corridor, while the crops have been affected by an extended drought period since 2017, making farming almost impossible in the plains. No processing facility has been established or improved with the support of AVANSE, although a target of four was established at the project's inception and most of the crops promoted by the project would generate more income if this gap in the value chain was filled.

Respondents said farmers were not fully convinced about the effectiveness of the promoted Improved Technologies and Management Practices (ITMP) for two main reasons. First, demonstration plots were not systematically established for banana/plantain and cacao through tangible results and increase confidence and likelihood of adoption. Second, field visits were not broadly organized between FFS to encourage application and adoption of the ITMP. Insufficient input stores were also another gap pointed out by beneficiaries. Due to lack of service providers and/or accessibility to the farm, only some farmers received subsidized plowing. More input stores were needed to increase the effectiveness of the voucher program. The performance report indicates that 5 to 10 percent of vouchers are not claimed by farmers because financial institutions involved were facing frequent software problems. Additionally, financial institutions sometimes only give out 60 percent of the value of the vouchers.

The field visits unfold two factors that hindered the effectiveness of the AVANSE projects: Lack of flexibility against changing situations and inadequate capitalization on previous projects,

especially PLUS, HAP, and DEED. Actually, respondents said that AVANSE should have introduced drought resistant crops to cope with extended drought period that has made farming almost impossible in its intervention area. It should have also improved communication with beneficiaries of vouchers to better understand their needs as well as with irrigation users' associations. In term of access to market, AVANSE would achieve greater results if it capitalized on the excellent results achieved by previous USAID's projects, PLUS, DEED and HAP, which created new markets for a broad range of crops including mangoes, yam, pumpkin, and chilly. The projects were able to organize producers so that they could meet the needs and put them in touch with the exporters. They also have successfully developed technology packages that are still alive in some parts of their intervention areas. It developed a market-driven approach in partnership with the private sector. HAP helped to export, which allowed to start fair trade certification for many products such as mangoes, coffee, and cacao. HAP followed Project PLUS in a spirit of continuity and included pumpkin and chili in the basket of export products. So far export of pumpkin is continuing. The export of mango and cocoa has continued through the organic and fair-trade sectors.

The most stated results cited during the field work were improving resilience (most cited result), increasing productivity and income, and boosting access to market. Increase income was achieved by reducing expenses for inputs, providing capital; improving product quality, and promoting highly demanded value chains such as rice. Improve productivity resulted mainly from Increased plantation density through intensive cropping system. Improve producers' resilience at the beginning of the value chain, the top result, was driven by the provision of capital for production to farmers, access to inputs that became affordable.

To achieve these results, respondents revealed that AVANSE worked with local community and institutions as well as with private sector entities, fostering partnership between NGOs and local organizations, as well as between farmers and private companies. They said that the technical approaches that were the most effective were: vouchers for inputs, providing technology packages including inputs in combination with training, Farmer-to-Farmer/Model Farmer Training and demonstration, Farmer field schools (Introduces higher-yield crop varieties and cultivation techniques for strategic crops). In this endeavor, AVANSE combined Farmer field schools+ Providing technology package including inputs in combination with training.

Sustainability

Although the AVANSE project was effective in achieving the results described above, our research revealed that it is not fully sustainable because critical gaps need to be filled at the end of the intervention and key results to sustain it. The performance report consulted indicates that activities aimed at improving cacao marketing have produced very encouraging results. Public Private Partnership has been successfully tested and appears as a viable exit strategy to sustain the project. Thanks to AVANSE, Novella Enterprises, like other fermented cacao exportation institutions have now direct connection with farmers, which takes away two middle-men from the chain: the retailers and speculators. Novella helped get better cacao from farmers and, with the MGs, has better control and can show traceability, with the aim of selling with an "organic" label. As a result, the price will go up in everyone's interest, including the farmer. The Cooperative Producers Cacao du Nord (CPCN) was able to develop a partnership with Novella which sold on the ordinary market, unlike FECCANO and PISA which sold on fermented market. Another kind of PPP is the relationship established between farmers and *Collective de Lutte contre l'Exclusion Sociale* (CLES) consisting in providing extension services to farmers and facilitate their access to market by processing and buying their products. On the other hands, not all the farmers were following the recommendations of the voucher program, especially some newly enrolled rice farmers in the voucher program who complained that they were not fully benefitting from the advantages offered by the voucher program. Rice and plantain farmers were also reluctant to use chemical fertilizers application instruction. As stated earlier, the number of input stores involved in the voucher program to serve farmers was not sufficient over

the targeted area. Additionally, the agricultural departmental offices (ADO) from the North and Northeast who should have played a decisive role in this project's long-term sustainability disclosed it was left out by AVANSE. The lack of improvement of irrigation systems in the corridor, while the crops have been affected by an extended drought period since 2017 is one of the impediments for the sustainability of the intervention and its approaches. This is particularly critical when water users' associations and the decentralized entities of MARNDR said that AVANSE worked mainly alone.

Enabling Environmental Factors

Both beneficiaries and project implementers cited the negative impacts of the lack of ownership and governance in the agriculture sector. Inadequate governance affects the sector by inhibiting coordination, causing a lack of synergies and complementarity between the AVANSE project and other projects implemented by the ministry of agriculture and other actors (PPI, RESEPAG, PTTA, etc.), and thereby decreasing the impact of technical approaches. Government officials indicated that they were insufficiently involved in the implementation of the voucher strategy, which explains why they have not taken ownership of the intervention. The absence of an insurance system to cope with extended period of drought and climate change has undermined some achievements of the project as well as the absence of a national research and development strategy that would integrate the voucher approach and the technology packages introduced by the intervention. Inadequate public agriculture infrastructure, especially irrigation and processing facilities have lessened the benefits of the increase in productivity driven by the project. The desk review highlighted these impediments as well. The low trade tariff policy has negatively impacted the project, namely for rice and bananas, that is, domestic consumer goods, the open market policy has discouraged local production.

LESSONS LEARNED

A permanent system of research, innovation and agricultural extension is essential to support the sustainability of interventions. The sustainability of the positive results generated by the project (introduction of new technologies to increase productivity in the rice, cocoa, banana, banana fig, and PPP sectors) is hindered by the lack of a system of permanent research, innovation and extension to support these technologies.

Partnerships with the private sector should be an element in all future projects because it eases access to market. For example, the IDB has encouraged Heineken/BRANA to invest in the sorghum sector. AVANSE supported several public private partnerships, including between the cocoa producers and the company NOVELA and in the rice value chain between farmers and CLES.

Greater flexibility in the implementation of Feed the Future North could both promote diversified and more drought-tolerant crops and provide new market opportunities. Working in an area affected by extended drought seasons, with insufficient irrigation infrastructure, AVANSE should have introduced drought resistant varieties, and tried to find unplanned irrigation mechanisms. It is capital to capitalize on the successes of previous interventions. AVANSE has not capitalized sufficiently on the experience of PLUS, DEED and HAP projects. These projects have successfully developed technology packages that are still alive in some parts of their intervention areas and the open market national and international channels for several value chains.

Demonstration plots should be the center of all FFS established to show the increase in productivity associated with promoted technologies and management practices and to increase adoption rates. Therefore, FFS training should be ongoing until every participant is convinced of the advantage of the promoted technologies and has the ability to implement the technologies on their farms. The AVANSE has started the dissemination of technology packages without insuring that most of the targeted farmers were fully convinced and were able to implement them.

One shoe fits all approach and relevance. We must not develop a single model of technical approaches. The latter should be adapted to various income and evolves overtime. Most of the technical packages developed were directed to all types of farmers and during the project lifespan.

Without Irrigation infrastructure it is nearly impossible to achieve positive results in the plains. AVANSE has not achieved significant work in water control, which has limited its effectiveness. The effectiveness of any technical approach depends on the availability of other supporting services such as involvement of strong organizations, availability of inputs and access to credits, market access with the availability of acceptable road infrastructure, and Links with processing companies and marketing.

CONCLUSIONS

AVANSE is one of the ten interventions analyzed in depth during the agriculture sector assessment. Its effectiveness resides in the application of multifactorial technical approaches that complemented each other in filling certain gaps in key value chains selected to satisfy specific needs of farmers in each of its intervention areas. Overall, it was successful at (1) protecting soil against further degradation, (2) increasing land productivity, (3) strengthening agriculture markets and local organizations. Its sustainability is mainly hindered by an inadequate post project follow-up mechanism that would follow-up the technical approaches promoted by the intervention, as well as filling other gaps such as improving access to irrigation, helping to have more and quality agriculture services providers. It is also undermined by the inexistence of a national research and development strategy to integrate the technical approaches that it promoted. Nevertheless, the intervention has generated tremendous lessons learned: a permanent system of research, innovation and agricultural extension is essential to support the sustainability of interventions; Partnerships with the private sector should be an element in all future projects because it eases access to market, Greater flexibility is critical in the implementation of project to achieve and sustain results, it is capital to capitalize on the successes of previous interventions.

SOURCES CONSULTED

Documents:

- Performance evaluation report
- https://pdf.usaid.gov/pdf_docs/PA00N69Z.pdf; CIRAD report

People Consulted:

- Donor representative
- Implementing partners
- Implementing agency
- Ministry of agriculture representatives
- Focus group discussions reports
- Interview with CBO
- Interview with participating enterprises

CASE STUDY #4: HAITI-SMALL SCALE IRRIGATION REHABILITATION (PPI I&II)

INTERVENTION DETAILS

- Type of financing: Donor
- Donor: IFAD- *International Fund for Agricultural Development*
- Budget: 34\$M
- Years of intervention: 1999-2015
- Implementation areas: Centre, Northeast, and Northwest
- Main implementing agency: Ministry of Agriculture, Natural Resources and Rural Development (MARNDR)

BACKGROUND

The Small-Scale Irrigation Rehabilitation (PPI) project included two phases with irrigation infrastructure as the primary focus. As is the case for most of the agriculture projects implemented during this period, it faced problems during all phases of implementation, especially changes of ministers and project managers. The second phase was particularly affected by the 2010 Earthquake and staff turnover⁸⁴.

OBJECTIVES AND COMPONENTS (based on PPI II)

The objective of the Project was to sustainably increase and secure the incomes and living conditions of poor rural households, especially those of the most vulnerable groups⁸⁵. The intervention was expected to affect a total of 21,000 households in 3 departments: Central, North-East and North-West by developing irrigation for 3000 hectares of land. The project encompassed three components:

- Development of irrigation,
- Support to productive activities, and
- Capacity building.

FINDINGS FROM THE AGRICULTURE SECTOR ASSESSMENT:

Effectiveness

Overall, the Project completion report assessed that for all three components, the effectiveness of PPI was considered moderately satisfactory. The project promoted a participatory approach to delivering extension services including dissemination of soil and water conservation techniques, improved soil fertility, and increased production on slope areas. In line with its third component, the project sought to formalize the community solidarity groups into community-based financial institutions called CREP, which would provide financial services to the rural poor. As far as natural resource management is concerned, the project reduced environment and soil degradation and improved gully control quality. According to the report, community participation and ownership contributed to the success of the intervention. The project was very effective in strengthening community-based organizations (CBOs). The report claims that the project emphasized citizen empowerment, successfully spreading the notion of working together to overcome limits to economic development of all community households. It also succeeded in strengthening communities' social capital and strengthening their local organization capacity (including capacity to manage a budget, manage meetings more efficiently, create a better structure and business approach, and seek and utilize funding from a variety of sources). Respondents in the fieldwork described the main focus of PPI as the construction of agriculture infrastructure, including irrigation canals, and provision of irrigation pumps to prevent flooding of farm. In addition, PPI conducted training sessions for users on the management of input stores constructed, warehouse and depots for inputs, provided tools, packaging and training to help create value-added products, granted goats to vulnerable women and oxen for plowing, and taught beneficiaries to construct improved chicken coops.

⁸⁴ RAPPORT DE SUPERVISION DU PROJET

⁸⁵ <https://operations.ifad.org/documents/654016/127663c9-1bd3-451c-a497-0c6e3e816569>

Beneficiaries noted the positive results brought by the irrigation infrastructure, particularly increased production of bananas and chickpeas. One focus group participant stated, "Before the construction of the canals, access to water was difficult. Previously, our harvests in chickpeas were practically nil. A watered banana tree has a better yield and we can sell it at a higher price." Increased productivity was the first most cited result cited by beneficiaries, followed by increased job creation, and improved natural resource management. Improved food security was the least cited result, possibly due to a lack of knowledge about food security. Data collected from beneficiaries indicated that the approaches implemented by PASAH that contributed the most to the results were Vouchers for inputs, Irrigation infrastructure, Support to local organizations - i.e. regional development institutions, irrigation management groups, and Support to local authorities (CASEC, ASEC, Mayor).

Beneficiaries also noted several negative aspects of the project. Institutional inefficiencies and high staff turnover slowed decision-making. Project implementer representatives cited several administrative problems including slow mobilization of project resources due to instability of administrative officials and poor financial management. In many sites pests or diseases hurt the crops during project implementation. Although productivity was the biggest result achieved, beneficiaries confessed that they did not receive assistance in marketing their increased production and their new value-added products such as juices. In addition, problems with theft plagued some of the construction activities. People also noted that access to credit was not a component of the project and could have been helpful to the community. Focusing mainly on infrastructure, the project did not work with existing private sector entities, which could have eased market access and helped to sustain the benefits of the intervention.

Sustainability

Different respondents revealed differing opinions of the sustainability of the project. Project implementers and local CBO representatives reported that the outcomes of the intervention are visible in many sites, including (i) training provided to local organizations and the training in improved organic gardening techniques has continued to provide benefits to those who participated, (ii) the people and organizations are continuing to use the skills they developed. (iii) irrigation infrastructure constructed by the project is still available.

Beneficiaries on the other hand, stated that while a few results of the program are still visible and benefiting participants, other aspects have not been sustainable. The irrigation canals and some of the pumps are still functioning and allowing people to irrigate and continue to produce more than they did before the project, but other parts of the small-scale systems have broken and have not been repaired. A sophisticated irrigation infrastructure, such as drip system, was not appropriate to local conditions. Water users' associations were not adequately prepared to be able to operate the systems in the Northwest. The livestock activities have not been sustainable – focus group discussions participants in the Northeast stated that many of the oxen and chickens have died because they did not have access to veterinary care. Many value-added production activities have also not been sustainable because the community has not found a market to sell these products.

Enabling Environment Factors

The main impediment to the community's economic growth was cited as the poor quality of the roads and high cost of transportation, which have inhibited the search for markets and made many of the promoted products unprofitable to sell outside of the villages. Access to credit for inputs, especially improved seeds, remains the greatest challenge in some communities. While the improved access to irrigation was an incentive for farmers to increase investment in their farms, they could not find financing mechanism that responded to their needs.

Project implementers stated that despite significant effort on the part of IFAD and the project to work with local and national government officials, at several points the GOH was unable or unwilling to contribute counterpart funds or fulfill other agreed-upon procurement obligations. This resulted in a ten-month suspension of program activities, ultimately leading to the

achievement of only a fraction of the activities and results originally anticipated. Other enabling environment hindrances include lack of a coherent agricultural policy that allows for transfer of ownership and management of infrastructure to communities to manage, as well as the lack of an irrigation water-management authority that would manage and regulate all irrigation water systems in the country. Finally, the absence of agriculture insurance to cope with natural disaster has decreased the impacts of the PPI.

LESSONS LEARNED

- **Providing access to water is important, but without access to other factors of production or marketing opportunities it alone cannot achieve the expected results in terms of increased productivity or increased income.**
- **Irrigated perimeters do not exist without the upstream watershed where farmers live and produce.** Small watershed protection projects like those carried out by PPI (regeneration of vegetation cover, anti-erosion, etc.) to protect the downstream where the irrigated perimeters are located should be considered in all irrigation infrastructure projects.
- **When infrastructure is included in a project, management and maintenance post-project are always the biggest challenge.** In this case, the Ministry of Agriculture was involved from the beginning and is continuing certain activities, though maintenance of the infrastructure has not been carried out as planned.
- **The absorption of donor funds requires appropriate institutional capacity in terms of planning, execution, monitoring, and reporting.** The inefficiencies in the management of this project hindered its effectiveness and lessened its sustainability.

CONCLUSIONS

Although PPI did result in increased income and productivity for beneficiaries, its effectiveness was negatively affected by institutional inefficiencies such as slow decision approval and high staff turnover. Some benefits have continued post-project, but sustainability was hindered by a lack of maintenance of irrigation infrastructure, and a lack of continued access to inputs and markets. Nevertheless, the intervention has generated lessons learned: the need to blend provision of irrigation water with other factors of production to achieve results, the prerequisite to act upstream in the watershed while working downstream, the need for institutional appropriation of approaches and interventions by the Ministry of Agriculture so that it can take over management of infrastructure post-project, and the need for identification and consideration of any critical institutional weaknesses within the Haitian government to speed up absorption of donor project funds.

SOURCES OF INFORMATION

Documents Consulted:

- Project Completion Report

People Interviewed:

- Water users Associations members
- Representatives of involved Community-based Organizations
- Involved local and national government representatives
- Representatives of Implementing entity
- Project beneficiaries
- Implementing partner Representatives
- Donor Representatives

CASE STUDY #5: Food Security Improvement Program in Haiti (PASAH)

INTERVENTION DETAILS

- Type of financing: Donor
- Donor: European Union
- Budget: €20M
- Years of intervention: 2013-2016
- Implementation areas: Northeast, Northwest, Artibonite and South
- Main implementing agency: Ministry of Agriculture, Natural Resources and Rural Development (MARNDR), *Centre*: PROTOS et AVSF, *Northwest*: AAA-CHRISTIAN AID/KORAL), and *Artibonite*: OXFAM INTERMON

BACKGROUND

The Food Security Improvement Program in Haiti (PASAH) was created in January 2013 by the Government of Haiti to combat food insecurity in the country. The main objective of this program was to improve food security in the Northwest, Northeast, South and Artibonite departments through an increase in quality and quantity of local products, irrigation of land with new watering techniques, management of watersheds and the improvement of agricultural roads.

OBJECTIVES AND COMPONENTS

The main focus of PASAH was food security. The intervention included several sub-projects that aimed to combat food insecurity, including:

- Project to improve food security in the Artibonite Valley (PASAVA) implemented by Oxfam America, PRODEVA, and RACPABA;
- Improvement of food security in the Northeast department executed by FAO;
- Strengthening rural entrepreneurship and value chains for agricultural products in the Central Plateau implemented by AVSF MPP/VETERIMED/EMDH/KNFP/COOPECLAS,
- Improving food security by strengthening marketing and processing systems for local products in northwestern Haiti implemented by KORAL.

FINDINGS FROM THE AGRICULTURE SECTOR ASSESSMENT

Effectiveness

Project donor and implementation agencies revealed that the PASAH project contributed to improving food security in its intervention areas. In the Northeast department it established Farmer Field Schools that championed processing / marketing of fish and peanuts. In the central Plateau, it strengthened rural entrepreneurship and value chains for agricultural products through the construction of a dairy and two mills in Maïssade, and the construction of a fish food production center. The intervention also improved food security by strengthening marketing and processing systems for local products in northwestern Haiti, especially by providing chicken processing centers, grain depots, and mills.

Though the main objective of the project was Food security, improved food security was only the third most frequently cited result by the respondents – they conveyed that food security was improved through diversified income sources, improved social protection through community institutions, and improved nutrition status. Improved access to markets, Increased productivity and Increased income were the other most cited results by all respondents. Increased income was achieved mainly through a reduction of expenses for inputs - by subsidizing this expense, farmers could grow more at a lower cost and therefore earn more income. Improved productivity was mainly achieved by promoting value-added products and increasing yields at the farm level. To achieve the stated results, the project worked with local institutions by foster partnerships between NGOs, local organizations, and local government. It worked also with communities by strengthening CBOs in a participatory fashion, specifically targeting vulnerable groups. To a lesser extent it worked with private sector buyers and other donor projects such as Lèt Agogo for milk processing, worked with fertilizer/inputs suppliers, and RACPABA in rice commercialization.

Data collected from beneficiaries indicates that the PASAH project implemented 14 of the 25 approaches identified in the Comprehensive Agriculture assessment, including the voucher approach. The approaches implemented by the interventions that contributed the most to the results are:

- Providing technology package including inputs in combination with training,
- Small scale training on value-added products and improving quality for producer's/producer groups, including seeds and input production,
- Animal Husbandry and livestock market infrastructure and marketing support, and
- Farmer-to-Farmer/Model Farmer Training and demonstration.

Many respondents stated that the combination of three of the technical approaches in particular was responsible for the bulk of the results: vouchers combined with Inputs provided as part of a Training Package plus greater access to water.

Respondents noted several factors that negatively affected the project. They mentioned that Hurricane Matthew devastated some project sites and drought has affected most of them. Beneficiaries confessed that better management of the intervention by the implementing agencies would have yielded higher results. The availability of agricultural inputs and cold rooms for the commercialization of processed livestock such as chicken, would also have improved the results.

Sustainability

Most of the respondents said that PASAH was somewhat sustainable. Respondents alleged that some of the benefits of the project still are visible, including the animal husbandry and livestock promoted by the project that are still generating revenue, CBOs that still exist and are continuing some of the activities, and some of the small-scale irrigation infrastructures are still operational.

On the other hand, beneficiaries stated that other aspects have not been sustainable. The project invested in infrastructure without setting up a mechanism for long-term maintenance, and the local organization entrusted with the activities post-project did not have the capacity to carry out this role. The introduction of fishing techniques in freshwater in the Northeast was very effective during the implementation of the project, but at the end of the intervention the beneficiaries were unable to establish electrical power needed to raise water in the basins and for cold storage of fish. Some beneficiaries complained that some fish died due to lack of oxygen, especially during hot weather. They also could not find food to feed the fish. One group of beneficiaries met in Capotille confessed that "We had no spare parts or technicians for the equipment. When these devices fail we do not know what to do to troubleshoot them." The project rehabilitated a road; however, no money was set aside for the maintenance of the rehabilitated road after the project.

There is no funding to continue subsidizing some of the activities that were subsidized during the project. With no access to credit, once the project ended some farmers were unable to pay for inputs or services. Respondents explained that the project failed to establish an exit strategy that would maximize its sustainability. Given the large scope of the intervention, they felt that more time was needed to sustain its outcomes.

Enabling Environment Factors

Several factors in the enabling environment have affected the PASAH project. Drought destroyed the crops in many project sites, especially in the Northwest. Beneficiaries met in the northeast acknowledged that drought is their biggest challenge since the rainy season has shortened and most of them do not have access to irrigation. Having no insurance, most of the farmers lost harvests several years in a row during the implementation of the project. Another factor that negatively impacted the results is the lack of good roads to facilitate the access of agriculture products to the markets, which increased post-harvest losses. Finally, the lack of a

government mechanism to take ownership of and manage infrastructure post-project affects the sustainability of the small-scale irrigation infrastructure built by PASAH.

LESSONS LEARNED

- **Implementing technical approaches in a combined way is better than implementing them separately.** PASAH implemented at least 14 different technical approaches in its different sites. However, according to many who were involved with or benefited from the project, many of the approaches were not implemented to complement each other towards the achievement of specific results to fill specific gaps in the targeted value chains.
- **To combat food insecurity and malnutrition, projects must also target other sectors besides agriculture.** The PASAH project worked with the following state entities: MARNDR, The Ministry of Social Affairs (MAST), The Ministry of Health and Population (MSPP), and the Planning Ministry (MPCE).
- **Partnering with school food buyers is also a promising strategy to facilitate access to market with benefits for farmers and students.** Government needs quality food to feed school children. Organized farmers can address this need.
- **It is important not to overestimate the capacity of grassroots organizations.** An attempt was made to put in place a rice processing and marketing unit to be managed by RACPABA in Artibonite, but its management weaknesses made this unsuccessful.
- **The donor grant mechanism tends to favor large NGOs that have financial means.** This results in resources flowing out of the country instead of staying locally and helping to build local capacity. Therefore, it is good practice to require large NGOs to partner with small local NGOs or CBOs in responses to calls for proposals. Partnership requirements are one solution that the European Union found.
- **Money must be set aside for the maintenance of rehabilitated infrastructure such as irrigation canals and roads after the project.** PASAH did not, which has decreased the sustainability of the intervention.
- **The size of the farms is a limiting factor for an export-oriented agriculture in Haiti.** It is difficult to promote export-oriented agriculture in Haiti because the average size of farms is between 0.5 and 1 hectare. For this reason, the PASAH targeted family farming. Export-oriented agriculture is better left to larger farms, or cooperatives of farmers, and requires the availability of irrigation infrastructure.

CONCLUSIONS

Using a set of technical approaches that involved a broad range of partners including implementing partners, CBOs, and local enterprises, PASAH contributed to improving farmers' income, their resilience, productivity, food security and access to markets. The lack of a mechanism to continue to manage project infrastructure following the end of a project affected the sustainability of the small-scale irrigation infrastructures and processing facilities built by PASAH. Nevertheless, the intervention has generated lessons learned around combining technical approaches in a strategic way, involving other sectors and agencies including schools when attempting to address food insecurity and malnutrition, managing the weaknesses and disadvantages of small local NGOs, and the importance of post-project maintenance strategies for project-built infrastructure.

SOURCES OF INFORMATION

Documents Consulted:

- Une étude exhaustive et stratégique du secteur agricole/rural haïtien et des investissements publics requis pour son développement. CIRAD-BID, 2025
- Mission d'Evaluation à mi-parcours du Programme d'Amélioration de la Sécurité Alimentaire en Haïti (PASAH) / Initiative OMD Rapport Final 10/04/2015;
- <http://www.bonfedhaiti.gouv.ht/securite-alimentaire-et-nutritionnelle>

Some of the People Interviewed:

- Donor representatives
- Project beneficiaries
- Direct Observations
- Implementation partner staff
- Involved government representatives

CASE STUDY #6: Project of Technology Transfer to Small Farmers (PTTA)**INTERVENTION DETAILS**

- Type of financing: Donor
- Donor: InterAmerican Development Bank (IDB)
- Budget: \$25 million
- Year of intervention: 2013-2016
- Implementation areas: West (Petit-Goave) and Nippes; North (Saint-Raphael)
- Main implementing agency: Ministry of Agriculture, Natural Resources and Rural Development (MARNDR)

BACKGROUND AND OBJECTIVES

Most Haitian farms operate at low productivity, which undermines their food security. To address this issue, the Project of Technology Transfer to Small Farmers (PTTA) aimed at improving the livelihood of small farmers by increasing agricultural output and food security. Based on experience gained in Sub-Saharan Africa that showed that one-time targeted subsidies can be effective at increasing the adoption of fertilizer and lead to increased agricultural productivity, PTTA was planned to grant smart subsidies in the form of vouchers to pay for labor, fertilizer, and pesticides. It targeted 30,000 small farmers living in the low plains as well as in mountainous areas of the Nord and Nord-Est departments.

COMPONENTS

The main focus of the project was promoting new agricultural technology to farmers, with the goal of increasing yields and improving food security. It had two technical components: 1) Improved and sustainable agricultural technology adoption; and 2) Strengthening of the National Seeds Service.

FINDINGS FROM THE AGRICULTURE SECTOR ASSESSMENT**Effectiveness**

The final evaluation report indicates that, PTTA helped beneficiaries to cope more with expenditures related to food, payment of debts, schooling; investments in livestock purchases; agricultural intensification, land purchases, trade and home repairs. Overall, 76 percent of beneficiaries felt that the project improved their living conditions in general.

People consulted during the fieldwork declared that the PTTA project assisted farmers in access to inputs (seed, fertilizer, pesticides), plowing services, transplanting, training on improved farming techniques such as intensive production of rice, and training on methods of sprinkling plots by showing them how to handle pesticides. Improved resilience was the most cited result by the respondents. They explained that the project improved farmers' access to inputs and agricultural technology. The other most cited results were increased income, increased productivity, and the creation of jobs. Although the project was concentrated on food security, improved food security was one of the least cited result by the beneficiaries. They later conveyed that food security was improved through diversified income sources, and improved nutrition, while productivity was improved through increased yield at the farm level and better access to inputs and services.

To achieve the stated results, the project worked with local community institutions and with private sector enterprises (financial institutions, and a pool of agricultural service providers) to operate its voucher strategy.

Data collected from beneficiaries indicated that the approaches implemented by the interventions that contributed most to the results were providing a technology package that included inputs in combination with training: Training on sustainable agricultural techniques such as reforestation and physical erosion control to protect waterways and prevent flooding. Respondents noted several factors that negatively impacted the effectiveness of the project. They mentioned natural disasters (extended drought season and hurricanes) that have affected the northern region of the country. They also pointed out that the intervention could be better managed, especially in terms of communication with final beneficiaries both to detect early signs of implementation failures, and to better respond to farmers' expectations and in making sure that seeds and fertilizer arrive on time to farmers. The lack of support in access to market, especially in terms of food processing and conservation, was flagged as a disabling factor by different types of respondents. Finally, they mentioned that free breeding and inadequate roads to access markets has decreased the effectiveness of the intervention.

Sustainability

The final evaluation report concludes that the sustainability of the intervention is not assured. The beneficiaries do not have the technical and financial support or enough experience (practices) to adopt the innovations. More specifically, they say that in irrigated areas smallholders do not have enough money to purchase sufficient inputs and to pay for plowing services properly. The amounts granted by the project and the production surpluses (when they exist) are often invested in other non-agricultural activities (schooling, purchase of land, residential rehabilitation, livestock, etc.). Incentives alone are insufficient to keep farmers on the path of the PTTA. Other investments (water control, research and development, technical support), and access to finance are necessary to sustain the intervention.

Overall, respondents alleged that some of the benefits of the project still subsists. Providers of agricultural services still exist and continue providing services. Farmers are using the training provided by the projects as well as technology bought through the voucher approach. Livestock provided by the project are still being used as alternative savings by the households. The project also helped to create agriculture cooperatives that are still operational. Beneficiaries, on the other hand, stated that while the results described are still visible and benefiting farmers, other aspects have not been sustainable. Though the farmers retain the knowledge and skills gained, most of the benefits were not sustainable. For example, program participants received vouchers for rice inputs. Many farmers who did not have irrigation were unable to cultivate because an extended drought season made growing rice and other crops impossible when no water catchment infrastructure or other resiliency strategies were planned for. Respondents argued that the project distributed vouchers without a rigorous identification of farmers. It should have made better use of grassroots structures to allow for more equitable distribution of services. Furthermore, there is no fund to continue with the smart subsidies at the end of the project while farmers' access to credit continues to be very limited.

Enabling Environment Factors

Several factors in the enabling environment have affected the PTTA project. In the absence of a national phytopathology and zoo-pathology extension system, pests and diseases injured the crops. That lessened the benefit of the increase in productivity driven by the project. Another factor that negatively impacted the results was the poor quality of the roads, especially in the Northwest, which have inhibited the access to markets and made many farmers' products unprofitable to sell outside of their village. Beneficiaries also indicated that inadequate or absent Irrigation/drainage infrastructure hindered the profitability of their farms in a context of extended drought season. Finally, uncontrolled grazing of animals has discouraged some farmers by destroying their crops.

LESSONS LEARNED

Mobilizing local grassroots structures' knowledge would allow an equitable distribution of agricultural services to farmers. The voucher strategy implemented by PTТА would be more equitably distributed within its intervention areas.

Incentives can work well only if there is suitable terrain. It is not enough to provide a technological package if it is not generated by an agricultural research system, without support for marketing, in a context where the hydro-agricultural infrastructures are failing.

The appropriate technical approach depends on the financial needs of different categories of beneficiaries. For low income farmers, the subsidy incentive system makes sense, while a credit system would better support farmers who have higher income.

Vouchers should be designed so that they are easing a true constraint to input usage. In the Northeast, farmers were already using most of the inputs in the voucher package and were able to finance them through local traders. Providing the vouchers therefore allowed them to take fewer loans but did not result in higher input usage. In this case, vouchers act more like a cash transfer, and have less chance of spurring agricultural technology adoption.

Technical packages need to be improved and developed through an iterative process based on listening to and understanding farmers' constraints and strategies to gradually develop more appropriate responses. To facilitate the adoption of the technical packages, the PTТА should have used demonstration plots of these packages, which would allow the farmer not only to see first-hand the results, but also and especially to develop a greater trust in other players.

In contrast with smart subsidy programs in Sub-Saharan Africa where subsidies allow farmers to learn and adopt new technologies, the PTТА subsidies in the Northeast were for inputs that were already widely used. While the voucher amounts were initially set so they would provide farmers a higher amount of fertilizer than they typically use, the increase in fertilizer prices resulted in the vouchers not automatically spurring higher fertilizer use. Moreover, farmers decided not to complement the inputs obtained with the vouchers with their own purchases, possibly due to the drought conditions.

Given the high risk related to rain-fed agriculture, annual rain-fed crops in Haiti might not be the ideal focus area for a smart subsidy program, in particular if the objective is to increase yields.

The benefits of any new smart subsidy program might be higher if it's targeted to crops that are less weather dependent, for which new technologies exist, and/or for which lumpy one-time investments might be important to reach substantial productivity increases in the long-run.

The "big push" and "poverty trap" theories of Rosenstein-Rodan (1943) and Murphy et al (1988) have not been proven in the context of the PTТА. In fact, only one campaign was not enough for farmers to continue to grow profitably in the years to come. The self-sustaining chain of technology use and profitable reinvestment was not unlocked by their first crop earnings.

CONCLUSIONS

Using a set of technical approaches that involved a broad range of partners, including implementing partners, financial institutions, governmental structures, and local enterprises, the PTТА project contributed to improving farmers' resilience in an intervention area where resilience is critical. It also contributed to increasing their income, and food security. Although the project was concentrated on food security, improved food security was one of the least cited results by the beneficiaries. Plagued by institutional inefficiencies and natural disaster, the flagship technical approach of the project, the voucher, is not yet sustainable. Nevertheless, the intervention has generated lessons learned: how to have a more equitable distribution of the agricultural services to farmers, the need to link vouchers to an agricultural research system and marketing support, and to design vouchers for different categories of beneficiaries and so that they are easing a true constraint to input usage.

SOURCES OF INFORMATION

Documents Consulted:

- Une étude exhaustive et stratégique du secteur agricole/rural haïtien et des investissements publics requis pour son développement. CIRAD-BID, 2031

- Impact evaluation report, Development Impact Evaluation (DIME)
- Paris School of Economics (PSE), March 2017
- Final evaluation report

Some of the People Interviewed:

- Rapport de synthèse du focus réalisé avec entreprises bénéficiaires du projet PTТА dans le cadre de l'évaluation du secteur agricole en Haïti/ Groupe : Entreprise bénéficiaires / OPD /PTТА
- Rapport de synthèse du focus réalisé avec entreprises bénéficiaires du projet PTТА dans le cadre de l'évaluation du secteur agricole en Haïti/ Groupe : Entreprise bénéficiaires / Entreprise Bénéficiaire (Action, Transfert de Technologies aux Agriculteurs : ATТА-SÔL)
- Rapport de synthèse du focus réalisé avec les bénéficiaires du projet PTТА dans le cadre de l'évaluation du secteur agricole en Haïti / Groupe : OCB /groupement de planteurs de Coïcou

CASE STUDY # 7: FOOD SECURITY PROJECT/PROJET DE SÉCURITÉ ALIMENTAIRE (SECAL)

INTERVENTION DETAILS

- Type of financing: Donor
- Donor: Agence Française de Développement (AFD)
- Budget: 21.2M
- Years of intervention: 2012-2019 (still underway as of time of writing)
- Implementation areas: Plaine des Cayes, Arcahaie and Artibonite
- Main implementing agency: Ministry of Agriculture, Natural Resources and Rural Development (MARNDR)

BACKGROUND

Haiti has been facing a situation of severe food insecurity, both chronic and marked by acute crises (CNSA, 2016) while the agricultural sector, which provides 40 percent of income in rural areas, is declining and generating only 25 percent of GDP. This situation began after the liberalization of the Haitian economy in the 1990s that exposed Haitian production to international competition in a context of growing demographic pressure on domestic natural resources. Satisfying 80 percent of national food requirements in 1981, currently agricultural production covers only 40 percent of the country's needs. Furthermore, the development of Haiti's agricultural sector has faced many challenges, including poor access to finance, technology, advice and training, low public and private investment, degradation of infrastructure such as irrigation systems and storage equipment that hinders production. The added value created remains low in most of the food-producing value chains in a country highly vulnerable to natural disasters such as cyclones.

COMPONENTS AND OBJECTIVES

The SECAL project aimed to improve the food security and income of rural populations. It also intended to contribute to the recovery of populations following Hurricane Matthew, which hit the South department in October 2016. To this end, several priority value chains have been targeted – particularly corn, beans and peanuts in the southern department and banana plantains in the western and Artibonite departments.

The expected impacts from the intervention are:

- Increased income for producers,
- Post-disaster recapitalization of agricultural activities,
- Improved maize processing and quality to enable access to higher-paying markets,
- Structuring of water users associations,

- Capacity building (technical, management, leadership) of the Departmental Direction of Southern Agriculture.

FINDINGS FROM THE AGRICULTURE SECTOR ASSESSMENT

Effectiveness

Interviews with project donor staff and implementers revealed that the SECAL project rehabilitated the irrigated perimeters of Avezac in Camp-Perrin while building the capacity of irrigation Associations using these perimeters. Farmers working on maize and bean value chains were supported through the distribution of vouchers for the purchase of seeds, plowing and fertilizer. They were also supported in their technical choices by a local NGO. Increased productivity and income were the results most cited by all groups of respondents. They explained that the project improved farmers' access to inputs and agricultural technology through an effective implementation of the voucher strategy. Increased income was achieved mainly through a reduction of expenses for inputs. By subsidizing this expense, farmers could grow more and therefore earn more income. The other most cited results were improved resilience of farmers, improved natural resources management, and access to jobs and markets. Although the project had improving food security as a major objective, this was the least frequently cited result by the beneficiaries. One reason may be because the beneficiaries did not understand well the concept of food security.

To achieve the above-stated results, the project worked with community members, local institutions and with private sector enterprises (including financial institutions and a pool of agricultural input and service providers) to operate its voucher strategy. In an effort to support producers towards sustainable and autonomous financing, SECAL co-financed the SYFAAH (Financing and Agricultural Insurance System)⁸⁶ project in 2015 to structure a range of financial services for agro-entrepreneurs, especially through creation of a credit union.

Data collected from beneficiaries indicated that the approaches within this intervention that contributed the most to the results are providing technology package including inputs in combination with training, supporting financial institutions to expand to rural areas through loan guarantees, and providing irrigation infrastructure.

Respondents noted several factors that negatively affected the project. They mentioned that Hurricane Matthew devastated the southern region of the country, including some of the areas targeted by the project. Beneficiaries mentioned that uncontrolled grazing of animals has decreased the effectiveness of the intervention. They believed that the combination of the voucher approach combined with inputs provided as part of a training package approach worked together well to make the project effective. Another particularly effective combination was providing access to irrigation water plus providing increased access to inputs.

Sustainability

Most of the respondents said that SECAL was somewhat successful – the project improved irrigation and the provision of inputs helped increase productivity. Respondents alleged as well that some of the benefits of the project still exist - providers of agricultural services still operate and continue providing services. Farmers are using skills learned in training provided by the projects as well as technology brought through the voucher. Irrigation infrastructure that was rehabilitated is still operational. Financial institutions supported through SYFHA are still providing services to farmers.

On the other hand, beneficiaries also stated that while the results described are still visible and benefiting farmers, other aspects have not been sustainable. The project did little to improve market access while it contributed to increasing production. There is no funding to continue with the smart subsidy of inputs at the end of the project. Once the project funds stopped, people said that they have been unable to continue to pay for inputs and services. Though the irrigation

⁸⁶ The SYFAAH project has been working since 2011 with the financial support of the Canadian Cooperation and the Haitian State, as well as Switzerland since 2014.

infrastructure is currently still operational, maintenance is not being done on a regular basis, making it likely that at some point it will cease to operate as well. Furthermore, although the Ministry of Agriculture was involved in the implementation, the Haitian government has not fully taken ownership of the infrastructure constructed during the intervention.

Enabling Environment Factors

Several factors in the enabling environment have affected the SECAL project. Hurricane Matthew destroyed most of the crops in the South department. Having no insurance, most of the farmers had to start from scratch, or with support provided by the project. Another factor that negatively impacted the results is the tariff and trade policy practiced by Haiti that favors imported agricultural products, making them cheaper than locally produced agricultural products. Finally, the lack of a government mechanism to manage infrastructure and continue project activities post-project affects the sustainability of the irrigation infrastructure built by SECAL as well as the benefits of the voucher strategy.

LESSONS LEARNED

- **Interventions are most successful when they partner with decentralized government agencies.** From the project conception the AFD worked with the DDA, which helped which contributed to strengthen local office and staff that championed the project and will provide post intervention follow-up to sustain the results
- **It is critical to consider all upstream and downstream effects of the intervention and be sure to integrate appropriate measures for each link in the chain.** At the beginning of SECAL, the project neglected to consider the upstream role of the watersheds in the management of water for agriculture. After realizing this link, watershed management was integrated in the project.
- **Combining approaches that are complementary drive better results.** SECAL implemented one of the most common combinations of technical approaches found in our research: Vouchers combined with Inputs provided as part of a Training Package plus Access to Irrigation. Most of the respondents indicated that the effectiveness of the intervention is partly due to the implementation of this blended approach.
- **Working on an irrigated perimeter helps to clarify property rights because it required delineating property lines, which is a critical issue in the Haitian agriculture sector.** For example, to determine the path of the irrigation canal the users were consulted in order to determine who owned each parcel – this helped the community publicly define each member's rights.

CONCLUSIONS

Using a set of technical approaches that involved a broad range of partners including implementing partners and local enterprises, SECAL successfully contributed to improving farmers' income. It also contributed to increasing farm productivity, resilience and natural resource management. Though the project hoped to improve food security, this result was not cited by the beneficiaries. Some elements of the project have proven to be sustainable, while others have not - the lack of a government mechanism to manage the irrigation infrastructure built by SECAL as well as the voucher system will almost definitely negatively affect the project's sustainability. Nevertheless, the intervention has generated several lessons learned: Interventions are more successful when they partner with decentralized government agencies, projects must consider all upstream and downstream effects of the intervention and be sure to integrate appropriate measures for each link in the targeted value chains, the combination of complimentary approaches drives better results, and irrigation projects can also help to clarify property rights as a secondary benefit.

SOURCES OF INFORMATION

Documents Consulted:

- Une étude exhaustive et stratégique du secteur agricole/rural haïtien et des investissements publics requis pour son développement. CIRAD-BID, 2016<http://coeh.eu/wp-content/uploads/2017/05/Programme-SECAL.pdf>
- <https://www.afd.fr/en/print/pdf/node/3150>

Some of the People Interviewed:

- Services providers
- Involved government representatives
- Donor representatives
- Direct observation of irrigation canal of Camp-Perrin

CASE STUDY #8: PADELAN (Projet d'appui au développement local et à l'agroforesterie des Nippes)

INTERVENTION DETAILS

- Type of financing: Donor
- Donor: Canadian Cooperation
- Budget: \$7.6 Million
- Years of intervention: 2005-2012
- Implementation areas: *Nippes*: Miragoane and Paillant, Anse-à-vau; *Artibonite*: Saint-Michel de lattalaye and Gonaïves; *West*: Port-au-Prince and Léogâne; *Southeast*: Jacmel.
- Main implementing agency: Oxfam Quebec

BACKGROUND

PADELAN began as a natural resource management program by Oxfam Quebec but became an emergency response program after the January 2010 Earthquake. Oxfam-Québec's humanitarian response, which has been in Haiti since 1983, is an integral part of Oxfam's response. Deeply shaken, the Haitian diaspora in Quebec invested in various ways to provide assistance to victims. Coordination between Oxfam, civil society and local authorities was put in place to deal with the situation as effectively as possible. OXFAM's teams, both in Haiti and Quebec, mobilized and participated in this humanitarian response.

OBJECTIVES AND COMPONENTS

The main goals of the project were to:

- a) design, promote and implement production models of sustainable agroforestry and management of micro-watersheds;
- b) strengthen the intervention capacities of local structures and socio-economic organizations, particularly in the design and management of local development programs, in a context transition and democratic reconstruction.

The post-earthquake intervention aimed to support people affected by the earthquake in many parts of the country: Port-au-Prince, Jacmel, Léogâne, Gonaïves, Saint-Michel de Lattalaye, Miragoane, and Paillant. Oxfam-Québec intervened in the following areas:

- Water, Sanitation and Hygiene (WASH) and health promotion;
- Reconstruction of communities (temporary shelters, psychosocial support, support to vulnerable populations);
- Food security, agricultural revival and livelihood reconstruction;
- Work for pay in support of different sectors of intervention; and
- Advocacy and campaigns.

Taking into account the issues and challenges specific to the situation, Oxfam's approach was based on the following strategic axes:

- Respond to the needs expressed by the population under quality humanitarian conditions and standards;
- Work in areas where Oxfam has developed expertise and gained notoriety in Haiti over the years;
- Promote the potential of Oxfam's partners in Haiti, especially those in the areas directly affected, and
- Ensure that organizations from affected populations participate actively in the decisions and activities implemented in their communities.

This case study focused on the agriculture component of the intervention during the post-earthquake phase.

FINDINGS FROM THE AGRICULTURE SECTOR ASSESSMENT

Effectiveness

The final report of the project indicates that OXFAM worked both on the humanitarian and developmental fronts by providing food kits to disaster affected people while supporting local agricultural production in rural areas hosting displaced people from Port-au-Prince, which was the most affected by the catastrophe. Agroforestry was promoted in the Nippes department mainly through the distribution of seedlings of lemon, breadfruit and mango. Goats and chicken rearing was promoted, especially in Leogane, which was part of the epicenter of the earthquake. Additionally, Agricultural infrastructure development and environmental protection were carried out using High Intensity Labor Force Method (HIMO), especially to provide jobs and increase the income of farmers. The activities generated more than 5,758 jobs in the municipalities where Oxfam Québec was working in the provinces as part of the development projects. In addition, the project distributed agricultural tools (machetes, serpettes, hoes, rakes, and pump sprinklers) to re-capitalize farmers, through local Community based organizations (CBO). Beneficiaries in the Nippes department who participated in focus group discussions as part of this assessment confirmed that they received these benefits from the project.

Improved resilience, increased food security, jobs and income were the results most cited by the respondents. They explained that the project increased their income by reducing their expenses for inputs and creating jobs. Food security was increased as a result of the diversification of their income sources through various technical strategies implemented by the project. They associated the improvement of resilience mainly to a better access to inputs and capital received from the project in the form of livestock and agricultural inputs. The other most cited results were improved natural resource management and agricultural productivity driven by training that they received on better farming techniques and livestock management.

To achieve the above-stated results, the project worked with the target communities in a participatory fashion and local institutions such as representative of the Ministry of agriculture at both the local and municipality levels. Data collected from beneficiaries indicated that the approaches implemented by the interventions that contributed the most to the results are Training on sustainable agricultural techniques, providing technology packages including inputs in combination with training, Participatory community environmental management planning, and Supporting local authorities (CASEC, ASEC, Mayor).

Respondents noted several factors that negatively affected the project – most notably natural disasters. Hurricane Matthew destroyed many achievements of the projects in the Nippes departments, including loss of significant numbers of livestock and trees.

Sustainability

The project benefits have mostly been lost due to the inability to continue activities or restart them following Hurricane Matthew. Although the project was mainly a response to one natural disaster, there was no contingency plan to face upcoming natural disasters. Additionally, the project initiated a lot of activities (agroforestry, livestock, Food security, food processing, agricultural revival, watershed management, agricultural track, access to credit through the

promotion of credit unions such as La Caisse d'Épargne et de Crédit de l'Arrondissement des Nippes (CECANIP, etc.) with limited budget, in a short time period, making it difficult to sustain them. Several respondents said the project was too short to have lasting effects.

Enabling Environment Factors

The main factor in the enabling environment that affected the PADELAN project was the lack of insurance in a context of project sites vulnerable to natural disaster. By destroying many achievements of the project, Hurricane Matthew undermined the effectiveness and the sustainability of the intervention.

LESSONS LEARNED

- **PADELAN had a very effective and innovative communication strategy.** The participatory approach adopted by the project allowed all the institutions to be involved in the monitoring of the project and to provide feedback when something was wrong. The consultation centers built by the project and animated by the local animators were intended to channel information in a bottom-up fashion to the coordination level, using the same means to disseminate key information.
- **Positive agro-ecological evolution can be implemented with a blended approach consisting of cash crops in addition to agroforestry over a long timeframe.** PADELAN is part of a long history of projects promoting a mix of cash crops and agroforestry. This, and the programs before it, have led to the positive agro-ecological evolution of the Plateau des Rochelois (Salagnac).
- **Humanitarian projects can lead to long-term results when they address not only short-term needs but also long-term needs.** Even though the PADELAN project's main focus was humanitarian, it also considered long-term development goals such as assisting farmers' capitalization in terms of inputs (seeds, agricultural tools, irrigation, etc.), promoting the use of local products to strengthen the national economy and develop links between producers and consumers, supporting the recapitalization of small urban and rural businesses by providing them with equipment, training and inputs, providing structuring work through the improvement of water management infrastructure, and strengthening the autonomy of women in their economic activities.

CONCLUSIONS

PADELAN was effective in improving farmers' resilience, increasing food security, jobs and income in a post-earthquake context. To a lesser extent it helped improved natural resource management and agricultural productivity. However, the intervention's achievements were negatively affected by Hurricane Matthew – the program had no resilience strategy to mitigate these impacts. As a result, the project's benefits have mostly been lost due to the inability to continue the activities put in place during the intervention or restart them after the hurricane. The main lessons learned from this intervention relate to positive models for communication strategies, the positive agro-ecological effects of encouraging both cash crops and agroforestry, and the potential for humanitarian projects to address systemic development issues in addition to short-term, post-disaster needs.

SOURCES OF INFORMATION

Documents Consulted:

- Haïti, réponse humanitaire, un an plus tard, Oxfam Québec

Some of the People Interviewed:

- Direct observations conducted in Paillant and Nippes
- Donor Representatives
- Involved local and national government representatives
- Project beneficiaries
- Implementation staff representatives

CASE STUDY #9: LÈT AGOGO

INTERVENTION DETAILS

- Type of financing: Donor
- Donor: Oxfam UK and other donors
- Budget: N/A
- Years of intervention: 2008-2011
- Implementation areas : Terrier-rouge, Limonade, Bon repos, Leogane
- Main implementing agency: Veterimed

BACKGROUND AND OBJECTIVES

In the 1970s and 1980s, various public and private sector initiatives helped established a modest but robust network of dairy farms and processing facilities, which use local raw milk—rather than powdered imports from foreign producers—to make local yoghurt, cheese, and sterilized milk for sale. To consolidate this initiative, Let Agogo (Haitian Creole for “Milk Aplenty”) was created in 1999 as a network of dairies by leading Haitian animal health NGO Veterimed and supported by Oxfam UK (OGB) since its start. Building on Let Agogo’s successes, Veterimed opted in mid-2008 to expand the dairy network from 13 to 25 processing units in a second phase of the project, with support from OGB and other key donors. In doubling the number of processing sites, Veterimed and OGB aimed to increase Let Agogo’s domestic market share from 0.4 percent to 5 percent, while benefitting 2,000 rural producer families across Haiti. Target beneficiaries were small-scale dairy farmers who owned between 4-5 cows on small plots of land—but who are not leveraging their animals’ full production potential because of a lack of good market access for milk sales. Veterimed and OGB also estimated that several thousand other small-scale producers in areas near the new dairies would benefit indirectly from the project, through anticipated increases in local market prices for milk following the start-up of the new dairies (which would offer guaranteed, higher purchase prices per gallon). Let Agogo’s overall project goals were two-fold: a rise in market share relative to competitors, and a related rise in producer income as the result of increased production and sales. To achieve these objectives, OGB/Veterimed intended to put a strong emphasis on aggressive product marketing and promotion.

COMPONENTS

The project included five core components which built on the project’s first-phase activities. First, support to producers through a range of support for small-scale producers, including technical training on improved husbandry and provision of animals, especially to women. The second component was strengthening producer associations: Capacity-building training for new and current producer associations. Third was support to dairies: Creation of new dairy facilities that offered multiple milk processing options (cheese production, yoghurt production, sterilized milk, etc.), and strengthening of current/new dairies’ production capacities. The fourth was enhancement of milk product marketing: Strengthening of the Central Unit’s marketing and outreach capacity and proactive acquisition of new large-scale customers and supply contracts. Finally, the project strengthened advocacy for the dairy sector as a whole: Lobbying the government to enshrine pasture land rights of producers, and improve producers’ access to state credit. While not explicitly stated as a project component, the new *Lèt agogo* phase also committed to improving gender equality in local communities, by giving women access to cows (through the “Manman Boeuf” initiative), by engaging more women as local producers, and by creating women’s producer associations in some communities and integrating women into mixed associations to give women a greater voice in local dairy production

FINDINGS FROM THE AGRICULTURE SECTOR ASSESSMENT

Effectiveness

The final evaluation report conducted by OXFAM in 2009 indicated that the project was effective at helping local dairy farmers to increase their milk production by 67 percent in a short three- to

five-year period, by providing support to producers in the form of training, equipment and animals. The project's efforts to strengthen producer associations have created new opportunities for dairy producers to build social networks and mobilize collectively to solve problems and/or obtain resources. *Lèt Agogo* support to dairies has helped communities establish new channels for local milk supply to be harnessed and processed to meet local demand; it has also created much-needed jobs and established new quality standards for local milk production. From the start of the project through 2009, beneficiaries' annual milk production rose by 67 percent to an average of 282 Gallons/year. Non-beneficiary milk production over the same period was approximately 265 Gal/year. Production increases were assessed as a possible consequence of project support, in combination with parallel project efforts to boost market access. This translated into greater income and income-earning options for women. Our fieldwork found similar evidence of success during the project. Despite some challenges, the first phase of the OGB-funded *Lèt Agogo* project achieved success in several key areas. Respondents cited increases in productivity, jobs and income most frequently. They explained that the project built a robust national network of dairies that transformed local producers' milk into yogurt, sterilized/pasteurized milk, and cheese, and then sold these finished goods for profit in various sites near the dairies.

The other most cited results were improved resilience of farmers through the provision of livestock - considered to be an alternative method of saving income - and the availability of milk processing technology. Even though it was a major objective of the project, improved food security was cited infrequently by the beneficiaries. One reason may be a lack of understanding of the concept of food security among the beneficiaries.

To achieve the stated results, the project worked with community and local institutions such as NGOs, government ministries and international organizations to secure and increase market share for the dairies.

Data collected from beneficiaries indicated that the approaches implemented by the interventions that contributed the most to the results are Animal Husbandry and livestock market infrastructure and marketing support, Small scale training on value-added products and improving quality for producers'/producer groups, Value chain integration - linking milk producers to processors/buyers, including through trade fairs, other marketing support and producer business groups.

Respondents noted several factors that negatively affected the effectiveness of the project. The most important is the extended period of drought that has affected the country during the last three years. Fluctuating climate and weather were cited as obstacles to higher milk production. During the dry season, some dairies have had to cease operations, decreasing the effectiveness of the intervention. Lack of access to credit hindered as well the development of the dairies. According to the evaluation report, with only a small amount of recurrent net profit, some dairies reported having little leftover money to invest in facilities/equipment upgrades or expansion.

Sustainability

According to the evaluation report, although the network of dairies is still operating, the intervention is not sustainable. Many challenges have impeded the growth of milk processing capacity over time, including cash flow problems that have impacted the production cycle (one manager reported being forced to wait several weeks for payment after selling milk to local schools), and fluctuating climate and weather as obstacles to higher milk production. Product competition prompted managers, especially in the northeast, to cap production at levels below capacity, as the availability of imported yoghurt grows in local markets. Also, the report suggested that most of the dairies are not managed as businesses. Actually, the project aimed to turn non-profit dairies that were begun through support by an NGO, into for-profit businesses managed by local producer associations. However, the associations lack private sector management capacity, and concerted efforts must be made to change this status quo.

Additionally, the dairies suffer from a lack of standardization or cohesion. This reality poses a key challenge for a project that aimed to create a strong, unified national brand--and bases its business model on a centralized marketing and purchasing hub, the Central Unit that acts like a franchising owner.

Most of the respondents consulted confirmed the evaluation reports findings. They mainly highlighted the incapacity of most of the dairies to break even without subsidies, especially because of an inadequate market-oriented business model, in a context with limited access to credit and unfavorable extended drought seasons associated mainly with climate change.

Enabling Environment Factors

Several factors in the enabling environment have affected the *Lèt Agogo* project. The lack of insurance in a context of extended period of drought in most of the project sites has hindered the effectiveness and the sustainability of the intervention. Another factor that impacted negatively the results is the low tariff trade policy practiced by Haiti that favors imported dairy products - *Lèt Agogo* products in the Northeast department can't compete with these low prices. An inadequate rule of law has also had a negative impact on the *Lèt Agogo* network. The theft of cows is widespread throughout the site, discouraging producers to invest in new cows. The lack of access to credit has also hindered the growth of the *Lèt Agogo* network – preventing producers from investing in more cows and preventing investment in expanded facilities and equipment.

Finally, the absence or unreliability of electricity in most of the sites has negatively impacted the development of the dairies, which require electricity for refrigeration. This enabling factor affects all private sector activities in the country.

LESSONS LEARNED

- **Management strategy is an essential piece for planning cooperatives and other community businesses.** Successful community businesses are those whose management has been entrusted by responsible grassroots organizations, highly motivated, business-savvy and entrepreneurial people.
- **All projects should have a strategy in place to deal with major natural disasters, especially in a context of climate change.** *Lèt Agogo* did not create a contingency plan to deal with the extended drought season that has negatively affected most of the dairies.
- **Specific focus on women can help improve the status of women and decrease poverty.** While not explicitly stated as a project outcome, women's empowerment was a key priority for *Lèt Agogo*. That priority is visible through the entire project - the "Manman Boeuf" cow distribution campaign explicitly aimed to increase the number of female producers affiliated with local dairies. Activities to strengthen producer associations aim to increase overall female membership to 30 percent of the total, with women producers holding 40 percent of leadership posts. This requirement has contributed to empowering female community members to own assets, earn income, and contribute to their household's economic development. As one woman said "We had nothing before. Now this project has transformed our lives."
- **To be profitable, businesses should be managed according to business principles, even if they also implement a social corporate responsibility strategy.** *Lèt Agogo* as social business has focused on achieving social goals, sometimes at the cost of financial performance, which should be its primary focus if it is to be sustainable long-term.

CONCLUSIONS

Despite some challenges, the *Lèt Agogo* project has achieved success in several key areas, especially in contributing to create community enterprises that provide value-added milk products, transforming farmers into entrepreneurs and increasing their income. However,

although the network of dairies is still operating, the intervention is not sustainable. Many challenges have impeded the growth of milk processing capacity over time, including cash flow problems, fluctuating climate and weather, product competition and a lack of business acumen in most of the dairies. Additionally, the dairies suffer from a lack of standardization or cohesion. This intervention has many lessons to teach USAID and other aid practitioners, including the importance of business-like management strategies, natural disaster mitigation planning and can serve as an example for how a project can contribute to improving the status of women and decreasing poverty.

SOURCES OF INFORMATION

Documents Consulted:

- Power to Producers Building a network of dairy enterprises owned by local farmers' groups in Haiti;
- Evaluation of Stories of Change Project 'Haiti - *Lèt agogo*
- Rapport de synthèse du focus réalisé avec les bénéficiaires du projet *Lèt agogo* dans le cadre de l'évaluation du secteur agricole en Haïti/Limonade/Association de producteurs de produits laitiers du projet *Lèt agogo* /Asosyasyon Pwodiktè Lèt nan Limonad (APWOLIM)

People Interviewed in the Fieldwork:

- Involved government representatives
- Direct observation of the dairy Bois-Neuf, Saint Marc
- Donor and implementer representatives

CASE STUDY #10: AGRISUPPLY

INTERVENTION DETAILS

- Type of financing: Private investment
- Donor: Private Investors
- Budget: Unavailable
- Year of implementation: 1958 to date
- Implementation areas: South department
- Main implementing agency: Agrico SA

BACKGROUND

AGRI-SUPPLY CO S.A. is a private company specialized in agricultural products and supplies. One of the 10 largest factories in Haiti, it is currently the largest producer and exporter of Vetiver⁸⁷ oil in the world⁸⁸. Its Vetiver oil factory, known as FRAGER, is located in Les Cayes in the Southwestern part of the country, which is the center of the vetiver producing area in Haiti that extends from Port-Salut to Aquin. The factory was founded in 1958 by Franck Leger, but managed now by his son Pierre Léger who took over in 1984. It is certified Organic and Fair Trade by ECOCERT. Currently, the combination of direct distribution, new technology and low operating costs due to increasing economies of scale has helped Frager attain a competitive advantage over its competitors in Brazil, China, Indonesia and Reunion. Agri-Supply exports mainly to Europe and partners with high-end companies such as L'Oréal, Guerlain, Firmenich, and Chanel.

OBJECTIVES AND COMPONENTS

The objective of Agri Supply is to produce and export Vetiver oil to the world. The company establishes partnerships with farmers who supply vetiver as a raw material that is then processed by the company in a single factory.

KEY FINDINGS (based on USAID's Agriculture sector assessment)

⁸⁷ Vetiver (*Vetiveria zizanioides*) is a tall grass native to India, that grows in Haiti and specific regions of the world. The essential oil derived from its extensive network of roots is a key ingredient of fine perfumes and industrial fragrances. Haiti is the world's leading producer of vetiver oil.

⁸⁸ <http://frager-vetiver.com/history.php>

Effectiveness of the intervention and its approaches

All respondents said that the company is a success story because it has developed a competitive advantage working in a value chain with high demand, and it is well-managed - the company focuses on cultivating its relationships with producers, especially by creating and supporting farmers' cooperatives that supply vetiver.

Owners of the company state that Agri Supply directly employs 300 people and indirectly supports nearly 27,000 families who are involved in the vetiver production. As a corporate social strategy, Pierre Léger, the CEO and owner, prioritizes maintaining a win-win partnership with the local communities of vetiver suppliers. He places a great emphasis on education by supporting the farmers' youth through scholarships and educational projects. "Now we are working from the producer to the perfume bottle. With my son Francky, we are keeping Haiti's flag flying high. Many countries come to les Cayes to learn from our company. We are proud of having made Haiti into the world leader in the vetiver value chain. We are continuously innovating and going forward" (Pierre Leger, March 2019).

Vetiver producers who took part in our focus groups said that Agri Supply creates jobs and improves their access to market, by absorbing more than 50 percent of the vetiver produced in the South department. The sale of vetiver is a permanent source of income for the producers of the Southern region, which also increases their food security. They mentioned that Agri Supply provides agriculture extension support through the cooperatives. It assigns agronomists to accompany the vetiver growers. "We were given training sessions on contouring techniques, to avoid landslides. The techniques (planting on contour lines, time weeding all year round, etc.) have allowed us to increase our yield. So, we make more money," said focus group participants of Massey, in les Cayes. The company creates loyalty among its suppliers by providing a bonus at the end of the production season. It also grants scholarships to young people and builds schools for the children of producers. Mobile clinics are periodically organized under the guidance of doctors to meet the health needs of producers. Recently, in collaboration with its international European partners, the company invested in small rural electrification and drinking water projects in the Massey area.

The effectiveness of the company lies with establishing partnerships both with the community of farmers through the cooperatives, and with multinational companies such as Fermenich, L'Oréal, Guerlin, and Chanel. Agri Supply has operated in a "Blue Ocean" market space with few competitors both at national and international markets. As a result, with a sound business model, it has developed over time a competitive advantage that made it among the top global leaders of vetiver oil producers.

Data collected from beneficiaries indicated that the approaches implemented by the interventions that contributed the most to the results are Value chain integration - linking producers to processors/exporters + Training on sustainable agricultural techniques to avoid soil erosion.

Sustainability of the intervention and its approaches

Agri-Supply, as a private enterprise, appears to be sustainable. Business is operating and structures are clean, well-maintained and in use. The company is growing. It has elevated its production capacity in ten years from 20 to 60 tons annually, making it the largest producer of vetiver oil in the world. Beneficiaries stated that they are still growing Vetiver and continuing to do good business with the company. Although it is a different model from donor projects, it provides a model of an effective strategy to make interventions sustainable.

Knowing that the commercial exploitation of vetiver can provoke soil erosion, the company ensures that its Vetiver essential oil is derived from plants that are grown and harvested in compliance with organic and sustainable farming practices. Consequently, it provides technical support and allocates a premium on the vetiver roots to encourage growers to apply ecological and sustainable cultivation techniques. As an attestation to these efforts, the company is certified Organic and Fair Trade by ECOCERT.

Enabling Environment Factors

Agri-Supply owners conveyed that in other countries, the vetiver essential oil value chain is supported by public policies that aim to increase their market share, whereas it is not the case in Haiti. They stated that because of its social and economic importance for the country, the government should consider providing incentives to the companies operating in this industry.

LESSONS LEARNED

- **The Haitian economy would benefit from a better promotion of the vetiver sector.** Haiti occupies one of the first places in the world of vetiver. The company's operations increase the purchasing power of farmers in the vetiver supply area. "There is a better sale in hardware stores, supermarkets and shops when the plant is running," said Franky Leger.
- **Alliances shaped by a relationship of trust between producer and buyer improves results.** Agri Supply is showing results because of its win-win alliance with vetiver growers. Win-win partnership can help give structure to a value chain and sustain technical approaches. Agri Supply has structured vetiver producers around vetiver cooperatives with whom it is dealing on a sustainable basis by providing extension services and a secure market, while it uses their raw material to maintain its competitive advantage in the vetiver oil industry.
- **Promotion of market approach.** Donors should develop market approaches by supporting companies that have identified a business opportunity and develop an appropriate business model to take advantage of the opportunity. There are still "Blue Ocean" opportunities to pursue in the agriculture sector in order to boost economic growth.

CONCLUSIONS

Agri-Supply is a private sector intervention, making it different than the other nine interventions studied. Its effectiveness resides in the application of a socially responsible business model supported by two complimentary technical approaches that create sustainability in the value chain of the company, help to achieve economies of scale, and leads the company to enjoying global competitive advantage. As an industry leader, the company has significantly contributed to the Haitian economy and raised tens of thousands of farmers out of poverty. It has generated tremendous lessons learned for international donors that are promoting private sector development, and more importantly for the Haitian Government about sound and socially responsible business models of how private sector companies could serve as economic engines in specific value chains.

SOURCES CONSULTED

Documents:

- <http://frager-vetiver.com/keyfactors.php>

People Consulted:

- Focus groups with vetiver producers
- Direct observation conducted on the company
- Involved government representatives
- Company staff representatives

SUMMARY OF LESSONS LEARNED FROM THE TEN CASE STUDIES

Each of the ten interventions explored in the Phase III Fieldwork is described in detail in Annex C. Below is a summary of the main lessons learned from each intervention, organized into themes:

THEME	LESSON LEARNED	RELEVANT INTERVENTION
Creating Fully Functional Value Chains	Voucher systems are a way of incentivizing the use of inputs without undermining existing private sector value chain actors	RESEPAG
	Combinations of technical approaches that target different weaknesses throughout the value chain will be most effective	RESEPAG PASAH SECAL
	Interventions should take care not to create market distortions by focusing too much on a single value chain	RESEPAG
	CRDDs are a useful model for developing access to inputs, services and training and could provide other services	WINNER
	Farmer Field Schools including demonstration plots are an effective way to train producers on improved techniques	AVANSE
	The effectiveness of any approach depends on how well other parts of the value chain are functioning	AVANSE PPI PASAH PTTA
	It is important to consider upstream and downstream effects of the intervention in the targeted value chain and integrate appropriate measures for each	SECAL PPI
Planning for Sustainability	All projects, including CRDDs need committed managers, established institutional partnerships, and revenue-generating sources to be sustainable	WINNER LET A GOGO
	Private sector partnerships are the best way to develop access to markets and inputs	AVANSE AGRI SUPPLY
	When infrastructure is included in a project, management and maintenance post-project are always the biggest challenge – money must be set aside	PPI PASAH
	Partnering with school food buyers is a promising strategy for facilitating sustainable access to markets	PASAH
	Even humanitarian projects can help with sustainability and long-term development if they focus on relevant barriers to productivity and profitability	PADELAN
	Businesses should be managed according to business principles, even if they also have social goals	LET A GOGO
	Donors should support companies that have identified a viable business opportunity to help them take advantage of this opportunity – look for “Blue Ocean” opportunities	AGRI SUPPLY

Developing the Enabling Environment	Government-supported research and agricultural extension systems are critical for sustaining innovation in Haiti	WINNER AVANSE
	Small farm size is a limiting factor for export-oriented agriculture in Haiti	PASAH
	Unclear property rights are a major problem in Haiti – irrigation projects have an opportunity to help clarify individuals' rights	SECAL
Working with Local Organizations	It is important not to overestimate the capacity of grassroots organizations	PASAH
	The existing donor grant mechanism favors large NGOs over local ones – requiring partnerships between the two can help increase the capacity of local organizations without threatening the success of the project	PASAH
	Making use of the knowledge of grassroots structures is the best way to ensure equitable distribution of services and full community inclusion	PTTA
Communications	When introducing a new system such as Vouchers, it is important to make sure that all partners are sufficiently informed of how the system will work	RESEPAG
	Feedback and participation mechanisms are important systems to build into projects	PADELAN
Developing Resilience	Agroforestry approaches can improve resilience, especially when combined with annual crops	RESEPAG PADELAN
	Rain-fed crops may be too risky of a focus for input subsidy systems, given the prevalence of natural disasters in Haiti	PTTA AVANSE
	All projects should have contingency plans to deal with natural disasters	LET A GOGO AVANSE RESEPAG PTTA
Flexibility in Programming	Voucher system should be able to respond flexibly to changes in needs, demands or capacity levels	RESEPAG PTTA
	Projects should build in contingency plans to ensure that agricultural seasonality is respected and anticipated even in the face of unavoidable delays in implementation	RESEPAG
	In the face of natural disasters, projects need to be able to adapt and diversify	AVANSE
	Projects should capitalize on the successes of previous interventions and integrate their relationships and experiences into new interventions	AVANSE
	Technical approaches need to be adaptable to a variety of income groups and community needs over time	AVANSE PTTA
	Agricultural growth takes more than one season – projects need to be patient and sustained for several seasons to see results	PTTA

Working with the GOH	The absorption of donor funds requires appropriate institutional capacity in terms of planning, execution, monitoring and reporting	PPI
	Interventions are most successful when they partner with decentralized government agencies	SECAL
Empowering Women	Interventions specifically targeted to giving women income-producing opportunities can have a real effect on women's empowerment and status within the community	LET A GOGO

ANNEX D: LIST OF RESPONDENTS

LIST OF PHASE II KEY INFORMANT INTERVIEWS		
EXPERT NAME	TITLE	INTERVIEW FORMAT
1. Philippe Mathieu	Former Minister of Agriculture Consultant Owner of Agro-consult	In person
2. Robert Chery	MARNDR staff and Project Manager	In person and by email
3. Innette Durandis	Agriculture and rural development expert/Former representative of EPER	In person
4. Guypsy Michel	General Director at CECI/Senior Agriculture expert	In person
5. Ketty Paquiot	Senior Agriculture consultant	Via Skype
6. Michel Chancy	Senior Agriculture consultant; Former Agriculture State Secretary	In person
7. Yvrose Joseph	Senior Agriculture finance consultant at the Central bank	In person
8. Herve Philippe	Senior Agriculture Expert at BON/UE	In person
9. William Gustave	Senior Agriculture Consultant-Evaluator	Via Skype and email
10. Carmel Belliard	Senior Agriculture consultant; Former Minister	By telephone
11. Emmanuel Prophete	Senior Agriculture advisor at the MARNDR	In person
12. Maurois Francois	Former ODVA director, former chief of staff of the Minister of Agriculture	In person
13. Arnoux Severin	Former Chief Executive (MARNDR)	By telephone
14. Chesnel Jean	Senior Agriculture consultant and owner of Ayitika	By telephone
15. Jocelyn Louissaint	Senior Consultant Dean of the College of Agriculture of the State University	In person

RESPONDENTS INTERVIEWED IN PHASE III:
Cross-cutting – covering all ten interventions:

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIs	FGDs	DOs	Reasons for number of KIIs, FGDs or DOs
GoH – Central level	MARNDR: General Director External relation officer Agriculture infrastructure officer Planning and Studies Unit (UEP) officer Program coordinator/COP Component coordinator innovation in Port-au-Prince Monitoring and evaluation officer CNSA's Technical Director Director UPISA Animal production Unit officer	KIIs	AQ 1, 2, and 4	11			Each of these 5 departments of the Ministry can provide different opinion about the project, especially about its integration in the sector. The Program coordinator/COP will provide deeper insights about project and approaches implementation/ effectiveness and sustainability Component coordinator innovation will generate learning about innovation aspects about the voucher aspects

RESEPAG/WB- Strengthening the Management of Agriculture Public Services (GFRP)

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIS	FGDs	DOs	Reasons for number of KIIs, FGDs or DOs
GoH – Local Level	Bureau Agricole Communal Thiothe and Camp-Perrin Agriculture Research Centers: Camp-Perrin and Thiotte	KIIs	AQ 1, 2 and 4	4			The 4 sites were the main geographic areas of the intervention, especially about its integration at regional level.
Donors / funding agency	WB Agriculture Specialist in in Port-au-Prince IDB Agriculture specialist in Port-au-Prince	KIIs	AQ 1, 2 and 4	2			The specialist will provide insights about project supervision/effectiveness and sustainability
Participating enterprises	Input suppliers and services providers in Thiothe and Camp-Perrin	KIIs	AQ 1, 2, and 4	2			Participating enterprises will generate insights on /effectiveness and sustainability as far as Input supplies and services are concerned
Implementing Partners	AVSI and CECI in Port-au-Prince	KIIs	AQ 1, 2 and 4	2			Implementing partners will provide insights about project and approaches execution/effectiveness and sustainability
CBOs	CBOs in Thiothe and Camp-Perrin	FGDs	AQ 1, 2 and 4		2		To provide insights about project and approaches execution/effectiveness and sustainability
Total				10	2		

WINNER- Watershed Initiative for National Natural Environmental Resources

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIs	FGDs	DOs	Reasons for number of KIIs, FGDs or DOs
GoH – Local Level	Direction départementale Agricole (DDA) West – Port-au-Prince BAC Kenscoff	KIIs, DOs (Soil conservation, fruit trees in Kenscoff)	AQI, 2 and 4	2			The project covers the North and Northeast departments. The views of the respective representatives of the Ministry of Agriculture are to be taken into account.
Donors / funding agency	USAID Specialist in Tabarre	KIIs	AQI, 2 and 4	1			The specialist will provide insights about project supervision/effectiveness and sustainability
Participating enterprises	Participating enterprises and cooperative in Croix des bouquets Participating cooperatives in Croix des bouquets and in Kenscoff	KIIs	AQI, 2, and 4	2			These are two of the mains participating enterprises. They will generate insights on /effectiveness and sustainability as far as Input supplies and services are concerned
Implementing Partners	OXFAM in Petion-Ville	KIIs	AQI, 2 and 4	1			To have the view of implementing partners on the project since they shared responsibility with the main executing agency
CBOs	Associations that receive tractors- Croix des bouquets Women associations in Kenscoff and Croix des bouquets Farmers associations- Croix des bouquets Farmers associations- Kenscoff	2 FGDs, DOs (tractors)	AQI, 2 and 4		4	1	To have direct beneficiaries' insights about project and approaches execution/effectiveness and sustainability

Site visits	FtF-Kenscoff (vegetables and fruits, soil conservations) Rehabilitation of riverbanks and irrigation systems-Plaine cul de sac FtF-Croix des bouquets (cereals)					3	These sites will provide insights on Farmer Field School effectiveness and sustainability
CRDDs	CRDD in Bas Boen (CRDD) Bas Boen, La Tremblay/Croix-Des-Bouquets CRDD Wynn farm in Kenscoff CRDD/Duvivier			3		3	The CRDD have to be visited in order to respond AQ3. We have selected 3 out of the 6 that were built
Total				9	4	7	

AVANSE- Feed the Future North

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIS	FGDs	DOs	Reasons for number of KIIs, FGDs or DOs
GoH – Local Level	Direction départementale Agricole (DDA) Nord – Cap Haïtien Direction Départementale Agricole (DDA) Nord-Est Fort-Liberté	KIIs	AQ 2 and 4	2			The project covers the North and Northeast departments. The views of the respective representatives of the Ministry of Agriculture are to be taken into account.
Main implementing agency / organization	Program coordinator/COP Component coordinators	KIIs	AQ 2 and 4	2			The Program coordinator/COP and Component Coordinator will provide deeper insights about project and approaches implementation/ effectiveness and sustainability
Donors / funding agency	USAID Specialist	KIIs	AQ 2 and 4	1			The specialist will provide insights about project supervision/effectiveness and sustainability
Participating enterprises	Input suppliers and services providers	KIIs	AQ 2, and 4	4			Participating enterprises will generate insights on /effectiveness and sustainability as far as Input supplies and services are concerned
Implementing Partners	Agro Consult, Agridev	KIIs	AQ 2 and 4	2			shared responsibility with the main executing agency
CBOs	To be determined	FGDs	AQ 2 and 4		1		To provide insights about project and approaches execution/effectiveness and sustainability
Total				11	1	0	

PPI 1 and II- Projet de Développement de la Petite Irrigation

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIs	FGDs	DOs	Reasons for number of KIIs, FGDs or DOs
GoH – Local Level	Direction départementale agricole-DDA-Nord-Est/Fort liberté Direction départementale agricole-DDA-Nord-Ouest/Port de Paix Direction départementale agricole-DDA-Centre/Hinche	KIIs	AQ1, 2 and 4	3			The project covers these 3 departments. The views of the respective representatives of the Ministry of Agriculture are to be taken into account.
Main implementing agency / organization	Project coordinator in Port-au-Prince	KIIs	AQ 1, 2 and 4	1			The Program coordinator will provide deeper insights about project and approaches implementation/ effectiveness and sustainability
Donors / funding agency	IFAD specialist in Port-au-Prince	KIIs	AQ1, 2 and 4	1			The specialist will provide insights about project supervision/effectiveness and sustainability
Local authorities	CASEC in Bassin bleu CASEC in Ouanaminthe	KIIs	AQ1, 2 and 4	2			Participating enterprises will generate insights on /effectiveness and sustainability as far as Input supplies and services are concerned
CBOs	Irrigation associations-Bassin bleu/ and Ouanaminthe	FGDs	AQ1, 2 and 4		2		To provide insights about project and approaches execution/effectiveness and sustainability
	Irrigation infrastructure-Bassin bleu and Ouanaminthe	DOs	AQ1, 2 and 4			2	To observe the infrastructure
Total				7	2	2	

PASAH- Programme d'Amélioration de la Sécurité Alimentaire

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIS	FGDs	DOs	
GoH – Local Level	MARNDR / Direction Départementale Agricole (DDA) Nord-Ouest/Port-de-Paix, Nord-Est/fort liberté, Artibonite/Gonaïves	KIIs	AQ1, 2 and 4	3			The project covers these 3 departments. The views of the respective representatives of the Ministry of Agriculture are to be taken into account
Main implementing agency / organization	Former coordinator in Port-au-Prince	KIIs	AQ1, 2 and 4	1			The Program coordinator will provide deeper insights about project and approaches implementation/ effectiveness and sustainability
Donors / funding agency	UE project officer in Petion-Ville	KIIs	AQ 2 and 4	1			The specialist will provide insights about project supervision/effectiveness and sustainability
CBOs	Two Farmers associations in Fort-Liberte Local authorities (CASEC, ASEC, Mayor) in Fort-liberte	FGDs	AQ1, 2 and 4		3		To provide insights about project and approaches execution/effectiveness and sustainability
Site visits	2 Collection centers in Fort Liberte area 2 Farmer to Farmer in Fort Liberte areas	DOs	AQ1, 3			4	Fort Liberte is one of the cities where the project was implemented.
Total				5	3	4	

Projet de Transfert de Technologies aux Agriculteurs (PTTA)

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIS	FGDs	DOs	
GoH -Local level	Direction Départementale Agricole-DDA : Ouest Nord Nord-Est	KIIs	AQ 2 and 4	3			The project covers these 3 departments. The views of the respective representatives of the Ministry of Agriculture are to be taken into account.
Participating enterprises	10 participating enterprises-Fort-liberté 10 participating enterprises-Saint-Raphael 10 participating enterprises-Petit-Goave	FGDs	AQ 1, 2 and 4		3		To have the opinion of the participating enterprises about the Project
CBOs	To be determined	FGDs	AQ 2 and 4		6		To provide insights about project and approaches execution/effectiveness and sustainability
Donors / funding agency	IDB specialist in Bourdon	KIIs	AQ 1, 2 and 4	1			The specialist will provide insights about project supervision/effectiveness and sustainability
Total				3	9		

PADELAN-Projet d'appui au développement local dans les Nippes

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIs	FGDs	DOs	Reasons for number of KIIs, FGDs or DOs
GOH – Local Level	Direction départementale Agricole (DDA) Nippes/Miragoane Bureau Agricole Communal (BAC) Paillant	KIIs	AQ 1, 2, 3 and 4	2			Nippes is the place where this intervention was mainly implemented so far and DDA and BAC are the main actors at this level. Paillant is one of the main place where the approaches were implemented
Main implementing agency / organization	Oxfam Quebec Program coordinator/COP or Executive director in Port-au-Prince	KIIs	AQ 1, 2 and 4	1			The Program coordinator/COP will provide deeper insights about project and approaches implementation/ effectiveness and sustainability
Donors / funding agency	Canadian cooperation Agriculture Specialist in Port-au-Prince	KIIs	AQ 1, 2 and 4	1			The specialist will provide insights about project supervision/ effectiveness and sustainability
CBOs	Sample of men and women who benefited trees, goats, and chicken in Paillant Women association that benefited from small commerce support in Paillant	FGDs	AQ 1, 2 and 4		2	1 Observation of environmental protection	To provide insights about project and approaches execution/ effectiveness and sustainability
Total				4	2	1	

SECAL/AFD-Projet de sécurité alimentaire

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIs	FGDs	DOs	Reasons for number of KIIs, FGDs or DOs
GOH – Local Level	Direction départementale Agricole (DDA) Sud /Cayes Bureau Agricole Communal (BAC) and Camp-Perrin/Agriculture Research Centers : Ferme Levi	KIIs	AQ 1, 2, 3 and 4	2			The South is the place where this intervention has been mainly implemented so far and DDA and BAC are the main actors at this level
Main implementing agency / organization	MARNDR Program coordinator/COP in Port-au-Prince	KIIs	AQ 1,2, 3 and 4	1			The Program coordinator/COP will provide deeper insights about project and approaches implementation/ effectiveness and sustainability
Other implementing partner	Système de financement et d'assurance agricole (SYFAAH) in Port-au-Prince	KIIs	AQ 1,2, 3 and 4	1			To understand access to finance and insurance aspects of the intervention
Donors / funding agency	AFD Agriculture Specialist in Port-au-Prince	KIIs	AQ 1, 2, 3 and 4	1			The specialist will provide insights about project supervision/effectiveness and sustainability
Participating enterprises	Input suppliers and services providers in Les Cayes and Camp-Perin	KIIs	AQ 1, 2, 3 and 4	2			Participating enterprises will generate insights on /effectiveness and sustainability as far as Input supplies and services are concerned
CBOs	Associations of users of irrigation system in Camp-Perrin and Torbeck	FGDs	AQ 1, 2, 2 and 4		2	1	To provide insights about project and approaches execution/effectiveness and sustainability
Total				7	2	1	

LET A GOGO/VETERIMED

RESPONDANT CATEGORY	ILLUSTRATIVE RESPONDENTS AND INSTITUTIONS	INSTRUMENT	RELEVANT ASSESSMENT QUESTIONS	KIIS	FGDs	DOs	Reasons for number of KIIs, FGDs or DOs
GOH – Local Level	Direction départementale Agricole (DDA) Nord Bureau Agricole Communal (BAC) Limonade	KIIs	AQ 1, 2, and 4	2			The North is one of the place where this intervention has been mainly implemented and DDA and BAC are the main actors at this level
Civil society/private sector of the North department	President of Chamber of commerce of the North-Cap-Haitien	KIIs	AQ 1, 2, and 4	1			To understand the effectiveness and sustainability of the project and its approaches from a private sector perspective
Main implementing agency / organization	VETERIMED Program coordinator/COP Port-au-Prince	KIIs	AQ 1,2 and 4	1			The Program coordinator/COP will provide deeper insights about project and approaches implementation/ effectiveness and sustainability
Donors / funding agency	OXFAM Agriculture Specialist in Port-au-Prince	KIIs	AQ 1, 2 and 4	1			The specialist will provide insights about project supervision/effectiveness and sustainability
Participating enterprises	Dairies in Limonade/Nord, Terrier-Rouge/Northeast	KIIs	AQ 1, 2, and 4	2		1	Participating enterprises will generate insights on /effectiveness and sustainability as far as Input supplies and services are concerned
CBOs	Cow producers in Limonade	FGDs	AQ 2 and 4		1		To provide insights about project and approaches execution/effectiveness and sustainability
Total				7	1	1	

ANNEX E: PROTOCOL FOR THE PHASE II KEY INFORMANT INTERVIEWS

Part 1: Informed Consent Statement

The Informed Consent Statement is an introductory statement that the interviewer makes to each respondent to explain the objective of the interview and assures the respondent of confidentiality. The following text will be read to all potential respondents before the start of any interviews or FGDs. Informed consent must be obtained from all participants before beginning.

Informed Consent Script:

Good morning/afternoon,

My name is X, and I am with Social Impact, an evaluation organization. We have been contracted by USAID to conduct an assessment of the agriculture sector in Haiti. The objective of this assessment is to determine what activities have been the most effective and the most sustainable in Haiti, with the goal of informing USAID on the best course of action for future programs. As a part of this assessment, we are speaking with a large number of stakeholders in the agriculture section, including donors, implementing organizations, government ministries, beneficiaries, and others. We are currently at the first phase of our assessment. The objective of this interview is to select a list of approaches and related projects for our field work. Your participation in this study is voluntary. You do not have to participate if you do not want to, and you may also choose not to answer any particular questions. There is no direct benefit to you for participating, and neither are there consequences for choosing not to participate. However, we would greatly appreciate any insights you might have regarding your experiences and knowledge of agriculture in Haiti. Your information and responses will be kept confidential and neither your name nor your position will appear in our report.

Though we have a number of specific questions to ask you, we encourage you to share any additional thoughts that you feel are important to the assessment that our questions do not address.

Do you have any questions about any of this?

Do you wish to continue with the interview/focus group discussion? (all participants present MUST answer in the affirmative. Anyone who does not consent should leave the discussion)

Part 1I: Questionnaire

1. In your experience, which projects implemented between 2000 and 2018 in the agriculture sector demonstrated the greatest effectiveness towards attaining all or most of the following results in Haiti:
 - Increase beneficiaries' household incomes
 - Create jobs
 - Improve market access at the end of a value chain
 - Improve producers' resilience at the beginning of the value chain
 - Improve natural resource management
 - Improve productivity at the farm-level
 - Improve food security
2. List a few interventions that you think were particularly interesting in terms of approach. Then could you give each intervention a score from 1-5 (1 being the best) based on their effectiveness and sustainability?

How would you describe the technical approach followed for each intervention?

Intervention	Rating (1-5)	Technical Approach	Comments

3. We want to hear about your experience and opinions about several different technical approaches. For each category of approaches, could you share your experience with what approaches have been the most effective? These approaches could be from international donors, local NGOs, private sector organizations, or the Haitian government.

(Ask about each category, one at a time):

What specific technical approaches to: Agricultural Extension

Agribusiness and Market-Based Approaches

Policy and Institutional Strengthening

Access to Finance

Watershed and Environmental Management

Agricultural Infrastructure

... have been most effective in your experience?

What interventions best represent the technical approaches that you think were most effective?

Category of Technical approaches	Specific approaches that have been most effective based on income, job creation, etc.	Specific approaches that have led to the greatest Sustainability	Particularly Interesting or successful Interventions that Represent these approaches	Why was this approach and/or intervention effective?
Agricultural Extension				

Agribusiness and Market-Based Approaches				
Policy and Institutional Strengthening				
Access to Finance				
Watershed and Environmental Management				
Agricultural Infrastructure				

4. We'd also like to learn about technical approaches that have been less successful or less sustainable, in your experience. Could you answer the same question as above, but this time thinking about technical approaches that weren't effective or sustainable?

Category of Technical approaches	Specific approaches that have been least effective based on income, job creation, etc.	Specific approaches that have led to the least Sustainability	Particularly unsuccessful Interventions that Represent these approaches	Why was this approach and/or intervention ineffective?
Agricultural Extension				

Agribusiness and Market-Based Approaches				
Policy and Institutional Strengthening				
Access to Finance				
Watershed and Environmental Management				
Agricultural Infrastructure				

ANNEX F: PHASE III DATA COLLECTION PROTOCOLS

This section presents detailed questionnaires that were used during KIIs and FGDs by both the data collection firm and the Assessment Team. These questions were elaborated using the evaluation questions about sustainability as template and the USAID definition of sustainable development as guiding principle. We first present the guiding principle, the interview protocol, then the questionnaires.

A. Guiding principle to assess sustainability of selected interventions

Definition of sustainable development. Source: USAID'S STRATEGY FOR SUSTAINABLE DEVELOPMENT: AN OVERVIEW (USAID, 2000)

Sustainable development is characterized by **economic and social growth** that does **not exhaust the resources** of a host country; that respects and safeguards the economic, cultural, and natural **environment**; that creates many incomes and chains of enterprises; that is nurtured by **an enabling policy environment**; and that builds **indigenous institutions** that involve and **empower the citizenry**. Development is "sustainable" when it permanently **enhances the capacity** of a society to improve its quality of life. Sustainable development enlarges the range of freedom and opportunity, not only day to day but generation to generation.

B. Interview Protocol

The interview protocol is divided into 3 parts:

Part 1: Informed Consent Statement

The Informed Consent Statement is an introductory statement that the interviewer makes to each respondent to explain the objective of the interview and assures the respondent of confidentiality. The following text will be read to all potential respondents before the start of any interviews or FGDs. Informed consent must be obtained from all participants before beginning.

Informed Consent Script:

Good morning/afternoon,

My name is X, and I am with Social Impact, an evaluation organization. We have been contracted by USAID to conduct an assessment of the agriculture sector in Haiti. The objective of this assessment is to determine what activities have been the most effective and the most sustainable in Haiti, with the goal of informing USAID on the best course of action for future programs. As a part of this assessment, we are speaking with a large number of stakeholders in the agriculture section, including donors, implementing organizations, government ministries, beneficiaries, and others.

Your participation in this study is voluntary. You do not have to participate if you do not want to, and you may also choose not to answer any particular questions. There is no direct benefit to you for participating, and neither are there consequences for choosing not to participate. However, we would greatly appreciate any insights you might have regarding your experiences and knowledge of agriculture in Haiti. Your information and responses will be kept confidential and neither your name nor your position will appear in our report.

Though we have a number of specific questions to ask you, we encourage you to share any additional thoughts that you feel are important to the assessment that our questions do not address.

Do you have any questions about any of this?

Do you wish to continue with the interview/focus group discussion? (all participants present MUST answer in the affirmative. Anyone who does not consent should leave the discussion)

Part 2: Persons to be Interviewed. The Chart of Interviewees

Definition: The Chart of Interviewees presented in Annex D identifies the interviewees for the KIIs and FGDs by intervention. It also indicates the sites selected for Direct Observation visits and their relationships with the intervention. Data collection events will be held in 9 out of 10 departments in Haiti and will involve 20 FGDs and 78 KIIs. A total of 19 Direct Observation site visits of three CRDDs and other infrastructure will be made.

How the Chart of Respondents will be used

Identifying interviewees, defining communities of consensus, and making strategically useful correlations. The Chart of Respondents will help the Assessment Team identify interviewees by commune and also identify those who are specific to particular interventions. The source material that will be used for this purpose includes project reports and conversations with implementing partners (IPs). The ET will count on IPs and civil servants from the Ministry of Agriculture (MARNDR) to find points of contact and for reach out to participants. A letter from USAID to the implementing partners will be used in that regard. This data will help to deepen gender and social analysis and provide deep understanding of the sustainability of the interventions. For example, data may show correlations between groups of respondents regarding gender, points of view, or policy positions thereby suggesting communities of consensus useful for policy framework, better technical approaches or extension services etc.

Part 3: The Interview Guide (IG)

Definition: For each type of respondent, the IGs will be uniformly followed with each person

interviewed. This structured approach will permit triangulation across the respondent designations (e.g. geographic location, intervention, position, sex, social or economic status, etc.).

The following questions probe for sustainability of recent interventions deemed to be successful in Haiti.

Key Informant Interviews (Interventions)

I. Key Informant Interviews with USAID/Haiti Technical Office (AVANSE, WINNER...)

Q1: To what extent has the intervention <state the name> achieved results in the following area <state the area> (increase income, create jobs, improve market access, improve producers, improve producers' resilience at the beginning of the value chain, improve natural resource management, improve productivity at the farm-level, Improve food security at household level)? What factors contributed to the success of the intervention?

- Why?
- What examples can you give that demonstrate whether the intervention was effective?

Q2: From our review of project reports, it appears that the intervention utilized the following approaches < approaches from table of approaches >. Is this correct? Are there other approaches that were also utilized?

- What impact did each of these approaches have on the intervention's success or lack thereof?
- As a result of your experience with this intervention, would you consider < state each relevant approach > effective in the Haitian context? Why or why not?
- For future interventions that use approach < state each relevant approach >, what should project planners keep in mind or what advice can you give to help interventions following this approach be as effective as possible?

Q3: To what extent has the intervention < xxxx> contributed to strengthening local organizations / institutions? Probe on the following:

- What was achieved and have the benefits / achievements persisted until now?
- What capacities have been built/what local solutions have been promoted?
- How have citizens been empowered?
- Were local institutions involved in the program activities? Were they responsive?

Q4: To what extent have the program activities, services, interventions continued after the end of the project? Probe on the following:

- Who is doing what?
- Why and how they are continuing?
- What has the intervention put in place to secure continuity at the end of the project?
- What other factors contributed to the continuity of the intervention?
- Did the intervention have an exit strategy?
- What should the intervention have done to better ensure sustainability?

Q5: To what extent have the outcomes of the project on beneficiaries persisted after the end of the intervention?

- Have they persisted equally for women and men?
- What were the enabling factors (geographic location, relevance of technology, socio-economics, project management issues, environmental factors...)?
- To what extent external shocks, risks and natural and man-made disasters influenced the success and sustainability of interventions?
- Were politics a factor in whether the intervention was sustainable?
- Did trade policies, crop insurance or other macro-economic factors influence these outcomes?

Q6. To what extent has the intervention promoted environmentally friendly approaches? Better use of natural resources? Better use of local solutions?

- Was this a goal of the intervention?
- How can future interventions that follow these approaches achieve the best possible results?

Q7. Was policy reform a goal of this intervention? To what extent did the intervention create an enabling environment policy to promote key value chains and ensure sustainability? Please specify how and why for the key results below.

- Access to markets / commercialization of agricultural products
- Private sector development
- Access to inputs (specify)
- Access to services (specify)
- Inclusion of the poorest segment of the population in the development process
- Other (specify)

Q8: To what extent is gender equity integrated in policies, procedures and institutional framework? What elements of gender equity in policies, procedures and institutional framework need to be addressed for agriculture sector interventions to be more effective? Are current agricultural policies affecting men and women differently? If yes, can you explain how?

Q9: In the framework of the [put name] intervention, to what extent have elements of the enabling environment such as policies, procedures, and institutional frameworks influenced positively or negatively the effectiveness of the intervention? In which of these areas of results do you think the elements you have just cited have had a negative or positive effect? Please explain

- Increase beneficiaries' household incomes
- Create jobs
- Improve market access at the end of a value chain
- Improve producers' resilience at the beginning of the value chains
- Improve natural resource management
- Improve productivity at the farm-level
- Improve food security at household level

Q10: To what extent has the [put name] intervention stimulated the development of the private sector in agriculture? What elements of the enabling environment such as policies, procedures, and institutional frameworks influenced the effectiveness of the intervention in favor of stimulating the development of the private sector?

- Were any public-private partnerships developed through the intervention?
- Were these sustained after the intervention ended?

Q11: Did the intervention attempt to improve access to credit? How?

- Were these efforts successful?
- What examples can you give that demonstrate success in improving access to credit?
- What constraints still exist in access to credit?

II. Key Informant Interviews about CRDD with USAID/Haiti technical office (WINNER...), with Managers of CRDDs, GoH at central level

Q1: What was the intended use of the CRDDs during the WINNER project implementation?

Q2: What was done to promote the use of the CRDDs?

Q3: In general, do you think that CRDDs have been effective and why? In your view, what are the main benefits of the CRDDs?

- What examples can you give that demonstrate whether the CRDD was effective?
- What do you know about the operations and effectiveness of other CRDDs?
- How well are the CRDDs managed? What management problems have you observed?

Q4: What (if any) services performed by the CRDDs during the implementation of the WINNER project are not being performed now? Why?

Probe on specific examples like: Tractor rental, Training of master farmers, Extension, Market information, Other, please specify

Q5: To what extent are the services targeting women client of CRDDs

Q6: In comparison to when the WINNER project was active, what is the level of service currently being delivered by the CRDD(s)? Can you describe the changes that have occurred?

Q7: To what extent do the following factors determine success/weakness of CRDD? Please explain.

Funding, Awareness/outreach, Staff/leadership, Quality of the services provided, Cost of services provided, Relevance of services, Community empowerment, Integration of the participation of different categories from society, including women and young people.

Q8: What are the main difficulties that the CRDDs are facing currently? How do you think they can be addressed?

Q9: How can CRDDs best continue to operate and serve farmers? What needs to be done in order to ensure this happens?

Q10: What (if any) services are in demand and not provided? Why?

Q11: What services are in lowest demand? Why?

Q12: To what extent do the services provided correlate with where the CRDD is located? And to what extent could or should the CRDDs be specialized based on location?

Q13: How do you envision the CRDDs in five years? Will they still be operating? Why or why not? What changes do you envision?

Q14: In your view, is the GoH making full use of the CRDDs? Please explain how so and why.

Q15: To your knowledge, have donors (other than USAID) expressed interest in the CRDDs? What aspects of the CRDDs in particular are they the most interested in? Please explain.

Q16: To what extent have donors other than USAID committed funding for the operation or expansion of CRDDs?

Q17: What advice would you give when thinking about sustainability of the CRDDs?

III. Key Informant Interviews with GoH at Central level, donors and funding agencies (All 10 interventions)

We will make sure that we are interviewing the right person for the right project at GoH central level. The Director of External Cooperation and the West and North Departmental Directors of the MARNDR will be among the interviewed.

Q1: To what extent has the intervention <state the name> achieved results in the following area <state the area> (increase income, create jobs, improve market access, improve producers, improve producers' resilience at the beginning of the value chain, improve natural resource management, improve productivity at the farm-level, Improve food security at household level)?

- What factors contributed to the effectiveness of the intervention?
- Why?
- What examples can you give that demonstrate whether the intervention was effective?

Q2: From our review of project reports, it appears that the intervention utilized the following approaches < approaches from table of approaches >. Is this correct? Are there other approaches that were also utilized?

- What impact did each of these approaches have on the intervention's success or lack thereof?

- As a result of your experience with this intervention, would you consider < state each relevant approach > effective in the Haitian context? Why or why not?
- For future interventions that use approach < state each relevant approach >, what should project planners keep in mind or what advice can you give to help interventions following this approach be as effective as possible?

Q3: Did the intervention work with local organizations or institutions? To what extent did the intervention < xxxx> contribute to strengthening local organizations / institutions?

- What was achieved and have the benefits / achievements persisted until now?
- What capacities have been built/what local solutions have been promoted?
- How were citizens empowered?
- Were local institutions involved in the program activities? Were they responsive?

Q4: To what extent have the program activities, services, and interventions continued after the end of the project? Probe on the following:

- Who is doing what?
- Why and how they are continuing?
- What did the intervention put in place to secure continuity at the end of the project?
- What other factors contributed to the continuity of the intervention?
- Did the intervention have an exit strategy?
- What should the intervention have done to better ensure sustainability?

Q5: To what extent have the benefits of the project for beneficiaries persist after the end of the intervention? Probe on the following:

- Have they persisted equally for women and men?
- What were the enabling factors (geographic location, relevance of technology, socio-economics, project management issues, environmental factors...)?
- To what extent did external shocks, risks and natural and man-made disasters influence the success and sustainability of interventions?
- Were politics a factor in whether the intervention was sustainable?
- Did trade policies, crop insurance or other macro-economic factors influence these outcomes?

Q6. Was environmental management an objective of the intervention? To what extent did the intervention promote environment friendly approaches? Better use of natural resources? Better use of local solutions?

Q7. Was policy improvement an objective of the intervention? To what extent did the intervention create an enabling environment policy to promote key value chains and ensure sustainability? Please specify how and why for the key results below.

- Access to markets / commercialization of agricultural products
- Private sector development
- Access to inputs (specify)
- Access to services (specify)
- Inclusion of the poorest segment of the population in the development process
- Other (specify)

Q8: To what extent is gender equity integrated in policies, procedures and institutional frameworks? Probe on the following:

- What elements of gender equity in policies, procedures and institutional framework need to be addressed for agriculture sector interventions to be more effective?
- Are current agricultural policies affecting men and women differently?
- If yes, can you explain how?
- Is there a difference between how men and women are treated in the law vs. in real life? Give examples.

Q9: In the framework of the [put name] intervention, to what extent have elements of the enabling environment such as policies, procedures, and institutional frameworks influenced positively or negatively the effectiveness of the intervention? On which of these areas of result do you think the elements you have just cited have had a negative or positive effect? Please explain

- Increase beneficiaries' household incomes
- Create jobs
- Improve market access at the end of a value chain
- Improve producers' resilience at the beginning of the value chains
- Improve natural resource management
- Improve productivity at the farm-level
- Improve food security at household level

Q10: To what extent did [put name] intervention stimulate the development of the private sector in agriculture? What elements of the enabling environment such as policies, procedures, and institutional frameworks influenced the effectiveness of the intervention in favor of stimulating the development of the private sector?

- Were any public-private partnerships developed through the intervention?
- Were these sustained after the intervention ended?

Q11: Did the intervention attempt to improve access to credit? How?

- Were these efforts successful?
- What examples can you give that demonstrate success in improving access to credit?
- What constraints still exist in access to credit?

Q12 What type of activities or interventions you think have been successful in achieving development related results the agriculture sector, and why? What type of activities do you think USAID should be focusing on and why?

- What technical approaches have been particularly effective?
- Which approaches have been ineffective?
- Which combinations of approaches seem to produce the best results?

IV. Key Informant Interviews with GoH at local level (all 10 interventions) *BAC directors, Mayors, CASEC who should be informed about the project implementation and results.*

Q1: Where you in that position when < xxx> was being implemented? To what extent where you involved in the project during its implementation?

Q2: To what extent has the intervention <state the name> achieved results in the following area <state the area> (increase income, create jobs, improve market access, improve producers, improve producers' resilience at the beginning of the value chain, improve natural resource management, improve productivity at the farm-level, Improve food security at household level)?

- What factors contributed to the success of the intervention?
- Why?
- What examples can you give that demonstrate whether the intervention was effective?

Q3: From our review of project reports, it appears that the intervention utilized the following approaches < approaches from table of approaches >.Is this correct? Are there other approaches that were also utilized?

- What impact did each of these approaches have on the intervention's success or lack thereof?

- As a result of your experience with this intervention, would you consider < state each relevant approach > effective in the Haitian context? Why or why not?
- For future interventions that use approach < state each relevant approach >, what should project planners keep in mind or what advice can you give to help interventions following this approach be as effective as possible?

Q4: Did the intervention <xxx> work to strengthen local organizations or institutions? To what extent did the intervention < xxxx> contribute to strengthening local organizations / institutions?

Probe on the following:

- What was achieved? Have the benefits / achievements persisted until now?
- What capacities were built/what local solutions have been promoted?
- How were citizens empowered?
- Were local institutions involved in the program activities? Were they responsive?

Q5: To what extent have the program activities, services, interventions continued after the end of the project? Probe on the following:

- Who is doing what?
- Why and how they are continuing?
- What has the intervention put in place to secure continuity at the end of the project?
- What other factors contributed to the continuity of the intervention?
- Did the intervention have an exit strategy?
- What should the intervention have done to ensure greater sustainability?

Q6: To what extent have the benefits of the project for beneficiaries persisted after the end of the intervention? Probe on the following:

- Have they persisted equally for women and men?
- What were the enabling factors (geographic location, relevance of technology, socio-economics, project management issues, environmental factors...)?
- To what extent have external shocks, risks and natural and man-made disasters influenced the success and sustainability of interventions?
- Were politics a factor in whether the intervention was sustainable?
- Did trade policies, crop insurance or other macro-economic factors influence these outcomes?

Q7. Did the intervention promote environmental management? To what extent did the intervention promote environmentally friendly approaches? Better use of natural resources? Better use of local solutions?

Q8. Did the intervention attempt to improve the policy environment? To what extent did the intervention create an enabling environment policy to promote key value chains and ensure sustainability? Please specify how and why for the key results below.

- Access to markets / commercialization of agricultural products
- Private sector development
- Access to inputs (specify)
- Access to services (specify)
- Inclusion of the poorest segment of the population in the development process
- Other (specify)

Q9: To what extent is gender equity integrated in policies, procedures and institutional framework?

- What elements of gender equity in policies, procedures and institutional framework need to be addressed for agriculture sector interventions to be more effective?
- Are current agricultural policies affecting men and women differently? If yes, can you explain how?

- Is there a difference between how men and women are treated in the law vs. in real life? Give examples.

Q10: In the framework of the [put name] intervention, to what extent have elements of the enabling environment such as policies, procedures, and institutional frameworks influenced positively or negatively the effectiveness of the intervention? On which of these results do you think the elements you have just cited have had a negative or positive effect? Please explain

- Increase beneficiaries' household incomes
- Create jobs
- Improve market access at the end of a value chain
- Improve producers' resilience at the beginning of the value chains
- Improve natural resource management
- Improve productivity at the farm-level
- Improve food security at household level

Q11: To what extent [put name] intervention have stimulated the development of the private sector in agriculture? What elements of the enabling environment such as policies, procedures, and institutional frameworks have influenced the effectiveness of the intervention in favor of stimulating the development of the private sector?

- Were any public-private partnerships developed through the intervention?
- Were these sustained after the intervention ended?

Q12: Did the intervention attempt to improve access to credit? How?

- Were these efforts successful?
- What examples can you give that demonstrate success in improving access to credit?
- What constraints still exist in access to credit?

Q13: What type of activities or interventions you think have been successful in achieving development related results the agriculture sector, and why? What type of activities you think USAID should be focusing on and why?

- What technical approaches have been particularly effective?
- Which approaches have been ineffective?
- Which combinations of approaches seem to produce the best results?

V. Key Informant Interviews with GoH at local level about CRDD (for WINNER)

This questionnaire is intended to the BAC director of MARNDR at local level

Q1: What was the intended use of the CRDDs during the WINNER project?

Q2: What was done to promote the use of the CRDDs?

Q3: To what extent would you refer someone to the CRDD? For which services?

Q4: What services are in demand but are not provided by the CRDD? Why?

Q5: To what extent the services are targeting women client of CRDDs

Q6: What are the main difficulties that the CRDDs are facing currently and How do you think they can be addressed?

Q7: How can CRDDs best continue to operate and serve farmers? What needs to be done to ensure this happens?

Q8: How well are the CRDDs managed? What management problems have you observed or heard about?

Q9: To what extent are the service provided correlated to where CRDD is located?

Q10: What do you know about the operations and effectiveness of other CRDDs in other locations?

Q11: How do you envision the CRDDs in five years? Will they still be operating? Why or why not? What changes would you like to see happen?

Q12: In your view, to what extent is the BAC making full use of the CRDDs? Please explain

Q13: To your knowledge, have donors (other than USAID) expressed interest in the CRDDs? What aspects of the CRDDs in particular are they the most interested in? Please explain

Q14: What advice would you give when thinking about sustainability of the CRDDs?

Q15: What type of policies could enhance the use of services like the ones provided by the CRDDs?

Q16: Would you consider the CRDDs to be effective? Why or why not? What examples can you give that demonstrate whether a CRDD is effective?

VI. Key Informant Interview with implementing partners or beneficiary institutions (for all 10 interventions)

Ideally project managers, Monitoring and Evaluation specialists, alternatively Executive directors who were involved in the implementation of the intervention

Q1: To what extent has the intervention <state the name> achieved results in the following area <state the area> (increase income, create jobs, improve market access, improve producers, improve producers' resilience at the beginning of the value chain, improve natural resource management, improve productivity at the farm-level, Improve food security at household level)?

- What factors contributed to the effectiveness of the intervention? Why?
- What examples can you give that demonstrate whether the intervention was effective?

Q2: From our review of project reports, it appears that the intervention utilized the following approaches < approaches from table of approaches >. Is this correct? Are there other approaches that were also utilized?

- What impact did each of these approaches have on the intervention's success or lack thereof?
- As a result of your experience with this intervention, would you consider < state each relevant approach > effective in the Haitian context? Why or why not?
- For future interventions that use approach < state each relevant approach >, what should project planners keep in mind or what advice can you give to help interventions following this approach be as effective as possible?

Q3: Did the intervention <xxx> work to strengthen local organizations or institutions? To what extent has the intervention < xxxx> contributed to strengthening local organizations / institutions? Probe on the following:

- What was achieved and have the benefits / achievements persisted until now?
- What capacities have been built/what local solutions have been promoted?
- How were citizens empowered?
- Were local institutions involved in the program activities? Were they responsive?

Q4: To what extent have the program activities, services, interventions continued after the end of the project? Probe on the following:

- Who is doing what?
- Why and how are they continuing?
- What did the intervention put in place to secure continuity at the end of the project?
- What other factors contributed to the continuity of the intervention?
- Did the intervention have an exit strategy?
- What should the intervention have done to ensure greater sustainability?

Q5: To what extent have the outcomes of the project on beneficiaries persisted after the end of the intervention?

- Have they persisted equally for women and men?

- What were the enabling factors (geographic location, relevance of technology, socio-economics, project management issues, environmental factors...)?
- To what extent have external shocks, risks and natural and man-made disasters influenced the success and sustainability of interventions?
- Were politics a factor in whether the intervention was sustainable?
- Did trade policies, crop insurance or other macro-economic factors influence these outcomes?

Q6. Did the intervention focus on environmental management? To what extent the intervention promoted environment friendly approaches? Better use of natural resources? Better use of local solutions?

Q7. Did the intervention attempt to improve the policy environment? To what extent has the intervention created an enabling environment policy to promote key value chains and ensure sustainability? Please specify how and why for the key results below.

- Access to markets / commercialization of agricultural products
- Private sector development
- Access to inputs (specify)
- Access to services (specify)
- Inclusion of the poorest segment of the population in the development process
- Other (specify)

Q8: To what extent is gender equity integrated in policies, procedures and institutional framework?

- What elements of gender equity in policies, procedures and institutional framework need to be addressed for agriculture sector interventions to be more effective?
- Are current agricultural policies affecting men and women differently?
- If yes, can you explain how?
- Is there a difference between how men and women are treated in the law vs. in real life? Give examples.

Q9: In the framework of the [put name] intervention, to what extent have elements of the enabling environment such as policies, procedures, and institutional frameworks influenced positively or negatively the effectiveness of the intervention? On which of these results do you think the elements you have just cited had a negative or positive effect? Please explain

- Increase beneficiaries' household incomes
- Create jobs
- Improve market access at the end of a value chain
- Improve producers' resilience at the beginning of the value chains
- Improve natural resource management
- Improve productivity at the farm-level
- Improve food security at household level

Q10: To what extent [put name] intervention have stimulated the development of the private sector in agriculture? What elements of the enabling environment such as policies, procedures, and institutional frameworks influenced the effectiveness of the intervention in favor of stimulating the development of the private sector?

- Were any public-private partnerships developed through the intervention?
- Were these sustained after the intervention ended?

Q11: Did the intervention attempt to improve access to credit? How?

- Were these efforts successful?
- What examples can you give that demonstrate success in improving access to credit?

- What constraints still exist in access to credit?

Q12: What type of activities or interventions you think have been successful in achieving development related results the agriculture sector, and why? What type of activities you think USAID should be focusing on and why?

- What technical approaches have been particularly effective?
- Which approaches have been ineffective?
- Which combinations of approaches seem to produce the best results?

Q13. Do you have any impact or final evaluation report to share with us? Yes...no...Document received yes...no...

Focus Group Discussions

I. Focus Group Discussion with CBO members or with beneficiary households (for all 10 interventions)

Members of CBO are better positioned to discuss about the impact of the intervention on beneficiaries

1. How familiar are you with the <state the name of the intervention>?
2. Did you participate in the intervention? If yes, what role did you play?
3. What do you think the main benefits (if any) were to <state the name of the intervention>? Probe regarding the following types of results:
 - a. Access to markets / commercialization of agricultural products
 - b. Private sector development
 - c. Access to inputs (specify)
 - d. Access to services (specify)
 - e. Inclusion of the poorest segment of the population in the development process
 - f. Access to credit
 - g. Other (specify)
4. What examples can you give that demonstrate whether the intervention was effective?
5. Were there any negative consequences of the intervention? If yes, please describe.
6. From your perspective, how well was the project implemented? What worked well about it? What didn't work quite as well?
7. Did the intervention involve local leaders, organizations or government offices? Was this relationship effective?
8. To what extent (if at all), were any changes resulting from the project sustained after the end of the project? Why/why not? What could have been done differently to help the results continue after the project?
9. Given your role in the agriculture sector, what are the biggest challenges that remain for you?
 - a. Probe: access to credit?
 - b. Trade policies/other economic issues?
 - c. Crop insurance policies?
10. What could be done to help alleviate those challenges? Who should be responsible for helping to alleviate the challenges?
11. If you could design a new agriculture project, what would it look like?
 - a. What activities would be involved?
 - b. Who would be responsible for implementing it?
 - c. What role would the community and/or individual farmers have in the project?
 - d. What should project planners keep in mind when planning these types of projects?

12. Is there anything else that you would like to share with us about the <state the name of the intervention>? Or about the agriculture sector in general in Haiti?

II. Focus Groups with CBO members about CRDDs (Winner)

Q1: What do you know about the CRDDs during the WINNER project? Probe regarding:

- The mission, activities, and what was done to promote the use of the CRDDs?

Q3: To what extent have the CRDDs have been a success and why? Probe on the following:

- In your view, what are the main benefits of the CRDDs?
- Have farmers been using the services provided at the CRDDs?
- To what extent have the services targeted female clients of CRDDs?
- What examples can you give that demonstrate whether the CRDDs are effective?
- How well are the CRDDs managed? What management problems have you observed?

Q6: In comparison to when the WINNER project was active, how have the CBOs been recently involved with the CRDD? And how this can be improved (if improvements are needed)?

Q7: To what extent have the following factors determine success/weakness of CRDD? Please explain

Funding, Awareness/outreach, Staff/leadership, Quality of the services provided, Cost of services provided, Relevance of services, Community empowerment, Integration of the participation of different categories from society, including women and young people.

Q9: What services are needed but not provided? Why?

Q10. What services are in low demand? Why?

Q11. How can CRDDs best continue to operate and serve farmers? What needs to be done in order to ensure this happens?

Q12: What have you heard about other CRDDs in other locations? Are they more or less effective than the one you have here? Why?

Q13: In your view, what are the impediments, if any, for the CBO to making full use of the CRDDs?

Q14. How do you envision this CRDD in five years? Will it still be operating? Why or why not? What changes would you like to see?

Direct Observations

For Functional Infrastructure, including CRDD buildings, irrigation infrastructure and Experimental and Demonstration Plots:

Overall Condition:

1= Excellent Condition: No substantial signs of wear such as cracking, broken or deteriorated walls, floors, windows, or ceilings; no chipped/worn paint; no noticeable roof leaking; fully functioning heat and/or cooling apparatuses. Furnishings are in excellent shape and appear well cared for (no broken pieces or parts, substantial stains, etc.). Space is used for its intended purpose.

2= Acceptable Condition: Noticeable signs of wear such as cracking, broken, or deteriorated walls, floors, windows, or ceilings; issues with heating/cooling may be present; space is still usable for most intended functions. Furnishings show signs of wear, including potentially broken parts, but overall the furnishings are still functional and usable.

3= Poor Condition: Space is not usable and/or its use is very limited and/or poses a risk to users. Potential issues include cracked and damaged walls, windows, floors, or ceilings; non-functioning heat and/or cooling apparatuses. Furnishings may or may not be present, but if they are, they are largely damaged and unable to serve their intended purpose.

Maintenance Status

- 1= Well Maintained:** Maintenance efforts such as patching or repainting walls, repairing cracks in the structure, replacing or repairing windows or doors, etc. have occurred. However, some wear and tear remains visible. For experimental and demonstration plots, plants are healthy, weeds are under control.
- 2= Adequately Maintained:** Some maintenance has occurred, but may be incomplete. For instance, wall cracks may have been repaired, but the patches have not been repainted. Some noticeable maintenance deficiencies are apparent. For experimental and demonstration plots, plants are being cared for and weeds are being actively managed, though not as well or as frequently as they should be.
- 3= Poorly Maintained:** Some maintenance may (or may not) have occurred, but significant deficiencies are apparent. Maintenance efforts may be partial and/or may not have completely solved the maintenance issue (for instance, patching and repainting spots of water damage without repairing the water leak itself). For experimental and demonstration plots, overgrowth of weeds or plants that have not been watered or cared for.

Cleanliness Status

- 1= Very Clean:** Space has been cleaned recently; little dust or dirt is present; floors have been swept/mopped/vacuumed; windows have been cleaned (some spotting or dust may be present, but not substantial buildup); no noticeable stains on floors, walls, or ceiling.
- 2= Moderately Clean:** Space gets cleaned regularly, but some dust or dirt may be present; some stains may exist (in particular, check high traffic areas of the floor, walls near light switches or other used areas, and on ceilings); windows still provide visibility, but may have some buildup of dirt/dust.
- 3= Unclean:** Space has not been cleaned recently; significant dust and dirt are present; significant staining of floors, walls, and/or ceilings is present; windows may be partially obstructed by dirt/dust/grime.

Use

- 1= Well Used:** Space shows significant signs of use; people may even be using the space at the time of visit. Signs of use include: presence of all necessary equipment and consumables (such as pens/pencils, training equipment, etc.), items recently placed in the trash bins (but not yet removed); potential presence of a utilization schedule or assignment of the space for a particular course or instructor; presence of teaching paraphernalia, assignments, and associated Port-au-Princeers; a used space is more likely to be at least moderately clean and adequately maintained. For experimental and demonstration plots, signs of recent cultivation including healthy plants.
- 2= Somewhat Used:** Space appears to be used occasionally, but perhaps not to its maximum potential. For instance, it may only be used a few times a week. Signs of use (such as those listed above) may be present, but to a lesser extent. The space may not be as clean or as well maintained as those that are well used. For experimental and demonstration plots, signs of cultivation present indicating use within the past growing season, but presence of weeds, and plants in poor condition indicate that the sites are not actively or adequately managed.
- 3= Barely Used:** Space does not appear to be used regularly. The space may not be adequately organized for its intended purpose (for instance, chairs and tables may not be arranged properly). Few or no signs of recent use such as recent schedules, presence of recent student assignments or projects; space is likely not maintained or cleaned very regularly. For experimental and demonstration plots, no signs of cultivation.

Functional Infrastructure	Ratings		Observer Notes/Justification for Rating
1: <i>CRDD Building</i>	Overall Status		
	Maintenance Status		
	Cleanliness		
	Utilization		
	Additional Notes:		
2: <i>Experimental Plot</i>	Overall Status		
	Maintenance Status		
	Cleanliness		
	Utilization		
	Additional Notes:		
3: <i>Demonstration Plot</i>	Overall Status		
	Maintenance Status		
	Cleanliness		
	Utilization		
	Additional Notes:		
4: <i>Training Center</i>	Overall Status		
	Maintenance Status		
	Cleanliness		
	Utilization		
	Additional Notes:		
5: <i>Irrigation Infrastructure</i>	Overall Status		

	Maintenance Status		
	Cleanliness		
	Utilization		
	Additional Notes:		
6: <i>Dairies and Collection Centers</i>	Overall Status		
	Maintenance Status		
	Cleanliness		
	Utilization		
	Additional Notes:		
7: <i>Other livestock infrastructure</i>	Overall Status		
	Maintenance Status		
	Cleanliness		
	Utilization		
	Additional Notes:		

For Laboratories, Teaching Materials and Agricultural Tools

Overall Status:

- 1= Excellent Status:** Equipment/resource is present and fully functional for its intended purpose; it is well maintained and shows only minimal signs of wear and tear; all necessary consumables are present (such as batteries, ink, parts needed for operation and training purposes, etc.). If the equipment requires electricity, it is adequately available within reach of the machine.
- 2= Adequate Status:** Equipment/resource is present and all key functions are operational for its intended purpose (some minor functions may no longer be operational); if the equipment requires electricity, it is adequately available within reach of the machine. At least some (but perhaps not all) necessary consumables are present. Noticeable wear and tear may be present, but the equipment/resources are still operational for their intended purpose.
- 3= Poor Status/Non-existent:** Equipment/resource may no longer exist; if it does exist, it is only partially operational (if at all). Significant wear and tear is evident. Necessary consumables may not present. If electricity is required, it may not be adequately provided

within reach of the equipment. Overall, the equipment/resource is not able to adequately serve its intended purpose.

Maintenance Status:

- 1= Excellent Maintenance:** Regular maintenance of the equipment/resources is evident; Items are clean and show limited signs of wear and tear; items are fully functional for their intended purpose; all consumables are available for use. Equipment is clean and free of debris.
- 2= Adequate Maintenance:** Equipment/resources have been maintained, but some signs of wear and tear are evident (such as worn buttons, missing pieces that don't substantially impede use, etc.). Despite the wear and tear, items are still mostly functional for their intended purpose (any non-functioning components are not core to the purpose of the equipment or resource). Items may be dirty. Some consumables may not be readily available.
- 3= Poor Maintenance:** Equipment may be non-functioning or have very little functionality. Significant wear and tear is evident. Necessary consumables are not available.

Use:

- 1= Well Used:** Shows signs of regular use and is readily accessible (not blocked behind other equipment or furnishings). Someone may even be using it or waiting to use it at the time of visit. Wear and tear is a sign of use, as is the presence of necessary consumables. No significant buildup of dust or dirt on the equipment or resources can also be a sign of regular use (but can also be a sign of good cleaning practices). Nearby presence of related teaching tools (notebooks, text books, etc.) can also evidence use. If the equipment produces something (such as a circuit board or results of a 3-D printer), existence of that output nearby also evidences use.
- 2= Somewhat Used:** Shows some signs of use, but perhaps not frequent use. Perhaps some portions are getting frequent use, but not all portions. Some wear and tear may be evident. Some consumables are present, but perhaps some are not.
- 3= Barely Used:** No/few signs of use. Thick layers of dirt or dust on equipment or resources indicate disuse, as do items that are difficult to access (hidden behind other equipment or furnishings). Lack of necessary consumables also indicates disuse. Non-functioning equipment cannot be used and should be given this rating.

Equipment/ Resource	Ratings		Observer Notes
1: <i>Laboratory Materials</i>	Overall Status		
	Maintenance Status		
	Use		
	Additional Notes:		
2: <i>Teaching Materials</i>	Overall Status		
	Maintenance Status		
	Use		

	Additional Notes:		
2: <i>Agricultural Tools</i>	Overall Status		
	Maintenance Status		
	Use		
	Additional Notes:		

For Operational Tools and Documentation

Gender representativeness of Staff

1= Roughly equal distribution of men and women in staffing list, including in positions of leadership.

2 = Some women on staff, but fewer women than men, or no women in positions of leadership

3 = Few or no women on staff, no women in positions of leadership.

Staffing List, Monitoring tools, Financial Management tools, Research and Partnership Documentation

1= Documentation includes prominently-displayed and up-to-date organizational chart, employee work schedule, contact information, tracking tools, budgeting tools, etc. These documents are easy to find and appear to be useful for staff – staff are familiar with them and can easily explain how they are used.

2 = Documentation exists but appears to be out of date or not easy to access. Staff may know about them but may not be able to describe them or explain in detail how they are used.

3 = No documentation exists or documentation cannot be located or accessed. It appears that no one is using them regularly.

Documentation	Ratings		Observer Notes
1: <i>Staffing Documents</i>	Existence		
	Accessibility		
	Utilization		
	Additional Notes:		

2: <i>Monitoring Tools</i>	Existence		
	Accessibility		
	Utilization		
	Additional Notes:		
3: <i>Financial Management Tools</i>	Existence		
	Accessibility		
	Utilization		
	Additional Notes:		
4: <i>Business Plan</i>	Existence		
	Accessibility		
	Utilization		
	Additional Notes:		
5: <i>Research and Partnership Documents</i>	Existence		
	Accessibility		
	Utilization		
	Additional Notes:		

For Means of Transportation:

1= Provided vehicles are on-site, well-maintained and ready for use. Usage logs are up-to-date and reflect appropriate uses for vehicles. Vehicles are appropriate for the types of uses required.

2= Provided vehicles are on-site, adequately-maintained and usable. Usage logs exist but may not be up-to-date or adequately detailed. Vehicles are appropriate for the types of uses required but may show some signs of misuse.

3= Provided vehicles are not present or not usable. No usage logs exist, or are not being used. Clear signs of misuse of vehicles or lack of maintenance.

Transportation	Ratings		Observer Notes
1: <i>Project Vehicles</i>	Appropriateness		
	Availability		
	Appropriate Use		
	Maintenance		
	Documentation		
	Additional Notes:		

ANNEX G: CONSENT FORM

The Assessment Team provided the following verbal consent statement to all interviewees prior to engaging in the data collection protocol.

Part 1: Informed Consent Statement

The Informed Consent Statement is an introductory statement that the interviewer makes to each respondent to explain the objective of the interview and assures the respondent of confidentiality. The following text will be read to all potential respondents before the start of any interviews or FGDs. Informed consent must be obtained from all participants before beginning.

Informed Consent Script:

Good morning/afternoon,

My name is X, and I am with Social Impact, an evaluation organization. We have been contracted by USAID to conduct an assessment of the agriculture sector in Haiti. The objective of this assessment is to determine what activities have been the most effective and the most sustainable in Haiti, with the goal of informing USAID on the best course of action for future programs. As a part of this assessment, we are speaking with a large number of stakeholders in the agriculture section, including donors, implementing organizations, government ministries, beneficiaries, and others. We are currently at the first phase of our assessment. The objective of this interview is to select a list of approaches and related projects for our field work. Your participation in this study is voluntary. You do not have to participate if you do not want to, and you may also choose not to answer any particular questions. There is no direct benefit to you for participating, and neither are there consequences for choosing not to participate. However, we would greatly appreciate any insights you might have regarding your experiences and knowledge of agriculture in Haiti. Your information and responses will be kept confidential and neither your name nor your position will be connected with your responses in our report.

Though we have a number of specific questions to ask you, we encourage you to share any additional thoughts that you feel are important to the assessment that our questions do not address.

Do you have any questions about any of this?

Do you wish to continue with the interview/focus group discussion? (all participants present MUST answer in the affirmative. Anyone who does not consent should leave the discussion)

ANNEX H: DOCUMENTS REFERENCED

Govt Policies and strategies:

- MARNDR. Politique de développement agricole. 2011.
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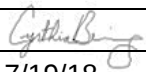
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ANNEX I: DISCLOSURE OF CONFLICT OF INTEREST

Organization Name: Social Impact, Inc.	
Evaluation Position?	☐ Service Provider ☒ Team Leader Team member
Evaluation Award Number (<i>contract or other instrument</i>)	L038 Task: H_001_07
USAID Project(s) Evaluated (<i>Include project name(s), implementer name(s) and award number(s), if applicable</i>)	Agriculture Sector Assessment
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	
Date	7/19/18

Organization Name: Social Impact, Inc.	
Evaluation Position?	☐ Service Provider ☐ : Team Leader ☒ Team member
Evaluation Award Number <i>(contract or other instrument)</i>	L038 Task : H_001_07
USAID Project(s) Evaluated <i>(Include project name(s), implementer name(s) and award number(s), if applicable)</i>	Agriculture Sector Assessment
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 7. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 8. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 9. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 10. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 11. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 12. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	JEMPSY FILS AIME
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Date	7/19/18
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Organization Name: Social Impact, Inc.	
Evaluation Position?	☐ Service Provider ☐ : Team Leader ☒ Team member
Evaluation Award Number <i>(contract or other instrument)</i>	L038 Task: H_001_07
USAID Project(s) Evaluated <i>(Include project name(s), implementer name(s) and award number(s), if applicable)</i>	Agriculture Sector Assessment
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 13. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 14. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 15. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 16. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 17. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 18. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	JEAN CHARLOT MICHEL
Date	7/19/18

ANNEX J: SUMMARY INFORMATION FOR ASSESSMENT TEAM

ASSESSMENT TEAM QUALIFICATIONS

Team Leader, Cynthia Berning, is a certified Project Management Professional with 5+ years of USAID and MCC program experience researching, designing, implementing and evaluating agriculture and land tenure projects in Africa, the Caribbean and Europe. She is an outstanding technical writer with experience in proposal development, Monitoring and Evaluation Plans and project reporting. Ms Berning holds a MA in International Development Studies from the Georges Washington University, with an in-the-field agriculture Capstone Project in Bangladesh. Ms Berning has extensive experience in raising sheep, goats, poultry, bees and other small livestock, organic vegetable and fruit production, and permaculture techniques. She is fluent in English, Moroccan Arabic, French and Spanish, and has intermediate skills in Wolof, and Mandarin Chinese.

Deputy Team Leader, Jempsey Fils-Aimé, has over 18 years of experience in the field of Agribusiness development and in program evaluation. Over the past 15 years, Mr. Jempsey has provided technical assistance to developing Haiti counterparts in identifying, collecting, disseminating, and using information for agribusiness development in Haiti for the IDB and for the Ministry of Commerce. Mr Jempsey has developed expertise in conducting evaluations that combine the strengths of different evaluation approaches and methods (quantitative and qualitative) in order to optimize the usefulness and the relevance of results. Mr Jempsey holds a bachelor's degree in agriculture from de State University of Haiti, a Master of Science in Management of Development from University of Turin, and an MBA in Global Management from the Thunderbird School of Global Management in Phoenix, Arizona.

Deputy Team Leader, Jean Michel Chariot, is a trained agronomist with more than 30 years conducting research and evaluation in the field of Agriculture. He has worked as a consultant leading data collection teams and conducting programs evaluation of in various socio-economic areas, including agriculture. Mr. Chariot has worked as an evaluation consultant in Haiti, gaining hand-on experience in both qualitative and quantitative methods. He has extensive experience in the Haitian rural areas context, gaining in-depth knowledge of Haiti's agricultural supply chain challenges as well as its food security challenges. He had the opportunity to collaborate with various stakeholders in the sector including the State, NGO and private sectors. Mr Chariot holds two masters: (1) a master's degree in **Project Evaluation** at the "Institut d'Administration des Entreprises (IAE)", University of Paris 1 Sorbonne, France, and (2) a master **Public Affairs Management** at Pontificia Universidad Católica Madre y Maestra, RSTA, Santo Domingo, Dominican Republic.

Project Director, Dr. Kari Nelson, has over ten years of experience in International Development and Monitoring and Evaluation. On the evaluation end, Dr. Nelson has led several independent evaluations. While at MCC from 2013-2016, Dr. Nelson oversaw all monitoring and evaluation (M&E) work for the Senegal I and II, Burkina Faso, and Benin II Compacts, as well as for MCC's collaboration with PEPFAR, the Data Collaboratives for Local Impact program, which included extensive agriculture and irrigation projects. In addition, Dr. Nelson has led evaluations in the WASH sector in Ethiopia and Senegal, and a Technical/Vocational Education evaluation in Mongolia. She has also participated in a variety of other team member roles for evaluations in Senegal, the Dominican Republic, Pakistan, Lebanon, and Kazakhstan.

Senior Evaluation Specialist and Program Manager, Dr. Antoine Wesner, is an expert in monitoring and evaluation. In the last twenty years, he has been providing expertise in Haiti in comprehensive Strategic Planning, Monitoring and Evaluation Plan development, M&E systems design, data collection and analysis, database management, and training and supervision of enumerators. He has designed and implemented several project evaluations involving the extensive use of complex surveys, FGDs and other participatory methods of data collection. He is an adept user of statistical analysis software, including SAS, SPSS, R and CSPRO, and is well versed in ACCESS database management. Dr. Wesner spent two years as a Post-Doctoral fellow at the department of Biochemistry of the University of Missouri, Columbia, developing statistical methods to analyze biological data. He has a Ph.D. in Cell and Molecular Biology, an MA in statistics and an M.Sc. in Agronomy/ Biotechnology, all from the University of Arkansas in the United States. He earned a BS in Agronomy at the School of Agriculture at Damien and studied Economics and Development Sciences from the State University of Haiti. Dr. Wesner is Haitian and speaks fluent Creole, French and English, and basic Spanish.