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SECOND ANNUAL REPORT

APPUI À LA VALORISATION DU POTENTIEL AGRICOLE DU NORD,
POUR LA SÉCURITÉ ÉCONOMIQUE ET ENVIRONNEMENTALE

(AVANSE)



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Title page photo: the rice harvest at Grison Garde, 22 August 2014. AVANSE has promoted a more rigorous system of intensive rice cultivation (called SRI) through its farmer field schools, and the rice planted with this method last spring was ready for harvest at the end of FY 2014. Here in Grison Garde, farmers carry rice stalks they have cut to a threshing area in another part of the field. The strict spacing between the cut stalks visible on the bottom-left is one feature of the SRI method. These farmers harvested twice as much rice as they usually do, and AVANSE hopes to help them generate an even larger harvest next year with a steadier fertilizer supply under more favorable climatic conditions.

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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FOREWORD

The second Annual Report of the USAID-funded AVANSE project covers its activities and accomplishments from October 1, 2013 to September 30, 2014. The Annual Report consists of three sections: a quarterly activities report covering the major activities in each technical area of the project during July, August, and September 2014; an annual progress report, which assesses workplan progress, major successes, and major challenges over the entire year; and a set of annexes which provide additional details to many of the topics covered in the first two sections.

AVANSE (which means 'move forward' in Haitian Creole) is a 5-year, \$87 million dollar project with the objective of catalyzing inclusive, sustainable economic growth in the potentially highly productive Northern Corridor of Haiti. The flagship Feed the Future program in the region, AVANSE's intermediate results include increasing agricultural productivity among a wider circle of small farmers in strategic plains; improving watershed stability above the selected plains; strengthening agricultural markets by increasing access to financial products; developing the capacity of Haitian firms and associations; and improving transportation infrastructure, such as roads to fertile but inaccessible farmland.

The period covered in this report saw AVANSE move from its start-up phase into full



These farmers in Grande Rivière are part of AVANSE's watershed management initiative. They are working to systematically install soil-retention structures that will make this steep hillside more productive and protect the farmland downhill from dangerous flooding.

implementation. The project developed successful technical crop models and implemented them on a medium scale, designing a strategy to leverage local implementing partners to bring this activity to full scale next year. To protect these innovative crop technologies in highly productive but vulnerable plains, the project’s watershed management component developed a system of core agroforestry blocks and community-level organizations to reduce erosion and consequent flooding downstream. Meanwhile, the markets team began signing and implementing collaboration agreements with major firms in the area to provide a market outlet for the lowland and hillside crops produced by beneficiaries of AVANSE’s agricultural activities, and the project’s capacity-building staff worked with nearly a dozen local organizations to prepare them to implement this kind of work with USAID directly in the future. With this strong base of technology, economic models, and commercial and community networks, AVANSE is poised to reach a much larger scale during the next fiscal year.

ABBREVIATIONS

APS	Annual Program Statement
AVANSE	Appui à la Valorisation du potentiel Agricole du Nord, pour la Sécurité Économique et environnementale (“Support for the valorization of the agricultural potential of the North, for economic and environmental security”)
BAC	Bureaux Agricoles Communaux (Commune-level agricultural bureaus, the local offices of the Ministry of Agriculture)
CACHE	Caribbean Council of Higher Agricultural Education
CNSA	Conseil National pour la Sécurité Alimentaire (National Council for Food Security)
DDA	Directions Départementales Agricoles (Department-level agricultural bureaus, regional offices of the Ministry of Agriculture)
DEED	Développement Économique pour un Environnement Durable (“Economic development for a sustainable environment”, a project implemented by DAI)
DFPEA	Direction, Formation, et de Promotion des Entreprises Agricoles (“Management, training, and promotion of agricultural enterprises”)
DGI	Directoire Général des Impôts (Haitian Directorate General of Taxes)
DR	Dominican Republic
EOI	Expression of interest
FAMV/UEH	Faculté d’Agronomie et de Médecine Vétérinaire/Université d’État d’Haïti (the department of agronomy and veterinary medicine at the State University of Haiti)
FFS	Farmer field school

FOG	Fixed-Obligation Grant
FTF	Feed the Future Initiative
FTF-N	U.S.-Haiti Feed the Future Partnership: Northern Corridor Project (re-named AVANSE)
FY	fiscal year
Gds	Gourdes
GIS	Geographic Information System
ha	Hectare
HIMO	High-intensity main d'œuvre
ICA	Institutional capacity assessment
ICT	Information and Communications Technology
IDB	Inter-American Development Bank
INARA	Institut National de l'Application de la Réforme Agricole (National Institute for the Application of Agrarian Reform)
IP	Implementing partner
IR	Intermediate result
LTTA	Long-term technical assistance
M&E	Monitoring and evaluation
MARNDR	Ministère de l'Agriculture, Ressources Naturelles, et le Développement Rural (Haitian Ministry of Agriculture, Natural Resources and Rural Development)
MDE	Ministère de l'Environnement (Haitian Ministry of the Environment)
ME	Micro-enterprise
MIS	Market information system
MT	Metric ton
NGO	Nongovernmental organization
NRM	Natural-resource management
NUPAS	Non-U.S. Organization Pre-Award Survey
OCA	Organizational capacity assessment
ORE	Organization for the Rehabilitation of the Environment
PIA	Programme de l'Intensification Agricole (MARNDR Agricultural Intensification Program)

PIF	Production intensive par fragments (intensive production by fragmentation, a technique for the rapid replication of banana trees)
PMP	Performance monitoring plan
PO	Producer organization
PPI	MARNDR/Projet de Developpement de la Petite Irrigation
RESEPAG	Strengthening of Agricultural Public Services Project
RFP/RFA	Request for proposals/request for applications
SME	Small and medium-sized enterprises
SNS	Services Nationales des Sémences (National Seed Services)
SOW	Scope of work
SRI/SRA	Système rizicole intensive/Système rizicole améliorée (intensive rice-production system)
STTA	Short-term technical assistance
SWMB	Sub-watershed management body
TAMIS	Technical and Administrative Management Information System
ToT	Training of trainers
UCNH	Université Chrétienne du Nord d'Haïti
URHC	Université Roi Henri Christophe
USAID	United States Agency for International Development
USD	U.S. Dollars
USDA	U.S. Department of Agriculture
WUA	Water-user association

QUARTERLY ACTIVITIES REPORT

A number of ongoing activities bore fruit during the quarter stretching from July to the end of September 2014. After months of planning and negotiation, AVANSE signed an agreement with cacao exporter NOVELLA in a partnership that will help transform the production, processing, and export of cacao in northern Haiti—adding to the agreement signed with the exporter PISA in the previous quarter. The project's environmental team launched an ambitious assessment of the environmental issues in all six watersheds where AVANSE works. Six community groups elected leaders to organize tree planting and building soil conservation structures to combat erosion to protect hillsides above vulnerable plains. And rice planters who adopted the SRI method in the spring harvested their crop and saw their yields double.

The quarter was also marked by the development of the project's workplan for October 2014–September 2015. AVANSE is implementing an innovative program in a challenging region, so it has naturally developed its approach in response to the limitations as well as the aspirations and potential of the local environment. The project's new workplan capitalizes on the successes of the past year and adapts to the unexpected challenges it has addressed, with the overall goal of replicating the successes of FY 2014 on a much larger scale.

The material contained in the Quarterly Activities Report discusses the progress of each technical team on AVANSE during the most recent quarter, beginning with the agricultural production team and the August rice harvest.

IR 1: AGRICULTURAL PRODUCTIVITY INCREASED

AVANSE's agricultural production team saw some of its efforts from earlier in the year come to fruition this quarter and took advantage of the less active agricultural season for some of its target crops to plan to scale up its efforts next quarter and into 2015.

SUB-RESULT 1.1: KNOWLEDGE AND AVAILABILITY OF IMPROVED PRODUCTION TECHNOLOGIES & SYSTEMS INCREASED

For the cacao and maize and beans teams, the months of July, August, and September were not major months for planting. However, the rice and banana planting seasons did begin during the quarter. Additionally, with the upcoming autumn-winter rainy season and in anticipation of the activities that will accompany the next spring planting season, the teams concentrated on the registration of potential Farmer Field School (FFS) beneficiaries for all focus crops.

RICE

Participants in the AVANSE rice-production program who planted in the beginning of 2014 harvested their crops in August. In spite of the severe drought—and in some cases significant delays in planting dates—these farmers have been more successful than in the past thanks to the high-yielding *Système de Riziculture Intensive* (SRI) method. The SRI method requires less water, fewer rice seeds, less fertilizers, and a strict control of the density of planting in comparison with traditional practices. The positive results of this technique include a decreased strain on water resources, fewer seeds and fertilizers needed, and (because the fields are not completely flooded) less pesticide needed to control mollusks and other pests (see the Annual Progress Report pages 54 to 89 for more details on SRI). While SRI techniques have many benefits, it is important to realize as well that they require greater mastery over water levels in fields and have higher labor requirements.

The initial figures on the increase in yield are very encouraging. The per hectare yield will be determined precisely and validated by the upcoming post-harvest survey in the next quarter,



Rice cultivated under the SRI method is more strictly spaced, uses less water and other inputs, and yields more grain.

but preliminary estimates from Grison Garde suggest that production volume increased by at least 100%, and other rice-growing zones reported similar positive results. Such results are particularly impressive given the drought and the fact that there was dearth of fertilizer in the North during this time—a problem that has since been partially addressed for these farmers through AVANSE’s voucher program (see Sub-Result 1.3 below).

The rice team was also hard at work registering new participants for next season, and 600 new producers are in a process of enrolling in AVANSE’s rice program at the end of the quarter—this in addition to 940 producers currently in the 47 Farmer Field Schools that were assisted in FY 2014. All participants in this program in FY2014 benefited from trainings in SRI techniques and the 5 tons of Jaragua and Jouma-67 rice seed purchased and distributed by AVANSE. In addition the MARNDR has purchased and donated the 39 cono-weeders, 39 roller markers for use by the farmers. AVANSE will also magnify its impact in the upcoming workplan year: Rice Specialist Jean Buddy Lucien plans to recruit an additional 1,000 producers for the rice season beginning in January 2015 and another 1,000 in the last quarter of FY2015—bringing the planned cumulative total to over 3,000 active participants in FY 2015.



AVANSE is working with small nurseries like this one to build their capacity to produce high-quality cacao seedlings to respond to the needs in the North for high-quality germplasm. The increased production is also essential for AVANSE to implement its vision.

CACAO

This quarter, members of the cacao Farmer Field Schools focused mostly on the maintenance of old orchards—completing pruning work in 1,138 parcels covering approximately 109 ha—as the season for planting new seedlings did not begin until late September. However, the practical training component continued through the quarter, including a two-day training/certification of 32 cacao grafters.

In preparation for the autumn-winter planting, cacao specialists Raoul Dominique and Wasner Pierre took advantage of the lull in planting to conduct an evaluation of the availability of high-quality cacao seedlings in the project zone. They have determined that with current nursery availability, AVANSE will need to wait until December to acquire the

750,000 cacao seedlings it needs for next season, and the project is planning accordingly. In addition to grafting workshops, the cacao team will work with both the network of 50 local tree nurseries to be supported by IR 2 and an even broader network of small community nurseries linked to cacao FFS that are closer to the project implementation zones to ensure a strong supply of high-quality cacao trees. Raoul Dominique and Wasner Pierre worked closely with IR 3 Acting Team Lead Stéphan Jean-Pierre (whose team is responsible for the collaboration agreements with PISA,

NOVELLA, and soon FECCANO) to elaborate this strategy for sourcing planting material in FY 2015 during the last quarter.

They also conducted an evaluation of the survival rate of banana suckers planted in new cacao plantations as temporary shade trees. In FY 2014, a total of 180,000 banana suckers and 130,500 cacao seedlings were transplanted in April–May on 1,872 parcels. Mainly because of the drought, the average survival rate is 58% for cacao seedlings and 60% for banana suckers. This is a better figure than expected, given the drought, but the cacao and banana teams expect to achieve an even higher number in the next rainy season at the end of the year.

BANANAS

Banana-planting activities did not begin again until late September, and most of the quarter was spent in preparation for the banana-planting season.

TEXT BOX: PIF TECHNIQUES FOR MULTIPLYING BANANA PLANTING MATERIAL

The greatest input cost in growing bananas—unlike most crops—is the banana plant itself. Banana trees are not grown from seeds, but rather cut from the shoots that naturally grow out around adult banana trees—typically 10 to 12 shoots per parent tree. This limits the supply and increases the cost of this basic input. This feature of banana biology makes it difficult to rapidly multiply planting material from the generally small stock of high-quality, disease-resistant trees.

Another feature of banana-tree biology provides a solution to this limitation: if a banana tree is cut and placed in a warm, moist bed of mulch or sawdust, and if its apical meristem is prevented from growing, the plant is forced to redirect its energy to replication instead of growth, and it will sprout many more shoots: instead of 10 to 12, the plant can produce 20 to 50 shoots, which can in turn be cut and planted to grow into adult banana trees. This technique, known in French as *production intensive par fragmentation* or “PIF” has the additional advantage of preventing the spread of disease because the cuttings grow in a protected enclosure and are clonal replicas of the mother plant.

Near the close of the quarter, a specialist from the MARNDR led a workshop on this technique with AVANSE bananas specialist Julène Moïse for 41 participants (specifically including technicians from the tree nurseries being supported by IR 2) at Vaudreuil, and AVANSE began to develop a low-cost PIF “kit” to distribute to beneficiaries so that they can replicate banana trees on a small scale in their own gardens. As of the end of the quarter, a second training had been planned for January 2015. During FY 2015, IR 1 and IR 3 will collaborate on providing technical support and business training to PIF banana centers to promote the development of service providers in this potentially lucrative market niche.

In September, the banana team began the distribution of 180,000 banana cuttings to cacao producers, continuing the productive partnering of these two cropping teams and following on the success of similar parcels planted last spring. In this associative crop arrangement, the larger banana trees provide shade for the vulnerable cacao trees, increasing their survival rate.

An evaluation conducted by three interns on 70,450 suckers planted in April and May revealed that 30,144 (42.79%) were still living—this relatively disappointing result is a consequence of the drought that reduced soil humidity. The most affected areas were Quartier Morin (with only a 20.61% survival rate) and Bord de Mer de Limonade (39.72%). This demonstrated an urgent need for irrigation water supply in these areas, and Julène Moïse collaborated with Water-Users Association Specialist Luc Saint-Vil and infrastructure team lead Yves Ducarmel to design a household well pilot initiative under sub-result 1.5 (see below) to address this problem.

At the end of the month, IR 1 was also finalizing the procurement of an additional 400,000 cuttings for distribution to banana farmers in the main planting season in FY 2015. The delivery of these will begin in mid-October for immediate planting. As the quarter closed, IR 1 had already enrolled 361 women and 959 men to participate in the next banana-plantation season, which began in late September and will continue through the beginning of the next fiscal year.

MAIZE AND BEANS

The maize and beans team harvested in August and September the maize planted during the spring season. Although the drought negatively affected the maize harvest, the project still saw anecdotal success with the short-cycle “chicken corn” variety it introduced in the spring (see more on this new maize variety in the Annual Progress Report). It also prepared for the post-harvest survey that will quantify the economic effects of the drought on this harvest and also substantiate the success of the new maize variety.

During the quarter the Maize and beans team also worked to plan for scaling up its activities. AVANSE registered 2,000 potential beneficiaries for the season centered on beans starting in November 2014. At the end of the quarter, the IR1 team was finalizing



At the PIF training at Vaudreuil, a participant places cut banana trees in a bed of sawdust. When covered with a sheet of plastic to keep the area warm and moist, it will produce 4-5 times more shoots than it would in regular soil. This is extremely significant to the banana value chain because the banana cuttings used to grow new trees are the farmer's most expensive input.

the scope of work to recruit implementing partners to extend even further the scale of its activities during the spring maize season.

INCREASING THE KNOWLEDGE OF LOCAL UNIVERSITIES

AVANSE organized a workshop during July 24-25 with the participation of its U.S. university partner Auburn University the representatives of a national-level grouping of Haitian agronomy faculties known as CACHE, and representatives from the agronomics departments of universities and technical schools in the north and elsewhere in Haiti (Université Henry Christophe de Limonade, Université Roi Henry Christophe du Cap-Haitien, Université Chrétienne du Nord d'Haïti, Ecole Agricole Fondation St. Vincent, Centre Technique d'Éducation Agricole et Développement (CTEAD), Université Anténor Firmin, l'École Technique de Saint-Barnabas, Université Episcopale d'Haïti, Université Caraïbes). The main objective of the workshop was to allow the participants to have an open-ended discussion to identify possible areas of collaboration between AVANSE, Auburn and the Haitian universities and agricultural schools. During the workshop, a number of specific themes were identified for follow-up by AVANSE and the other participants. These include:

The regional Universities will pool resources and start a regional exchange network. The participating regional schools agreed during the workshop to pool their resources and create a common structure that would serve as a technical coordinating body for the different members as a first step to establishing a common code of standards in agronomic education. The University Henry Christophe de Limonade agreed to open its own digital work space (Espace Numérique de Travail—ENT) to all the other institutions to provide basic common administrative service. The participants also agreed to work towards a mutualisation of professors—allowing professors to teach in multiple institutions.

AVANSE will devise a number of concrete areas in which professors and students could be involved and take part in project field actions. These would include establishing demonstration reference plots so that universities would be involved in the measurement of productivity changes resulting from AVANSE activities. Auburn university staff will help with the elaboration of precise methodological protocols.

AVANSE will assess needs for material support for regional University partners. Such support may include equipment for the Espace Numérique de Travail, resources to establish demonstration plots and farms, and support through contracts or grants for professorial research activity and student internships.

Auburn University will work with AVANSE to develop a program for soil testing that would be linked to local universities. Next quarter, a team from Auburn will look at current soil-mapping resources and initiatives and AVANSE's needs for tailored fertilizer applications as they relate to the main IR 1 crop packages and to the list of fertilizers that can now be realistically procured in Haiti given the current and future states of market demand—taking into account the possible proliferation of more open market channels for importing fertilizer that would be a logical consequence of AVANSE's voucher efforts.



AVANSE cacao specialist Wasner Pierre explains AVANSE's program for grafting highly productive cacao trees to Joseph Molnar, Senakpon Kokoye, Dennis Shannon, and Curtis Jolly during their visit from Auburn University in July.

SUB-RESULT 1.2: STRENGTHENED EXTENSION OF AGRICULTURAL TECHNOLOGIES AND NUTRITION INFORMATION

The IR 1 team began preparations to dramatically scale up the impact of the innovations developed under Sub-Result 1.1 (above). Starting in November, the project will launch a first RFP to recruit IPs to replicate the successes of the technical crops packages through the FFSs over a much larger area. The team has prioritized these according to the timing of the seasons of each crop and the number of beneficiaries anticipated in order to maximize the project's impact: the first RFP will be issued for maize/beans extension, followed by rice, bananas and then cacao (implementation of the latter is one of the contributions of AVANSE to the collaboration agreements recently negotiated by IR 3).

In the prior quarter, AVANSE had issued a call for expressions of interest for this activity, but judged the response to be too weak. During this quarter, then, IR 1 conducted a survey to build a more robust listing of potential IPs in the project zone to whom to issue future RFPs. By the end of August, they had vetted 19 additional organizations and from this developed a listing of 14 total potential qualified partners. IR 1 team leaders will work with AVANSE's grants and contracting department to hold public bidders conferences to increase the visibility of these potential contracts and encourage widespread responses. At the end of the quarter, Beans and Maize Specialist Mathias Fils-Aimé and Water-Users Association Specialist Luc Saint-Vil were finalizing the terms of reference for the first beans/maize RFP, and scopes for the other focus crops were in progress.

AVANSE CONTINUES TO PROVIDE INSTITUTIONAL CAPACITY-BUILDING ASSISTANCE TO THE MARNDR

Opportunities for capacity-building support arise in unanticipated places, and the integration of capacity-building objectives across the various IRs in the FY 2015 workplan allows AVANSE to seize these opportunities and make the most of them. For example, one of the most appreciated instances of institutional support to the MARNDR during FY 2014 has been the guidance received from the AVANSE voucher administration team—notably LTTA Voucher Administration Specialist Hélène Kirémidjian and STTA voucher expert Joël Le Turioner. Most recently (and during this last quarter), this guidance took the form of a proposed *veille commerciale* (“commercial monitoring”) on international fertilizer prices. The Ministry has long maintained a subsidy program to import fertilizers to Haiti, but in the course of AVANSE's voucher-related work with the Ministry, AVANSE noted that no system was in place to monitor the price fluctuations of fertilizer on the international market. So far, the price-monitoring support AVANSE has offered allowed the MARNDR to negotiate a 20% reduction in the unit price of one batch of fertilizer purchases. Ministry officials were enthusiastic about implementing such a system with AVANSE's help. It can be a complicated process on an institutional level, a process which requires some support and follow-up over a prolonged period. Formalizing this *veille commerciale* system with the MARNDR is therefore part of the new SOW for M. Le Turioner pending with USAID at the end of the reporting period. If approved, the activity will take place throughout the first three quarters of FY 2015.

SUB-RESULT 1.3: ACCESS TO INPUTS INCREASED

AVANSE's voucher program (called 'SIBA' in French—see the Annual Progress Report for a more detailed explanation of the program) made enormous strides during the last quarter. Although the first six months of 2014 saw successes in program design and operationalizing the program, it was not until the most recent quarter that Voucher Administration Specialist Hélène Kirémidjian and program assistants Huberte Estiverne, Adrien Fritz-Gerald and Vilson Cadet began to see the dividends of their work.

Challenges like the December–March drought and systemic fertilizer shortages had forced AVANSE to extend until August 31st the period of validity of vouchers for cacao grafting services and fertilizer for rice and bananas from the winter season. In the

meantime, the voucher administration team negotiated with Haitian importers in partnership with the MARNDR to participate in the launching of an open-market fertilizer import and distribution scheme that will be set up to procure fertilizer internationally without import subsidies. This is an important outgrowth of the first voucher test in the early months of 2014—which showed that planning voucher schemes on stocks that are imported through the MARNDR’s normal import subsidy program does not work since the fertilizer either arrives too late to be of use or does not arrive at all. This new mechanism, based on non-subsidized, open-market imports from private importers who are convinced of the reliability of demand based on voucher planning documents and evidence of farmer advance payments, was tested in the 2014 summer rice campaign (this activity is ongoing and the period of validity for the vouchers ends October 31st). With the arrival of these products in August, the program was extremely successful, with hundreds of vouchers purchased in the first few days they were available. The tables below reflect the progress in voucher sales and the redemption of vouchers for agricultural inputs as of 30 September. Comments section in each table explain the relevant specific factors that were being the results obtained in each campaign.

TABLE 1: CYCLE 1 OF VOUCHER PROGRAM, WINTER CAMPAIGN 2014 (MARCH 2014 TO AUGUST 31ST 2014)

	Initial Planning Parameters				Actual Performance						
	# Vouchers Planned	# Participating FFSs	# Farmer Participants Planned	Total Planned Budget (AVANSE + Farmer Contributions)	# vouchers issued (purchased by farmers)	# Farmers buying Vouchers	Value of Farmer Contributions	Value of AVANSE Contributions	Total Face Value of Voucher's Issued	# Vouchers Redeemed	Total Face Value of Vuchers Redeemed
Banana											
Glysophate	2,660	29	658	1,330,000	97	17	4,850	43,650	48,500	81	40,500
TOTAL	2,660	29	658	1,330,000	97	17	4,850	43,650	48,500	81	40,500
Performance Indicators: Banana											
Vouchers Issued/Vouchers Planned				4%	Comments: Low issuance rates for the first banana campaign were due to two reasons: (1) problems with the selected pesticide and (2) the drought. Regarding the pesticide, AVANSE had initially planned to issue vouchers for the nematocide Oxamil. We had to remove this and replace it with Glysophate, after confirming that Oxamil was not included in the existing USAID PERSUAP. Unfortunately, field experience with the product indicated that Glysophate performed poorly. The drought also interfered with farmer demand, leading AVANSE to extend the validity period into August. However, even with this extension, farmers were not terribly interested in Glysophate given its poor performance. AVANSE has decided therefore to refocus banana vouchers on fertilizer, as long as a proper nematocide cannot be found.						
Face value of Voucher issued/Planned Budget				4%							
Vouchers Redeemed/Vouchers Planned				3%							
Farmer Contributions as % of Total Face Value of Vouchers Issued				10%							
Rice											
NPk 20-20-10	497			447,300	213		115,560	76,680	192,240	190	171,000

	Initial Planning Parameters				Actual Performance						
	# Vouchers Planned	# Participating FFSs	# Farmer Participants Planned	Total Planned Budget (AVANSE + Farmer Contributions)	# vouchers issued (purchased by farmers)	# Farmers buying Vouchers	Value of Farmer Contributions	Value of AVANSE Contributions	Total Face Value of Voucher's Issued	# Vouchers Redeemed	Total Face Value of Vouchers Redeemed
SA	415			249,000	128		46,020	30,720	76,740	5	3,000
Urea	422			379,700	178		96,660	65,880	162,540	130	117,000
2,4 D	422			147,700	183		6,090	57,645	63,735	168	58,800
TOTAL	1,756	20	399	1,223,700	702	199	264,330	230,925	495,255	493	349,800
Performance Indicators: Rice					<p>Comments: The initial rice campaign experienced some problems due to the drought, which interfered with water availability and farmers' confidence in being able to access water throughout the growing period, as well as a general lack of fertilizer supply in the region. In particular, one distributor was unable to get any fertilizer at all, and all farmers who had purchased vouchers in the distributor's region were unable to use them. AVANSE is reimbursing these farmers for their share. This episode was critical in convincing AVANSE to not rely on allocations of fertilizer purchased through the official MARNDR import subsidy program—as the supply of these stocks is unsure.</p>						
Vouchers Issued/Vouchers Planned				40%							
Face value of Voucher issued/Planned Budget				40%							
Vouchers Redeemed/Vouchers Planned				28%							
Farmer Contributions as % of Total Face Value of Vouchers Issued				53%							
Cacao											
Grafting of cacao trees	736	84	521	736,000	26	20	2,600	23,400	26,000	5	5,000
TOTAL	736	84	521	736,000	26	20	2,600	23,400	26,000	5	5,000
Performance Indicators: Cacao											

Initial Planning Parameters				Actual Performance							
# Vouchers Planned	# Participating FFSs	# Farmer Participants Planned	Total Planned Budget (AVANSE + Farmer Contributions)	# vouchers issued (purchased by farmers)	# Farmers buying Vouchers	Value of Farmer Contributions	Value of AVANSE Contributions	Total Face Value of Voucher's Issued	# Vouchers Redeemed	Total Face Value of Vuchers Redeemed	
Vouchers Issued/Vouchers Planned			4%	Comments: The use of vouchers to spur demand for cacao grafting services in the March to August 2014 period ran into serious obstacles. The first of these was that the qualifying certification program for grafters run by the MARNDR at the high point of the drought was only able to certify 6 grafters. This was due to the low success rate of test grafts given the low vegetative vigor of cacao trees. This problem then continued for the six grafters who had great difficulty achieving the target success rates of 80% that would allow AVANSE to consider that the service had been provided and approve the voucher for redemption. For these reasons, as well as the administrative complexity of verifying field grafts for payment, AVANSE has decided to not include grafting in its planned expansion of the voucher program in FY 2015.							
Face value of Voucher issued/Planned Budget			4%								
Vouchers Redeemed/Vouchers Planned			1%								
Farmer Contributions as % of Total Face Value of Vouchers Issued			10%								

TABLE 2: CYCLE 1 OF VOUCHER PROGRAM, SUMMER CAMPAIGN 2014 (AUGUST 2014 TO OCTOBER 31, 2014)

	Initial Planning Parameters				Actual Performance						
	# Vouchers Planned	# Participating FFSs	# Farmer Participants Planned	Total Planned Budget (AVANSE + Farmer Contributions)	# Vouchers issued (purchased by farmers)	# Farmers buying Vouchers	Value of Farmer Contributions	Value of AVANSE Contributions	Total Face Value of Voucher's Issued	# Vouchers Redeemed	Total Face Value of Vouchers Redeemed
Rice											
NPk 20-20-10	664			597,600	299		161,460	107,640	269,100	299	269,100
DAP	664			597,600	287		154,980	103,320	258,300	287	258,300
Urea	596			536,400	255		137,700	91,800	229,500	255	229,500
2,4 D	593			207,550	223		7,805	70,245	78,050	223	78,050
TOTAL	2,517	20	600	1,939,150	1,064	180	461,945	373,005	834,950	1,064	834,950
Performance Indicators: Rice											
Vouchers Issued/Vouchers Planned					45%	Comment: The second rice voucher campaign started off with promising results and good farmer demand. The issuance rate of 50 percent results mainly from the unplanned stoppage of voucher emission before the end of the campaign, after it became apparent that the fertilizer distributors in the rice production zones were not compliant with reg 216 environmental compliance standards. AVANSE's voucher unit fully believes that numbers would have been significantly higher without this development, and once the planned mitigation measures are being put in place and sales resume, the team expects this number to increase substantially.					
Face value of Voucher issued/Planned Budget					43%						
Vouchers Redeemed/Vouchers Planned					42%						
Farmer Contributions as % of Total Face Value of Vouchers Issued					55%						

PREPARING THE FUTURE LARGE-SCALE VOUCHER PROGRAM

During the quarter, AVANSE evaluated responses to a solicitation for a firm to administer a future, large-scale voucher program and conducted negotiations with the Haitian firm Transversal to implement this activity. The two parties were on the verge of finalizing an agreement at the end of the quarter. The role of this firm is essential to scaling up an ambitious voucher program like AVANSE's: the administrative burden of validating the numbers of vouchers needed for AVANSE's scaled-up activities—which anticipate 34,000 vouchers in circulation at its peak in FY 2015—is unrealistic for the in-house voucher administration team. Additionally, since Transversal has experience with electronic schemes, the firm brings a new, more efficient technology to the voucher program. Nevertheless, AVANSE will provide close technical supervision of the voucher activity and conduct field supervision with MARNDR, monitoring of supplier relations, troubleshooting and operational coordination with the MARNDR and other projects using vouchers in the project zone.

COLLABORATION WITH THE MINISTRY OF AGRICULTURE

Voucher Administration Specialist Hélène Kirémidjian also continued to participate in the monthly MARNDR *Table de Concertation* meetings in Port au Prince, which coordinate voucher activities in the project area. Joël Le Turioner, an internationally recognized expert in agricultural-inputs subsidies, frequently accompanied Ms. Kirémidjian in coordinating with the MARNDR on voucher program administration and the key planning of open market importation outside of the MARNDR inport subsidy program. The assistance that AVANSE is providing to the MARNDR on planning its fertilizer procurements and in helping to coordinate an overall approach to input subsidization with the MARNDR's PTTA project has been one of the most successful examples of capacity-building assistance and coordination to date (see text above under Sub-result 1.2 on the development of a commercial fertilizer price monitoring system for the Ministry). Specific work tailored to MARNDR requests for further assistance have been included in Joël Le Turioner's next SOW, which was pending USAID approval at the end of the reporting period.

BUILDING ENVIRONMENTAL COMPLIANCE CAPACITY IN THE NORTHERN CORRIDOR

At the end of September, as noted in Table 2 above, it was discovered that several of the input suppliers participating in the voucher programs were not environmentally compliant, and AVANSE immediately halted all SIBA activities with these vendors. In the interim, AVANSE collaborated with the MARNDR to temporarily relocate all fertilizers and pesticides to Ministry warehouses. Although this is a serious environmental concern and the disruption to current SIBA activities is hardly negligible, the changes necessary to bring vendors into compliance are essentially material facilities issues (such as repairs to a leaking roof) that can be addressed promptly and comprehensively, and the voucher administration team is confident that AVANSE will be able to restart voucher activities with most of these vendors after obtaining USAID approval for environmental mitigation plans and reports (EMPRs) for each store. With the expected approval of these EMPRs by mid-November, the program should be able to restart with minimal disruption. Indeed, during the last week of September, AVANSE environmental compliance staff was

already working with the infrastructure team and the voucher program to design remediation plans for the input suppliers in question.

The outlook for this activity in the first quarter of FY 2015 is positive, albeit busy, as the team resolves environmental compliance issues, tries to complete the August rice campaign sales, and prepares to scale up its activities for the next planting season.

SUB-RESULT 1.4: MANAGEMENT CAPACITY OF WATER-USER ASSOCIATIONS (WUAS) INCREASED

Since many of the IR 1 target areas are located in irrigated perimeters, building the capacity of community organizations to manage water resources is essential to the sustainability of the project's interventions. WUAs manage irrigation systems and resolve disputes over the use of the resource to ensure that it remains in productive use, and the participation of these associations is essential to AVANSE's objectives. Moreover, after the completion of the project, WUAs may serve as a vector for new funding and new initiatives in this area, as well as a key resource for local government charged with natural-resource management.

At the end of the quarter, AVANSE concluded negotiations with implementing partner Geosociety, a firm that will increase the basic capacities of existing WUAs through management-strengthening training. The firm will also strengthen the entire ecosystem of WUAs across AVANSE's target zones by strategically forming new WUAs. The firm is working closely with the DDAs (Départemental branches of the MARNDR) to design a specific management-strengthening program which will be rolled out in the end of October. Geosociety began work on these activities in the end of September.

SUB-RESULT 1.5: PROPERTY SECURITY STRENGTHENED

AVANSE beneficiaries living in the drylands area stretching from Limonade to Terrier Rouge have faced serious water shortage challenges related to the drought and erratic flow of rivers and streams due to degradation further up in the watershed. The financial impact of being unable to water crops is of course considerable, and in some cases the de-capitalization of these farmers is so severe as to force the IR 1 team to adjust their technical-extension tactics, for instance procuring inputs originally planned to be supplied by the beneficiaries themselves.

In response to this—and digging to the root of the problem—the infrastructure team partnered with Producer/Water-Users Association Specialist Luc Saint-Vil and Banana Specialist Julène Moïse this quarter to design a pilot initiative that will install approximately 200 small household pumps in pre-existing wells in strategic areas for banana production in Quartier Morin and Limoande/Bord de Mer. This initiative will begin in November, as will a parallel activity led by the infrastructure team to rehabilitate approximately 20 larger casing wells.

The lessons learned from this initiative will serve as a base in the development and award of the drylands development grants planned for large-scale implementation beginning in April. This quarter, the project identified and recruited a consultant to complete the diagnostic study necessary to develop the grants facility for this activity; the study will be complete in January, with the grants mechanism finalized, approved by USAID, and implemented in March and April.

IR 2: WATERSHED STABILITY IMPROVED

During the quarter, the IR 2 watershed management component made major progress in the areas of strengthening sub-watershed management bodies, and the team was also able to take advantage of the new planting season to replace many of the trees, grasses, and agro-forestry crops in the demonstration blocks that had been lost because of the drought in the earlier part of the year. The demonstration block model initiated earlier in the year has proven quite successful at its current scale (see the Annual Progress Report for more details), and IR 2 began planning to aggressively scale up this activity in the first half of FY 2015.

SUB-RESULT 2.1: WATERSHED GOVERNANCE BODIES ESTABLISHED AT THE SUB-WATERSHED LEVEL

A key element of the IR 2 strategy is the establishment of Sub-Watershed Management Bodies (SWMBs), which are committees established in conjunction with local government authorities that have a mandate to serve as a community forum for the treatment of land-use issues and planning to foster improved watershed conservation. They are essential to the long-term sustainability of IR 2 interventions, since they—along with local CBOs—will be closely involved in bringing initiatives like the demonstration blocks to scale and for ensuring the follow-up necessary as these critical slopes develop into full-fledged agro-forestry systems.

ESTABLISHING NEW SWMBS

During this quarter, IR 2 focused on completing community elections to finalize the SWMBs (seven sub-watersheds held elections this quarter, and the election for the last SWMB will occur at the beginning of next quarter) and holding initial workshops with the new SWMBs to familiarize these committees and local community leaders with the prospective role and activities of the new groups. The next step in the process, which will begin next quarter, will involve participatory discussions facilitated by AVANSE around spatial land-use patterns (aided by maps from the geo-spatial study conducted by AVANSE in late FY 2013 and early FY 2014) that will serve as the platform for developing community-driven sub-watershed management plans.

In the meantime, AVANSE will contract IPs to put into place a series of SWMB capacity-building measures, implement sub-watershed soil conservation activities, and coordinate investments in non-erosive agricultural systems. Even as SWMB elections were still taking place, IR 2 developed the terms of reference for this activity. An RFP will be issued early in the next quarter.

RE-ACTIVATING EXISTING SWMBS

At the same time as the formation of new SWMBs, AVANSE helped to re-activate SWMBs formed under the DEED project in Limbé. The assessment of SWMB sustainability in Limbé watershed took place last June, and IR 2 concluded that the committees still exist and express interest in participating in AVANSE's initiatives, but that they were not currently implementing activities. The IR 2 team has therefore incorporated the Limbé SWMBs into its plan for the first two quarters of FY 2015.



IR 2 team lead Jean-Claude Pierre Louis explains to a sub-watershed management body in the Marion watershed the role of SWMBs in sustainably managing hillsides and implementing sub-watershed management plans. Conservation activities will begin under the supervision of these SWMBs in early 2015.

TABLE 3: SUB-WATERSHED MANAGEMENT BODY PROGRESS, JULY–SEPTEMBER 2014

	Creation of sub-watershed management bodies				Elaboration and execution of sub-watershed management plans			
Completed previously	Initial Organization Workshop With Local Governments	Geographic Division of Sub Watershed	Election of SWMB Committee	Trainings on Role of SWMB Completed	Sub-Watershed Maps presented to SWMBs for modification and verification	Participative Design of Community Land-Use Map	Finalization of Sub-Watershed Management Plan	Engagement of implementing Partner(s) Responsible for Accompaniment
Completed this quarter								
TROU-DU-NORD WATERSHED								
Sub-watershed 1: Sainte Suzanne								
Sub-watershed 2: Trou du Nord								
Sub-watershed 3: Caracol								
MARION WATERSHED								
Sub-watershed 1: Perches								
Sub-watershed 2: Acul Samedi								
Sub-watershed 3: Dum/Fol								
HAUT-DU-CAP WATERSHED								
Sub-watershed 1: Cap Haitien	SWMB FORMED BY ANOTHER ORGANIZATION AND VALIDATED BY AVANSE							
Sub-watershed 2: Acul du Nord								
Sub-watershed 3: Milot/Quartier Morin								
GRANDE RIVIÈRE WATERSHED								
Sub-watershed 1: Jolitrou								

	Creation of sub-watershed management bodies				Elaboration and execution of sub-watershed management plans			
Completed previously	Initial Organization Workshop With Local Governments	Geographic Division of Sub Watershed	Election of SWMB Committee	Trainings on Role of SWMB Completed	Sub-Watershed Maps presented to SWMBs for modification and verification	Participative Design of Community Land-Use Map	Finalization of Sub-Watershed Management Plan	Engagement of implementing Partner(s) Responsible for Accompaniment
Completed this quarter								
JASSA WATERSHED								
Sub-watershed 1: Ouanaminthe								
Sub-watershed 2: Gens de Nantes								
Sub-watershed 3: Acul des Pins								
LIMBÉ WATERSHED								
Sub-watershed 1: BALI	DONE UNDER DEED							
Sub-watershed 2: RAHALIC								
Sub-watershed 3: SOLCAMA								
Sub-watershed 4: SACOGRRA								
Sub-watershed 5: MARLA								

The table above charts the progress in the formation and execution of activities through IR 2 SWMBs. Cells highlighted in light grey represent steps completed earlier in 2013-2014, whereas yellow cells mark steps completed this quarter. Note that AVANSE is working with 6 SWMBs formed under other programs: the Cap Haitian SWMB and the five SWMBs in Limbé. These are shown in the dark green areas in Table 3.

This quarter, the IR 2 team made particular progress in the Jassa watershed, organizing, electing, and training three SWMBs. At the end of the quarter, only the election for the Ouanaminthe SWMB was pending; this is scheduled for early October. The team also completed elections in 6 SWMBs—a challenging activity to organize, but an important one for the sustainability of the SWMBs.

Early next year, they will be working with these 13 SWMBs to discuss and finalize sub-watershed management plans before implementing activities with all 18 SWMBs across all watersheds.

PROTECTING CRITICAL COASTAL ZONES

The scoping phase of the environmental assessments (EAs) of the six watersheds targeted by AVANSE (see the section later in the quarterly progress report covering environmental compliance) have brought to light the importance of providing technical assistance and capacity-building to local government for the development and execution of local natural-resource-management strategies, especially in the low-lying coastal areas that are part of the Three Bays Marine Protected Area that are critical to production of several of the AVANSE target crops (in particular, bananas). The EAs will collect information about the actions required to mitigate the negative impact of increased demographic and agricultural pressures on these areas and to monitor the impact of those pressures and the mitigating strategies, including technical assistance to local government.

AVANSE held an informal incubator on this subject in mid-August to devise a strategy for FY 2015 with the technical assistance of Glenn Smucker and Andrew Watson. The project determined that it would need to build on its collaboration with local government and local representatives of the MARNDR in the project area to develop a strategy for reinforcing natural resource management in the critical coastal zones. AVANSE is coordinating with USAID's Mission-level and Regional Environmental Officers to develop this strategy in a manner consistent with USAID's regional environmental initiative. In FY 2015, implementation of the strategy will likely involve a subcontract to a firm or NGO for baseline data collection in the lowland and near coastal marine environment and a grant to the Haitian NGO(s) working within the USAID regional environmental program on the Three Bays Protected Area to enhance the technical assistance they provide to local government and community organizations on sustainable natural-resource-management strategies, environmental governance, and alternative economic livelihoods. The terms of reference for this activity were being drafted at the close of the quarter.

SUB-RESULT 2.3: CRITICAL SLOPES STABILIZED THROUGH FARMER-LEVEL INVESTMENT

The new planting season only began very late in the quarter, which allowed the IR 2 team to reflect on the challenges and successes of its demonstration block strategy—which organizes landowners to convert entire blocks of contiguous parcels uphill from IR 1 intervention areas into sustainable agro-forestry systems for a magnified ecosystem effect on an identifiable tract of land—and lay the groundwork to rapidly scale up the activity in the upcoming quarter.

The most substantial challenge for IR 2 under these activities was last year's drought, which resulted in higher mortality than expected among the seedlings planted last spring. AVANSE's agro-forestry model depends on a series of crops that provide continuous income to the farmer from the first year. In the past year, in addition to trees that will eventually form a canopy layer, beneficiaries planted annual crops like sugar cane and pineapple which serve a dual purpose of generating income and reinforcing soil conservation structures. At the end of the reporting period, AVANSE had procured more seedlings and cuttings, and communities around demonstration blocks established earlier in the year were mobilizing to re-plant in the agro-forestry parcels most heavily affected by the drought. This level of community engagement (eventually to be coordinated and sustained by SWMBs formed under IR 2's watershed governance activities) is an essential part of AVANSE's plan to scale up the demonstration block activities and begin achieve saturation in the critical areas identified.



This hedgerow is the first step in the stabilization of this critical slope in Grison Garde. Trees and non-erosive perennials will next be introduced to the slopes between these soil-conservation bands and eventually convert the entire parcel to a mature agro-forestry system.

The table on the next page charts the progress of AVANSE's implementation of demonstration blocks by watershed and quarter. This quarter, the IR 2 team worked with 600 landowners in 18 demonstration blocks and:

- Established 11 new demonstration blocks, for a total of 562;
- Treated 9.2 linear km of soil conservation structures, for a total of 156;
- Protected an additional 22.19 hectares of land, for a total of 653.25 ha, reaching very close to the activity target of 880 ha.

The relatively low level of new activity this quarter is due to the relative dry period, which is not conducive to planting trees.

TABLE 4: IR 2 DEMONSTRATION BLOCK ACTIVITIES TO DATE

#	WATER-SHEDS	TARGET ZONES	Demonstration blocks	Number of HA targeted for protection	Number of Participants	Number of HA treated from January to March 2014	Number of HA treated from April to June 2014	Number of HA treated from July to September 2014	Number of HA reaching "protected status"	% Percentage of HA protected	Number of demonstration plots established from January to March 2014	Number of demonstration plots established from April to June 2014	Number of demonstration plots established from July to September 2014	TOTAL demonstration plots established	Number of linear meters treated from June to March 2014	Number of linear meters treated from April to June 2014	Number of linear meters treated from July to September 2014	TOTAL linear meters treated
1	LIMBE	Camp Coq/Marmelade	Massabiel	38	25	8.25	3.0	0.30	11.55	30.39	26.00	0.0	0.00	26.00	3800.00	0.0	480.00	4,280.00
			Ravines des Roches	33	25	5.9	1.0	0.00	6.90	20.91	23.00	2.0	0.00	25.00	2450.00	183.0	0.00	2,633.00
		Ravine des Roches/Limbe	Camp-Coq	35.61	25	6.75	1.0	0.21	7.96	22.35	25.00	0.0	0.00	25.00	3250.00	0.0	105.00	3,355.00
			Beudoret	34	25	5	2.0	0.68	7.72	22.71	18.00	7.0	0.00	25.00	1871.50	1082.0	98.00	3,051.50
2	HAUT DU CAP	Grison Garde/Robillard	Milot	11.5	25	3.77	2.0	0.00	5.77	50.17	11.00	6.0	0.00	17.00	2500.00	1120.0	0.00	3,620.00
			La Bruyere	15	25	6	2.5	1.80	10.30	68.67	23.00	1.0	0.00	24.00	3500.00	150.0	870.00	4,520.00
			Coupe Davide	13	25	4.5	1.0	2.50	8.00	61.54	21.00	1.0	0.00	22.00	2000.00	205.0	1097.00	3,302.00
		La Suisse/Bord de Mer	Grison Garde	14.5	25	5	2.5	4.00	11.50	79.31	9.00	9.0	0.00	18.00	2637.00	1598.0	1150.00	5,385.00
3	GRANDE RIVIERE	Ste Suzanne/Gens de Nantes	Jolitrou	41	50	13.33	4.0	3.96	21.29	51.93	24.00	21.0	1.00	45.00	4735.30	0.0	0.00	4,735.30
			Distrou	37.17	50	11.5	3.0	3.56	18.06	48.59	38.00	8.0	1.00	46.00	3000.00	0.0	0.00	3,000.00
4	TROU DU NORD	Ste Suzanne/Gens de Nantes	Garcin	30.44	25	12	17.40	0.00	29.40	96.59	14.00	13.00	0.00	27.00	2650.00	3091.10	0.00	5,741.10
			Sarazin	39	25	7.5	30.53	2.25	40.28	103.27	11.00	16.00	7.00	27.00	2750.00	5659.20	4400.00	12,809.20
			Burotte	48	25	8.5	35.18	0.00	43.68	91.01	12.00	17.00	0.00	29.00	3350.00	6456.20	0.00	9,806.20
			Foulon	38	25	6.58	28.80	0.00	35.38	93.10	15.00	17.00	0.00	32.00	2766.00	9643.50	0.00	12,409.50
5	MARION	Ste Suzanne/Gens de Nantes	Acul Samedi	85	50	10.97	70.84	0.00	81.81	96.25	37.00	9.00	0.00	46.00	6500.00	21500.00	0.00	28,000.00
			Perches	110	50	17	91.44	2.93	111.37	101.24	32.00	18.00	2.00	50.00	9260.00	22500.00	1000.00	32,760.00
6	JASSA	Ste Suzanne/Gens de Nantes	Acul des Pins	83	50	6.23	28.43	0.00	34.66	41.76	17.00	11.00	0.00	28.00	1977.50	2949.47	0.00	4,926.97
			Gens de Nantes	173	50	12	155.62	0.00	167.62	96.89	22.00	28.00	0.00	50.00	3367.50	8798.00	0.00	12,165.50
TOTAL				879.22	600	150.78	480.28	22.19	653.25	74.30	378.00	184.00	11.00	562.00	62,364.80	84,935.47	9,200.00	156,500.27

INCREASING LOCAL CAPACITY TO PRODUCE HIGH-QUALITY SEEDLINGS

Because there were fewer soil-conservation and tree-planting activities planned for July and August, during those months IR 2 focused on strengthening the capacity of local input providers. These included grafters for producing mango, avocado, orange, citrus, and cacao trees (this last in cooperation with IR 1). Last spring, the team identified 150 ‘master grafters’ to participate in a series of workshops on how to graft more economically productive trees and thereby rejuvenate the stock of old trees. This quarter, 120 of these master grafters remained in the program for the practical phase of the training, which was completed in July and August. The eventual goal is for these master grafters (who will each train three to five new grafters this quarter) to produce 100,000 high-quality grafted seedlings which AVANSE has identified as an upcoming procurement need one it has expanded the current network of demonstration blocks. AVANSE plans to use the same strategy to train farmers in yam mini-sets (a technique that dramatically multiplies the number of buds from a single yam on the same principle as the PIF technology for bananas) in January.

In parallel to the grafting trainings, IR 1 and IR 2 have initiated partnerships with fifty local nurseries to increase the production of the seedlings and cuttings AVANSE needs to reach its protected hectare targets. Earlier this year, the IR 1 and IR 2 teams estimated that they would need approximately 5.3 million plants (with a survival rate of at least 70%) over the course of the project. However, this quantity of high-quality germplasm is not available in the project area. Earlier in the year, the project identified 47 (which has now grown to 50) nurseries to target for capacity-building support in order to address this lack of local technical capabilities. During this quarter, IR 2 conducted a second round of diagnostics on these nurseries and worked with IR 1 and the Grants & Subcontracts team to prepare an assistance agreement. A non-compete authorization request to USAID was on the verge of submission at the close of the quarter. AVANSE will provide these nurseries with technical assistance (such as the PIF workshops offered by IR 1 last quarter, which many of the technicians from these fifty nurseries attended) and business-management training as well as delivering approximately \$10,000 in equipment per nursery during FY 2015.

The table below captures the number of trees (both fruit and forestry trees) distributed to date by AVANSE to for planting in new agro-forestry systems. Please note that as the new planting season only began at the very end of September, this table has not changed since the last quarterly report.

TABLE 5: IR 2 TREE DISTRIBUTION BY WATERSHED

Water-shed	Delivery zone	Cash-ew	Mango	Citrus	Bread-fruit	Avocado	Haitian oak	Span-ish cedar	Acacia	Mah-ogany	Total
Limbé	Massabiel & Ravine des Roches	1,000		750		500	1500	1,000	1,500	1,150	14,800
	Camp Coq & Beudoret	1,000		750		500	1500	1,000	1,500	1,150	

Water-shed	Delivery zone	Cash-ew	Mango	Citrus	Bread-fruit	Avoc-ado	Haitian oak	Span-ish cedar	Acacia	Mah-ogany	Total
Haut du Cap	Milot & La Bruyère	1,500	1,500	750	100		1000	1,500	1,500	1,000	17,700
	Coupe Davide & Grison Garde	1,500	1,500	750	100		1000	1,500	1,500	1,000	
Grande Rivière	Jolitrou	1,500	1,500	500		500	500	1,250	2,000	1,000	17,500
	Distrou	1,500	1,500	500		500	500	1,250	2,000	1,000	
Trou du Nord	Garcin & Sarazin	1,000	1,500	1,000	100	500	500	1,250	1,500	1,000	16,700
	Burotte & Foulon	1,000	1,500	1,000	100	500	500	1,250	1,500	1,000	
Marion	Acul Samedi & Perches	3,000	3,000	2,000	100	1000	1,500	2,400	1,000	2,000	16,000
Jassa	Acul des Pins	1,000	1,500	1,000	50	500	750	2,000	500	1,000	16,600
	Gens de Nantes	1,000	1,500	1,000	50	500	750	2,000	500	1,000	
TOTAL		15,000	15,000	10,000	600	5,000	10,000	16,400	1,500	12,300	99,300

SUB-RESULT 2.4.: CRISIS MANAGEMENT CAPACITY ESTABLISHED

Earlier this year, AVANSE completed an assessment of the emergency-preparedness of civil protection committees (CPCs) in the North and Northeast, and during April–June, AVANSE held a series of meetings with Departmental committee members and determined that the capacity of local government to respond to emergencies (especially hurricanes) could be best met through material and training support. This quarter, IR 2 followed up with these officials to develop a list of materials needed and initiated the procurement in September.



NOVELLA's Daniel Zephyr shakes hands with AVANSE's Bertrand Laurent after signing a collaboration agreement on 24 July. Under the terms of the agreement, AVANSE and NOVELLA will work together to strengthen the capacity for high-quality chocolate production in the Northern Corridor and increase the incomes of small cacao farmers.

IR 3: AGRICULTURAL MARKETS STRENGTHENED

Last quarter, the IR 3 team followed up its successes from the third quarter of FY 2014 (notably signing a collaboration agreement with the new cacao exporter PISA) with the completion of a similar agreement with the established cacao exporter NOVELLA, significant progress on implementation of its workplan activities, and solid preparation for the upcoming year. Major achievements include progress towards the signature of two new collaboration agreements anticipated in FY 2015 and the start of field activities foreseen to begin formation of the direct farmer-to-exporter purchasing mechanism that is part of AVANSE's agreement with NOVELLA.

During the quarter, AVANSE management and subcontractor Agridev also took steps to complete the IR 3 staff: Jean-Osmy Chéry was approved as the Business Training Specialist for IR 3, the team completed a very long and challenging recruitment effort for a qualified Access to Finance Specialist with the identification of Demetrio Torres, and AVANSE and Agridev agreed to submit Stéphan Jean-Pierre (who has been the acting IR 3 team lead since mid-summer) for approval as the new LTTA leader of the component.

SUB-RESULT 3.2: IMPROVED ACCESS TO STORAGE AND PROCESSING FACILITIES; AND SUB-RESULT 3.5: RELATIONSHIPS IN TARGETED VALUE CHAINS STRENGTHENED

STRENGTHENING MARKET LINKAGES WITH PISA AND NOVELLA

This quarter the IR 3 team, led by Agridev's Stéphan Jean-Pierre and Junior Paul, made substantial progress in establishing key market linkages. The collaboration agreement signed on June 30 with PISA (Produits des Iles, S.A., a subsidiary of REBO S.A. that recently began processing and exporting cacao in the North) took effect during the quarter. The agreement plans for cooperation between PISA and AVANSE to increase cacao production in the North by producing and distributing over 500,000 high quality cacao seedlings to farmers and training farmers on new production technics through Farmer Field Schools managed directly by PISA. PISA will purchase freshly harvested cacao to ferment in its newly built facility in Acul du Nord; these direct purchases will enable the farmers to capture 100% of the price paid by PISA with no intermediaries between exporter and farmer.

AVANSE also negotiated and signed a collaboration agreement with NOVELLA on July 24. The terms of this agreement are similar in many regards to the one signed with PISA. AVANSE will provide technical support to farmers for increased production as well as provide investments in planting material for small farmers. AVANSE will also provide technical assistance to help NOVELLA launch a fermentation process. This is a significant change for NOVELLA, which currently exports only the unfermented cacao that commands a lower price on the world market. However, a major difference vis-à-vis the PISA agreement is that AVANSE's agreement with NOVELLA also includes significant activities to improve the quality and marketing of unfermented cacao through the formation of a new direct-purchase mechanism between farmers and NOVELLA. This mechanism will be based on transparent pricing that rewards good drying practices at the farm and allows full traceability that will permit future organic and/or fair trade certification of the farmers and of NOVELLA. This new mechanism for unfermented cacao has the potential to increase farmer revenues by 20% to 30% simply by streamlining the value chain and improving quality.

At the end of the quarter, negotiations were still ongoing with and with the cooperative federation FECCANO, the third cacao exporter operating in the North, and with the LEA Trading Company that is organizing procurement for S & H Global, the Caracol industrial management company. A partnership with LEA Trading or with S & H Global will focus on making local agricultural products available to the industrial park employees. IR 3 also initiated negotiations for a new potential collaboration agreement with a local Sisal processing company. The activities under the agreement would involve supporting a large number of farmers in drylands in the North East for the increase in production of sisal.

The table below summarizes the status of the market-linkage and collaboration agreement activities of the IR 3 team, noting the key information about the partner or potential partner, the sector it is investing in or might invest in, and the status of its relationship with AVANSE (developments from this quarter are shaded in green with italic text). Note that the table is divided into two categories of partners: 'collaboration agreements' (those targeted for a formal

agreement with AVANSE) and ‘market linkage partnerships’ (simply firms AVANSE is supporting with information about agricultural markets in the zone).

Most notable among the developments this quarter, of course, is the signature of the NOVELLA collaboration agreement and the beginning of activities under the agreement signed with PISA in June. Additionally, however, the IR 3 team identified SISALCO, a sisal exporter, as a potential partner which could support production of sisal by small farmers in drylands of the North-East.

TABLE 6: AVANSE COLLABORATION AGREEMENTS

Potential Private Firm Partner	Nature of Business	Major Goals of Joint Project	Potential Collaboration Mechanism	Current Status of Agreement	Potential Private Sector Investment	Actions undertaken in quarter	Actions Foreseen in next quarter
Signed collaboration agreements:							
Maison NOVELLA	Cacao export	(1) Increase cacao production in partnership with small farmer in North; (2) expand to fermented cacao; 3)Improve post-harvest treatment to raise quality and improve farmer price incentives; (4) certify supply chain & improve traceability ; 5) Disseminate price information's to farmers	Collaboration Agreement	Finalizing last version of the agreement and detailed work plan	1.3 million USD	<i>Agreement Signed</i> <i>Implementation started</i>	<i>Continue implementation</i>
Rebo/PISA	Cacao export	(1) Increase cacao production in partnership with small farmer in North; (2) Develop an operation of exporting fermented cacao; 3)Improve post-harvest treatment to raise quality and improve farmer price incentives; (4) certify supply chain & improve traceability	Collaboration Agreement	Agreement signed. Working on detailed implementation plan.	800,000 USD	<i>Implementation started</i>	<i>Continue implementation</i>
Total signed collaboration agreements:					2.1M USD		
Potential collaboration agreements foreseen in FY 2015:							
SEPAC	Rice processing	Install a rice milling operation in North east region	Collaboration Agreement	SEPAC is reviewing investment plans. Formalization of MOU depends on SEPAC's decision to invest in milling infrastructure	2 million USD	Establish market linkages with rice producer association in Ferrier for increased production as first step in local investment.	Continue discussions to finalize and sign MOU before the end of the quarter
Jacques Sauveur Jean	Rice farming and processing and distributor	Develop an improved rice processing facility to serve own and small farmers	Grant	Awaiting launch of APS	100,000 USD	Finalized APS	Launch APS
Banamiel	Banana	Develop an integrated Haitian-Dominican banana production- export program	PPP	Will launch feasibility study	TBD	<i>Recruited Consultants for</i>	Launch feasibility

Potential Private Firm Partner	Nature of Business	Major Goals of Joint Project	Potential Collaboration Mechanism	Current Status of Agreement	Potential Private Sector Investment	Actions undertaken in quarter	Actions Foreseen in next quarter
Group	export	with Dominican firm Banamiel				Study	study
SISALCO	Sisal Processing and Export	Support production of sisal by small farmers in dry lands to increase supply of sisal	Collaboration agreement	MOU Negotiation	1.5 Million US	Received and reviewed SISALCO business plan	Sign MOU
Total potential collaboration agreements:					> 2.5 million USD		

Market linkage partnerships:

CALI	Corn processing	Facilitating market linkages activities to sell corn	Market Linkage	Order from Ministere des Affaires Sociales being prepared.	None	Assist CALI in securing a second deal to sell 500 MT of corn mill to Haitian government food program	Supervise second sale to MAS. Link to private sector buyers
LEA Trading/Par k Caracol	Food distribution	Sale of local products to Caracol park employees	Market Linkage	Price negotiations	TBD	Facilitated negotiations between partners	Finalize linkage
AIGG	Rice processing	Facilitating market linkages activities to sell rice	Market Linkage	Waiting for harvest	None	Assist AIGG in securing deal to sell 500 MT of rice to Haitian government food program	Finalize sale of 500 MT rice to MAS Link to private sector buyers
CLES	Rice processors	Market linkage with buyers	Market Linkage	Waiting for harvest	None	Assist CLES in securing a order of rice from MAS	Finalize sale of rice to MAS
Quisqueya	Food processor	Market linkage for the supply of dry banana chips to Quisqueya	Market linkage	Assessing capacity of banana processors in the north	None	Soured banana processors in the North	Identify banana processor TA to processor to supply dry banana chips to Quisqueya
RAFAVAL	Cocoa processing	Link RAFAVAL to US buyer	Market Linkage	Waiting for buyer to place first order of raw chocolate	None	Worked with US buyer on volume and quality requirements	TA to RAFAVAL for the supply of raw chocolate to US buyer

TRAINING LOCAL ENTERPRISES IN BUSINESS MANAGEMENT

The IR 3 enterprise-training program continued as scheduled this quarter with activities on two specific tracks: a track for medium enterprises and a track for micro- and small enterprises. Each of these is described below.

Training local medium enterprises

On the medium enterprise track, AVANSE implementing partner SOFITRAINING completed the last of four training modules for the eight participating enterprises. In the second phase of these trainings, SOFITRAINING Trainers will help each enterprise to develop tailored action plans to address the constraints that were diagnosed during the first phase. In FY 2015, AVANSE will incorporate an additional 12 agro-enterprises into this track.



Making Cents' Tim Nourse conducting a needs assessment of agro-enterprises in Port Margot.

Training small and micro-enterprises

On the micro- and small enterprise track, STTA training specialist Tim Nourse from Making Cents completed a needs-assessment for targeted agro-enterprises. Following this mission Making Cents began preparation of a more general SOW to provide support for the development of a training program and institutional strengthening activity in which a specialized Haitian organization implementing partner will be engaged to provide continuing training and coaching to micro-and small enterprises in the project zone. It is worth noting that the planned curriculum will specifically include a series of modules focused on women entrepreneurs and the cacao groups who

will be participating in the direct farmer to exporter cacao buying program under the private-sector collaboration agreement with NOVELLA. The curriculum for this micro-small enterprise course will be developed by the end of the calendar year, with training occurring in January–March 2015.

LEGALIZING LOCAL AGRIBUSINESS

Throughout last quarter, IR 3 led an effort to identify agro-enterprises that had not yet been legalized and target them for help with financial and business planning and for formalization assistance (as described by sub-activity 2.5 in the FY 2014 workplan). IR 3 worked closely with the Ministry of Commerce to identify the steps necessary for formalization. Based on Ministry of Commerce requirements, IR 3 began identifying the service providers (mostly law firms) capable of providing legalization services and was drafting the solicitation to procure these services at the close of the quarter. Once firms are legalized, they can become candidates for consideration for future AVANSE agro-enterprise grants.

The outlook for IR 3 progress in this area for next quarter is positive: in addition to the training activities and the implementation of the collaboration agreements described above, AVANSE is planning a number of ongoing activities, including the further elaboration of the cash-flow models for major types of agro-enterprise clients developed by IAEC Economic Analyst James Weber and the continuous reiteration of the list of potential agro-enterprise clients, which is scheduled for another comprehensive update in January 2015.

SUB-RESULT 3.3: INCREASED ACCESS TO FINANCIAL PRODUCTS

AVANSE released the approved agro-enterprise grants mechanism to give stand-alone subsidies to agro-enterprises and help them to access formal credit from financial institutions (as described in the last quarterly report) and began selecting which respondents were qualified to submit full proposals. Over 300 agro-enterprises applied under the grant window, including ploughing enterprises, rice mills, corn mills, cacao processing firms, storage facilities, producers of high-quality seeds for agriculture, and a wide variety of agricultural-input suppliers. Applicants will submit formal proposals during this upcoming quarter with the assistance of proposal workshops organized by AVANSE. With USAID approval of the proposals in early 2015, implementation will begin in the middle of the second quarter of FY 2015.

The IR 3 team reviewed and modified the mobile-money pilot design proposed by MEDA and described in the last quarterly report. AVANSE will itself conduct a small mobile-money exercise in the cacao value chain in November, with a subcontract planned to MEDA to implement the scaled-up program in the next cacao season. The AVANSE-run activity in November and December will work with cacao selling groups to connect them with NOVELLA, establish a Digicell agent network to provide local mobile money liquidity, and coordinate the ICT aspects of the activity. This system will be done on a trial basis in the first cacao season—with payments from NOVELLA to farmer passing through this mechanism. This will give AVANSE and NOVELLA an opportunity to experiment with subscription fees, test equipment, and trouble-shoot the mechanisms, thereby informing the larger MEDA design effort for full-scale launch of the mobile money payments system in the spring 2015 cacao season.

SUB-RESULT 3.4: IMPROVED MARKET INFORMATION SYSTEMS

Under the terms of the collaboration agreement to be signed with Novella in October, AVANSE and Novella will re-design the market-information system for cacao (*kout lanbi*). This activity had been on hold until it could be responsibly incorporated into the agreement with Novella and PISA. We anticipate this activity moving forward at the beginning of the next quarter, with a pilot conducted internally in the next quarter and large-scale implementation scheduled for early 2015. In the meantime, IR 3 will engage in a needs assessment in order to begin planning for MISs in other AVANSE target crops (maize, beans, bananas, and rice), which will be based on lessons learned from the cacao MIS. These activities are described in more detail in the FY 2015 workplan.

IR4: CAPACITY OF LOCAL ORGANIZATIONS STRENGTHENED

In August, AVANSE welcomed Senior Capacity-Building Specialist Michèle Breton as the new IR 4 team lead. A specialist in project management, institutional strengthening and capacity building, working with microfinance institutions, small businesses, and governmental institutions, Ms. Breton brings with her an extensive network of professional contacts and relationships with NGOs, public-sector institutions, and private firms in Haiti. The arrival of Ms. Breton, combined with the identification of a financial capacity-building specialist (who will complete the component's LTTA team) and the continued strategic support from Bethesda-based Kirsten Weeks, positions IR 4 to accelerate its implementation schedule during the first quarter of FY 2015.



Capacity-building Officer Dialine Joseph meets with representatives from MOFADEL and KODELI in Limonade to plan for legalization. In July, AVANSE hosted a series of workshops on applying for legal status from the Ministry of Social Affairs.

The most significant achievement of IR 4 this quarter was the design of strategic planning exercises that accompanied Ms. Breton's orientation to the project and the overall effort to assemble the AVANSE workplan for FY 2015. Since the organizational environment in Haiti's Northern Corridor is weak (there are, for instance, no Haitian organizations to date certified to receive direct awards from USAID), IR 4 is implementing a new initiative in a challenging

environment. The simplified IR 4 strategy for achieving USAID–FORWARD objectives takes into account challenges faced so far and is articulated more fully in the FY 2015 workplan developed during the last month of the quarter. Notably, it anticipates the administrative and operational needs of implementing partners preparing for NUPAS¹ certification, and it also more clearly defines when and how capacity-building support will be delivered to local organizations not identified as potential direct-award-holders.

SUB-RESULT 4.1: STRENGTHENING OF IPS AND POTENTIAL DIRECT AWARD-HOLDERS TO RESPOND TO USAID FORWARD OBJECTIVES

AVANSE has been working since the beginning of FY 2014 with its original consortium partners Agridev and AgroConsult to qualify these organizations to bid on and administer direct awards from USAID—a major USAID–FORWARD objective. This quarter, both organizations made progress in the Action Plans they developed with IR 4 earlier this year.

AGRIDEV DEVELOPS PERSONNEL POLICIES

In July, Marina Mutchler, a senior DAI operations specialist, helped Agridev strengthen its personnel and human resources policies. She helped Agridev to develop a comprehensive benefits policy in keeping with Haitian law and USAID regulations, which was an area identified as a weakness in Agridev’s initial ICA. Ms. Mutchler began this work in August and completed it in September. To date, she has reviewed Agridev’s current employee manual and advised the firm of the steps needed to bring these into full compliance with USAID regulations. Then, in close cooperation with Agridev senior management, she elaborated a basket of potential fringe-benefit options, taking into account the international scope of Agridev’s work, so the benefits she proposes to Agridev management are comparable to packages offered by other international consulting firms. Under Ms. Mutchler’s guidance, Agridev management is following up with a local labor lawyer. She will complete her assignment during the next quarter, and the IR 4 team will follow up to ensure

TEXT BOX: INSTITUTIONAL STRENGTHENING STEPS FOR POTENTIAL DIRECT-AWARD-HOLDERS:

1. An implementing partner (IP) responds to a competitive AVANSE procurement.
2. IR 4 identifies the IP as an institution with potential to receive and administer a direct award from USAID.
3. If the IP demonstrates interest, IR 4 conducts and Institutional Capacity Assessment (ICA) to identify the steps necessary for the institution to qualify to directly administer USAID funding.
4. IP works with IR 4 to craft an Action Plan (AP).
5. IP and IR 4 follow up to implement AP items, conducting additional ICAs as necessary; IR 4 assists in securing resources (training, grants) through AVANSE to strengthen IP according to action plan.
6. USAID evaluates IP according to NUPAS guidelines to certify IP to receive direct funding.
7. IP bids on USAID solicitations and begins implementing USAID projects directly.

¹ Non-U.S.-Organization Pre-Award Survey.

Agridev receives the assistance necessary to implement her recommendations.

AGROCONSULT COMPLETES STRATEGIC PLANNING EXERCISE

Institutional Strengthening Specialist Maryse Holly is charged with the ongoing supervision of AgroConsult's action plan. AgroConsult noted progress in several areas at their last meeting: they had begun to implement a new filing system, detailed the content for a new website, begun work on improving HR and recruitment systems, and obtained an up-to-date quitus.

Later in the quarter, Michèle Breton also led a strategic planning activity with AgroConsult. The activity helped the firm to prepare a business plan covering the next financial year, which will highlight the areas where AVANSE can help the organization to strengthen its capacities, not only in terms of training but also in the form of grants and operational support to implement action plan items. At the end of the quarter, IR 4 was in discussions with project management about how best to offer operational support to AgroConsult to help it implement its Action Plan priorities. Ms. Breton (with Ms. Holly co-facilitating) will conduct the same strategic-planning exercise with Agridev during the next quarter.

IR 4 LAUNCHES ICA WORK WITH NEW IMPLEMENTING PARTNERS

The capacity-building team also continues to make progress on deepening the pool of IPs with Action Plans to strengthen their capacity to manage direct awards or fixed-obligation grants. During the last quarter, IR 4 shared the results of 10 ICAs completed in the prior quarter with their respective beneficiaries, bringing the total to 13 organizations.

Additionally this quarter, IR 4 identified three more IPs with potential to receive direct USAID funding. These three institutions, financial-service providers affiliated with the network of Caisses Populaires (credit unions) "Le Levier" and covering the North and Northeast of the country, are presently involved with the AVANSE voucher program (SIBA). They possess high potential for future USAID project implementation in the agriculture sector and any other sector where the financial services they provide may play a role in a given value chain. ICAs for these three organizations have been planned for next quarter.

AVANSE PLANS FINANCIAL MANAGEMENT SUPPORT TO IPS

The end of last quarter also found IR 4 collaborating with the U.S. project-management team to identify DAI resources to lead two training efforts for IPs (including those beginning their Action Plans more recently)—one focused on project management, and another workshop on writing proposals for potential clients like USAID. These financial management skills are essential to directly manage USAID awards, so delivering this assistance is a high priority for IR 4 in the next quarter.

The table below summarizes the status of capacity-building work with the 13 local organizations that had been identified as of the end of the quarter. As of 30 September, all organizations targeted by IR 4 had developed action plans.

TABLE 7: STATUS OF IMPLEMENTING PARTNERS ON TRACK FOR FORWARD CERTIFICATION

#	Partner	Type of Organization	Date of 1st ICA	ICA score	Qualification Level (FOG/ Direct Obligation)	Action Plan Developed	Major Areas of Weakness	Trainings thus far	Projected Date, 2nd ICA	2nd ICA score	Status
1	Agridev	Consulting Firm	16, 19 and 20, August 2013	1.82	Direct Obligation	Yes	Financial Management	Doing Business with USAID	Oct-14		STTA and IR4 to provide Financial Systems improvement support
2	Agro-Consult	Consulting Firm	12- 14, August 2013	1.69	Direct Obligation	Yes	Financial Management	Doing Business with USAID and Strategic Planning Activity	Oct-14		STTA and IR4 to provide Financial Systems improvement support
3	Scagitech	Consulting Firm	10, March 2014	1.94	FOG	Yes	Financial Management	Doing Business with USAID	Nov-14		Approval of Action Plan AVANSE contributions with Administration
4	Jaden Lakay	Ag Goods and Services	5, May, 2014	1.64	FOG	Yes	Documentation of procedures and Financial Mgmt.	Doing Business with USAID	Mar-15		OCA Report Shared
5	Fharen	Ag Goods and Services	12, May, 2014	1.6	FOG	Yes	Financial Management	None	Mar-15		OCA Report Shared/Invitation to "Doing Business with USAID"
6	Nach	Ag Goods and Services	13, May, 2014	1.53	FOG	Yes	Financial Management	None	Mar-15		OCA Report Shared
7	Veterimed	Ag Goods and Services	22, May, 2014	2.98	FOG	Yes	Sustainability, Access to finance	None	Mar-15		OCA Report Shared
8	Vidro-trading	Ag Goods and Services	23, May, 2014	1.82	FOG	Yes	Expansion/Diversification of services and strategic planning	None	Mar-15		OCA Report Shared/No Response from Vidrotrading

#	Partner	Type of Organization	Date of 1st ICA	ICA score	Qualification Level (FOG/Direct Obligation)	Action Plan Developed	Major Areas of Weakness	Trainings thus far	Projected Date, 2nd ICA	2nd ICA score	Status
9	Somir	Ag Goods and Services	29, May, 2014	1.78	FOG	Yes	Financial Management	None	Mar-15		OCA Report Shared
10	Aprodev	Ag Goods and Services	18, Jun 2014	1.91	FOG	Yes	Financial Management	None	Apr-15		OCA Report Shared
11	BECS-FAR	Consulting Firm	27, Jun 2014	2.18	FOG	Yes	Documentation of procedures and strategic planning	None	Apr-15		OCA Report Shared
12	ACFINCO	Consulting Firm	26, Jun 2014	2.64	Direct Obligation	Yes	Expansion/Diversification of services	Doing Business with USAID	Apr-15		OCA Report Shared
13	Gradimirh	Ag Goods and Services	30, Jun 2014	3.04	FOG	Yes	Financial Management and General Administration	Doing Business with USAID	15-Apr		OCA Report Shared

TEXT BOX: INSTITUTIONAL STRENGTHENING STEPS FOR POTENTIAL FOG RECIPIENTS

1. AVANSE completes a census of all CBOs identified by local MARNDR BACs for potential involvement in capacity-building activities.
2. IR 4 initiates a series of workshops to strengthen the institutional capacity of interested CBOs.
3. During the period of training workshops, IR 4 performs successive diagnostics of the CBOs to develop a list of those most likely to be able to respond to an APS and administer funds once awarded.
4. IR 4 assists CBOs in the process of preparing and submitting applications in response to the AVANSE APS.

SUB-RESULT 4.2: GENERAL CAPACITY BUILDING FOR PARTNERS AND BENEFICIARIES IN THE PROJECT ZONE

The AVANSE capacity-building team continues to work with community-based organizations (CBOs) and other actors in the project zone to build their general capacity. At the end of the quarter, the team was poised to launch a series of legalization trainings, and mayors of different municipalities had been informed about the forthcoming training and given their support to the project's initiative to encourage CBOs to obtain legal status. The team is planning a follow-up tool for later in the quarter.

In parallel to these training activities last quarter, Capacity-Building Officers Dialine Joseph and Gueriney Jaclin began a process of evaluation amongst these 176 CBOs in order to identify those with the most institutional potential to benefit from direct USAID funding through an APS mechanism. They have already identified 30 likely candidates and will complete these diagnoses at the beginning of the next quarter.

OTHER TECHNICAL AREAS OF AVANSE DELIVER INSTITUTIONAL-STRENGTHENING ASSISTANCE TO LOCAL ORGANIZATIONS

While IR 4 staff remain actively engaged with capacity-building support to CBOs in the project zone, the approach to the activities under this sub-result was also the subject of the strategic shift in focus that IR 4 incorporated into the FY 2015 workplan. It is clear that although IR 4 is an excellent cross-cutting resource for institutional strengthening support, the small team is not always the best located or best qualified agent to offer that support to all beneficiary organizations.

For instance, the business training program under IR 3 and consortium subcontractor Making Cents has already been very successful in building the capacity of local enterprises (and is detailed in the section of this report devoted to IR 3). Groups from IR 1 and IR 2 have been providing technical support to fifty nurseries in the project zone—technical services that the non-agronomist IR 4 staff are not as well positioned to provide. Similarly, DCOP Joanas Gué has been leading the institutional support to the MARNDR, activities which continued through this quarter (and IR 1 team lead Philippe Mathieu is stepping into this role since the DCOP's departure). Other components of the project (such as the AVANSE voucher program) have also provided support to the MARNDR at the appropriate opportunity (see the account under sub-result 1.2 of AVANSE's support to the MARNDR in developing a commercial monitoring system for international fertilizer prices).

AVANSE is very optimistic that during the next quarter, this decentralized approach to capacity building under this sub-result (see page 68 of the FY 2015 workplan for a more detailed table) will permit IR 4 staff to focus on USAID-FORWARD objectives under its work with IPs at the same time it allows the entire project to most effectively engage with beneficiary organizations to build their capacity.



Consultant Annouk Hudicourt gives a “Doing Business with USAID” compliance workshop to potential partners in the project area. IR 4 will continue to sponsor these workshops, but AVANSE CCN staff will gradually deliver

INFRASTRUCTURE

SUB-RESULT 1: IRRIGATION REHABILITATION/CONSTRUCTION (IR 1.6)

Irrigation works in the last quarter of FY 2014 proceeded on two fronts: progress on the detailed site-specific studies for specific irrigation works and on the development of an overall drainage plan for the project area. These are addressed below.

Global Drainage Study

Before commissioning the global study, the team needed to identify zones and a pre-evaluation needed to determine the terms of reference for a larger study. This pre-evaluation was completed during the last quarter. In addition, the Infrastructure team clarified with USAID what level of environmental and cost-benefit review was necessary before the larger study would be commissioned. With these hurdles cleared, AVANSE anticipates that the formal study will start in the next quarter and will be complete by March.

Site Specific Irrigation Works

Last quarter was a productive one for the different irrigation systems under consideration for infrastructure construction interventions by AVANSE. AVANSE's engineers completed technical site evaluations on the proposed Dubré, La Suisse, Chalopin, Grison Garde, and Robino irrigation sites (see the table below, which indicates in green activities completed or started this quarter; those in yellow reflect actions undertaken in the previous April–June quarter).

TABLE 8: IRRIGATION WORKS IN PROGRESS

Activity	Length or surface area	Preliminary site visits	Cost-benefit analysis	Preliminary technical evaluation	SOW for detailed technical studies	Expression of interest for technical studies	RFP for technical studies	Technical studies	RFP for construction
Sub-component 1: Irrigation -- Drainage, Rehabilitation/Construction (IR 1)									
Activity 1.1 Rehabilitation of Grison Garde irrigation system	350 ha	Finished	Finished	Finished	Finished	Finished	Finished	In Progress	Not Started
Activity 1.2 Construction of irrigation system at Glaudine (Terrier Rouge)	220 ha	Finished	Not Required	Finished	Not Started	Finished	Not Started	Not Started	Not Started

Activity	Length or surface area	Preliminary site visits	Cost-benefit analysis	Preliminary technical evaluation	SOW for detailed technical studies	Expression of interest for technical studies	RFP for technical studies	Technical studies	RFP for construction
Activity 1.3 Extension of Robino system (Haut Maribahoux)	250 ha	Finished	Not Required	Finished	Not Started	Finished	Finished	Not Started	Not Started
Activity 1.4 Extension of irrigation site at Roches Plates	8 ha	Finished	Not Required	Finished	Not Started	Finished	N/A	N/A	N/A
Activity 1.5 Construction of irrigation site at Chalopin	300 ha	Finished	Not Required	Finished	Finished	Finished	Finished	Not Started	Not Started
Activity 1.6 Drainage works in La Suisse system	160 ha	Finished	Not Required	Finished	Finished	Finished	Finished	In Progress	Not Started
Activity 1.7 Drainage works at the Dubré system	120 ha	Finished	Not Required	Finished	Finished	Finished	Finished	In Progress	Not Started
Activity 1.8 Partial drainage of Bas Maribaroux system	800 ha	Finished	Not Required	Finished	Finished	Finished	Finished	Not Started	Not Started

The infrastructure team also completed the internal cost-benefit assessments (none of the proposed sites are large enough to require USAID approval on formal CBAs) and launched the technical studies for the Dubré, La Suisse, and Grison Garde systems. These are scheduled for completion in October. The study of the Robino irrigation system is scheduled to be completed by the end of December.

Throughout the site identification and formal study process, the AVANSE infrastructure team has been in close contact with the MARNDR. In particular, the MARNDR has placed high priority on the Chalopin system and provided its technical study to AVANSE. AVANSE will conduct its own rapid technical evaluation to validate the Chalopin study in the next quarter.

AVANSE will issue RFPs for each of these five irrigation sites as soon as the technical studies are complete and rehabilitation work will start immediately afterwards.

SUB-RESULT 2: HILLSIDE STABILIZATION WORKS (IR 2.2)

The infrastructure team made noteworthy progress in identifying the three ravines it will rehabilitate during FY 2015. Of the original 78 potential sites identified at the beginning of the

project, AVANSE had evaluated 7 by the end of June 2014; last quarter, AVANSE evaluated and selected the Bréda ravine in the Haut du Cap watershed as one of these three ravines. The team will finalize the selection of ravines in the Jassa and Bas-Limbé watersheds and complete their evaluations in the first quarter of FY 2015.

AVANSE based this reduction of scope to three ravines on a realistic and responsible timeline for implementation of these ravine rehabilitation works by March 2016. It also considered which projects would have the most impact with respect to the project's indicators. The process for ravine selection involved substantive consultation with IR 1 and IR 2, since these ravine sites will all be upstream from IR 1 intervention areas and proximate to existing IR 2 demonstration blocks, and project environmental compliance staff assisted in the evaluation process.

AVANSE took into account the following factors in the selection process:

- Level of vegetative and soil degradation of the ravine and its surroundings;
- Nearby human population and the level of risk of injury to people and property;
- Proximity to IR 2 demonstration blocks or IR 1 production sites;
- Priority of the MARNDR;
- Proximity to major rivers and roads; and
- General visibility of the activity.

In September, the infrastructure and grants teams completed draft terms of reference for the hillside stabilization works so that the RFPs can be released as soon as the selections are finalized for the Bas-Limbé and Jassa watersheds.



The GIS survey team that completed the spatial land-use survey necessary to complete the calculations for the cost-benefit analyses informing the road studies.

SUB-RESULT 3: FEEDER ROAD REHABILITATION/CONSTRUCTION (IR 3.1)

After discussions with USAID during the quarter, the AVANSE infrastructure team was able to make a final selection of roads to be targeted for rehabilitation works. The final selection of

roads was delayed to take into account data from revised preliminary CBAs that were re-done after the team received new methodological instructions from USAID in quarter 3 as well as requests to prepare corridor maps for inclusion in the preliminary CBAs that required additional GIS field sureveys. After resolving these issues, the AVANSE engineering and grants teams were very active in moving this work forward during the quarter.

The following table summarizes this activity, again with new work highlighted in green:

TABLE 9: ROAD REHABILITATION WORKS

Activity	Length or surface area	Preliminary site visits	Cost-benefit analysis	Preliminary technical evaluation	SOW for detailed technical studies	Expression of interest for technical studies	RFP technical studies	Technical studies	RFP for construction
Sub-component 3: Rural road rehabilitation (IR 3)									
Activity 3.1 Rehabilitation of Robillard/Grison Garde road	6.9 km	Finished	Finished	Finished	Finished	Finished	Finished	In progress	Not Started
Activity 3.2 Rehabilitation of Carrefour Seminaire/Acul Jeannot road	3.5 km	Finished	Finished	Finished	Finished	Finished	Finished	In progress	Not Started
Activity 3.3 Rehabilitation of Camp Coq/Massabiel road	7.0 km	Finished	Finished	Finished	Finished	Finished	Finished	Not Started	Not Started
Activity 3.4 Rehabilitation of Carrefour Juchereau/Roches Plates road	5.8 km	Finished	Finished	Finished	Finished	Finished	Finished	In progress	Not Started
Activity 3.5 Rehabilitation of route nationale no. 6 at Coicou	6.3 km	Finished	Finished	Finished	Finished	Finished	Finished	In progress	Not Started
Activity 3.6 Rehabilitation of Limonade/Bois de Lance road	6.4 km	Finished	Finished	Finished	Finished	Finished	Finished	In progress	Not Started
Activity 3.7 Rehabilitation of Bergen/Haut Madelene road	4.0 km	Finished	Finished	Finished	Finished	Finished	Finished	In progress	Not Started
Activity 3.8 Rehabilitation of Malfety/Miniere road	11 km	Finished	Finished	Finished	Finished	Finished	Finished	N/A	MTPTC executing

All preliminary cost-benefit analyses (CBAs) were finalized for the six road segments targeted for rehabilitation in FY 2015. A cross-IR team evaluated bids from engineering firms for road

studies, and the technical study on the Robillard–Grison Garde road segment was contracted and had began at the end of the quarter.

As the quarter closes, the infrastructure team was finalizing the terms of reference for the other five study task orders and they anticipate issuing these in mid-October, with the technical studies beginning immediately thereafter. AVANSE expects to launch the RFP for construction in December or January, with work beginning in earnest in early February 2015.

INFORMATION, ANALYSIS, AND ENVIRONMENTAL COMPLIANCE

During the quarter, the new Information, Analysis, and Environmental Compliance (IAEC) unit became operational in its new configuration and immediately went to work verifying beneficiary information, completing the baseline analysis, and preparing for the post-harvest surveys and a large-scale environmental assessment of six watersheds.

The Annual Progress Report presents the rationale for this new unit and its structure in more detail since the IAEC represents a response to a long-standing—and long-evolving—project need; this section discusses simply the activities of each of the teams during the last quarter.

MONITORING AND EVALUATION

The IAEC unit's core Monitoring and Evaluation team includes two M&E specialists (AVANSE was still recruiting for the second of these at the end of the quarter), although the whole M&E activity will come under the aegis of the IAEC Director for which recruiting was also in progress at the end of the quarter. The M&E team coordinates reporting on key AVANSE indicators across all the technical components of the project. The team is also responsible for the annual results update (captured in the IPTT table), designing key data-collection initiatives (like beneficiary registration and post-harvest and annual exporter surveys), and ensuring high data quality through field visits.

During this quarter, the team was principally engaged in the following activities:

- **Completing the baseline survey** to conform with USAID instructions (this report was completed at the end of the quarter, for submission to USAID on 1 October),
- **Preparing for the post-harvest crop survey** in the first quarter of the new fiscal year,
- **Preparing for a data-quality assessment** exercise by the USAID M&E team scheduled for mid-October, and
- **Conducting ongoing data verifications**—in addition to the activities described above, M&E Specialist Eril Joseph and Database Management Specialist Rodney Davermann conducted a total of 49 field visits to validate data during the quarter.

The team also completed and validated data and conducted the variance analyses for the IPTT tables included in annex to this report. Next quarter, AVANSE will conduct post-harvest crop surveys, and annual export survey, and a six-month tree mortality study to complete all annual indicators for inclusion of an updated IPTT table in the quarterly report to be submitted in January 2015.

DATABASE MANAGEMENT

The IAEC data collection and management team is responsible not only for managing and retrieving information from the project's databases; it also includes a large field-data-collection team that works across the entire project, including formal M&E functions, technical surveys to inform strategic decisions, and even operational and compliance needs. The advantages of this centralized structure include the ability to allocate data-collection and -processing resources to the most urgent need, consistency of methodology used in survey execution, and the assurance that all data collected will be seamlessly shared with the rest of the IAEC and available to AVANSE and USAID management for more informed decision-making.

Rodney Davermann is the project's database management specialist charged with managing the baseline database and creating the survey forms on a digital platform for data entry and survey implementation. He also checks data quality, and retrieves data when requested by various components. This quarter, he was chiefly involved with John DeRiggi (who has been serving as Acting IAEC Manager during the unit's start-up) working to re-configure these databases (see text box).

TEXT BOX: AVANSE DATABASES

Currently, AVANSE's digital databases include:

- A spatial database that is capable of mapping landcover data in the project zone, with watershed boundaries and extension zones.
- About half of IR 1 beneficiary data (2,775 records), disaggregated by location, crop, gender, and a unique number.
- Seed distribution lists for IR2 (1,746 records).
- Most IR 2 demonstration block registration data by name, crop and location.
- IR3 survey data for 844 agro-enterprises.
- IR 4 organizational capacity scores.
- Voucher beneficiaries, disaggregated by program phase, crop, gender, and location.

The IR 1 seed distribution lists and some IR 1 and IR 2 beneficiary lists are still being digitized

At the close of the quarter, AVANSE was reaching the final stages of the recruitment process for a second database management specialist.

Next quarter and into early 2015, John DeRiggi will assist the database management team to integrate these into a relational database, which will facilitate more efficient reporting and program operations by connecting beneficiaries involved in different IR activities.

Field Data Coordinator Samuel Alc , who began work with the project at the very beginning of the quarter, manages 27 field data collectors (or *enqu teurs*) and data-entry workers, including training, logistics, and implementation of all data-entry tasks. Much of July, August and September were dedicated to assembling and training this team, but they also registered approximately 5,000 beneficiaries (of which 2,000 have already been digitized).

As of the end of the quarter, this team was capable of collecting and entering approximately 400 surveys per week. This was initially done with paper surveys but is now being completed increasingly with mobile devices, and at the end of the quarter AVANSE had planned for a

mobile-data-collection specialist from DAI to work throughout October and November to implement a state-of-the-art data-collection system.

The other principal tasks for the upcoming quarter include supporting the post-harvest surveys, registering IR 2 beneficiaries, and conducting and assessment of the IR 1 farmer field schools.

ANALYSIS

The Analysis team supports the IAEC Unit with high-level data analysis and reporting. Additionally, the team assists the agricultural production, infrastructure, and other technical teams with economic analysis of their activities as necessary.

This quarter, Economist Lonège Ogisma and Analyst James Weber assisted the environmental compliance team with the scoping study for the upcoming environmental assessments, contributed to the ongoing effort to update AVANSE indicators, and advised on the organisation of AVANSE databases. Mr. Ogisma was also instrumental in finalizing the preliminary cost-benefit analyses (CBAs) for five roads targeted by the engineering team (including a large data-collection effort for the Petit-Bourg de Borgne Road CBA), while Mr. Weber compiled two detailed reports on key issues of interest to the IR components of AVANSE: a review of the market for plowing services in the Northern Corridor and a review of the economic impact of the drought. The drought report will inform AVANSE's strategy to mitigate against such environmental challenges in FY 2015. It is attached as Annex C to this report. Next quarter, this team will be working to complete the CBAs for the IR 1 crop models and conducting follow-up interviews with farmers in order to operationalize the recommendations in the plowing study.

GENDER

During the quarter, AVANSE's program of gender inclusion activities was marked by the visit of short term gender specialist Michelle Muldoon from AVANSE's consortium partner Making Cents, who prepared a report with suggestions for a revised gender strategy. Ms. Muldoon visited field sites with each IR team to speak to project beneficiaries and better understand the constraints for women participating in the project—for instance, she identified a number of ways the project can schedule trainings to make it easier for women to participate—mainly taking in to account school schedules and market days. AVANSE is now implementing these suggestions.

Ms. Muldoon also helped to clarify the mandate of the cross-cutting gender task force AVANSE created while it continues to recruit for a new dedicated gender specialist. The gender task force spans technical and operational departments to ensure that gender considerations are incorporated into project activities at all levels. This task force closely follows progress on the project's gender inclusion targets, the most important of which is the participation rate of women in the FFS trainings occurring under IR 1—for which AVANSE had originally set a target rate of 30. However, this target figure did not take into account the actual prevalence of rural women headed households, which the 2009 census shows to be only 20.4 percent in the Departement du Nord and 15.6 percent in the Departement du Nord-Est. We have therefore reduced our target to be at least 5 percentage points above the 20.4 level in the Departement du Nord—or 25 percent overall. With this new target AVANSE is slightly exceeding its objective as women constituted 26.7% percent of the total number of beneficiaries enrolled in FFSs as of the close of FY 2014.

All technical teams in AVANSE have devised programmatic responses to increase the participation of women in key ways. In the case of IR 1, the gender inclusion program will focus on increasing substantially the participation of women in other activities—particularly the upcoming drylands farming activities, for which AVANSE has set a target of 40% women participation. The IR 2 team devised this quarter a way to engage women in agroforestry-crop cultivation through small household gardens (*jâden lakou*) of particular interest to women responsible for food preparation—the project provides training, materials, and technical support to women building what are essentially backyard vegetable gardens with highly nutritious or very marketable vegetables. IR 2 expects that this initiative will serve as a gateway for women into other, more traditionally male activities. IR 3 is specifically incorporating modules for women entrepreneurs into its micro-enterprise curriculum (which they developed with Making Cents this quarter), and the component will also provide post-harvest storage and facilitate access to finance for Madam Saras, formalize an assistance program for woman entrepreneurs, and tailor its mobile-money solutions specifically to address women’s security concerns. This quarter, the team also began the process of creating farmer groups to serve as a farmer-to-exporter sales channel (see text box) which has proven to attract a very high percentage of woman cacao growers.

TEXT BOX: MAKING COLLECTIVE-PURCHASING STRUCTURES WORK FOR WOMEN

The IR 3 team began at the end of FY 2014 cacao purchasing groups for direct farmer-to-exporter sales transactions which holds great promise for removing the market inefficiencies (principally due to a lack of transparency in price formation and quality grading) that work to the detriment of the income of the farmers.

Unlike traditional collective-purchasing arrangements, in which farmers sell their products to relatively removed cooperatives with highly structured, formalized governance bodies (complete with committees, nominations and elections), the cacao sales groups being piloted by AVANSE consist of groups of 16 to 24 farmers—with core membership usually coming from existing IR 1 farmer field schools—growing cacao in the same neighborhood. Each group designates a representative who collects other members’ dried cacao, administers simple quality tests, keeps records of all exporter pick-ups on a regular schedule, and facilitates payments from the exporter to each member with prices set according to a pre-determined public pricing schedule according to the quality of the cacao in terms of humidity content and freedom from mold.

This removes a number of traditional middle-men from the value chain. These intermediaries have been a screen between farmers and the exporter, preventing clear transmission of market signals between the two ends of the chain. Preliminary estimates suggest that this new mechanism can increase farmer income by 20% to 30%. In addition, because it makes the cacao sales chain traceable, it will facilitate organic and fair-trade certifications. Most importantly from the gender perspective, initial indications are that this mechanism is favored by women, who find its simplicity, rapidity of payment, and lack of formality more conducive to their participation than the traditional cacao cooperatives. As this whole activity is still in its inception phase, it is too early to draw strong conclusion in relation to its gender-inclusiveness. However, in recognition of these early positive signs, AVANSE will closely monitor the gender aspects of this activity in the upcoming fiscal year.

The capacity-building team under IR 4 works to integrate gender inclusion into all of the activities it oversees. It ensures that CBOs receiving institutional capacity-building support are also exposed to training on and are aided to implement gender inclusiveness across their organizations. The IR 4 team also insists that delegations from supported organizations to AVANSE-led trainings must include one man and one woman (unless it is a women's organization attending, in which case the project insists on both attendees being women).

ENVIRONMENTAL COMPLIANCE

At the end of the reporting period, AVANSE welcomed Senior Project Environmental Officer Jean-Marc Racine, an agronomist and engineer with over 15 years of experience in Haiti and the Caribbean region.

Mr. Racine comes to AVANSE from a role supervising social and environmental mitigation measures for post-earthquake USAID shelter programs, and he brings with him a multi-disciplinary expertise in environmental science and engineering, environmental information systems planning, GIS and remote sensing, integrated environmental management processes and project management, and results-based monitoring and evaluation.

Jean Marc Racine's arrival represents the culmination of a long and challenging recruitment process that AVANSE initiated in response to concerns about the capacity of the original environmental staffing plan to respond to the environmental monitoring and mitigation needs of project's complex mandate and broad geographical focus. On Mr. Racine's first day in Cap Haitian, he began working with the AVANSE voucher program to bring input suppliers on track with approved EMPRs by the end of October. He would spend his third week accompanying USAID Regional Environmental Advisor Paul Schmidtke and his team on visits to project sites. Mr. Racine's team will lead the full environmental assessment of the six AVANSE watersheds during the first quarter of FY 2015.

CONDUCTING WORKSHOPS AND MONITORING OF FIELD ACTIVITIES FOR ENVIRONMENTAL COMPLIANCE

Before Mr. Racine's arrival, the environmental compliance team provided regular environmental monitoring and mitigation services to a number of other AVANSE activities. They led an environmental compliance workshop in July in Limbé focused on beans and maize cultivation, following a similar workshop held earlier in Limonade on banana production. In August, the team worked with Bethesda-based DAI staff to better integrate environmental review activities into the project's management information systems, notably with respect to procurement and grants.

Throughout the quarter, the environmental compliance team also accompanied technical components in preparing and executing a number of important field activities, notably monitoring IR 2 demonstration-block work in all six watersheds, contributing to the visits and assessments of WINNER greenhouses, and reviewing infrastructure work in Grison Garde as well as planned

TEXT BOX: ENVIRONMENTAL COMPLIANCE TEAM STAFFING AS OF 30 SEPTEMBER 2014:

Senior Project Environmental Officer: **Jean Marc Racine**

Project Environmental Officer: **Jean François Yves Georges**

Environmental Compliance Specialist: **Frantz Dorvil**

Environmental Compliance Assistant: **Daréus Rocheteau**

road work at La Bruyère and accompanying infrastructure staff on exploratory visits to potential wells at Jacquézyl and Phaéton.

At the end of September, the environmental compliance team was monitoring the environmental mitigation plans for banana production and the fall rice harvest. They also were poised to complete EMPRs for each of the implementing fertilizer distributors in the AVANSE voucher program. An ongoing screening process of the household pump initiative in the Caracol area began last quarter and will continue into the first quarter of FY 2015.

PREPARING FOR WATERSHED-LEVEL ENVIRONMENTAL ASSESSMENTS

Most notable of these activities, however, has been the ongoing scoping study to prepare the six supplementary project environmental assessments (EAs) planned to begin in the first quarter of FY 2015. These EAs will both inform AVANSE's strategy in the North overall, contributing to the integration of social and environmental goals across all technical areas, and provide a framework for environmental evaluation of individual activities to allow the environmental review phase to proceed much more quickly and efficiently with a more comprehensive understanding



Environmental Compliance Specialist Andrew Watson, Banana Specialist Julène Moïse, Senior Engineer Vilbert Felix, and Environmental Officer Yves Georges interview an AVANSE beneficiary in the banana value chain as part of the scoping study for the supplementary environmental assessments planned for next quarter.

of key social and environmental issues involved in AVANSE's work. The EAs will also serve as a resource to guide future USAID and other major work in the Northern Corridor. A thorough, detailed, and methodologically sound scoping study is essential groundwork for effective and informative EAs, and AVANSE management designed the AVANSE scoping study begun this quarter to provide the focus and direction necessary to complete the EAs in a matter of three months (six ambitious EAs on this scale could take much longer if not informed by a thorough scoping study).

This quarter, Andrew Watson and Glenn Smucker traveled to Haiti to lead this scoping study. Dr. Watson, accompanied by AVANSE's long-term environmental compliance staff and, as appropriate, other members of the IAEC unit and technical components, visited a selection of rural areas targeted by the project and conducted interviews and site assessments to identify the major issues and questions to be addressed in the EAs. Dr. Smucker provided methodological guidance both for the survey methodology to Dr. Watson and the IAEC survey implementers. Andrew Watson returned for several days in the end of August to meet with the visiting USAID regional environmental team, and at the close of the quarter he had made plans

TEXT BOX: ENVIRONMENTAL ASSESSMENTS AS A CAPACITY-BUILDING OPPORTUNITY

In June, AVANSE developed terms of reference for geomorphologist Andrew Watson and anthropologist Glenn Smucker to complete this scoping study, and work began in earnest at the end of July. Dr. Watson is the Managing Director of DAI's Environmental & Health sector, and his experience with Haiti dates back to USAID's Hillside Agro-forestry Project and Hurricane Jeanne relief. Dr. Smucker is a watershed farming systems specialist who has been assisting USAID initiatives in Haiti's Northern Corridor since the early 1980s; he is intimately familiar with both the region and AVANSE—he wrote the project's Performance Management Plan and has remained closely involved with monitoring and evaluation efforts.

Dr. Watson has been providing overall technical guidance and quality assurance for the scoping process, including leading most of the field investigations with the LTTA environmental compliance staff and liaising with USAID environmental compliance teams during their frequent visits to the project area. Dr. Smucker is supporting Dr. Watson and the environmental compliance team with his background in watershed management and the Northern Corridor and with social-science support, especially survey methodology, design, and coaching of the AVANSE staff that will be involved in completing the EA.

Both Dr. Smucker and Dr. Watson have worked closely with the LTTA environmental compliance team during the scoping activities (indeed, coaching and mentoring Mr. Racine, Mr. Georges, Mr. Dorvil, and Mr. Rocheteau are integrated into the terms of reference for the scoping study), and this capacity-building strategy mirrors the project's two-phase approach to the EAs: while AVANSE designed the scoping activity to be overseen and managed—albeit with close involvement of LTTA environmental staff—mostly by these two senior, short-term technical experts, the EA activity itself will be owned chiefly by Jean Marc Racine and his team (although the project does anticipate contracting short-term surge support during the EA process so that other important environmental monitoring work is not neglected during this process).

The resulting EAs will therefore not only represent a vital tool for responsibly planning and implementing activities in the Northern Corridor—for AVANSE and future projects—but an instance of building in-country capacity to conduct systematic, multi-watershed environmental assessments across an entire region and according to international best practices.

to return with Glenn Smucker in early October to finalize the scoping statements and work closely with Jean Marc Racine and his team to prepare for the full EA phase. The EA phase will begin immediately once the scoping statements are approved by USAID.

COMMUNICATIONS & OUTREACH

Communications Specialist Joanna Stavropoulos mobilized during the third quarter of FY 2014, a full year after project start-up. She spent much of April, May and June organizing communications priorities, but in the most recent quarter communications activities hit stride: at the end of the quarter, AVANSE was regularly producing reporting on project activities and was poised to have all branding and marking signs in place.

The Communications Specialist expanded the AVANSE newsletters and success stories (see Annex D) this quarter and began distributing them to a wide audience, both through USAID, DAI, and social media in the U.S. Notably, USAID referred a journalist to the project and Ms. Stavropoulos facilitated a major positive story on highly productive cacao super-trees identified by the project that was picked up by National Public Radio and other major U.S. media outlets. She also began work on producing a flexible library of fact sheets on AVANSE's main departments and crops (including a map of the target zone with up-to-date facts and figures demonstrating the geographic distribution of the project's impact), which will be updated quarterly and quickly and easily configured into information packets on an as-needed basis for visitors. AVANSE was pleased to welcome many visitors from USAID during the quarter, and another principal task of the Communications Specialist was coordinating most of these visits to ensure availability of AVANSE staff and the prompt and consistent delivery of informational materials as necessary.

AVANSE also responded to USAID branding and marking requirements. The project developed and produced badges and apparel that clearly identify AVANSE personnel working on site, and it has produced work site signage which will be in place in the first half of the next quarter. In July, the Communications Specialist met with AVANSE's department of procurement to map out and discuss all communications needs through March 2016 and develop a comprehensive procurement strategy. AVANSE's procurement department has already identified providers of posters, flyers and booklets, and production on these items will begin next quarter.

Also next quarter, AVANSE plans to finalize the communications strategy drafted in FY 2014 for presentation to USAID. Once approved, this strategy will formally define AVANSE's major messages, audience, goals and objectives, implementation tools and communication material to be produced. The Communications department is also looking forward to hiring two long-term staff by the end of the calendar year. One of these communications officers will coordinate the public validation meetings with project beneficiaries that to date have been managed informally by field technicians from IR 1 and IR 2. A full communications staff will be able to manage and report on this in a more systematic manner. At the beginning of next quarter, communications staff will also complete implementation of project branding activities (see table below). With a full staff and the groundwork laid for a sound communications strategy, AVANSE expects extend its communications and outreach strategy in new and innovative ways during FY 2015.

TABLE 10: COMMUNICATIONS BRANDING IMPLEMENTATION PROGRESS

ITEM	DESIGNED	USAID APPROVAL	REQUISITIONED	PROCUREMENT PROCESS	PRODUCED
Business Card	DONE	DONE	DONE	DONE	
Badge Staff	DONE	DONE	DONE	DONE	
Badge for Visitors & Consultants	DONE	DONE	DONE	DONE	
T-shirts	DONE	DONE	DONE	DONE	
Polo shirts	DONE	DONE	DONE	DONE	
Hats	DONE	DONE	DONE	DONE	
Letterhead Template	DONE	DONE	N/A	N/A	
E-mail Signature	DONE	DONE	N/A	N/A	
Envelopes	DONE	DONE	N/A	N/A	
Folder	DONE	DONE	DONE	DONE	
Office Sign	DONE	DONE	DONE	DONE	
Office Road Sign	DONE	DONE	DONE	DONE	
Work Site Signs (temporary)	DONE	DONE	DONE	DONE	
Work Site Signs (permanent)					
Car Stickers	DONE	DONE	DONE	DONE	
Motorcycle Stickers					
Power Point Presentations	DONE	DONE	N/A	N/A	
Surveys	DONE	DONE	N/A	N/A	
Training	DONE	DONE		N/A	

ITEM	DESIGNED	USAID APPROVAL	REQUISITIONED	PROCUREMENT PROCESS	PRODUCED
Material					
Contract Template	DONE	DONE	N/A	N/A	
Voucher	DONE	DONE	DONE	DONE	
Public Announcements	DONE	DONE	N/A	N/A	
RFP Template	DONE	DONE	N/A	N/A	
Technical Reports template	DONE	DONE	N/A	N/A	
DVD Packaging (CD stickers and Case)	DONE	DONE			
Film (content)					
Radio (spots, shows etc)					
Posters			DONE	DONE	
Banners			DONE	DONE	
Flyers			DONE	DONE	
Booklets			DONE	DONE	

KEY ACTIONS FOR NEXT QUARTER

IR 1

- Enroll 7,500 new farmer participants to begin receiving training in FFSs (4,000 cacao, 1,500 bananas, 2,000 beans and maize).²
- Roll out new banana PIF centers equipped with training and materials (including small-scale 'kits' to produce banana suckers using PIF methods).
- Sign detailed cooperation MOUs with the two DDAs in the project zone along with launching of rehabilitation and equipment of selected BACs.
- Issue RFP and sign contracts for maize and beans extension IP.
- Engage IPs to begin training for strengthening Water-User Associations.
- Install at least 25 small-scale pumps to irrigate the fields of banana and maize & bean producers in Limonade/Bord de Mer and Quartier Morin.

IR 2

- Plant 90 ha of parcels with improved agro-forestry crops in existing demonstration blocks.
- Award grants to 18 CBOs for replication of demonstration blocks to farmers in their zones.
- Issue RFP to engage 6 IPs to work on large-scale reforestation blocks (work planned for second quarter of FY 2015).
- Provide equipment to civil protection committees.

IR 3

- Initiate mobile-money pilot payments mechanism test with cacao selling groups under collaboration agreement with NOVELLA.
- Sign one new private-sector collaboration agreement.
- Develop performance improvement plans with 8 medium enterprises.
- Issue RFP for IP to provide micro- and small enterprise trainings.
- Provide technical assistance to NOVELLA and PISA on cacao fermentation with the help of an international cacao-processing expert.
- Issue an RFP for a Haitian IP with a background in cacao marketing and processing to provide continued capacity development in marketing and processing to NOVELLA, PISA and FECCANO.
- Launch an SMS-based MIS to diffuse world market cacao prices as a benchmark to farmers in their selling operations to NOVELLA.
- Begin distribution of improved cacao drying equipment (tables & drying slabs) to farmers in concert with NOVELLA.

² The next rice FFS trainings will fall after next quarter (October–December). AVANSE is planning to enroll and additional 1,000 participants for rice FFSs in Q2 of FY 2015. See the FY 2015 workplan for more details.

IR4

- Provide financial management training through a short-term expert to AgroConsult and AGRIDEV.
- Prepare at least 5 institutional capacity assessments for new IPs.
- Develop action plans to build the capacity of at least 8 new IPs for which ICAs have already been completed.
- Provide 200 CBOs with training on legalization; target at least 75 to complete steps for legalization by the end of the quarter.

Infrastructure

- Finish urgent drainage work in Camp Louise and Noman as well as road repair work on the La Bruyère road.
- Work with IR1 to install at least 25 small scale pumps out of the 200 planned for the urgent small scale infrastructure works.
- Issue RFP for irrigation systems rehabilitation construction for Dubré, La Suisse and Grison Garde systems.
- Complete technical studies for ravine stabilization for Bréda and Blondo ravines.
- Complete technical study for Grison Garde road.
- Begin technical studies for 5 other roads (Carrefour Seminaire–Acul Jeannot, Carrefour Juchereau–Roches Plates, Coicou, Carrefour Bergen–Haut Madeleine, and Limonade–Bois de Lance).

Information, Analysis, and Environmental Compliance

- Complete and analyze post-harvest surveys.
- Complete and analyze annual exporter survey.
- Begin work on environmental assessments of six watersheds.
- Issue RFP for baseline study on marine environment.

ANNUAL PROGRESS REPORT

AVANSE saw a number of major programmatic successes during the last twelve months. It launched a first-of-its-kind voucher program in Haiti to prime input markets and give remote farmers access to the materials they need to double and triple their productivity. The project developed on a community-based approach to protecting entire hillsides from erosion. Its agricultural production team assembled a series of crop models that have proven well-adapted and well-received by beneficiaries. And the project facilitated key market linkages and fostered a strong relationship with the Ministry of Agriculture.

The project has also learned from the challenges it faced during the year, and it has adapted and redesigned some of its approaches to better respond to these. Thanks to the lessons learned these challenges and the groundwork laid by these successes, the project is well-positioned to accomplish the ambitious goals it has set for FY 2015.



AVANSE has developed crop models that substantially increase yields in the plains of the Northern Corridor, and its innovative approach to stabilizing at-risk hillsides like this one to protect those same downstream agricultural areas, together with the market mechanisms and institutional strengthening efforts it is facilitating to bring the greatest value possible to that agricultural output, make it possible for the project to transform the economy of the entire region.

PROJECT MANAGEMENT

Last year saw a number of developments in the organization and management of AVANSE, including a number of noteworthy successes. The project management teams in Cap Haitian and in Bethesda took advantage of the end of the fiscal year and the project's workplanning exercises to reflect on successes and challenges, to assemble strategies for improving performance in certain areas, and to prepare for scaling up project activities over the course of FY 2015.

CHANGING LEADERSHIP

The project welcomed Chief of Party Bertrand Laurent at the very beginning of 2014. Mr. Laurent, an agricultural anthropologist by training, brings to the project over 30 years of experience as a senior manager of international development efforts around the world and especially in Haiti. In the late spring, Senior Capacity-Building Specialist Michael Wilson and Senior Agribusiness and Markets Specialist Rodlène Paul left the project, but AVANSE quickly identified short-term resources—DAI's Kirsten Weeks and Agridev's Stéphan Jean-Pierre—to maintain momentum in the capacity-building (IR 4) and agribusiness (IR 3) components while recruiting for long-term replacements. In August, the project welcomed Michèle Breton, a seasoned program manager with extensive experience in institutional strengthening (especially with micro-finance institutions and small businesses, in Haiti and elsewhere) as the new IR 4 leader. At the end of September, DAI reached an agreement with Agridev for Stéphan Jean-Pierre to assume a long-term role as the lead of IR 3. Finally, at the end of the fiscal year the project welcomed Senior Project Environmental Officer Jean-Marc Racine to lead the strengthened environmental compliance team.

The end of the year also saw the departure of DCOP Joanas Gué. The DCOP's departure was a particular loss for the project with respect to his ability to conduct senior-level policy discussions, mainly with the Ministry of Agriculture. Fortunately former Minister of Agriculture Philippe Mathieu is also providing support to AVANSE's capacity-building efforts with the Ministry while the project recruits for a new DCOP. The search for this critical member of the AVANSE senior management team was ongoing as of the close of the fiscal year, and AVANSE is optimistic about this recruitment as an opportunity to re-tool the DCOP role to further enhance the cross-cutting relationships between the IRs. DAI is aiming to recruit a DCOP with both a strong technical background in agriculture and natural-resource management and also demonstrated experience in project planning, coordination and reporting. The project is no longer recruiting for the Planning Director position announced in the last quarterly report—instead, it intends to integrate those responsibilities into the DCOP role and, to a lesser degree, that of the IAEC Director. AVANSE envisions that the new DCOP will contribute decisively to closer integration of the different technical components with the grants, subcontracts, and other operational teams as well as with each other. Identifying and mobilizing this essential member of the project's senior management team remains the top recruitment priority for the AVANSE recruiter and the Bethesda-based management team going into FY 2015.

RESPONDING TO THE RECRUITMENT CHALLENGES OF CAP HAITIAN

AVANSE has successfully filled some of AVANSE's critical project openings, such as the one for the Project Environmental Officer. Additionally, AVANSE added a full-time Recruitment Specialist Alain Saint-Surin to the HR team in late August. This addition has allowed AVANSE to streamline the recruitment processes and provide continuous focus on backfilling the technical and administrative openings on the project team.

Nevertheless, Cap Haitian remains a difficult recruitment location. When CCN employees face the challenge of finding schooling options for their children and limited employment opportunities for their spouses, they often choose to keep their families in Port au Prince. Splitting their families between these locations has been a challenge for staff retention—once finding a viable alternative in Port au Prince, some AVANSE employees have left their jobs to move back. Likewise, and more of a challenge for AVANSE, prospective and qualified individuals not located in the northern region of Haiti are reluctant to relocate to Cap Haitian. This situation, at times, requires the use of STTA as a measure to fill staffing gaps—both to maintain the pace of the project operationally and to fill distinct technical voids while recruiting efforts continue.

DAI has been working to provide a more comprehensive and attractive compensation package to CCN employees in order to address these challenges with personnel recruitment and retention. On September 3, DAI submitted a request for USAID approval to offer additional allowances and incentive payments—with the exception of relocation costs, all consistent with what USAID offers its own cooperating country national staff under its local compensation plan—to CCN employees on the AVANSE project. It is hoped that offering these allowances to CCN staff will offset the hardships of living and working in Cap Haitian, incentivize potential high quality candidates to join AVANSE, and improve the morale of current employees.³

DAI has also signed up to participate in the NGO Local Pay Survey for Haiti, conducted by InsideNGO through the Birches Group, an internationally recognized HR and compensation firm. The results of the survey will provide more information on the market rates for professional and administrative staff in Haiti which will assist DAI in continuing to offer competitive salaries for future project employees.

ADDRESSING IMPLEMENTATION INEFFICIENCIES

International development programs often face unpredictability in their implementation, including postponed activities and unexpected setbacks. AVANSE is no exception. However, the project continues to review all of the elements that contribute to inefficiencies in the implementation of its activities including staffing challenges, limited local capacity the compliance requirements inherent in donor-funded projects, and inadvertent delays in the procurement system and its associated procedures. The project has already addressed some of these concerns (and the creation of the IAEC unit is a good example), and it will continue to do so in the future.

³ This topic was discussed at length during Ambassador Pamela White's June 26, 2014 roundtable discussion (AVANSE: Accomplishments and Challenges)

DAI will also continue to dedicate the corporate resources at its disposal to address challenges of these sorts as they arise. Senior Regional Managing Director Sani Daher travels to Haiti regularly to meet with the project and provide guidance and support. Likewise, of the overall project portfolio of new D.C.-based Project Director Leon Skarshinski, AVANSE receives the highest priority and will continue to do so. AVANSE also benefits from the assistance of many DAI corporate employees beyond the Bethesda-based management team and the senior technical specialist Tom Lenaghan assigned to this project—notably Max Goldensohn (who served as acting COP between October 2013 and January 2014), Andrew Watson (DAI’s Managing Director for Environment and Health who has been providing regular on-the-ground technical assistance to the six-watershed EAs in progress), and Kirsten Weeks (who has been working with the IR4 team on capacity-building activities since the beginning of 2014).

Other DAI corporate staff, including John DeRiggi (GIS), Jaclyn Carlsen (mobile data), Marina Mutchler and Matt Buzby (operations), Shikha Gupta (financial planning), Ana-Maria Ungureanu (IT), Ed Crowley (accounting), Alex Nguyen (grants), and Andrea Falso (procurement) have conducted STTA on AVANSE since the project’s inception. DAI’s overhead departments, especially contracts, recruitment, accounting/ finance, and ICT systems, consistently give AVANSE priority to ensure smooth and efficient support from Bethesda. Additionally, a team from DAI’s central project operations unit traveled to Cap Haitian in May to conduct a five-day workshop in procurement processes and compliance. AVANSE is, and will continue to be, one of DAI’s highest priorities.

RE-ORGANIZING INFORMATION, ANALYSIS, AND ENVIRONMENTAL COMPLIANCE

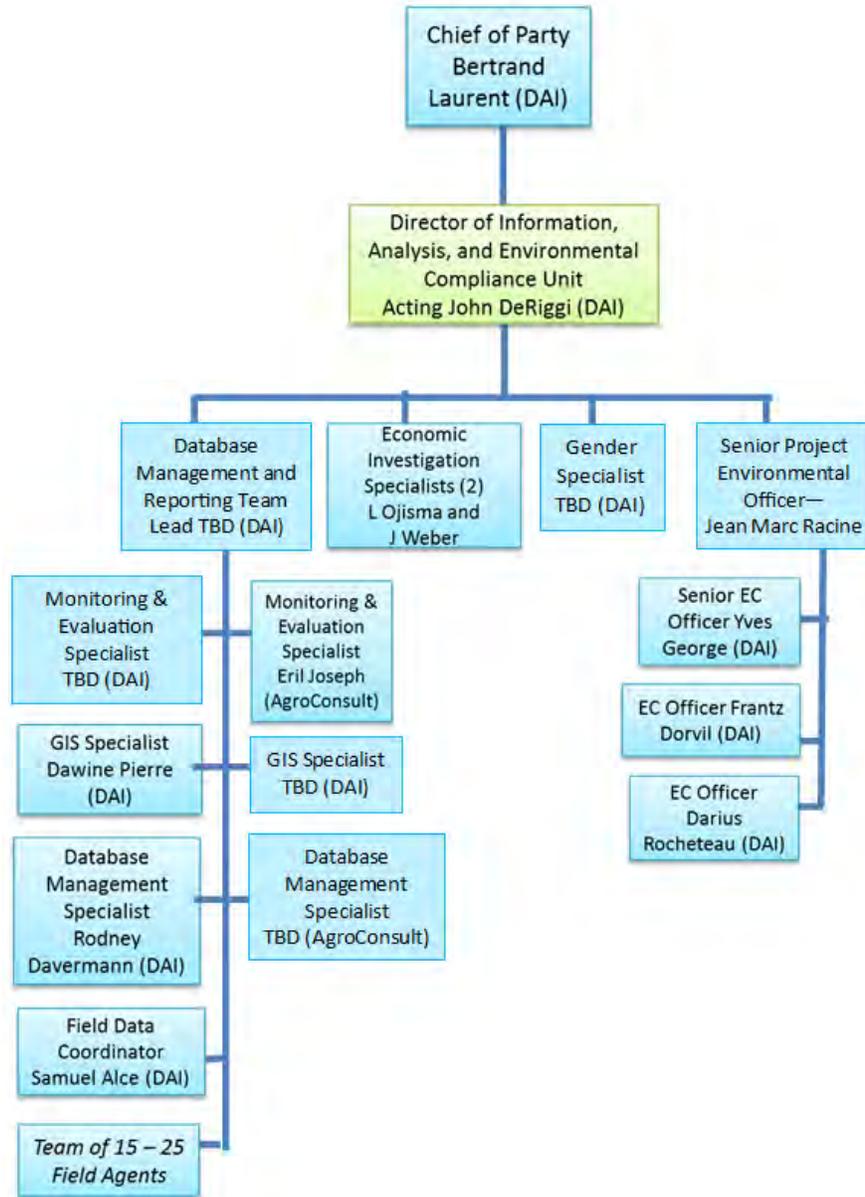
The Information, Analysis, and Environmental Compliance (IAEC) unit was conceived at the close of the April–June reporting period to strengthen environmental compliance, data management and reporting, and data-informed project management decisions and to provide consistent cross-cutting support to all the technical and operations units. AVANSE launched the re-organization and recruitment process completing the unit in order to strengthen the GIS, M&E and Database Management functions.

The new unit integrates the components that support the primary technical units responsible for implementation (the formal IRs and infrastructure teams); these components are: monitoring and evaluation, data collection and management services, the geo-spatial team, the economic analysts, the gender specialist, and the environmental compliance officers. The director of the unit—who will in effect function at the level of an IR lead—will be an experienced professional with a strong understanding of the Haitian context and experience in all the technical areas under his or her purview, particularly data management, monitoring, evaluation and reporting. This will give the different IAEC unit teams the planning and institutional leverage necessary to effectively meet their responsibilities.

To ensure maximum collaboration between the IAEC unit’s technical areas, the teams presented in the organogram below work closely together as a fusion unit—that is, one in which team members are assigned to lead specific, time-limited activities comprising multiple technical areas. This structure ensures work across areas of specialization and allows the IAEC unit to be fully cross-cutting in the way it supports AVANSE project implementation. For instance, one of the IAEC M&E officers may lead an activity involving an IAEC environmental officer, one of the

IAEC economists, and several IR 2 technicians; one of the IAEC economic analysts may lead an activity involving an IAEC environmental officer, some of the IAEC data collectors, and an engineer.

AVANSE is confident that this organizational structure will ensure better integration of environmental compliance, gender objectives, data collection, and program monitoring into day-to-day project activities and ensure higher-quality project implementation and FTF reporting.



STRENGTHENING THE PROJECT PRESENCE IN THE ZONE

AVANSE interventions span a broad range of technical areas—including production agriculture, natural-resource management and enterprise development—over a diverse region, often with interventions in different types of geography determined by technical focus (such as IR 2 activities on hillsides and IR 1 work in the plains). While at the technical component

management level each IR team's interventions are closely coordinated, this shared vision also needs to carry down to the level of every field intervention. For example, it is sometimes difficult for a field technician focused on the productivity of a specific cropping system in one target zone to appreciate the priorities of an enumerator conducting monitoring work for an environmental compliance activity nearby; and it may be difficult for both of them to grasp how enterprise training and finance interventions in the same zone combine with their work to have the overall impact AVANSE brings to that area.

Project management is therefore working to enhance awareness of AVANSE's mission, strategy, and accomplishments among field-based employees, implementing partners, and beneficiaries. Ramping up AVANSE's formal communications strategy and the efforts of USAID to promote the project have already helped considerably, but the COP and technical unit leaders are also working on new initiatives within the project that will accomplish this. To begin with, the project is planning to further strengthen the direct collaboration between members of different technical teams in the project, especially with respect to field staff so that it is clear to beneficiaries and the general public how closely all of AVANSE's objectives are related with each other. This has already happened in the cacao value chain, with a close collaboration between IR 1 and IR 3 on the PISA and Novella collaboration agreements, and in the banana value chain, with IR 2 developing a strategy to support 50 large nurseries in the zone which will provide germplasm for the IR 1 bananas team (and in turn, IR 1 included those nurseries in the first round of PIF trainings).

In FY 2015, AVANSE will build on this momentum to bring similar successes to the other value chains and other technical areas of the project. The project has already identified the potential for stronger structural linkages between the environmental compliance and infrastructure teams. The COP plans the creation of a coordination and implementation committee early in FY 2015 that will include the leaders of the main technical components with the leaders of procurement, administration, and grants and subcontracts, and AVANSE anticipates replicating the model of "activity leaders" being piloted in the IAEC unit to other aspects of AVANSE implementation.

Field Data Collection Manager Samuel Alcé is the activity leader for this survey effort; he is pictured here with a data collector from the IAEC and a cacao technician from IR 1 collecting data on a sample of the land belonging to this beneficiary at Pillâtre, near Plaisance.

AVANSE plans to bring this activity-oriented fusion management approach to other technical components next year.



For instance, if an IR 2 watershed technician and several IR 1 cacao specialists are included in the same IR 3 activity, their collaboration will enhance the impact of that activity; moreover, they will impart to the beneficiaries concerned a better understanding of what AVANSE is and what it does.

IMPROVING THE CLIENT APPROVAL PROCESS

During project start-up and through the first half of FY 2014, AVANSE experienced delays in obtaining USAID approval of project actions. This affected project implementation in some areas, resulting in more expensive, last-minute travel or procurement, restricting AVANSE's ability to plan in the long term, and postponing other activities entirely (the first candidate proposed as the Communications Specialist, for instance, was no longer available when the approval arrived, and AVANSE had to re-start the recruitment process).

DAI was able to partially resolve some of these challenges itself—for instance, purchasing at its own risk much of the seeds on AVANSE's first agricultural commodities waiver (20 weeks between submission and final approval), or renting vehicles at risk while waiting for approval to purchase the project's own 4x4 vehicles and motorcycles (8 and 19 weeks, respectively, and 27 weeks for retroactive approval for long-term vehicle leases). DAI remains very appreciative of USAID's verbal assurances in such instances that approval would eventually be granted, and especially of the willingness of the Contracting Officers to grant retroactive approvals in some cases.

USAID and AVANSE recognized this as a major challenge early in the fiscal year and, in response, the Contracting Officer took the initiative to institute a weekly call between USAID, the AVANSE COP, and the DAI contracts department in Bethesda in early 2014 to review and expedite pending requests. These calls have also served as an opportunity to raise other contractual issues and ensure continued close communication around technical implementation. In terms of improving communication around approvals, they have been especially successful: the average turnaround time for all requests receiving approval during October 2013 – March 2014 (ranging from simple international travel approval or customs clearance expedition requests to complex restricted commodities waivers) was 42 business days, but for all requests submitted during April – September 2014 (not including those pending approval as of 30 September), this figure had fallen to 13 business days. DAI and AVANSE are very appreciative of USAID's efforts to resolve this issue and look forward to a similarly productive working relationship with USAID in the coming year.

WORKPLAN IMPLEMENTATION STATUS

Thanks to some of the developments outlined in the project management section above, and despite some of the challenges that will be discussed in the sections to follow, AVANSE is largely on track with respect to its implementation schedule. Those areas which have been delayed have been identified and AVANSE has set a course to correct these during the first quarters of the next fiscal year.

This section of the Annual Progress Report discusses these areas in detail. First, a workplan status table covers all the technical components of the intermediate results contributing to AVANSE's ultimate goal of increasing agricultural incomes in the Northern Corridor. Subsequently, the report discusses those sub-results identified as containing activities that are behind schedule and presents a forecast for bringing the corresponding activities back on track.

WORKPLAN IMPLEMENTATION STATUS TABLE

The table on the following page examines the project according to the status of the each set of activities defined in the approved FY 2014 workplan. It is organized by sub-result, listing the overall status of the activities under the sub-results, explaining the principal factors in any delays (if applicable), identifying any major successes and major implementation challenges related to the sub-result, and finally outlining the outlook for the sub-result during the next fiscal year.

Any sub-result identified as "delayed" will receive a more detailed explanation in the subsequent discussion.

TABLE 11: WORKPLAN IMPLEMENTATION STATUS

Workplan sub-results and tasks	Implementation status	Reasons for delays (if any)	Major successes	Major challenges	Outlook for FY 2015
IR 1: Agricultural Productivity Increased					
Sub-Result 1.1: Knowledge and Availability of Improved Production Technologies & Systems Increased	On track		Development of innovative, successful crop models in maize/beans, bananas, rice, and cacao value chains.		Bringing new crop technologies to scale while continuing to introduce new ones (such as the PIF method for generating banana cuttings).
Sub-Result 1.2: Strengthened Extension of Agricultural Technologies and Nutrition Information	Delays	The drought interfered finalizing the crop models and needed technical input into the SOWs for extension IPs; initial response to DAI's first EOI was weak.		Drought.	Terms of reference were being finalized for beans and rice IP during the quarter and the project has prioritized scale-up by crop and number of beneficiaries for maximum impact. Activities will begin early 2015.
Sub-Result 1.3: Access to Inputs Increased	On track		Implementation of successful pilot voucher program. Solution to fertilizer-import challenge. Identification of IP for larger scale.	Fertilizer market shortages due to import difficulties (problem has been resolved).	Implementation of large-scale voucher program. Continued technical support to the MARNDR on import subsidy and voucher programs.

Workplan sub-results and tasks	Implementation status	Reasons for delays (if any)	Major successes	Major challenges	Outlook for FY 2015
Sub-Result 1.4: Management Capacity of User Associations (WUAs) increased	Delays	Internal procurement bottlenecks and difficulty at contract-negotiation stage for the initial diagnosis.			At the close of the quarter, the contract with the IP for the WUA diagnostic study was ready for signature. All activities under this sub-result will be accelerating substantially in early FY 2015.
Sub-Result 1.5: Property Security Strengthened	Delays	Internal procurement bottlenecks and staff constraints within IR 1.			Drylands pilot activity can begin in November. The property-security study is pending signature and will commence in October.
IR 2: Watershed Stability Improved					
Sub-Result 2.1: Watershed Governance Bodies Established at the Sub-Watershed Level	On track				Continue from groundwork laid with SWMBs and implement sub-watershed management plans.
Sub-Result 2.3: Critical Slopes Stabilized through Farmer-Level Investment	On track		Successful design and implementation of demonstration block agro-forestry model on medium scale.	Drought led to high mortality of many of the trees and grasses. Many of these plants needed to be replaced in the fall.	Scale up demonstration block system through continued direct implementation and in-kind grants to CBOs in key zones.
Sub-Result 2.4: Crisis Management Capacity Established	On track				Supply emergency preparedness materials to civil protection committees as outlined in workplan.

Workplan sub-results and tasks	Implementation status	Reasons for delays (if any)	Major successes	Major challenges	Outlook for FY 2015
IR 3: Agricultural Markets Strengthened					
Sub-Result 3.2: Improved Access to Storage and Processing Facilities/3.5 Relationships in Targeted Value Chains Strengthened	Minor delays		Signature of collaboration agreement with PISA and completion of negotiations with Novella.	Change in IR 3 leadership. Low level of long-term staffing during much of the year.	Implementation of collaboration agreements already signed with NOVELLA and PISA will facilitate rapid interventions in this area— as will the award of Agro-Enterprise Grants now in the pipeline.
Sub-Result 3.3: Increased Access to Financial Products	Minor delays	Lack of staffing in IR 3 component to move forward all activities on schedule.	Launch of agro-enterprise value chain grant window. Identification of access to finance specialist.	Difficulty recruiting a qualified access to finance specialist.	Agro-enterprise value chain grant proposals to be formulated and submitted for approval next quarter. Launch of leveraged grant-credit mechanisms to encourage investment in plowing equipment in next quarter
Sub-Result 3.4: Improved Market Information Systems	On track				The activities under this sub-result were dependent on collaboration agreements; now that these are signed, this will proceed rapidly.
IR 4: Capacity Building and Use of Sub-Awards					
Sub-Result 4.1: Strengthening of IPs and potential direct award-holders to respond to USAID Forward objectives	Minor delays	Change in leadership and challenges recruiting a financial capacity-building specialist.			Implement action plans for 10 identified IPs. Conduct ICAs for 3 additional potential IPs (and more as available).

Workplan sub-results and tasks	Implementation status	Reasons for delays (if any)	Major successes	Major challenges	Outlook for FY 2015
Sub-Result 4.2: General Capacity Building for Partners and Beneficiaries in the Project Zone	On track				Provide support to CBOs in preparing proposals for AVANSE capacity-building grant window.
Infrastructure					
Sub-Result 1: Irrigation Rehabilitation	Delays	Process changes in roads CBA requirements and resulting contracting delays; lack of clarity on CBA and EMPR requirements for irrigation and hillside retention, as well as initial prioritization of roads.		Lack of clarity on whether CBAs and/or EMPRs were required at the study phase; and changes to road CBA methodology required by USAID.	Complete global drainage study in November-March; irrigation studies and works to begin next quarter.
Sub-Result 2: Hillside Stabilization					Identification of large scale ravines was judged as the least urgent of the 3 infrastructure areas. st ravines to be identified in the next quarter; implementation in early 2015.
Sub-Result 3: Road Rehabilitation/ Construction (IR 3)					Technical studies will be complete next quarter, with work beginning in January.

DISCUSSION

Despite delays in some activities, during the last quarter AVANSE's IR 1 and infrastructure teams made significant gains in re-orienting them, and they were re-scheduled during the recent workplanning exercises. AVANSE's management team is now confident that the project can achieve its objectives in these areas according to the workplan.

IR 1:

Sub-Result 1.2: Strengthened Extension of Agricultural Technologies and Nutrition Information

While the drought delayed the ability of the project to finalize its technical crop packages and complete the scopes of work for extension IPs as foreseen in the FY 2014 workplan, the lack of highly qualified implementing partners is the main cause of the delays under this sub-result. The initial response to AVANSE's initial APS was extremely disappointing: only four firms were deemed technically qualified, and even these had only several competent agronomists on staff—nowhere near the number needed to reach the scale AVANSE intends. AVANSE has revised its IP engagement strategy in the FY 2015 to encourage larger consortia of firms/NGOs to account for this (see challenges discussion below), and the project expects IPs to begin implementing works in the beginning of calendar 2015.

Sub-Result 1.4: Management Capacity of User Associations (WUAs) increased

As a result of internal procurement system challenges, the time necessary to resolve several compliance concerns with the procurement, and difficulties finalizing the negotiations with the selected bid winner for the WUA assessment, the first activity under this sub-result was substantially delayed and was only beginning at the end of this workplan year. However, IR 1 took measures to jump-start the activity, mainly engaging a WUA training subcontractor to begin implementing the aspects of the WUA strengthening program that do not depend on the assessment. Both the assessment and the management training activities will be accelerated substantially in the first quarter of FY 2015.

Sub-Result 1.5: Property Security Strengthened

Although the diagnostic study for drylands development grants was delayed due to an extended recruitment and contracting process, AVANSE did continue to plan for a test of small scale irrigation pumps on dry lands in technical preparation for a larger scale implementation in the second quarter of FY 2015. All remaining issues with the contracting of the diagnostic study were resolved by the end of the last quarter, with signature scheduled for the beginning of October and the study to begin immediately afterwards.

INFRASTRUCTURE:

Sub-Result 1.6: Irrigation Rehabilitation/Construction; sub-result 2.2: Hillside Stabilization Works; and sub-result 3.1: Feeder Road Rehabilitation/Construction (IR 3)

Although all of the three main types of irrigation works in the above table suffered delays, these were most serious for road rehabilitation activities—particularly since these were clearly the highest priority for the infrastructure team at the beginning of FY 2014, a priority that had been emphasized during multiple meetings with the USAID infrastructure team during the first six

months of the contract. The delays in the road contracting process began with an instruction from USAID at the end of January 2014, to put a hold in the IQC RFP that AVANSE was in the process of issuing to identify qualified firms to complete the needed road technical studies. The reasons for this hold order included concerns about the structure of the RFPs, as well as several concerns about the methodology on existing preliminary drafts of roads CBAs that had been submitted to USAID for review. These methodological concerns were restated in further communications from USAID in early February. AVANSE responded to all these issues, with written responses to the methodological questions on the CBAs in mid-March and reached agreement on these issues in a meeting with the USAID Engineering Team at the end of the month. At this same time, however, the USAID engineering CORs requested new changes to the CBA data presentations and calculations and instructed the AVANSE infrastructure team to redo the CBAs in accordance with the new guidelines before they would authorize a resumption of the technical study procurement RFP. This required the collection of new data and reworking the study presentation—which AVANSE did, sending a copy of an example CBA to the Infrastructure CORs on May 9. In subsequent communications and meetings on May 23, all agreed that the CBA models were acceptable and that the RFP for the technical study firm IQC could be launched—and this last was authorized by the Contracting Officer on June 5.

At the same time that the door was opened for the release of the road study IQC, two members of the AVANSE team attended a workshop on CBAs in Washington from June 9 to 13 at USAID's request. During that training, USAID presented new requirements for the CBAs that needed to be addressed before task orders for individual road study segments could be issued. These concerned the need to conduct new spatial land-use inventories along each road corridor, which necessitated hiring and training enumerators to produce input for incorporation into revised CBAs and the SOWs for the technical study task orders for each road. AVANSE hired these personnel in July and August and their input was incorporated into the CBAs for the individual road study task orders in September. USAID approved the new revised preliminary CBAs in a telephone conference on September 25, after which AVANSE entered into negotiations to contract a firm to complete the study of the first road segment (Grison Garde) on September 30, with a signature of the contract scheduled for October 6. All other road studies will be contracted in October as well.

We detail this particular case to note that changes to the instructions governing the content and presentation of the road CBAs occurred at several instances during the January to September period, each time with a requirement that a revised CBA be prepared as a condition for allowing contractual progress on the road studies to continue—both for the IQC RFP and for the individual road task orders. This has contributed to significant delay in the start of the technical studies and, consequently, of the actual construction work.

Although the issue of road CBAs was still outstanding at the end of the reporting period, AVANSE had received approval to move forward with the studies and expects to continue that momentum into the next fiscal year, with technical studies on all roads occurring next quarter, and work beginning in January. Along the same lines, AVANSE will complete the global drainage study in November–March. All irrigation sites have been identified and technical studies are on the verge of completion. AVANSE expects to begin implementation next quarter. With respect to ravine rehabilitation, one ravine has already been identified. Two more will be identified in the next quarter, and implementation will begin in early 2015.

ANNUAL RESULTS REPORT

At the end of FY 2014, much of the data required to make final judgment on indicators for FY 2014 were still unavailable. This includes most of the data on crop production results and economic income, which were still pending final harvests and the administration of AVANSE's planned post-harvest survey in November. It also includes some data that needs to be collected at meaningful intervals that do not coincide to the close of the fiscal year. Of the total 41 indicators in AVANSE's agreed-upon IPTT Table, 31 of them had enough data to permit a judgment on the state of project achievement at the end of the quarter. These are shown below in two categories: those with good or satisfactory achievements where at least 80 percent of the overall target was attained; and those with poor achievement with under 80 percent of the overall target. The achievement levels for the remaining 10 indicators will be filled in in the next quarterly report after all of the currently outstanding data has been collected.

A detailed explanation of the achievement levels, data and reasons for variances with regard to target appears in the complete IPTT table that appears in Annex A below.

Indicators with good target performance (at least 80 percent of FY 2014 target)

Number of technologies or management practices made available to farmers as a result of USG assistance (150%)

Number of sub-watershed management bodies formed due to USG assistance (100%)

Kilometers of biological & mechanical conservation structures built/rehabilitated (174%)

Survival rates of USG assisted tree planting (90%)

Number of people receiving USG supported training in natural resources management and /or biodiversity conservation (92%)

Value of agribusiness sales due to USG assistance (infinity—target was zero for 2014 and the project assisted \$12,500 in agribusiness sales)

Number of public-private partnerships formed as a result of FTF assistance (100%)

Number of food security private enterprises, producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving USG assistance (81 %)

Indicators with low target performance (under 80 percent of FY 2014 target)

Number of individuals who have received USG supported short-term agricultural sector productivity or food security training (57%)

Number of farmers and others who have applied new technologies or management practices as a result of USG assistance (36%)

Number of hectares under improved technologies or management practices as a result of USG assistance (61%)

Number of rural households benefiting directly from USG interventions (46%)

Number of individuals who have received USG supported short-term agricultural sector productivity or food security training (64%)

Number of farmers who have access to improved agricultural inputs due to USG assistance (28%)

Hectares under new or improved/rehabilitated irrigation and drainage services as a result of USG assistance (0%)

Number of kilometers of irrigation systems repaired due to USG assistance (0%)

Number of rural hectares mapped and adjudicated (0%)

Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance (17%)

Number of hectares of biological significance and/or natural resources showing improved physical conditions as a result of USG assistance (17%)

Number of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance (38%)

Value of new private sector investments in the agricultural sector and food chain leveraged by FTF implementation (0%)

Number of firms (excluding farms) or Civil Society Organizations (CSOs) engaged in Agricultural and Food security-related manufacturing and services now operating more profitably (at or above cost) because of USG assistance (0%)

Kilometers of roads improved or constructed (0%)

Number of beneficiaries receiving improved transport services due to USG (0%)

Number of processing facilities established or improved due to USG assistance (0%)

Total increase in installed storage capacity (m3) (0%)

Value of agricultural and rural loans (0%)

Number of farmers accessing market information due to USG assistance (0%)

Number of jobs attributed to FTF implementation (0%)

Number of private enterprises, producer organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) that applied new technologies or management practices as a result of USG assistance (2 %)

A discussion of the factors behind the variances with respect to all these indicators is included in the Indicator Performance Tracking Tables in Annex A.

MAJOR SUCCESSES

The most noteworthy successes of the project this year were the new crop technologies adapted by IR 1 to the Northern Corridor, which will considerably increase yields and farmer incomes; the development of an agricultural input voucher model that is the first of its kind in Haiti and promises to address many of the supply problems small farmers face; the implementation of an innovative community model for hillside conservation and agro-forestry; two partnerships with major firms in the North that offer critical market linkages for small producers; and a very positive relationship between the project and the Haitian Ministry of Agriculture, without which none of this would be possible. AVANSE plans to build off of each of these major successes in FY 2015.

INNOVATIVE IR 1 CROP PACKAGES

Over the course of this year, AVANSE developed a number of new crop technologies for its beneficiaries. These are more than just new seeds: they are packages of seed or cuttings or budwood, tools, techniques, materials, spatial arrangements, pest management systems—everything needed to transform the way farmers in the Northern Corridor produce these key crops.

IMPROVING MAIZE PRODUCTIVITY.

Sometimes major innovations can be found close by. Last year, the IR 1 maize and beans team introduced a new variety of chicken corn to the maize producers in the Northern Corridor. The species of maize, an improved, fast-growing and hardy variety with potential yields from 2.5 to 4 metric tons per hectare, was actually developed in the plain of Les Cayes in southern Haiti by the Organization for the Rehabilitation of the Environment (ORE). This type of maize also produces a sweeter and more tender “green maize” than the traditional variety grown in the North. Recommended by the beans and corn expert who analyzed the beans and corn cropping system in the North in 2013, the chicken corn has proven particularly well-adapted to the ecological conditions of the agricultural zones targeted by AVANSE, and this year the project distributed 3.5 metric tons of seed to IR 1 target zones and 1.5 metric tons to IR 2 demonstration blocks.

Despite of the drought and severe caterpillar attacks, the chicken corn seed performed well—farmers call it the *san wont* “without shame” variety in reference to its capacity to produce good yields in difficult environments and with limited inputs from the farmer. These basic features of the maize variety—its hardiness and precocity—are essential for adapting the farms of producers in the North to droughts and other climate changes issues. Since the seed matures in less than 100 days, it can be harvested at least one month before traditional varieties—and it is at the very end of the season that there is the greatest risk of drought disrupting an entire crop, so the possibility of harvesting early mitigates against this risk.

To ensure that maize producers get the most out of this new variety of seed, AVANSE has developed a complete crop model, including fertilizer application (moderate amounts of urea (nitrogen)) with aspersion kits and safe-use materials and training for pesticide application. In November 2014, the chicken corn will be associated with black beans at a low density of 22,000 plants or less by hectare. As the fiscal year drew to a close, AVANSE was planning to scale up this model through implementing partners to reach 10,000 farmers and 5,000 hectares in the spring season.

GROWING “SUPER TREES” IN CACAO CLONAL GARDENS

Haitian cacao trees (called *kakawo peyi* in Creole) have evolved over centuries into an indigenous blend of criollo and forastero cultivars, and the chocolate produced from these plants is equally unique—and is in high demand in the world market. However, a major challenge for Haitian cacao exporters—like collaborators working with AVANSE through the

IR 3 team—is simply obtaining enough cacao. In FY 2014, AVANSE cacao specialists Raoul Dominique and Wasner Pierre harnessed naturally occurring, highly productive cacao trees in the zone to dramatically increase production of cacao in the region. One method is simply to cultivate seedlings from the 597 cacao “super trees” (highly productive trees that can produce more than 300 cacao pods a year) identified by AVANSE so far in the different zones. This is limited, of course, by the number of seedlings produced by the tree, and the fact that it takes five years for cacao trees to bear fruit.

Another method—and one with more immediate and potentially far-reaching effects—is to graft budwood cut from these trees onto pre-existing (but much less productive) trees already growing as saplings. The genetic material in the roots of the recipient remains the same, but the trunk and branches that develop will produce cacao pods in the same volume as the donor tree. Grafting from high-quality trees ensures not only the spread of the best cultivars, but also the expansion of the genetic base of these “super trees.” Just as important as the increase in



The highly productive cacao tree above may produce as many as 300 cacao pods per year. Grafting a branch from this tree to a less productive tree (below) can convey on the new tree the same productivity.



tree productivity is the decrease in the age of maturity of the grafted trees and their smaller size. These trees can be pruned to grow into a shorter, more efficient “champagne glass” shape and begin producing cacao pods after three years instead of five. The overall increase in productivity using this strategy could double the per hectare yield several times over.

In order to propagate these new super trees, AVANSE has already established 13 clonal gardens across the project intervention zones. These clonal gardens are part of a GIS inventory that will establish an ongoing reservoir of high-quality budwood. To date, these clonal gardens have yielded 5,611 highly productive seedlings to be further reproduced and spread throughout the zone. In FY 2015, AVANSE expects to quadruple the number of clonal gardens in the zone and even more dramatically increase the number of high-producing cacao trees. Because of the relatively long growth cycle of the cacao tree, the improvement of the genetic base of trees in the North will continue to increase for years after the close of the project.



The clonal gardens established with AVANSE's help will provide a reservoir of high-quality genetic material in the North that can eventually supply much larger cacao nurseries and cacao producers throughout the region.

DOUBLING RICE PRODUCTION

The intensive rice-growing system (*Système de riziculture intensive* or *SRI* in French) promoted by AVANSE is based on a more rigorous spatial distribution of the seeds and controlled irrigation to produce higher yields from each rice plant than is typical in traditional rice systems. The wider spacing allows plant roots and tillers to spread out, increasing both photosynthetic activity and the number of ears growing on each plant. In addition to (and just as important as) the increase in yield, the method requires fewer seeds, a cost savings to the farmer, less chemical fertilizers, and much less water—which reduces the strain on limited water resources and reduces water-borne pests and the use of pesticides (which are expensive and can negatively impact the environment).

TEXT BOX: CHARACTERISTICS OF SRI:

- Young rice seedlings are planted 25 cm apart in moist (not flooded) soil, with the help of roller marker tools.
- Less water is required to sustain the crop, but more labor is required to manage the water supply.
- Weeding can be done more efficiently between the rice rows with cono-weeder tools.
- Chemical fertilizer is only delivered to the plant at specific times when most needed in its life cycle
- Less pesticide is required to control water-borne pests.
- Harvest volume per hectare can exceed harvests using traditional methods by two or three times.

In adapting this SRI model to AVANSE's target zones, the rice team modified the methods to respond to farmers who are unable to controlling the water level in their rice plots to the degree required in the full SRI method. In this AVANSE adaptation of the model (called SRA or *Système de riziculture améliorée*), rice plants remain in the nursery for 20 days instead of 10 (in traditional SRI) and often two plants are put in each hole instead of just one. This new method represents then, a “half-way point” between SRI and non-improved rice systems for use in lands that are no suitable for the full SRI model.

In FY 2014, the MARNDR and AVANSE distributed key inputs for rice farmers following SRI and SRA techniques—59 cono-weeders, 79 roller markers, 9 tons of

Jaragua and Jouma-67 rice seed, and, through the AVANSE voucher program, fertilizer and pesticide. Four hundred farmers in the winter season and 941 farmers in the summer benefitted from this, each with between 0.25 and 2 hectares of land. Preliminary results are striking—especially considering the fertilizer shortage in the region. In Grison Garde, an initial survey indicated that crop yields per hectare doubled in rice fields planted using the SRI method. Visits to other target zones indicate that they have similarly encouraging results. As farmers see such a dramatic change on their neighbors' land, they are planning to convert their own rice parcels to SRI (and many AVANSE beneficiaries who used SRI on only a fraction of their land are converting it all to SRI next season). In FY 2015, AVANSE plans to replicate this success on a much grander scale, reaching 2,000 new producers and changing 1,000 hectares of rice cropland over to SRI and SRA.

AGRICULTURAL INPUT VOUCHERS

This year, AVANSE implemented a very successful pilot voucher program (called 'SIBA', its French acronym), an innovative and sustainable way to deliver strategic subsidies to farmers. The program, the first input subsidy program in Haiti to use partial subsidies that regress over

TEXT BOX: CRITERIA FOR SELECTING A PRODUCT FOR PARTIAL SUBSIDY

In order to qualify to be included in an agricultural input voucher subsidy program, a commodity should:

- Be a clearly defined product, both in terms of standards and quality;
- Have a good cost-benefit ratio for the beneficiary;
- Be available in the country/region in question (i.e. legal to import, etc.);
- Be available in sufficient quantity to respond to the demand the voucher program will produce.

time, along with mandatory farmer cash contributions paid in advance, allows farmers to purchase inputs directly from private suppliers without direct project intervention in the market that would distort incentives to suppliers and crowd out non-subsidized demand. Over time, farmers cover an increasing part of the market price themselves as their incomes increase through the adoption of new production practices promoted through the IR 1 Farmer Field Schools.

The AVANSE voucher administration team, led by H el ene Kir emidjian in close consultation with internationally-

recognized voucher expert Jo el Le Turioner and the Haitian MARNDR, works with IR 1 technical staff before the beginning of the season to determine which products will be included in the program, and at what level of subsidy. They also identify the farmers from the IR 1 Farmer Field Schools that will benefit from the program and work with networks of affiliated suppliers to ensure that they have available supplies at agreed-upon standards and that the mechanics of payment and ordering are set in advance of the season.

TEXT BOX: CAPACITY-BUILDING OPPORTUNITIES THROUGH THE SIBA VOUCHER PROGRAM

AVANSE has observed a number of side benefits to the voucher program. The voucher team anticipated and, indeed, intended for some of these benefits—such as increased access to finance for rural beneficiaries because they set up accounts with micro-finance institutions in order to purchase their vouchers, or the establishment of vendors in new areas closer to their customers because of the market-priming incentive that the flood of vouchers creates. Other side benefits were a welcome surprise.

For instance, the weekly collaboration between AVANSE and the Ministry of Agriculture has helped identify a number of ways in which AVANSE can provide highly desired technical assistance in the design and implementation of its own voucher schemes, including the separate Ministry-run fertilizer-import subsidy program. AVANSE plans to support these next year with support from Mr. Le Turioner to the MARNDR to help it set up a market price-monitoring mechanism.

Additionally, the voucher program has brought AVANSE into contact with a network of private input retailers in the zone, highlighting the need for work at this level to ensure environmental compliance. The IR 4 team has identified three micro-credit institutions that provide payments facilitation for the voucher mechanisms as candidates for capacity-building support so that they may eventually qualify for direct funding, a major USAID-FORWARD objective.

Once the voucher “campaign” goes into effect, AVANSE’s voucher unit is closely involved with both input suppliers (vendors of fertilizer, pesticides, etc.) and micro-finance institutions in the project area who act as conduits for payments. At the beginning of an agricultural season, participating farmers purchase their vouchers at the micro-finance institution at a pre-determined percentage of the face value of the voucher. They then take the voucher to a participating vendor and use it to “purchase” the product in question. AVANSE then reimburses the vendor for the face value of the voucher.



IR 1 team lead Philippe Mathieu explains the AVANSE voucher program to a group of banana farmers.

WATERSHED CONSERVATION BY BLOCK

One of the principal challenges of watershed conservation is achieving impact and sustainability when the main tools of intervention are trees and other perennials which may take years to grow, and when the typical area of intervention consists of many small parcels of land owned or farmed by different people under a range of land tenure arrangements.

AVANSE’s watershed-management team has developed and implemented an approach with promise to achieve both, at the level of micro-catchment basins as well as on whole hillsides. The

approach piloted this spring by IR 2 team lead Jean-Claude Pierre Louis and Watershed Management Leader Yves Gossin is based on intensive preparation work with clusters of farmers and local government to identify contiguous parcels of vulnerable land and get the owners to come together to merge them into a single block entirely converted to improved agro-forestry systems production. These demonstration blocks consist of 12-30 parcels of land within critical zones upstream from concentration areas where significant IR 1 investments are being made to improve agricultural productivity in the plains. The IR 2 strategy achieves a significant impact because it converts entire hillside tracts to sustainable agro-forestry production with needed soil conservation structures. Treating whole hillsides is far more effective than treating scattered, non-contiguous parcels—the approach typical of most hillside agricultural projects in Haiti, which reflect the dispersed and fragmented patterns of land use that dominate the Haitian landscape.

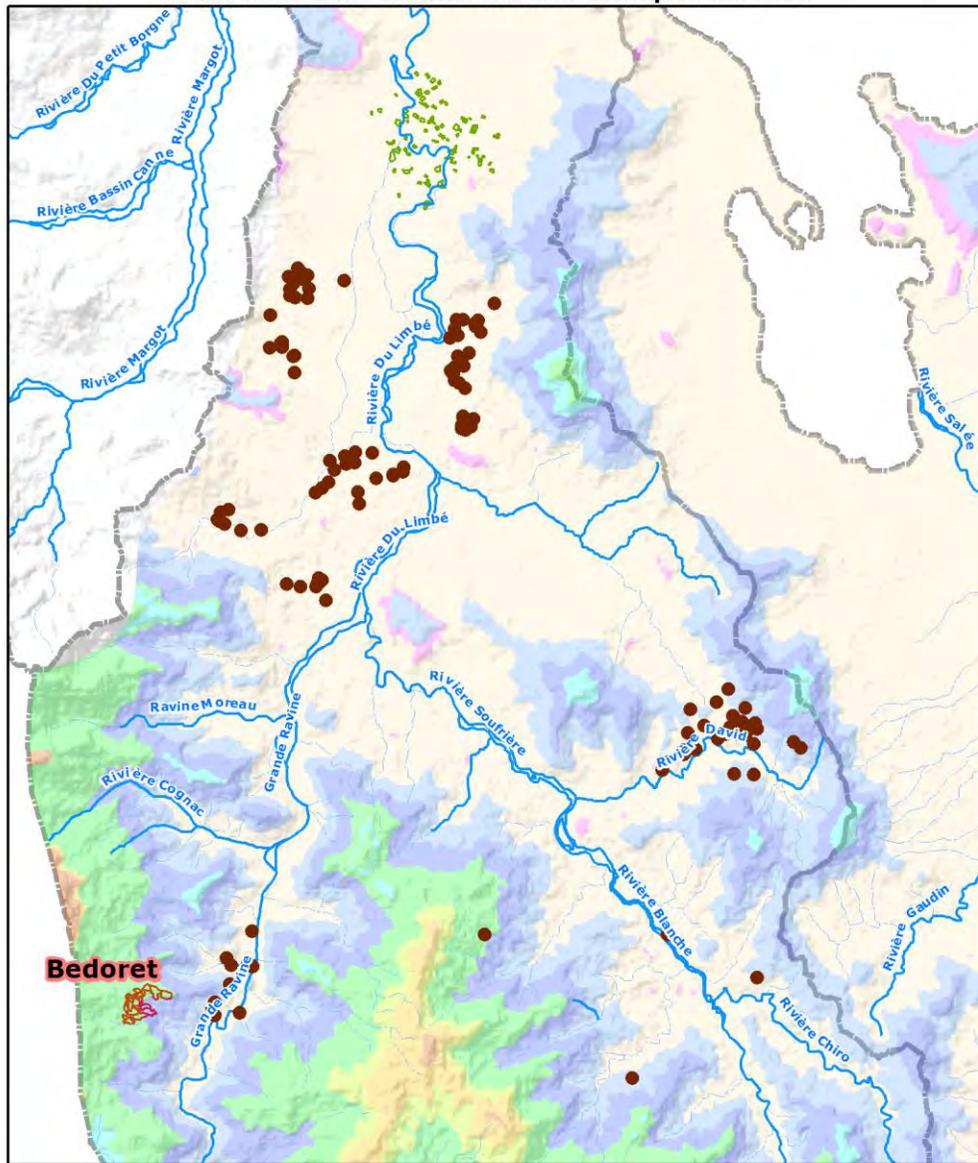
DEMONSTRATION BLOCKS THIS YEAR

Once a demonstration block is identified, AVANSE negotiates landowner agreements and trains farmers in techniques of soil conservation and integrated agro-forestry systems. The project then promotes *konbit*, a traditional Haitian labor-exchange mechanism, to install soil conservation structures and supplies seeds and seedlings for trees, grasses, and agro-forestry crops to plant in and around the soil conservation. The use of the *konbit* mechanism is essential, as the labor needed for soil conservation structures is by far the highest input cost to the landowner. IR 2 customizes crop packages in consultation with farmers in each target area. The IR 2 strategy for converting land from production of annual to perennial crops is designed to provide a continuous stream of income to farmers as their trees mature. Planting food crops in association with newly planted trees also protects the young trees from grazing damage. Many landowners have been eager to participate in the program because land blocks targeted for agroforestry and conservation were already under-producing or even non-productive if they were left in fallow to restore productivity. Once blocks of land have been treated, AVANSE field staff regularly monitor field sites and provide follow-up technical support to farmers and their garden sites within the demonstration blocks. In 2014, the project helped convert 562 parcels to agro-forestry and conservation treatments covering 653 hectares within 18 critical highland blocks, and anticipates doing many more next year.



A steep, degraded area like this one in Aux Perches can contribute to the risk of flooding downhill. However, because it is made up many small parcels owned by different people with different land tenure arrangements, it is difficult to organize the wholesale stabilization of such slopes. The demonstration block model being implemented by AVANSE addresses this problem through a community-based approach.

IR2 Demo block location and relationship to IR1 FFSS



		Legend Boundary - Demonstration parcels - Watershed	Stream - River - Ravine	Cartographic information Local projection UTM Zone 18 North, Datum : WGS 84 Geographic projection: Lat/Lon (DMS), Datum: WGS 84 Scale: 1:91,226 for A4 prints Production date: October 24, 2014
		IR1 - Cocoa FFSS - Banana FFSS	Elevation - High - Low	Sources - Demonstration parcels from GIS team © AVANSE 2014

This map of the Limbé watershed shows the relationship between the sites IR 2 targets for demonstration blocks and the downhill IR 1 target zones: the demonstration block of Bedoret is located on a critically eroded slope immediately uphill from one grouping of cacao FFSSs; and it falls upstream from many other cacao (brown dots) and banana (green) FFSSs. The soil-conservation work will reduce the risk of harmful flooding downhill.

TEXT BOX: IMPLEMENTING AN INTEGRATED AGRO-FORESTRY SYSTEM ON DEGRADED LAND

After a demonstration block site is identified, AVANSE technicians organize community work and training days or *konbit* to install soil conservation structures on each parcel of land in the block. These are simple terrace-like structures that follow the contour of the hillside, measured by a simple A-frame device constructed from three straight sticks and a plumb line. Depending on the slope and available local materials, farmers build a range of conservation structures including rock wall terraces, simple earthen canals, or bands of crop stover (maize stalks) anchored by living posts.

AVANSE provides living plant material within and around these soil conservation structures. A typical arrangement places vetiver grass at the top of the slope where its deep roots will do the most good, with sugarcane midway down the slope and rows of shallower rooted cultigens such as pineapples at the bottom. Farmers then plant high-quality fruit and forestry trees and associated crops such as *igname* (*discorea*) between soil-conservation structures on the contour.

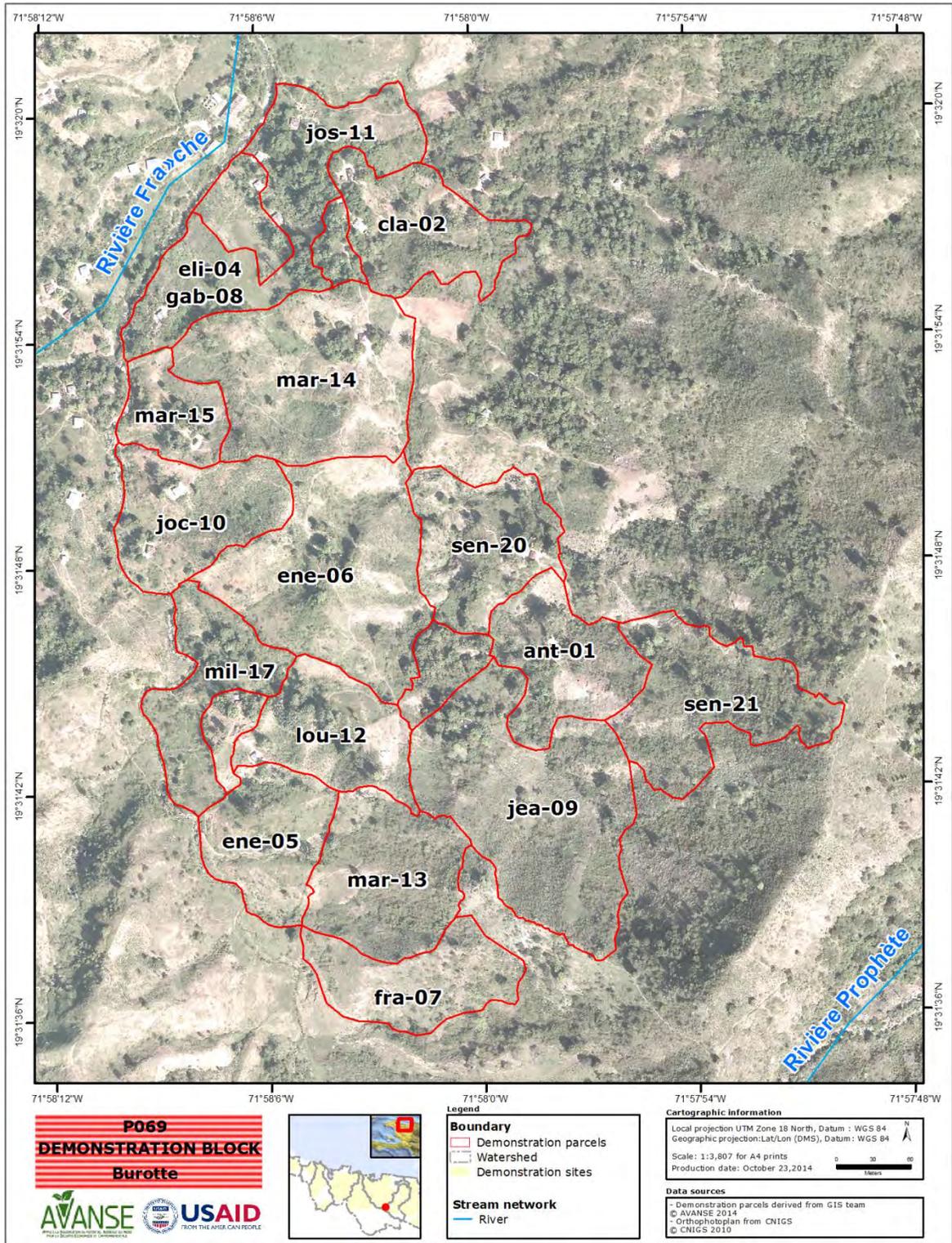
As the trees mature over time, the landowner will gradually adjust the mix of crops accordingly. For example, a mature agro-forestry system might have cacao or coffee under a canopy of fruit and forestry trees with vine crops such *igname* at the outer edges of the field garden.

LEVERAGING IMPACT

This approach may appear to benefit fewer people because the project works directly (albeit more intensively) with smaller numbers of farmers during its initial stages; however, the ecosystem impact is far higher than the relatively small number of farmers reached through the demonstration blocks. In fact, the blocks benefit a much larger number of people than those directly engaged with the project, particularly those downstream from targeted blocks at critical upland sites. Compared to approaches based on treating disparate, scattered plots, the demonstration blocks have an impact far out of proportion to the initial number of parcels treated. Each block links a series of adjoining plots and stabilizes whole slopes of vulnerable land. This system shows promise of post-project sustainability since the AVANSE-trained landowners with adjacent parcels use traditional non-monetary patterns of labor exchange (like *konbit*) to construct terraces across the slope. Grouping adjacent landholders facilitates tool-sharing and replication of project techniques on other plots. During the past quarter, IR 2 technicians observed farmers applying project-promoted agro-forestry and conservation methods on other plots outside the AVANSE assisted sites.



A participant in IR 2 soil-conservation activities calibrates an A-level device.



This map of the Burotte demonstration block highlights the potential of a large swath of contiguous parcels. IR 2 worked with the owners of each of the parcels outlined in red to work to install agro-forestry systems on all of their land at once. The combined ecosystem effect of this method is much greater than the sum of each parcel converted to agro-forestry individually.

There is relatively little precedent in Haiti for the innovative AVANSE strategy of working with contiguous plots across slopes; however, earlier projects that worked with adjoining farmers included as the LORD II project in Maissade and PADF Plus in the Grande Rivière valley, both funded by USAID (1980s), also the extensive terracing for high-value vegetable crops in the Ft. Jacques-Fermathe area. There is evidence from post-project observations that farmers in these areas have maintained and replicated tree cropping and terracing systems long after the close of projects that initiated them.⁴

EXPANSION AND DURATION

To capitalize on these features of the demonstration block system in FY 2015, IR 2 plans to replicate and expand existing blocks on a medium scale via farmer-to-farmer exchanges across different watersheds—and to scale up the creation of new blocks in other critical areas through work with community-based organizations. AVANSE has initiated a process to award in-kind grants to CBOs positioned to continue implementation of demonstration blocks activities on their own and on a larger scale than AVANSE can implement directly. The members of the CBOs are often already IR 2 beneficiaries and may own land in an existing demonstration block, so they already have a firm understanding of the theory and practice of hillside agro-forestry and soil conservation. In addition to materials, IR 2 will provide close planning and technical oversight through its team of 14 field technicians. AVANSE anticipates that this approach can increase the impact of IR 2 activities tenfold, with 6,000 hectares of land to be protected under new demonstration blocks in the next workplan year.

PARTNERSHIPS WITH LEADING CACAO EXPORTERS

LAYING THE GROUNDWORK FOR IMPROVED LINKAGES FOR SMALL FARMERS

During FY 2014, the IR 3 team negotiated two major agreements with leading private-sector cacao exporters. These agreements—with NOVELLA, the longstanding leading exporter of cacao in the North of Haiti, and with PISA, an affiliate of the Haitian consumer products firm REBO—will serve as the focal points for future AVANSE interventions in the cacao sector, with AVANSE and the private firms both focusing investments upstream to support small farmer production and in improved post-harvest handling and processing to improve the quality and value of cacao exports from the project zone. The agreements signed in June with PISA and in July with NOVELLA call for investments from the two private partners of \$800,000 and \$1.3 million respectively in genetic material for small farmers, nurseries, improved processing facilities and improved post-harvest handling and drying.

Major components of these agreements and the contributions of AVANSE and its two private sector partners are as follows:

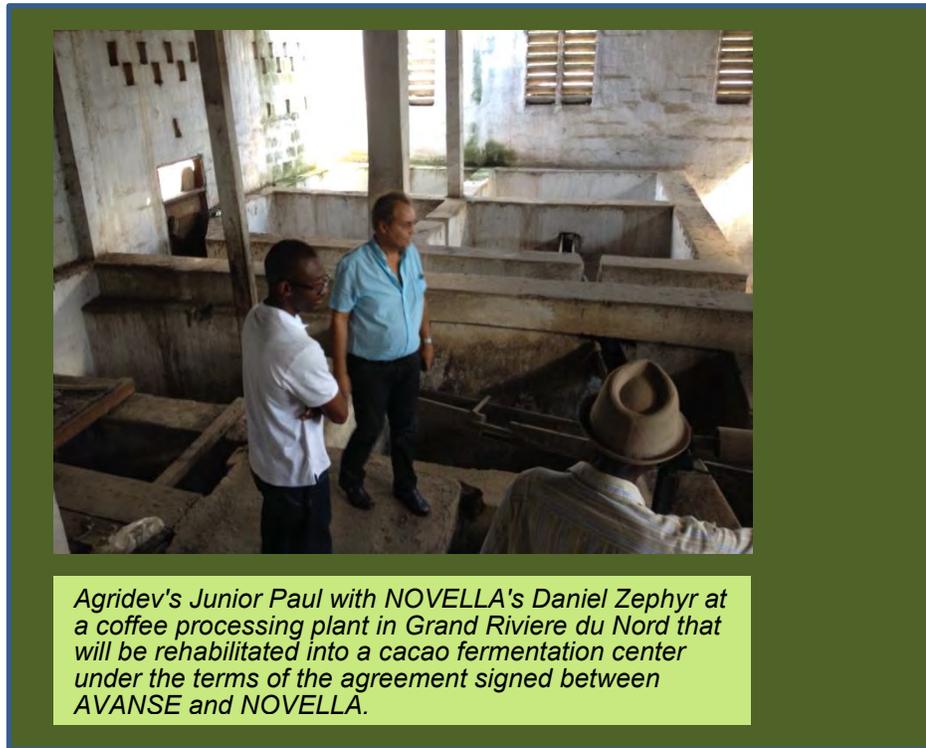
⁴ Cf. Smucker, Glenn R. Do Small Farmers in Haiti Invest in Natural Resource Management without External Subsidy? A Post-Project Review. DAI-HAP Technical Study. April, 2003.

Production. Both agreements call for AVANSE to distribute planting material and training for farmers in AVANSE Cacao FFSs that are linked to PISA and NOVELLA buying networks. AVANSE will train PISA technicians in cacao orchard maintenance and new plantation architecture with use of banana and other plants to provide temporary shading. In addition, AVANSE will provide technical guidance to help PISA establish its own nursery to serve farmers in the surrounding Acul du Nord zone. Under the agreement with NOVELLA, AVANSE is working out a detailed formula for joint payments for new planting material, consisting of seedlings and grafts, with it and NOVELLA each covering specific geographic zones or specific costs such as seeds, grafting material or seedling bags. The joint distribution of planting materials planned with NOVELLA will begin in the first quarter of FY 2015. A total of 500,000 seedlings are planned with both partners in FY 2015.

Processing. Under the signed agreements, both private partners will undertake major investments in new fermentation facilities in the North. Fermentation is a critical part of AVANSE's value chain strategy. It is a post-harvest process, which is not traditionally practiced in Haiti, that, through controlled fermentation, develops the flavor profile of cacao beans, generally adding to their market

value. Bean produced in this manner, if they have no other defects, are suitable for use in high quality chocolate. AVANSE will provide both private sector partners with technical training and advice on managing the fermentation process. All physical investments will be made by PISA and NOVELLA. PISA's fermentation center in Acul du Nord has been constructed and is ready for use at the start of the winter cacao season. NOVELLA is planning to debut its fermentation center in Grande Rivière du Nord in the course of 2015.

Post-Harvest Handling and Drying. As part of its agreement with NOVELLA, AVANSE is working to establish a new, traceable system of direct farmer-to-exporter purchasing of non-fermented cacao based on the relational networks established through the AVANSE FFSs. This is a critical development since, as the new fiscal year is beginning, NOVELLA and AVANSE staff are working to create small farmer associations around core members of FFSs that will be registered under the GOH's statutes governing non-profit associations. Each group identifies a delegate who will serve as the consolidator for receiving cacao and administering simple quality tests for humidity and mold content that will be used to assign one of three different quality grades—each with a pre-negotiated public price set as a percentage mark-down from the world market cacao price with differentials that reward farmers applying good drying practices. NOVELLA then takes delivery from the delegate of each farmers' lot with immediate payments



to each farmer that pass through the delegate. NOVELLA has agreed to pay stipends to the delegates to cover their cost and even to advance funds for initial purchases. Novella is also working with AVANSE to provide joint funding for distributions of improved farmer household drying equipment—traditional concrete drying platforms as well as new wooden/mesh drying tunnels that are being tested for the first time in Haiti this year. Initial evidence of use during the



Agridev's Junior Paul explains the new direct-purchase system with NOVELLA to a group of cacao farmers in Robillard.

first weeks of the winter season suggest that the tunnels can significantly reduce the time it takes to dry cacao. These post-harvest improvements will be promoted through the cacao direct sales groups, improving the efficacy of the market linkages open to the members by helping them to increase the quality of their cacao. Overall the new direct buying mechanism represents an important step in improving value chain linkages between small farmer and the main actor responsible for over 80% of cacao exports in the North of Haiti.

Certification. AVANSE will also support both NOVELLA and PISA to obtain certification of their buying mechanisms for small farmers. At the close of FY 2014, AVANSE was exploring both organic and fair trade certification possibilities. The underlying structure of the NOVELLA system will facilitate the advent of fair trade certification for farmers in the mainstream unfermented cacao marketing system—a first in Haiti.

COLLABORATION WITH THE MARNDR

On March 27, 2014 USAID and the MARNDR signed an MOU brokered by AVANSE which lays the foundation for collaboration and joint implementation of activities between AVANSE and the Ministry. Under the agreement, AVANSE commits to providing both material support to the Ministry's extension offices in the project zone, called Bureaux Agricoles Communales (or BACs) and training to BAC staff on the relevant crop packages from IR 1. The MARNDR, in turn, has committed to make some of its field installations accessible to AVANSE staff, to make some of its personnel available to participate in activities with AVANSE, and to ensure that a number of key independent organization under the Ministry's aegis, such as the Institut National de la Réforme Agricole (INARA), responsible for land tenure issues relating to public lands, cooperate fully with the project.

Collaboration under this agreement has gotten underway with AVANSE staff working closely with the Ministry in the area of input voucher and planning for the administration of fertilizer subsidies. During the last half of FY 2014, AVANSE's voucher team established clear protocols for sharing information on beneficiary lists, fertilizers and pesticides covered by the AVANSE voucher schemes and participating vendors of fertilizer with MARNDR projects (notably the PTTA) operating in the same zone with a similar agenda for distributing agricultural input vouchers to stimulate farmer demand.

A BASIS FOR JOINT IMPLEMENTATION AND INSTITUTIONAL STRENGTHENING

This collaboration has grown to include the participation of AVANSE voucher unit staff in the monthly ministerial working group on input subsidies responsible for piloting donor coordination on fertilizer subsidization and for providing technical input to the Ministry on key policy questions regarding access to inputs—notably the difficult co-existence of import supply subsidies administered directly by the MARNDR at the same time that AVANSE and the PTTA are trying to encourage a move to demand-based approach to input subsidization. At the end of the year, AVANSE voucher units staff were in the process of divesting a support program to the MARNDR to develop a commercial fertilizer price monitoring program—so that it would be able to better negotiate the commercial reference prices in its transactions with private fertilizer importers—both within the framework of the AVANSE and PTTA voucher programs as well as for its own direct import subsidies. This system, to be put in place in FY 2015, has the potential for great cost savings to the Ministry—AVANSE's assistance with the purchase of one product already helped the Ministry negotiate a 20% price reduction on the basis of international market prices.

On a more basic level, at the close of the year, AVANSE staff had conducted needs assessments for the necessary material support to MARNDR regional antennas in Limbé and Trou du Nord, which will be extended to eight other BACs in the first quarter of FY 2015. Detailed workplans outlining field collaboration between BAC staff and the IR1 FFS crop training teams will also be developed in the initial quarter of FY 2015.

MAJOR CHALLENGES

AVANSE is implementing its program in a challenging environment, and accordingly, it has had to react to unforeseeable difficulties arising from that environment. The most substantial in FY 2014 was certainly the extended period of drought.

TWO CONSECUTIVE DROUGHTS

Severe drought struck Haiti's Northern Corridor for two consecutive planting seasons—August to December 2013 and April to September 2014—during FY 2014. Soil-water indexes fell to crisis levels, and farmers experienced massive crop failures. Overall, rainfall was below half of historical averages, and anecdotal accounts of regional climate history maintain that northern Haiti has not seen such severe drought since the 1970s. AVANSE conducted a review of the agricultural and socio-economic effects of the drought over the course of the spring (the report was finalized this quarter and is in annex to this report) which found an average crop mortality of 86% across 261 rice, banana, maize and beans farmers—and more than half reported losing 100% of their crop.

Consequently, more than half of AVANSE beneficiaries surveyed reported extreme food insecurity, and the same proportion sold at least one animal during the season as a result of stressed economic conditions—a figure supported by an unusual fall in the market price for livestock in the region. There were social effects as well, including families withdrawing their children from school (34%), an increase in predatory lending (13%), and even geographic relocation: 15% migrated temporarily to the Dominican Republic in search of work.

This has of course affected AVANSE activities. Virtually all of AVANSE's target crops in IR 1 were harmed substantially, with one exception being the relatively strong performance of the summer rice crop using the SRI methods in irrigated areas. Trees and soil-conservation grasses and vegetables planted in IR 2 demonstration blocks suffered much higher mortality than usual. The effects of the drought stretched through each value chain as well, affecting the operations of IR 3 partners. The de-capitalization of farmers who lost one or two seasons of expected income has also affected project implementation since the economic models on which its interventions are based on historical farmer incomes and typical market behavior in the area.

AVANSE RESPONDS

Meteorological data suggest the possibility of another season of drought for the region, and consecutive droughts have a compounded economic and humanitarian effect. AVANSE is launching a pilot drylands well initiative to provide farmers with access to subterranean ground water in the corridor stretching from Limonade to Fort Liberté and planning other measures to mitigate against the acute food insecurity that the region needs to be prepared for.

DEARTH OF TECHNICALLY QUALIFIED HAITIAN ORGANIZATIONS

Although less visible than dramatic weather events, the lack of experienced Haitian organizations with strong agronomic credentials and the capacity to provide extensive field support for agricultural productivity trainings to small farmers has also proven to be a serious constraint.

In June, AVANSE issued an APS to identify potential Haitian organizations to respond to future RFPs to become implementing partners responsible for executing most of the AVANSE field training agenda for focus crops with small farmer participants grouped into Farmer Field Schools. A total of 15 firms responded, of which only 4 were judged to have the minimal technical capacity—and these were all small firms with at most 2 or 3 competent staff agronomists, most of whom have experience only in one crop and no corporate experience record of delivering larger scale production-oriented field trainings to small farmers. This disappointing response is unsettling, since the premise of AVANSE's IR 1 extension efforts is that much of the crop extension beginning in FY 2015 will be awarded in the form of subcontracts to Haitian organizations with some level of technical competency in agricultural productivity trainings.⁵ The results of this APS seem to challenge the viability of this option.

In examining the results of this June APS, we noticed that two of the respondents who were judged to be in the acceptable range structured their response as a consortium with international NGO subcontractors. In each of these cases, the international NGOs in question possessed good technical capacity in at least one of the focus crops, such that the consortium as a whole was judged as meeting the minimum technical requirements. Given the potential for fruitful collaboration between Haitian NGOs engaged in agricultural productivity raising actions and international NGOs (and firms) possessing a specialized technical experience and significant experience implementing large scale field activities, we have drawn upon this lesson to revise our strategy for rolling out extension activities in FY 2015.

Specifically, we intend to issue two RFPs in the year, one for maize and beans in the first quarter and another for bananas in the last quarter of FY 2015. In each of these we will hold well-publicized bidders conferences and expressly encourage respondents to consider the option of forming consortia with Haitian organizations and international or US NGOs to cover both the required technical depth and also to ensure that the consortia possess adequate administrative and operational capacity to implement field activities on a medium to large scale. With the provision that such consortia be led by Haitian prime contractors, in line with USAID's FORWARD strategy, these consortia will also be vehicles where mentoring between the international and Haitian partners is encouraged. In this manner, a Haitian NGO with a small core staff of one or two agronomists and a base of technical knowledge can partner with a larger international NGO possessing superior administrative and operational capacity, as well as international technical contacts that will significantly expand the implementation capacity beyond what the Haitian NGO could offer on its own. The sharing of technical and managerial

⁵ The reliance on Haitian organizations as implementing partners also stems from AVANSE's goal of supporting the USAID FORWARD initiative.

information and approaches and tools will be expressly encouraged, thereby providing another reservoir of potential capacity building support in addition to the support for which they will be eligible from IR 4 Staff.

LIMITED CAPACITY FOR ENVIRONMENTAL COMPLIANCE IN THE PROJECT ZONE

The project has noted since start-up the limited capacity of small vendors, implementing partners, and beneficiaries in the Northern Corridor to conform to environmental standards. While it fits the spirit of USAID-FORWARD goals to extend this level of compliance to a level of actors typically not reached by this sort of project, it can strain project resources and present unanticipated delays in project activities when a potential partner is discovered to require much more assistance in implementing required environmental mitigation measures than originally expected.

AVANSE has responded to this in a number of ways. From an organizational standpoint, it created the IAEC unit in June to give the environmental compliance team better institutional leverage inside of AVANSE to facilitate its coordination with other technical teams, and it recruited a larger, stronger environmental compliance team better able to efficiently assist cooperating institutions on environmental compliance questions. In August, it completed a modification of its administrative and operational information systems in order to automatically integrate environmental review into the procurement, grants and subcontracts processes from the initial requisition phase. And most importantly, it continues to respond immediately and thoroughly to all environmental compliance issues as they arise. AVANSE's environmental compliance team did precisely that in the case of voucher program input suppliers who were found to be non-compliant at the very end of the reporting period: within a matter of days, the environmental compliance team had drawn draft EMPRs for each vendor and was working on a daily basis with the voucher administration team to implement required mitigation measures; the project anticipates all issues to be resolved and sales of essential inputs to resume by the end of October.

AVANSE views this as a capacity-building opportunity, and it has been pleased to discover that many of the vendors and implementing partners it has interacted with on environmental compliance issues see it that way, too. Many of those same input suppliers affiliated with the voucher program, for example, expressed in the course of the EMPR process that they had long desired to remediate many of the issues (such as leaky roofs, inadequate signage, etc.) identified by AVANSE's environmental compliance staff. In general, the project has found that Haitians and Haitian organizations are very conscious of the environmental degradation their country has suffered, and are very understanding of environmental compliance concerns, so AVANSE looks forward to working with them to improve local environmental-compliance capacity. That said, it is also taking into account the major challenge that low capacity poses to its program planning, and will continue to mitigate against this in the future.

OUTLOOK FOR FY 2015

AVANSE is poised to complete the leap in the beginning of the next fiscal year from being a small-scale project experimenting with new approaches to a large-scale field implementor with a broad reach and a significant impact. Key aspects of this progression in FY 2015 will include:

Ramping-up of agricultural-production interventions within IR 1 and IR 2. IR 1 training and support activities to farmers will expand from reaching 7,000 beneficiaries in FY 2014 to 23,500 new farmers in FY 2015. Similarly, IR 2 demonstration block and reforestation activities will expand from 600 to 7,500 beneficiaries. Increasing the scale of the project at this rate is possible technically thanks to the work IR 1 and IR 2 staff have put in establishing and refining their assistance packages—crop models for IR 1 and the demonstration block approach to landscape reclamation for IR 2. Operationally, this will be facilitated by the engagement of outside partners to help in administering field activities. The addition of two large consortia with multiple partners experienced in production agriculture to work with IR 1; and a planned set of 18 CBO grantees implementing demonstration blocks, along with six reforestation and two to three SWMB-reinforcement partners for IR 2 will provide the critical extra implementation capacity. This engagement of outside partners is also consistent with USAID’s desire to see AVANSE fill more of a facilitation and less of a direct implementation role.

Expanding the Voucher program. After initial experiments demonstrating the fundamental viability of the voucher concept—with farmer willingness to contribute at least 50 percent of the purchase price of key inputs like fertilizer no longer under discussion—the voucher program is poised to make the leap to the scale of having real, regional impact. After reaching less than 500 participants in the first year, AVANSE plans to increase the reach of the voucher initiative to 13,600 farmers in FY 2015. As with the field extension activities of IR 1 and IR 2, this will also be facilitated by the engagement of a Haitian subcontractor (already identified as of the end of the quarter) to handle many of the administrative tasks.

Centralizing and effectively using information and data to produce more timely analysis. The creation of the project IAEC unit, with dedicated independent resources for data collection and treatment of all information generated by the IR teams, will enhance the project’s ability to synthesize and use data and information both for reporting needs and for ongoing project management. The procurement of additional smart phones and GPS units will enhance the linkages between AVANSE’s information data bases and its GIS systems—permitting a wider range of geographical analyses.

Increasing operational linkages between IR 1 and IR 3. Under the two cacao collaboration agreements with NOVELLA and PISA, IR 3 staff have brokered arrangements in which private-sector partners are willing to subsidize parts of AVANSE’s production investments in cacao. The smaller, farmer-based nurseries to be established in FY 2015 with support from NOVELLA will serve as a distribution vehicle for planting material and as a local relay for improved super-tree planting material from the cacao budwood gardens established in FY 2014. In this way, IR 3 staff are helping to establish more sustainable models of extension for cacao farmers by seeking outside resources from the private sector. At the same time, IR 1 field technicians are

being trained in marketing, post-harvest handling and in explaining world price movements for farmer participants in the direct sales groups that IR3 is establishing. This type of collaboration will be expanded through the signing of other collaboration agreements with private-sector actors in other value chains during FY 2015.

Infrastructure activities hit full stride. With the launching of technical studies for roads, irrigation, and hillside ravine protection—all foreseen to begin in earnest at the start of the first quarter of FY 2015—AVANSE’s irrigation activities will be entering into a phase of intensive work in the beginning of FY 2015; and major construction work is scheduled to begin in the spring in all three areas. To manage this surge of activity, the infrastructure team will be hiring additional short-term engineers to increase its capacity to deal with the increased work load.



A large rice field in Maribaroux. The AVANSE team built a strong foundation in 2013-2014 with successful crop models, agro-forestry system, economic strategy, institutional approach, and community engagement. Next year, they plan to bring their efforts to scale to reach many more farmers, small businesses, and local organizations across a much larger area.

ANNEX A: INDICATOR PERFORMANCE TRACKING TABLES

TABLE 12: AVANSE IPTT SUMMARY PERFORMANCE DATA FOR FY 2014 – INDICATORS AND QUARTERLY TARGETS

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
USAID FY2011 - FY2015 Goal 0.0 Stable and Economically viable Haiti																		
USAID/Haiti Feed the Future Objective: Increased Food Security																		
Impact	Per Capita Expenditure (as proxy for income)			USAID-Haiti Corridor Level HH survey														
Impact	Prevalence of underweight children under 5			USAID-Haiti Corridor Level HH survey														
FTF North objective: Increased Agricultural Income																		
(0.1) 4.5.2-36 FTF	Value of exports of targeted commodities as a result of USG assistance	USD	commodity (cacao)	Post harvest surveys of northern corridor producers and exporters	2013													Post-Harvest Survey of producers will be conducted during the first quarter FY2015 to obtain volume of exports. Post harvest survey of exporters will also be conducted in 1st quarter FY2015 to get price data. Survey
			Regional			36,612.00	0	0	0	0	0	38,442.60						

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April - Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
			Outside of region			1,323.00	0	0	0	0	0	1,389.15						instruments are available for both studies. The updated beneficiary data base will serve as sample frame for the Post Harvest Survey of producers.
			Total value of exports in USG			37,935.00	0	0	0	0	0	39,831.75						
(0.2) custom	Volume of cacao exports as a result of USG assistance	Metric Ton	Total	Post harvest export surveys of northern corridor cacao producers and exporters	2013	28.10	0	0	0	0	0	29.51						
			Regional			27.12	0	0	0	0	28.48							
			Outside of region			0.98	0	0	0	0	1.03							
(0.3) 4.5-11 FtF	Market Discount of targeted agricultural commodities (S) (cacao)	%	n/a	Post harvest export surveys of northern corridor cacao exporters	2013	10%	0	0	0	0	0	10%						
(0.4) custom	Average increase in agricultural income for beneficiary households due to USG assistance	%	Total	Post harvest survey	2013 (\$ 443)	0%	0	0	0	0	0	0	30%					Post Harvest Survey is targeted for first quarter of FY2015 to get information on the beneficiary income. Farmers have harvested the short cycle crops (corn, beans and rice), but they have not yet harvested cacao and plantain.
			Total New/Continuing			0	0	0	0	0	0							
			New			0	0	0	0	0	30							
			Continuing			0	0	0	0	0	0							

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
			Gendered household Type					0	0	0	0	0						
			Adult Female No Adult Male (FNM)			0		0	0	0	0	0	20					
			Adult Male No Adult Female (MNF)			0		0	0	0	0	0	25					
			Male and Female Adult (M&F)			0		0	0	0	0	0	30					
			Child no Adult (CAN)			0		0	0	0	0	0	0					
IR1: Agricultural Productivity increased																		
(1.1) 4.5 - 16,17,18 FtF	Gross margin per hectare, animal, or cage of selected product	\$USD/ha	Corn	Post harvest survey of beneficiary producers	2013	116.95		0	0	0	0	0	163.76					
			Beans			415.40		0	0	0	0	0	581.56					
			Rice			218.00		0	0	0	0	0	305.20					
			Plantain			5,035.26		0	0	0	0	0	5,538.79					
			Cacao			205.32		0	0	0	0	0	205.32					
																		The Post-Harvest Survey will be conducted in 1st quarter of FY2015 including data collection on costs and harvest sales of target crops for the spring 2014 planting season

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
			Male_corn			179.05	0	0	0	0	0	250.67						
			Female_corn			-139.99	0	0	0	0	0	-84						
			Joint_corn			-25.22	0	0	0	0	0	-15.13						
			association - applied_corn			N/A	0	0	0	0	0							
			Male_beans			448.48	0	0	0	0	0	583						
			Female_beans			90.08	0	0	0	0	0	117.1						
			Joint_beans			437.5	0	0	0	0	0	568.74						
			Male-rice			287.05	0	0	0	0	0	401.87						
			Female-rice				0	0	0	0	0	0						
			Joint-rice			-64.68	0	0	0	0	0	-38.81						
			Male-plantain			5472.52	0	0	0	0	0	6019.77						
			Female-plantain			2630.23	0	0	0	0	0	2893.25						

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
			Joint-plantain			4867.3	0	0	0	0	0	5354.03						
			Male-cacao			165.73	0	0	0	0	0	165.73						
			Female-cacao			304	0	0	0	0	0	304						
			Joint-cacao			232	0	0	0	0	0	232						
			Total			384,604.08	0	0	0	0	0	392,296.14						
			Corn			30,568.79	0	0	0	0	0	31,180.17						
			Beans			56959.73	0	0	0	0	0	58098.92						
			Rice			51869.21	0	0	0	0	0	52906.59						
			Plantain			212849.33	0	0	0	0	0	217106.3						
			Cacao			32357.02	0	0	0	0	0	33004.16						
			Grand Total			0	0	5821	1170	16	7007	19200						
			Total Sex			0	0					19200						
			Male			0	0	4435	850	11	5296	15360						
(1.2) 4.5.2-23 FTF	Value of incremental sales (collected at farm-level) attributed to FTF implementation (RiA)	Value (USD)		Post harvest survey of beneficiary producers	2013													Pending Post-Harvest Survey to be conducted in 1st quarter of FY2015.
(1.3) 4.5.2-5 FTF	Number of farmers and others who have applied new technologies or management practices as a result of USG assistance (RiA) (WOG)	#		Project records	2013													For IR1, prolonged drought since August 2013 constrained planting. Availability of planting material was also a constraint. Registering 2,100 additional rice and plantain planters July-November 2014, 8,000 for cacao & beans Oct-Dec 2014, 16,000 for rice, plantains, and corn

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)			
			Female			0	0	1386	320	5	1711	3840						by Jan-Sept 2015, IR1 plot monitoring form verifies farmer application of technologies. For IR2, delay in approval of grants' manual constrained outreach for conservation works. Target variance to be made up in 2015-16.			
			total New/Continuing									19200									
			New			0	0	5821	1170	16	7007	19200									
			Continuing			0	0	0	0	0											
(1.4) 4.5.2-2 FTF	Number of hectares under improved technologies or management practices as a result of USG assistance	ha	Total	Project records	2013	0		2226	628.7	1065.28	22.19	3942.17	6600						For IR 1, information available pending completion of update of beneficiary data base November 2014. Average plot size 0.5 ha per farmer for target crops, somewhat larger for banana plots, smaller for irrigated rice. For IR2, delay in approval of grants' manual constrained outreach for conservation works. Figure includes 863 ha based on farmer declared parcel size within 24 blocs de demonstration of contiguous plots, to be verified by GIS field study, quarters 1-2 of FY2015.		
			New/Continuing total			0								6600							
			New			0		2226	628.7	1065.28	22.19	3942.17	6500								
			Continuing			0								0							
			Technology total																		
			Pest management			0										5500					
			Disease management			0										5000					
			Soil-related			0		210	150.7	480.28	22.19	863.17	6600								

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
			Irrigation			0							4000					
			Water management			0							4500					
			Climate mitigation or adaptation			0							2500					
			Other			0							0					
			Total w/one or more improved technology			0	2226	628.7	1065.28	22.19	3942.17	6600						
			Sex total															
			Male										5280					
			Female										1320					
			Joint										0					
			Association-applied										0					
(1.5) Custom	Number of technologies or management practices made available to farmers as a result of USG assistance	#	None	Project records	2013	0	0	8	3	1	12	8						
(1.6) Custom	Number of beneficiary households with increased agricultural income	#	Total	Postharvest survey of beneficiary producers		0	0	0	0	0	0	19200						Post-Harvest Survey first quarter FY 2015 . Many famers did not plant in spring season due to drought. Information will be collected for those
			Income doubled				0	0	0	0	0	13200						

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)	
			Income increased					0	0	0	0	0	15350					farmers who did plant .	
			New					0	0	0	0	0	19200						
			Continuing					0	0	0	0	0							
			FNM					0	0	0	0	0	1920						
			MNF					0	0	0	0	0	1920						
			M&F					0	0	0	0	0	15360						
			CAN					0	0	0	0	0	0						
(1.1.1) Custom	Yield per hectare for USG assisted target crops	Kg/ha	Corn	Post-harvest survey of beneficiary producers	2013	411		0	0	0	0	0	764					Post-harvest survey targeted for first quarter of FY 2015 .	
			Beans			395		0	0	0	0	0	0	561					
			Rice			1561		0	0	0	0	0	0	2591					
			Plantain			6040		0	0	0	0	0	0	9,060					
			Cacao			319		0	0	0	0	0	319						
(1.1.2) 4.5.2-13 F	Number of rural households benefiting directly from USG interventions (S)	#	Total		2013	0		4033	2988	1770	16	8807	19200					Update of beneficiary data base to be completed in November 2014. The 1st FY2015 quarterly report will include disaggregation by household type once beneficiary data base is updated, linking individual beneficiaries to verifiable households.	
			total New/Continuing						4033	2988	1770	16	8807	19200					
			New						4033	2988	1770	16	8807	19200					
			Continuing						0	0	0	0	0	0					

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
			Gendered household Type															
			Adult Female No Adult Male (FNM)	Project record									1920					
			Adult Male No Adult Female (MNF)										1920					
			Male and Female Adult (M&F)										15360					
			Child no Adult (CAN)										0					
(1.2.1) 4.5.2-7 FTF	Number of individuals who have received USG supported short-term agricultural sector productivity or food security training (RiA) (WOG)	#	Grand Total	Training attendance forms	2013	0	4033	3456	1956	1063	10508	16325						Data for IR1 training is based on training attendance forms including Farmer Field Schools. For IR 4, two representatives from 760 CBOs invited for organizational capacity building training; 1,325 registered, plus 40 representatives of 34 organizations trained in USAID compliance. Figures also include data for IR2 and IR3 trainees.
			Total Sex			0	4033	3456	1956	1063	10508	16325						
			Male			0	2762	2382	1484	797	7425	13068						
			Female			0	1271	1074	472	266	3083	3267						
			Type of individuals															
			producers			0	4033	2091	1956	1028	9108	14700						

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
			People in government			0	0	0	0	0	0	0	40					
			People in private sector			0	0	0	0	0	35	35	75					
			People in civil society (NGOs, CBOs, CSOs, research and academic organizations)			0	0	1365	0	0	1365	1520						
(1.3.1.) custom	Number of farmers who have access to improved agricultural inputs due to USG assistance	#	Sex total	Project record, SIBA agricultural inputs	2013	0	0	2388	3042	16	5446	19200						SIBA and IR1 distribution of input lists. Many registered farmers did not plant due to drought. IR2 outreach constrained by delay in USAID approval of grants targeting 5,000 upland farmers.
			Male			0	0	1856	2178	11	4045	13440						
			Female			0	0	532	864	6	1402	5760						

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
(1.4.1) 5.1-28 FtF	Hectares under new or improved/rehabilitated irrigation and drainage services as a result of USG assistance (RiA) (WOG)	Ha	None	Project record, maps	2013	0	0	0	0	0	0	0	1400					All preliminary evaluations and technical documents completed, awaiting USAID approval. Agreement reached to launch technical studies 1st quarter, & construction 2nd quarter FY2015.
(1.4.2.) custom	Number of kilometers of irrigation systems repaired due to USG assistance	Kms	None	Project record			0	0	0	0	0	0	28					All preliminary evaluations and technical documents completed, awaiting USAID approval. Agreement reached to launch technical studies 1st quarter, & construction 2nd quarter FY2015
(1.5.1) 4.5.1-22 FtF	Number of rural hectares mapped and adjudicated (S)	Ha	Total	Project record	2013	0	0	0	0	0	0	0	30					RFPs issued and implementers selected for 2 land tenure studies. Implementation targeted for 1st quarter of FY2015, pending USAID approval.
			Male			0	0	0	0	0	0	21						
			Female			0	0	0	0	0	0	9						
			Joint			0	0	0	0	0	0	0						
			communal			0	0	0	0	0	0	0						
IR 2: Watershed stability improved																		

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April - Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
(2.1) 4.8.1-26	Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance	Ha		Project record, maps	2013	0	210	150.78	480.28	22.19	863.25	5000						FY 2014 figure of 863 based on farmer declared parcel size within 24 blocks of contiguous plots, to be verified by GIS field study, quarters 1-2 of FY2015. IR2 outreach constrained by delay in USAID approval of grants.
(2.2) Custom	Volume of soil preserved in upper watershed areas due to USG assistance	Ton3/ha	Total	Project record, test site data	2013	0	0	0	0	0	0	0	0.5					Recruitment of consultant underway to propose methodology . Test sites to be established by 2nd quarter of FY2015.
(2.3) F 4.8.1-1	Number of hectares of biological significance and/or natural resources showing improved physical conditions as a result of USG assistance	Ha	N/A	GIS Map, Qualitative observations on site	2013	0	0	210	150.78	480.28	22.19	863.25	5000					Conservation interventions on 24 blocks of contiguous ag plots used as training sites, for wider application by other farmers FY2015 with the implementation of grants activities . GIS analysis underway to verify land area., 1st quarter 2015.S128
(2.1.1) custom	Number of sub-watershed management bodies formed due to USG assistance	#	None	Project inventory and record	2013	5	0	0	5	7	12	12						

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April - Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
(2.2.1) custom	Kilometers of biological & mechanical conservation structures built/rehabilitated	#	Biological	Project record	2013	0	0	62.36	84.93	9.2	156.49	90						Without the implementation of activities by grants, we perform certain activities that allow to develop some more structures of conservation
			Mechanical				0	0	0	0	0	23				10 sites identified FY 2014, engineering studies underway for 3 sites in 1st quarter FY2015.		
(2.3.1) custom	Survival rates of USG assisted tree planting	%	None	Plot site tree counts, sample	2013	0	0	0	0	45	45	50						Preliminary three month survival rates 45%; awaiting 12 month count.
(2.4.1) 4.8.2-26 F	Number of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance	#	Total	Project record	2013	0	0	0	662	1028	1690	5000						
			Implementing risk-reducing practices or actions to improve resilience to climate change			0	0	0	662	1028	1690	4500				Introduction of short cycle corn variety resistant to drought. Anticipate distribution of short cycle corn to 10,000 farmers in spring season 2015. IR2 activities in this case, also will permit to reach the LOP target		

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)	
			Using climate information in decision making			0	0	0	0	0	0	0	500						
(2.4.2) 4.8.1-6 F	Number of people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance	#	Total	Project record, IR2 conservation enrollment and attendance form	2013	0	0	0	0	0	0	0	4500					NRM models under development. However, 650 farmers in conservation training blocks (contiguous plots) FY2014. Expanding to neighboring farmers in FY2015.	
			Male				0	0	0	0	0	3150							
			Female				0	0	0	0	1350								
(2.4.3) custom	Number of people receiving USG supported training in natural resources management and/or biodiversity conservation	#	Total	Project record, attendance form	2013	0	0	937	786	1028	2751	3000						Training in agroforestry, watershed committees, grafting in FY2014. Expanding to neighboring farmers in FY2015.	
			Male				0	725	593	771	2089	2100							
			female				0	212	193	257	662	900							
IR 3: Agricultural markets strengthened																			
(3.1) 4.5.2-38 FTF	Value of new private sector investments in the agricultural sector and food chain leveraged by FTF implementation (RIA)	USD	None	Enterprises, Record Survey	2013	0	0	0	0	0	0	0	500000						Agreements with PPP partners signed in 3rd/4th quarters; sets stage for implementation & new investments FY2015.

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)	
(3.2) custom	Value of agribusiness sales due to USG assistance	USD	Total	Project record.	2013	20000	0	12500	0	0	12500	0							Initial FY 2014 training, grants, & PPP agreements will generate increased sales in FY2015. However there was an opportunity. CALI has a contract with Planning Ministry to sale 1000 bags of Corn for a total cost of 12500 USD.
			Corn			1000	0	12500	0	0	12500	0							
			Rice			4000	0	0	0	0	0	0							
			Beans			2500	0	0	0	0	0	0							
			Plantain			6000	0	0	0	0	0	0							
			Cacao			6000	0	0	0	0	0	0							
			Producers			5000	0	0	0	0	0	0							
			Traders/assembles			15000	0	12500	0	0	12500	0							
(3.3) 4.5.2-43 FTF	Number of firms (excluding farms) or Civil Society Organizations (CSOs) engaged in	#	Firm	Project record	2013	0	0	0	0	0	0	10						Market linkages, & grant activities in FY2014 will require at least one full accounting cycle to generate increased profitability. Follow-up agribusiness survey to gauge increased profitability, FY2015	

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
	Agricultural and Food security-related manufacturing and services now operating more profitably (at or above cost) because of USG assistance (RiA)		CSO			0	0	0	0	0	0	0	10					quarters 3-4. IR3 targets for FY2015 include 12 IPs which may qualify for Direct Award or FOGs (see 4.1.1.).
(3.1.1) 4.5.1-17 FTF /4.4.3-13 F	Kilometers of roads improved or constructed (RiA) (WOG)	Kms	Total	Project record	2013	0	0	0	0	0	0	0	40					All preliminary evaluations and technical documents completed, awaiting USAID approval. Agreement reached to launch technical studies 1st quarter, & construction 2nd quarter FY2015.
			Improved			0	0	0	0	0	0	40						
			Constructed			0	0	0	0	0	0	0						
(3.1.2) 4.4.3.7 F	Number of beneficiaries receiving improved transport services due to USG	#	Total	Public records, transport survey	2013	0	0	0	0	0	0	0	100000					Counts will be made following completion of road construction FY2015.
			Male				0	0	0	0	0	48000						
			Female				0	0	0	0	0	52000						

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
(3.2.1) custom	Number of storage facilities installed as a result of USG assistance	#	None	Project record	2013	0	0	0	0	0	0	0	0					Two PPPs that include cacao storage signed. FY2014 and FY2015 targets to be reached by end of FY2015. Grants targeted for 1st quarter of FY2015, including storage.
(3.2.2) custom	Number of processing facilities established or improved due to USG assistance	#	Total	Project record	2013	0	0	0	0	0	0	0	5					Two PPPs with cacao processing signed; grants for rice and corn processing targeted for 1st quarter of FY2015. FY2014 and FY2015 targets to be reached by end of FY2015.
			Corn-processing facilities			0	0	0	0	0	0	3						
			Rice-processing facilities			0	0	0	0	0	0	2						
			Cacao-processing facilities			0	0	0	0	0	0	0						
(3.2.3) 4.5-10 FTF	Total increase in installed storage capacity (m3) (S)	cubic meters	Total	Project inventory and record	2013	0	0	0	0	0	0	0	4000					Two PPPs that include cacao storage signed. FY2014 and FY2015 targets to be reached by 4th quarter FY2015. Grants targeted for 1st quarter of FY2015, including storage.
			Dry storage			0	0	0	0	0	0	4000						
			Cold Storage			0	0	0	0	0	0	0						
(3.3.1) 4.5.2-29 F	Value of agricultural and Rural	USD	total	Survey of beneficiaries	2013	0	0	0	0	0	0	25,000					Two loan agreements between agro-enterprises and	

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (Avril-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
	loans		Producers			0	0	0	0	0	0	0	0					financial institutions targeted for implementation in 1st quarter of FY2015. Recruitment of Access to Finance specialist 1st quarter FY2015. Loan agreement for 200,000 line of credit for rice processing; implementation pending return of rice production following decline due to 2013-2014 drought.
			Local Traders/Assemblers			0	0	0	0	0	0	25,000						
			Wholesalers			0	0	0	0	0	0	0						
			Others			0	0	0	0	0	0	0						
			Total Sex															
			Male			0	0	0	0	0	0	0						
			Female			0	0	0	0	0	0	0						
			Joint			0	0	0	0	0	0	0						
			N/A			0	0	1	0	0	0	0						
(3.4.1) Custom	Number of farmers accessing market information due to USG assistance	#	Total	Project record, Phone list	2013	0		0	0	0	0	0	4,000					Market Information Systems presently under development via 2 cacao PPPs. MIS activities to be implemented FY2015.
			Male					0	0	0	0	0	2800					
			Female					0	0	0	0	0	1200					
(3.5.1) 4.5.2-12 FIF -F	Number of public-private partnerships	#	Total			0	0	0	1	1	2	2					1 signed 3rd quarter, 1 in 4th quarter 2014. Others under	

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April - Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)	
	formed as a result of FTF assistance (S)		Agricultural production					0	0	1	1	2	2					negotiation to be signed FY2015.	
			Agricultural post-harvest transformation					0	0	0	0	0	0						
			Nutrition	Project record	2013				0	0	0	0	0	0					
			Other areas						0	0	0	0	0	0					
			Multi-focus						0	0	0	0	0	0					
(3.5.2) 4.5-2 FTF	Number of jobs attributed to FTF implementation (RiA)	#	Total	Project record, agribusines survey	2013	0	0	0	0	0	0	0	10000					Ravine infrastructures, road & irrigation system construction and rehabilitation will generate jobs in FY2015. Technical studies targeted for 1st quarter 2015, implementation 2nd quarter.	
			Urban			0	0	0	0	0	0	0							
			Rural			0	0	0	0	0	0	10000							
			New			0	0	0	0	0	0	10000							
			Continuing			0	0	0	0	0	0	0							
			Male			0	0	0	0	0	0	7000							
			Female			0	0	0	0	0	0	3000							

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
IR 4: Improved capacity of local organizations																		
(4.1) 4.5.2-11 FTF	Number of food security private enterprises, producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving USG assistance (RiA) (WOG)	#	Total	Project record	2013	0	0	737	34	9	780	960						FY 2014 screening of CBOs to target capacity building (IR4). FY2015 target includes CBOs with higher potential. For firms (IR3), medium enterprise IP hired 3rd quarter. In FY2015 micro-enterprises will be trained and formalized; grants disbursed .
			total New/Continuing			0	0	737	34	9	780	960						
			New			0	0	737	34	9	780	960						
			Continuing			0	0	0	0	0	0	0						
			Type or organizations															
			Private enterprises			0	0	0	0	9	9	100						
			Producers organizations			0	0	0	0	0	0	15						
			Water user associations			0	0	0	0	0	0	5						
			Women's groups			0	0	0	0	0	0	15						
			Trade and business associations			0	0	0	34	0	34	15						

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
			Community based organizations			0	0	737	0	0	737	810						
(4.1.1) CBLD-5 FtF	Score in percent, of combined key areas of organization capacity amongs USG direct and indirect local implementing partners	%	Ratio	Beneficiary Assessment	2013	51.34	0	0	0	0	0	0	70					2 OCAs performed 2013; 10 additional in 2014, decreasing the average points scored.
			Numerator: total numbers of points scored			1109	0	0	0	0	0							
			Denominator: total numbers of points possible			2160	0	0	0	0	0							
(4.2.1) 4.5.2-42 FtF	Number of private enterprises, producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) that applied new technologies or management practices as a result of USG assistance (RiA) (WOG)	#	Total	Project record, Organization survey	2013	0	0	0	0	6	6	270						For IR3, training IP for medium enterprises hired 3rd quarter FY2014. Agro-Enterprise grants launched 3rd quarter to improve technologies including processing. Drying and fermentation technologies embedded in collaboration agreements. Targets for 2014/2015 to be achieved in FY2015. For IR4, an estimated 150 CBOs are expected to seek legal status following project training, and 50 will have implemented new technologies., based on follow-up survey of inventoried organizations. .
			total New/Continuing				0	0	0	6	6	270						
			New				0	0	0	6	6	270						
			Continuing				0	0	0	0	0	0						
			Type of enterprises															
			Private enterprises				0	0	0	6	6	42						
			Producers organizations				0	0	0	0	0	10						
			Water user associations				0	0	0	0	0	3						

Indicator #	Indicator Title	Unit of measure	Disaggregation	Data Source	Baseline Year	Baseline value	Accomplishment FY13 (April-Sept 2013)	Accomplishment Q1 FY14 (Oct - Dec 2013)	Accomplishment Q2 FY14 (Jan - March 2014)	Accomplishment Q3 FY14 (April - June 2014)	Accomplishment Q4 FY14 (July - Sept 2014)	FY14 actual (Q1+Q2+Q3+Q4)	FY14 target	% accomplishment compared with target (FY14 results/FY14 targets)	Accomplishment up to FY14 (FY13 total+FY14 total)	Target for life of the project	% accomplishment compared with life of project (up to FY14 results/LOP targets)	Remarks for this quarter (Give an overview of the source of the data reported for the specific period)
			Women's groups				0	0	0	0	0	0	5					
			Trade and business associations				0	0	0	0	0	0	10					
			Community based organizations				0	0	0	0	0	0	200					

ANNEX B: FARMER FIELD SCHOOLS

TABLE 13: FARMER FIELD SCHOOL SUMMARY TABLE

Totals by crop	number of FFS planned	number of FFS created	number of FFS members			number of farmers receiving planting material	number of farmers receiving fertilizer/pesticides	value in USD of agricultural inputs received		
			men	women	total			through direct distribution	through voucher programme	total
CACAO	160	160	2,762	1,271	4,033	1,872	0	\$114,094	\$110	\$114,204
BANANA	29	26	401	107	508	173	219	\$31,628	\$891	\$32,519
RICE	70	67	1,130	211	1,341	1,341	633	\$38,439	\$21,628	\$60,067
MAIZE-BEAN	48	31	570	184	754	0	0	\$49,074	\$0	\$49,074
Totals by Target Zone										
Target Zone 1: Desroches / Limbé	15	15	289	82	371	113	39	\$12,070	\$319	\$12,389
Target Zone 2: Camp Coq / Marmelade	24	24	445	155	600	138	0	\$21,549	\$0	\$21,549
Target Zone 3: La Suisse /Bord de Mer	16	14	185	37	222	43	75	\$11,742	\$506	\$12,248
Target Zone 4: Grison-Garde / Robillard	88	82	1,399	614	2,013	1,162	200	\$88,810	\$2,662	\$91,473
Target Zone 5: Limonade / Terrier Rouge (Bois de Lance)	16	10	205	46	251	64	0	\$15,728	\$0	\$15,728
Target Zone 6: Sainte Suzanne / Gens de Nantes	24	24	405	195	600	106	0	\$16,097	\$0	\$16,097
Target Zone 7: Bayaha / Maribaroux	76	67	1,163	209	1,372	1,160	538	\$41,895	\$19,032	\$60,927
Target Zone 8: Borgne / Port-Margot	48	48	772	435	1,207	600	0	\$25,344	\$110	\$25,454
TOTAL:	307	284	4,863	1,773	6,636	3,386	852	\$233,235	\$22,629	\$255,864

TABLE 14: CACAO FARMER FIELD SCHOOLS

Target Zone	number of FFS planned	number of FFS created	number of FFS members			number of farmers receiving planting material	number of farmers receiving fertilizer/pesticides	value in USD of agricultural inputs received		
			men	women	total			through direct distribution	through voucher programme	total
Target Zone 1: Desroches / Limbé	8	8	144	56	200	26		\$4,792		\$4,792
Target Zone 2: Camp Coq / Marmelade	24	24	445	155	600	138		\$21,549		\$21,549
<i>Target Zone 3: La Suisse /Bord de Mer</i>										
Target Zone 4: Grison-Garde / Robillard	48	48	832	393	1225	938		\$38,083		\$38,083
Target Zone 5: Limonade / Terrier Rouge (Bois de Lance)	8	8	164	37	201	64		\$8,230		\$8,230
Target Zone 6: Sainte Suzanne / Gens de Nantes	24	24	405	195	600	106		\$16,097		\$16,097
<i>Target Zone 7: Bayaha / Maribaroux</i>										
Target Zone 8: Borgne / Port-Margot	48	48	772	435	1,207	600		\$25,344	\$110	\$25,454
TOTALS:	160	160	2,762	1,271	4,033	1,872		\$114,094	\$110	\$114,204

TABLE 15: BANANAS

Target Zone	number of FFS planned	number of FFS created	number of FFS members			number of farmers receiving planting material	number of farmers receiving fertilizer/pesticides	value in USD of agricultural inputs received		
			men	women	total			through direct distribution	through voucher programme	total
Target Zone 1: Desroches / Limbé	7	7	145	26	171	87	39	\$7,278	\$319	\$7,597
<i>Target Zone 2: Camp Coq / Marmelade</i>										
Target Zone 3: La Suisse /Bord de Mer	16	14	185	37	222	43	75	\$11,742	\$506	\$12,248
Target Zone 4: Grison-Garde / Robillard	6	5	71	44	115	43	105	\$12,607	\$66	\$12,673
<i>Target Zone 5: Limonade / Terrier Rouge (Bois de Lance)</i>										
<i>Target Zone 6: Sainte Suzanne / Gens de Nantes</i>										
<i>Target Zone 7: Bayaha / Maribaroux</i>										
<i>Target Zone 8: Borgne / Port-Margot</i>										
TOTALS:	29	26	401	107	508	173	219	\$31,628	\$891	\$32,519

TABLE 16: MAIZE & BEANS FARMER FIELD SCHOOLS (SPRING SEASON/1ST CYCLE⁶)

Target Zone	number of FFS planned	number of FFS created	number of FFS members			number of farmers receiving planting material	number of farmers receiving fertilizer/pesticides	value in USD of agricultural inputs received		
			men	women	total			through direct distribution	through voucher programme	total
<i>Target Zone 1: Desroches / Limbé</i>										
<i>Target Zone 2: Camp Coq / Marmelade</i>										
<i>Target Zone 3: La Suisse /Bord de Mer</i>										
Target Zone 4: Grison-Garde / Robillard	24	20	338	154	492	Not available	Not available	\$27,798		\$27,798
<i>Target Zone 5: Limonade / Terrier Rouge (Bois de Lance)</i>	8	2	41	9	50	Not available	Not available	\$7,497		\$7,497
<i>Target Zone 6: Sainte Suzanne / Gens de Nantes</i>										
Target Zone 7: Bayaha / Maribaroux	16	9	191	21	212	Not available	Not available	\$13,779		\$13,779
<i>Target Zone 8: Borgne / Port-Margot</i>										
TOTALS:	48	31	570	184	754	Not available	Not available	\$49,074		\$49,074

⁶ Note that activities for the most recent maize/beans season were cancelled due to the drought. AVANSE distributed some materials, but farmers did not plant.

TABLE 17: RICE FARMER FIELD SCHOOLS

First cycle:

Target Zone	number of FFS planned	number of FFS created	number of FFS members			number of farmers receiving planting material	number of farmers receiving fertilizer/pesticides	value in USD of agricultural inputs received		
			men	women	total			through direct distribution	through voucher programme	total
Target Zone 1: <i>Desroches / Limbé</i>										
Target Zone 2: <i>Camp Coq / Marmelade</i>										
Target Zone 3: <i>La Suisse /Bord de Mer</i>										
Target Zone 4: Grison-Garde / Robillard	4	4	71	9	80	80	80	\$5,286	\$1,629	\$6,916
Target Zone 5: <i>Limonade / Terrier Rouge (Bois de Lance)</i>										
Target Zone 6: <i>Sainte Suzanne / Gens de Nantes</i>										
Target Zone 7: Bayaha / Maribaroux	16	16	277	43	320	320	320	\$11,286	\$8,326	\$19,612
Target Zone 8: <i>Borgne / Port-Margot</i>										
TOTALS:	20	20	348	52	400	400	400	\$16,573	\$9,955	\$26,528

Second cycle:

Target Zone	number of FFS planned	number of FFS created	number of FFS members			number of farmers receiving planting material	number of farmers receiving fertilizer/pesticides	value in USD of agricultural inputs received		
			men	women	total			through direct distribution	through voucher programme	total
Target Zone 1: <i>Desroches / Limbé</i>										
Target Zone 2: <i>Camp Coq / Marmelade</i>										
Target Zone 3: <i>La Suisse /Bord de Mer</i>										
Target Zone 4: Grison-Garde / Robillard	6	5	87	14	101	101	15	\$5,036	\$967	\$6,003
Target Zone 5: <i>Limonade / Terrier Rouge (Bois de</i>										
Target Zone 6: <i>Sainte Suzanne / Gens de Nantes</i>										
Target Zone 7: Bayaha / Maribaroux	44	42	695	145	840	840	218	\$16,830	\$10,706	\$27,536
Target Zone 8: <i>Borgne / Port-Margot</i>										
TOTALS:	50	47	782	159	941	941	233	\$21,866	\$11,673	\$33,539

ANNEX C: THE EFFECTS OF THE DROUGHT

[see report beginning next page]



Climatic causes and economic effects of recent drought-affected wet seasons in the North and Northeast Departments of Haiti

September 2014

Key Messages

- The North and Northeast Departments of Haiti have faced two consecutive wet seasons affected by severe drought. These drought-affected seasons, from August to December 2013 and from April to September 2014 respectively, each saw crisis-level Crop Soil Water Index ratings of less than 10% of Water Holding Capacity, Water Requirement Satisfaction Index ratings of Poor and/or Failing (<70%), and multiple consecutive pentadal rainfall averages at 30-50% of historic same-week means over the past 10 years during key growing periods. Each of these droughts developed as an anomaly based on comparisons to ten year historic averages and to data from the prior year.
- 261 farmers of rice, beans, corn and banana were surveyed to better understand experiences and economic effect during and after these drought-affected seasons. In areas lacking irrigation infrastructures and other risk mitigation systems farmers faced significant hardship; the majority lost 100% of crops planted including both financial investment and expected harvest returns.
- Secondary economic effects of these two lost seasons were noted in cross-border population movements, increased systemic hunger, highly reduced ability to meet school payments for children, and increased pressures on other industries including animal husbandry, fishing, and charcoal production.
- Many families were found to have liquidated family assets, including livestock, causing the market price of livestock to fall. Increased debt was a common effect, borrowed from both formal and, more often, informal sources.
- Interviews with officials from the Ministries of Agriculture and of the Environment show that seasonal drought may be presenting a greater risk, as a trend, over time. It is highly recommended that work to increase drought risk mitigation infrastructures and schemes such as irrigation systems, water storage, data collection, and farmer information access be continued in collaboration with the Government of Haiti.

Economic Effects of Recent Droughts on Agriculture in North and Northeast Haiti

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Introduction

Over the course of the 2014 winter and spring growing and harvest seasons in north and northeastern Haiti, rainfall occurred at levels below long-term averages, with various weeks of acute dryness. As a result, each wet season terminated prematurely, with the crops of small-holder farmer unable to reach harvest stage. Farmers pulled bean crops early to salvage returns as food crops, but numerous other crop systems including corn, rice, and to some extent banana crops, failed entirely.

The purpose of the research reported in this paper is to understand the meteorological events behind these extended drought conditions, the experience of the farmers during the drought-affected wet seasons, and the subsequent economic effects of the drought. This paper highlights the vulnerability experienced by rural farmers in Haiti's North and Northeast Departments, and recommends risk-mitigation strategies and infrastructure to better protect the rural farmers of this region against such volatility manifesting in extended dry spells. This work bears on the ideas of vulnerability to shocks, resilience and risk mitigation, food security, population migration, and public health.

Methods

Two phases of research were completed.

- 1) **Meteorological Data:** this research relies on data from the Famine Early Warning System, the Coordination Nationale pour la Sécurité Alimentaire (CNSA) of Haiti, NASA, and the USGS to gain an understanding of the meteorological events of the consecutive droughts and the subsequent soil and crop characteristics. Attention was paid to pentadal rainfall (RF), pentadal Crop Soil Water Indexes (SWI), pentadal crop Water Requirement Satisfaction Indexes (WRSI), and comparisons to average precipitation in corresponding weeks over the past ten years.
- 2) **Field Study:** 261 farmers across four geographic zones and four crop systems were surveyed to understand experiences during the past two wet seasons and subsequent economic effects and behaviors. These farmers represent AVANSE program beneficiaries based in or around the regions of Ferrier, Bord du Mer Limonade, Caracol, and Fort Liberty who cultivate rice, beans, corn, and bananas. The survey, administered with the help of full-time AVANSE field agents and local representatives, contained both multiple choice and free-response sections, allowing for the collection of both quantitative and qualitative data. Semi-structured interviews were also held with agronomists and technical specialists from the AVANSE markets and field production teams, and with the Departmental representatives of the Ministry of Agriculture and of the Ministry of the Environment for the North and Northeast Departments.

Results

Section 1: Meteorological Data

Meteorological data confirmed the existence of drought conditions and allowed insight in to the nature of the droughts and of farmer vulnerabilities. Analysis of the indexes mentioned above showed unexpected, below-average precipitation and severe soil dryness during critical crop growth stages. Interestingly, these drought periods did not apply to the entire or even a significant portion of the crop cycle; estimated soil dryness reached critical lows for final weeks of the growing season in each case. Therefore the relatively brief lack of precipitation, along with high rates of evaporation and non-percolating clay rich soils, was enough to wilt and destroy many crop systems in the highly vulnerable rain-fed agricultural landscape of north and northeast Haiti. Given the poverty of farmers in this region, the investment (often made through loans), the risk required in these value chains, and the subsequent loss of both income and invested capital following crop ruin, one would expect to find that affected farmers faced significant hardship and subsequent distressed behaviors and experiences.

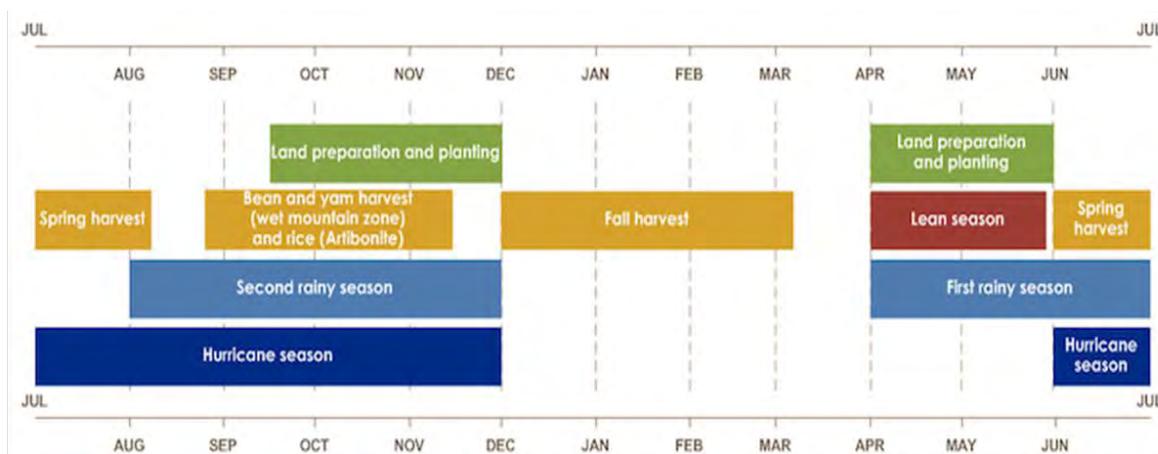


Figure 1.1: The above chart illustrates the two annual rainy, or wet, seasons, along with the seasonal Spring and Fall harvests.

Section 1A) Second Wet Season of 2013, August through December:

Rainfall for the season began low, and held at below historic averages, from August to late November. This created a distressed but somewhat manageable scenario for rural rain-fed agriculture. However rainfall decreased suddenly and significantly in mid-November starting a trend which continued through all of December, in effect terminating the wet season early, wilting almost-mature crops, and decimating the fall harvest.

The charts on the next page illustrate rainfall and soil moisture levels experienced in this second rainy season of 2013. Note the seasonal rainfall as compared to historical averages over the past 10 years. Rainfall throughout the first four months of the season held at acceptable levels, though were below historic averages. In late November and December rainfall fell significantly to near zero, and remained near zero, averaging less than 10% of historic averages from late November through late January of the following year (figures 1.2⁷).

⁷ Famine Early Warning System Network (FEWS NET), a service of the USGS, NASA, and USAID.



Figure 1.2: The charts above show pentadal (five-day period average) rainfall, in red, over the past 10 years (at top) for the North Department (left) and the Northeast Department (right). The chart set at middle shows the weekly rainfall data for 2013 (green) superimposed on these first data, and the chart set at the bottom shows the same 10-year averages with the 2014 data superimposed. Severely low rainfall compared to historical averages is visible throughout the second wet season of 2013, from November through December, and continuing through January 2014. This, in effect, constituted the premature termination of the second 2013 growing season and an early start for the 2014 fall harvest.

During this period, the localized Soil Water Index showed extended periods in which soils held less than 10% of their Water Holding Capacity (figure 1.3 below), a level designating “wilting” conditions. These conditions took form following the first week of November, 2013, and lasted through December and in to the usually dry fall harvest season.

This early lack of precipitation continued into the harvest season, when the divergence between current rainfall and the 10-year average rainfall over the same period diminished and the moisture level reached a dry-season norm. This shows an early termination of the second wet season of 2013 in the agriculturally-based North and Northeast Departments of Haiti. See figure 1.3 on the next page.

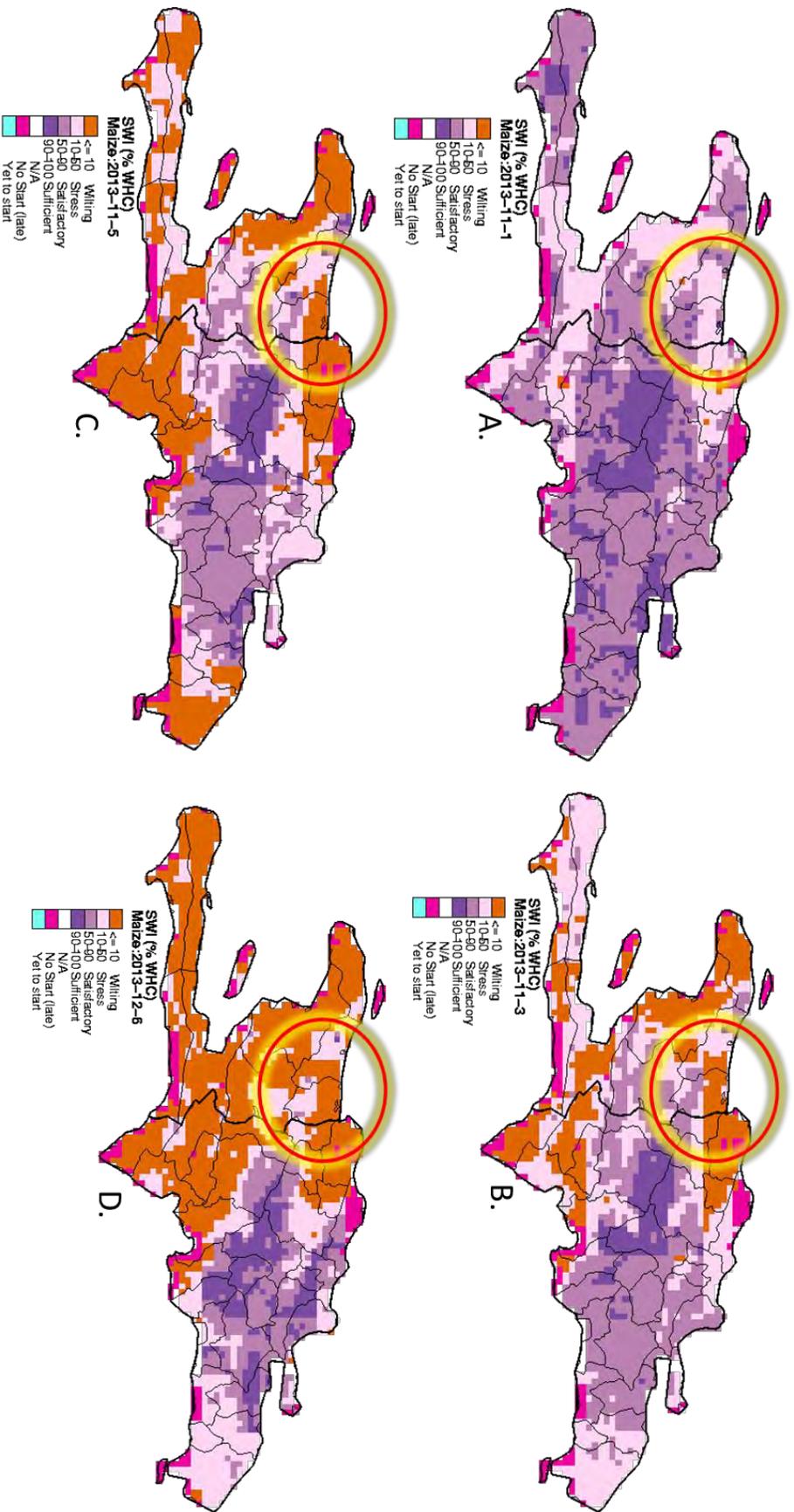


Figure 1.3: The above maps show the Crop Soil Water Index (SWI) for various pentadal periods, or 5-day averages, over November and December of 2013. These are, as shown, the 1st pentadal period of November 2013 (A), the 3rd pentadal of November 2013 (B), the 5th pentadal of November and continue through the end of the year. One can see the drought conditions develop following the first week of November, and continue through the end of the year. These maps show that the majority of the Northeast Department, part of the North Department, and all of the AVANSE implementation zones' soils were experiencing less than 10% of Water Holding Capacity (% WHC), denoted as "Willing" conditions in terms of agricultural feasibility, throughout the period. This trend continued through January 2014 without respite.

By the last week of December, as dry conditions continued, the Water Requirement Satisfaction Index (WRSI) showed numerous consecutive weeks below 50%, as this measure of (water required / water available) reached “Failure” levels throughout the North and Northeast Departments (figure 1.4). These WRSI measures showed variance from regional median WRSI measurements of up to 50%, or half, of long term averages (figure 1.5). Lastly, WRSI in December 2013 measured as up to 50% of WRSI for the same period of the prior year (figure 1.6). As can be seen in this last map, much of Hispaniola received more rainfall than the previous year while the North and Northeast Departments received significantly less.

It may be noted that parts of the Dominican Republic also experienced drought conditions, in terms of the Soil Water Index and the Water Requirement Satisfaction Index measurements. However irrigation systems are used in the majority of formal farming systems in the Dominican Republic; these systems have been a focus of long-term public and private investment throughout the 20th century⁸. As the figures here measure satisfaction of required moisture only through rainfall, it can be assumed that more farms in the Dominican Republic met farming need through the storage of past rainfall, or irrigation.

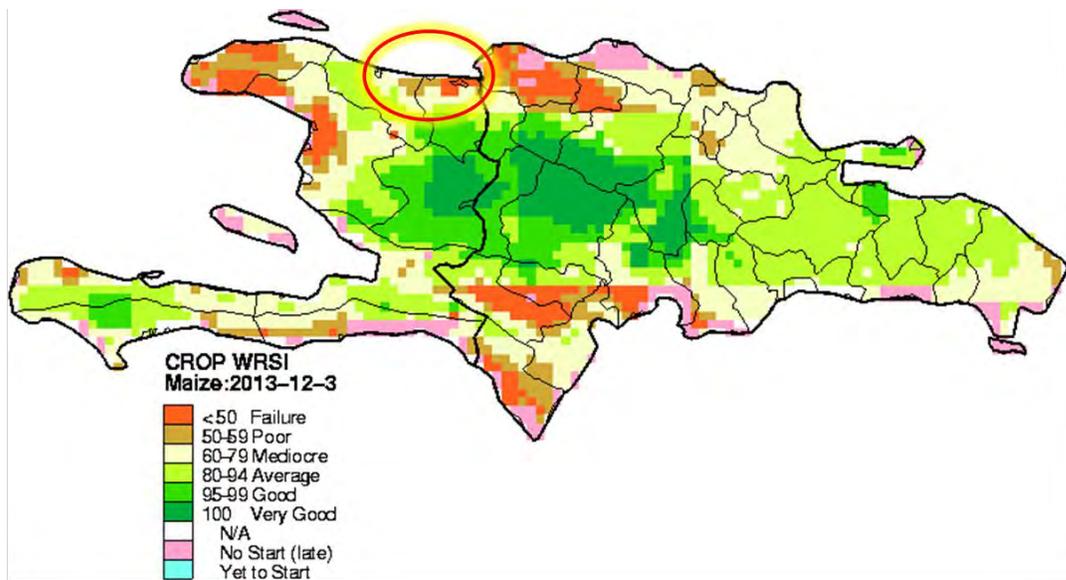


Figure 1.4: WRSI, or the Water Requirement Satisfaction Index, which calculates the amount of water available as a percentage of the amount of water required for maize crops, during the last week of December 2013.

8 Secretaria de Estado de Medioambiente y Recursos Naturales (2004). "Primera Comunicacion Nacional"(PDF). UNDP. p. 44.

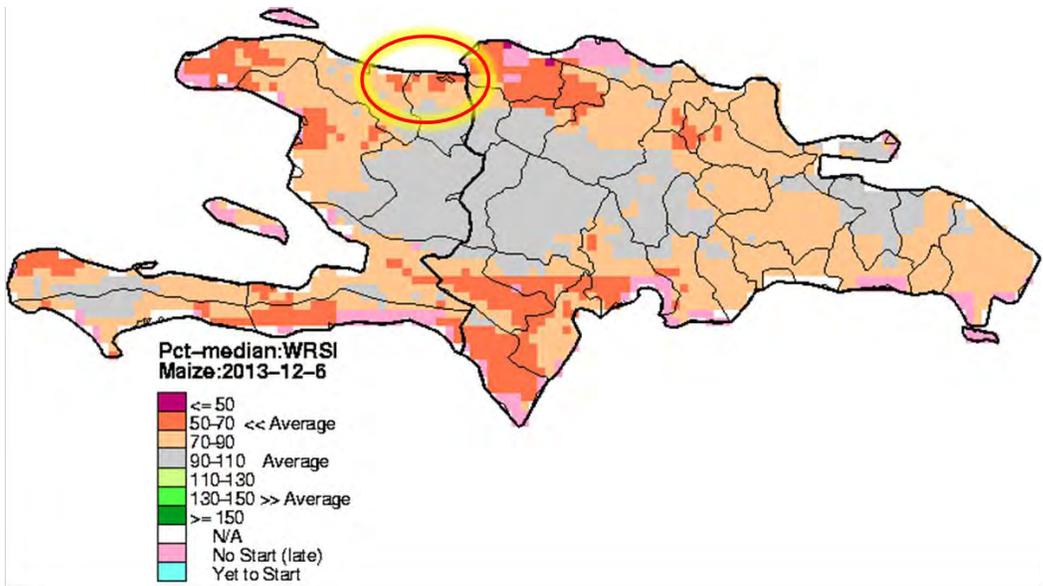


Figure 1.5: This Water Requirement Satisfaction Index (WRSI) anomaly chart shows that the North and Northeast Departments experienced unusual drought conditions, with the (amount of water required to grow maize / amount of water available) formula for December 2013 found to be 50-70% of the historic median for the same period of time over the past 10 years.

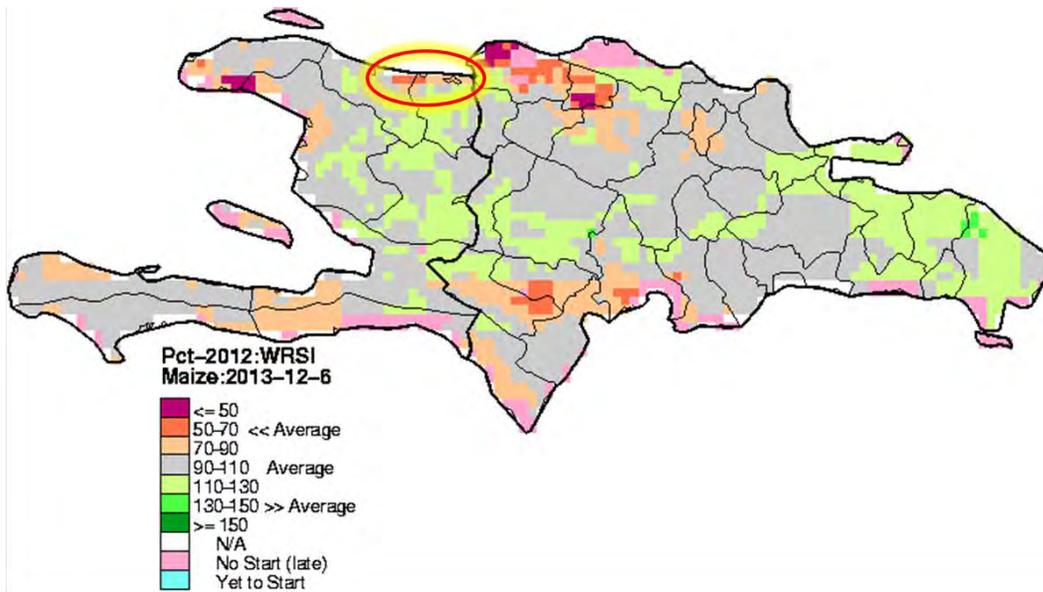


Figure 1.6: This Water Requirement Satisfaction Index (WRSI) map shows the WRSI of December 2013 as a percentage of the same period the year before, with the North and the Northwest faring poorly compared to most of Haiti. The Central Plateau, for example, showed an increase in WRSI over the same period of the past year.

It is clear that December of 2013 saw unexpectedly high levels of drought in the North and Northeast Departments of Haiti which made mature crop cultivation impossible in the context of rain-fed agriculture. The maps below show the amount of actual rainfall experienced in the region throughout December 2013.

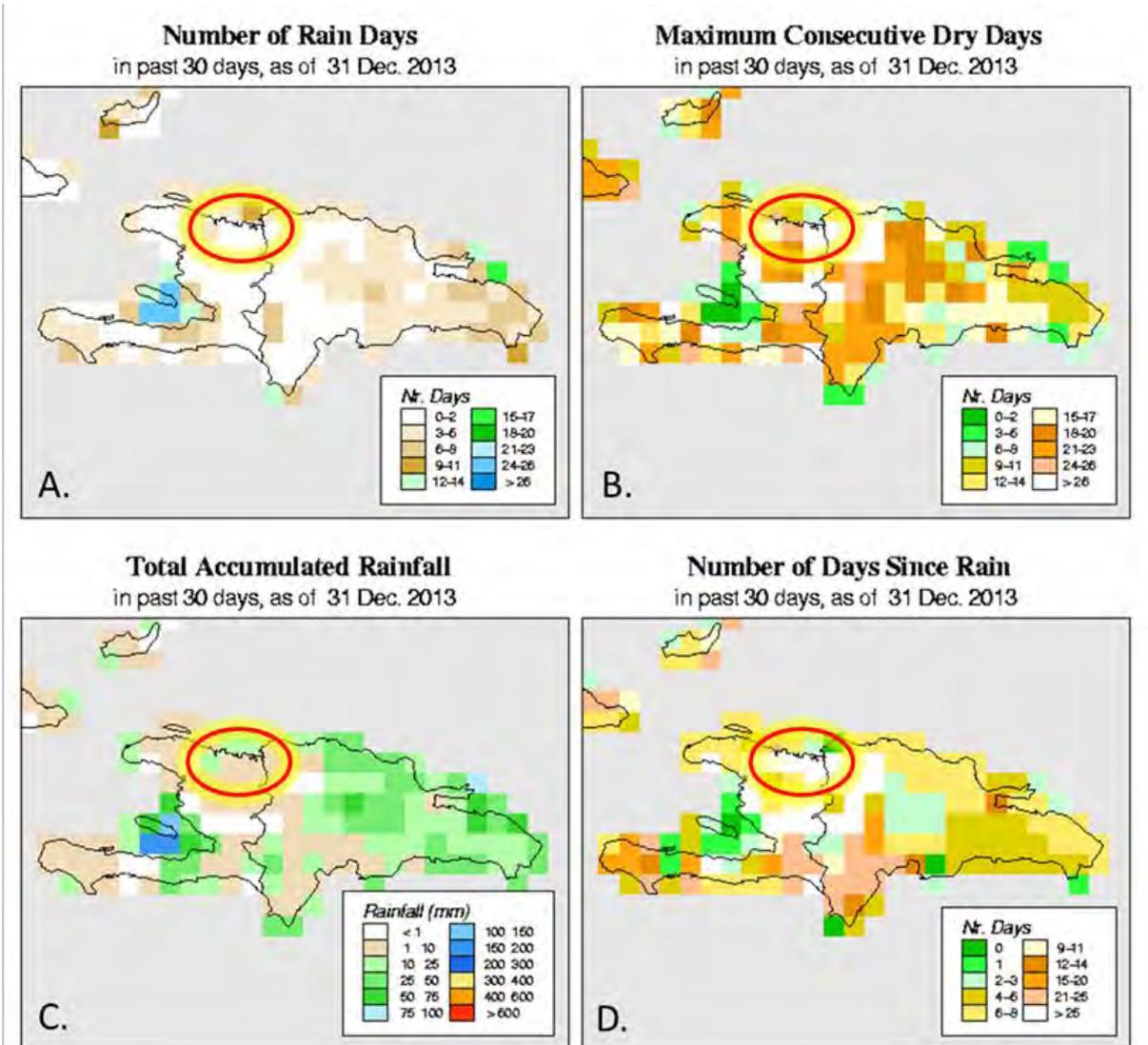


Figure 1.7: These maps show 30-day historic rainfall data prior to December 31, 2013. The North and Northeast Departments saw only 0 to 2 days with rain through the entire month (A), with the number of consecutive dry days recorded as being greater than 25 days (B). Total accumulated rainfall in each Department was less than 10mm during this period (C); the map shows that as of December 31, 2013, the region had seen over 25 days without rain (D).

Section 1B) First Wet Season of 2014, April through December:

Following the severe drought of the second half of 2013, the first wet season of 2014 showed early promise. The annual rains of late May and early June, which traditionally provide the greatest precipitation of the year by far, were abundant, and outpaced the average rainfall over the past ten year period. These heavy rains reduced fears of a second consecutive drought-affected wet season, and many farmers invested in agricultural inputs such as seed purchase and the procurement of plowing

services. Unlike the earlier second wet season of 2013, seasonal rainfall did not begin at below-average levels.

In early June, rainfall began to diminish significantly. This corresponded with the normal post-planting decrease in precipitation over the same period annually. However, rainfall continued to decrease, falling to near 50% of historic weekly averages and remaining at or below that measure for every pentadal period of the remainder of the season, apart from two pentadal periods in late June and early July in which precipitation slightly outpaced ten-year averages per five-day period. A pattern emerged in which rainfall was less, and at times far less, than 50% of ten-year averages per pentadal period for multiple consecutive periods through June, July, and August (figure 2.1).

While rainfall during the planting period of the season had been abundant, this unusual and unexpected lasting dry-weather trend during the end of the growing season again caused wholesale loss of crops as soil moisture fell to wilting levels. The events of this first wet season of 2014 gravely illustrate the level to which existing farmer vulnerability is enhanced by lack of irrigation and water storage infrastructures. While the initial weeks of the wet season experienced very heavy rainfall, this water was not able to be stored to a significant extent. As dryer conditions emerged, existing soil moisture evaporated and farmers' livelihoods suffered.

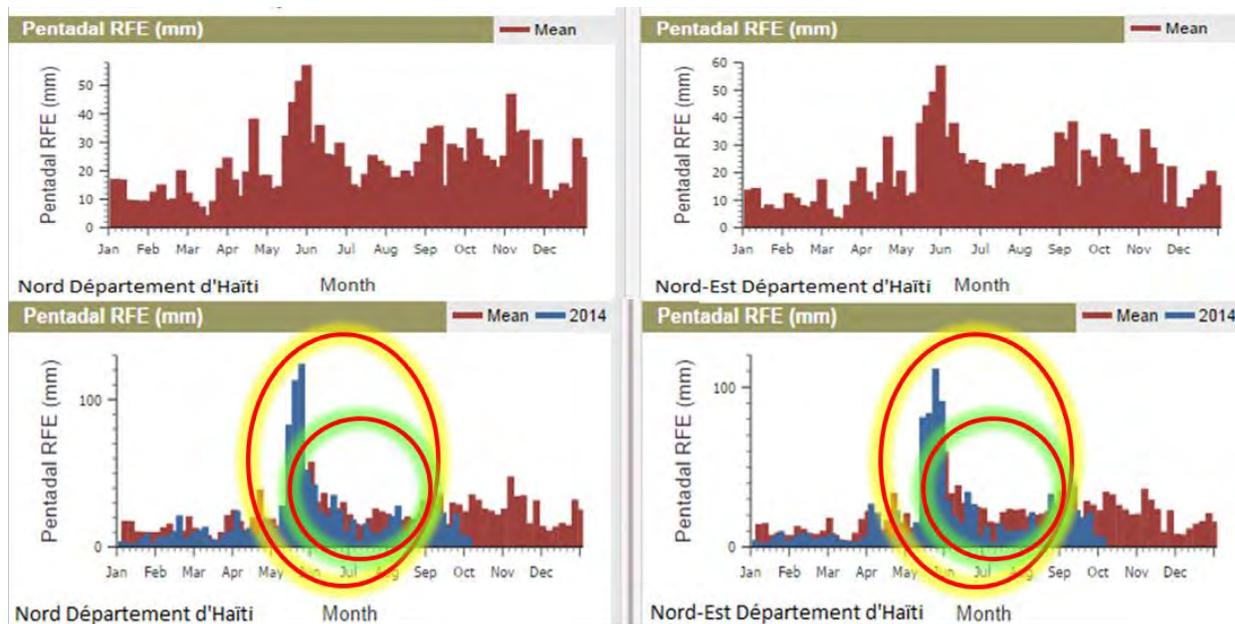


Figure 2.1: The charts above show pentadal (five-day period average) rainfall, in red, over the past 10 years (at top) for the North Department (left) and the Northeast Department (right). The chart set at the bottom shows the same 10-year averages with the 2014 data superimposed. Severely low rainfall compared to historical averages is visible in the first wet season of 2014, from the beginning to the middle of June and then through August, following a period of markedly high rainfall at the beginning of the season from late May to early June. In the context of rain-fed agriculture, this stress was enough to wilt existing bean, corn, rice and banana crops, and again constituted the premature termination of the growing season. The Northeast Department, at the bottom right, was especially affected by these unusually dry conditions. It is of note that the increased rainfall of May was of little use to farmers during June and July in the context of rain-fed agriculture.

The volatility in rainfall was of particular note in this drought-affected first wet season of 2014. As seen below in the Crop Soil Water Index maps (figure 2.2) of May, June, and July, soil water levels went from

being highly abundant, following above average rainfall in May, to below 10% of capacity in June and July again causing the withering of crops as the growing season ended prematurely. This aspect of surprise, given the unlikely instance of repeated early season termination, underscores the region's vulnerability to weather-related shocks. The fact that most farmers later surveyed lost 100% (or nearly 100%) of their crops during this cycle, even as May experienced rainfall well above the ten-year average, highlights the vulnerability innate to rain-fed agriculture when farmers lack the infrastructures necessary to store and manage water supply and irrigation.

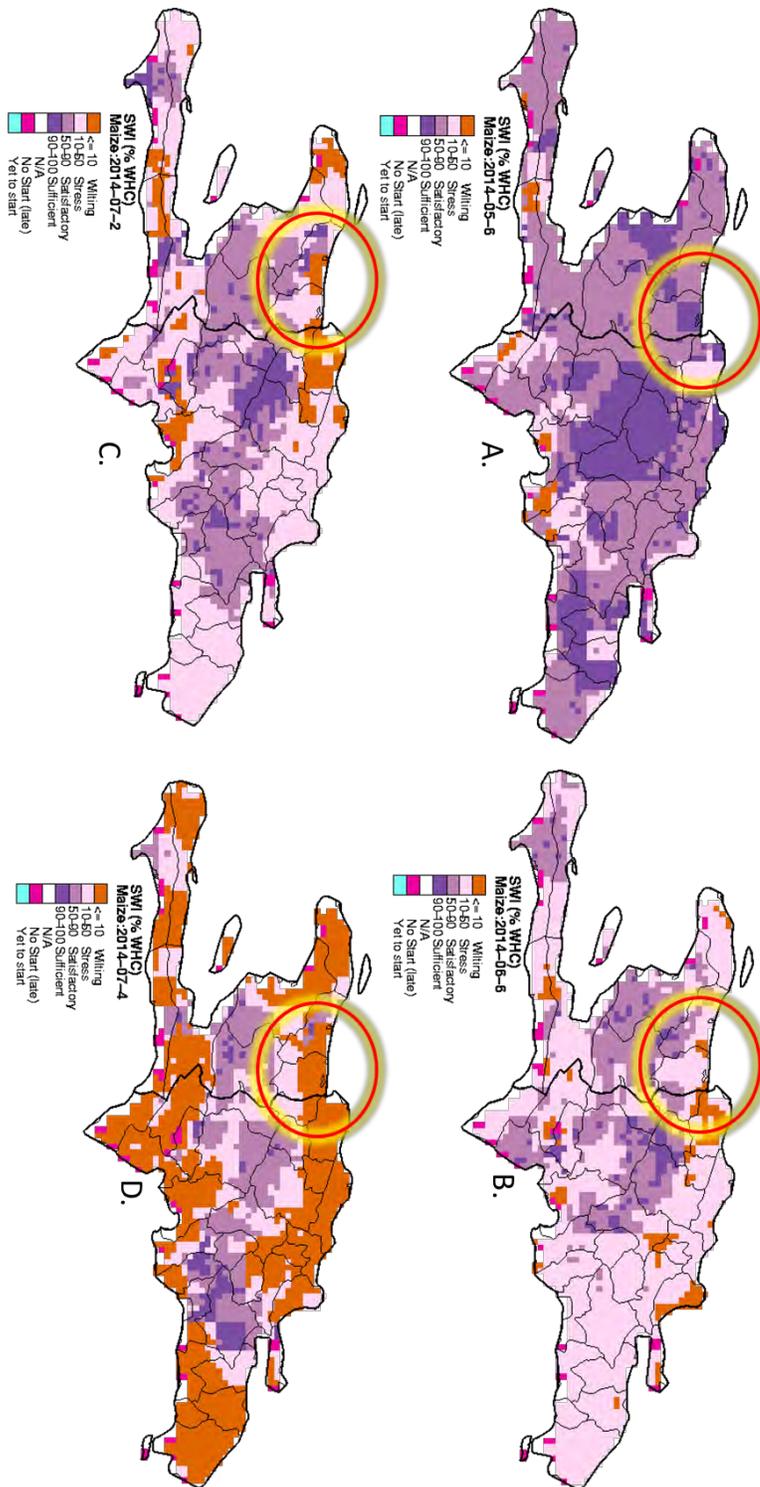


Figure 2.2: The above maps show the Crop Soil Water Index (SWI) for various pentadal periods, or 5-day averages, from May to July of 2014. Those shown are the 6th or last, pentadal period of May (A), the 6th or last pentadal of June (B), the 2nd pentadal of July (C), and the 4th pentadal period of July (D). One may note that in May (A) crops were especially well irrigated in the North and Northeast Departments. These regions then experienced high volatility in precipitation. Drought did not become evident until late June. By mid-July the Soil Water Indexes were showing Water Holding Capacity of below 10% and were at “Wilted” conditions, throughout the AVANSE regions, in a trend which continued through August and in to the traditional spring harvest season.

The maps below (figures 2.3–2.5) show the Water Requirement Satisfaction Index data for two periods in July of 2014. These maps illustrate the WRSI (2.3), the WRSI of the period as a percentage of historical mean (2.4), and the WRSI as compared to the same periods of the year prior (2.5). In each of these maps it is evident that drought conditions came on rapidly in July, and were unexpected as anomalies when compared to the historic mean and the prior year’s data. Also of note is the intense

severity of drought experienced particularly in the AVANSE target zones.

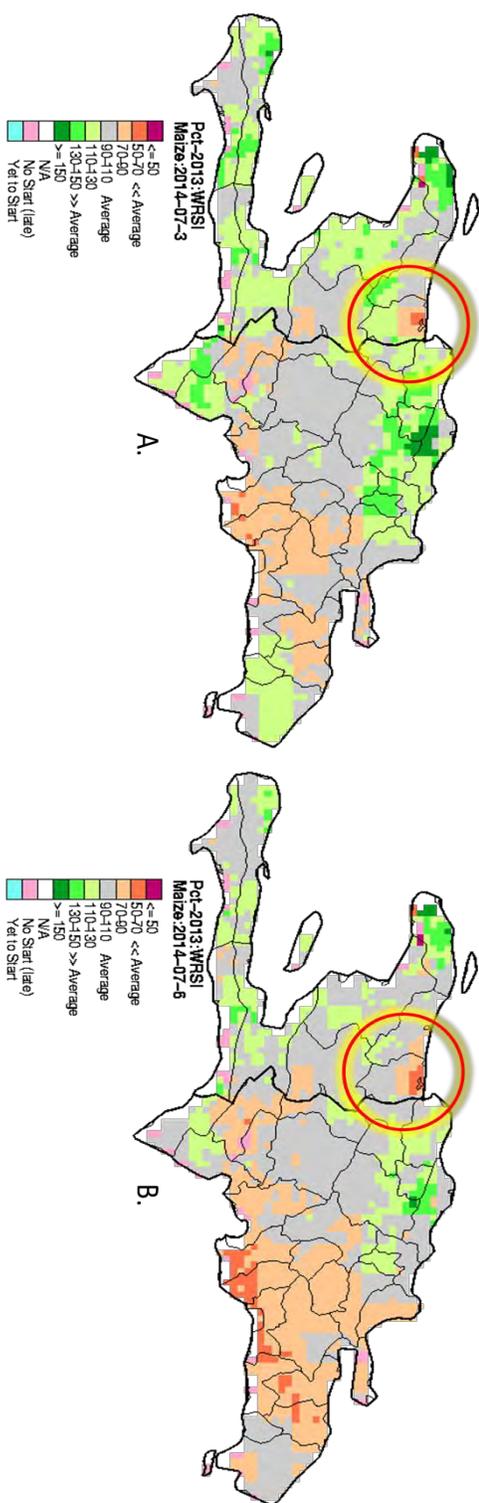


Figure 2.5: These Water Requirement Satisfaction Index (WRSI) maps show the WRSI of mid July 2013 (A), when drought conditions first became apparent, and late July 2013 (B), when the drought began to cause extensive crop damage as a percentage of the same period of the same year before. This sudden, unexpected late-season drought was experienced most severely in the regions of the North and the Northwest Departments as compared to the rest of the country.

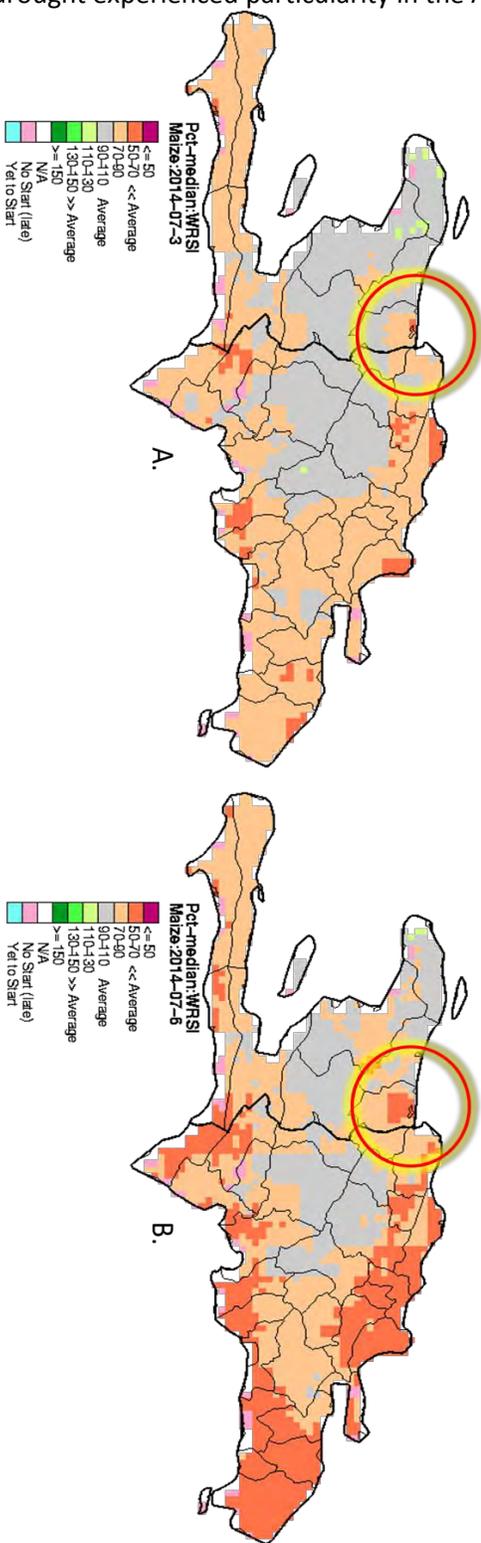


Figure 2.4: These Water Requirement Satisfaction Index (WRSI) anomaly maps show conditions as compared to the 10-year mean WRSI during the same period. The North and Northeast Departments experienced sudden and unusual drought conditions, with the (amount of water required to grow maize / amount of water available) formula for late July 2014 (B) found to be nearing 50% of the historic median for the same period of time over the past 10 years. The drought developed suddenly, as can be seen here, which is notable in the distinct variance in historical anomaly between mid July (A) and late July (B) 2014. Again this anomaly was focused intensely, in Haiti, in the North and Northeast Departments. While similar anomalies were found throughout the Dominican Republic, greater proliferation of modern irrigation and water-storage infrastructures satiated agricultural needs.

It has been shown that the drought of June 2014 came suddenly and dramatically, unlike the drought of late 2013 in which low precipitation levels were visible throughout the wet season. Actual rainfall data was gathered for the 2014 first wet season period, and is presented in the maps below (figure 2.6)

The period showed a drought scenario different from that of late 2013. Rainfall data shows that the 2014 drought period did, unlike the earlier drought, see significant rainfall in the North and Northeast Departments. This rainfall, however, still half of historical averages, left little moisture which evaporated rapidly in the hot summer sun. Given the ubiquity of solely rain-fed agricultural practices, this rainfall was not stored or managed.

It is of note that the North and Northeast region experienced more rain than in the previous 2013 drought period. However, rainfall in the North and Northeast Departments was among the lowest in the country. This led to dryer soils and higher instances of crop failure, as seen in the maps and charts above, in part because this area is one of the hottest and most arid regions in Haiti. It thus experienced extreme evaporation of soil moisture, which is intrinsically poor due to high clay content. These rainfall maps highlight this region's vulnerability to drought, even given some significant amount of rainfall, due to the lack of existing irrigation and water storage infrastructures. It is of note that the north and northeast regions experienced dryer conditions than most.

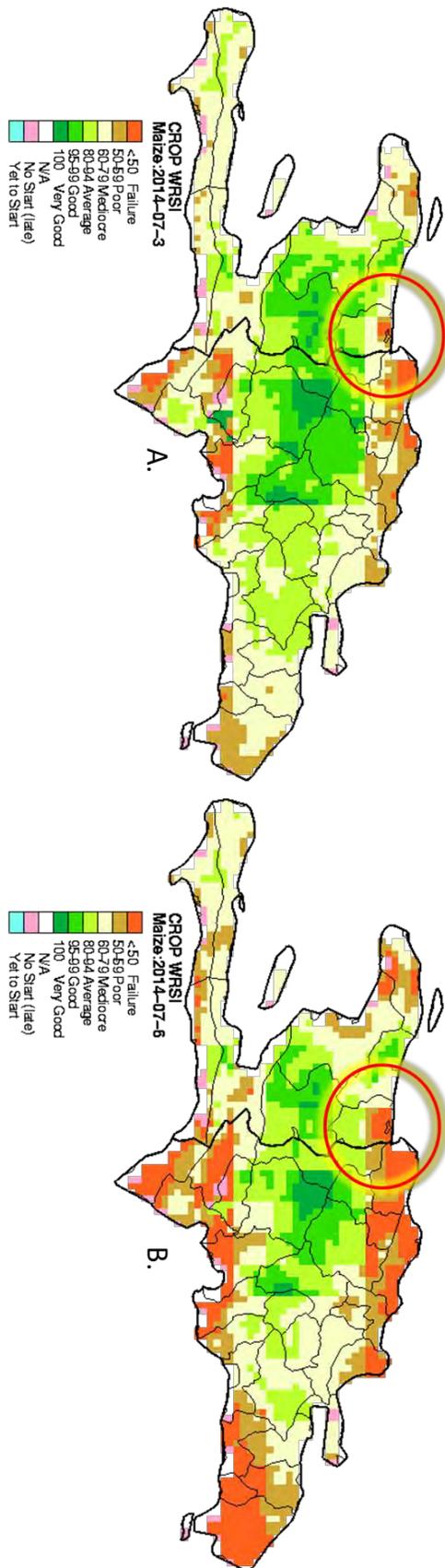


Figure 2.3: WRSI, or the Water Requirement Satisfaction Index, which calculates the amount of water available as a percentage of the amount of water required for maize crops, is mapped above. These two maps are useful as they compare A) the WRSI of the 3rd pentadal of July 2014 with B) WRSI for the 6th pentadal, or last five day period average, of July 2014. By mid-July precipitation had fallen compared to long term averages in the same period, the soil had begun to dry, and a < 50 WRSI in the North and Northeast Departments, signifying crop failure, became evident. The sharp, sudden decrease of rainfall began in early July and continued. By the end of July both Departments experienced wholesale crop failure due to low soil water levels. These maps are also notable in that the especially negative impact of the drought in the North and Northeast Departments of Haiti is evident.

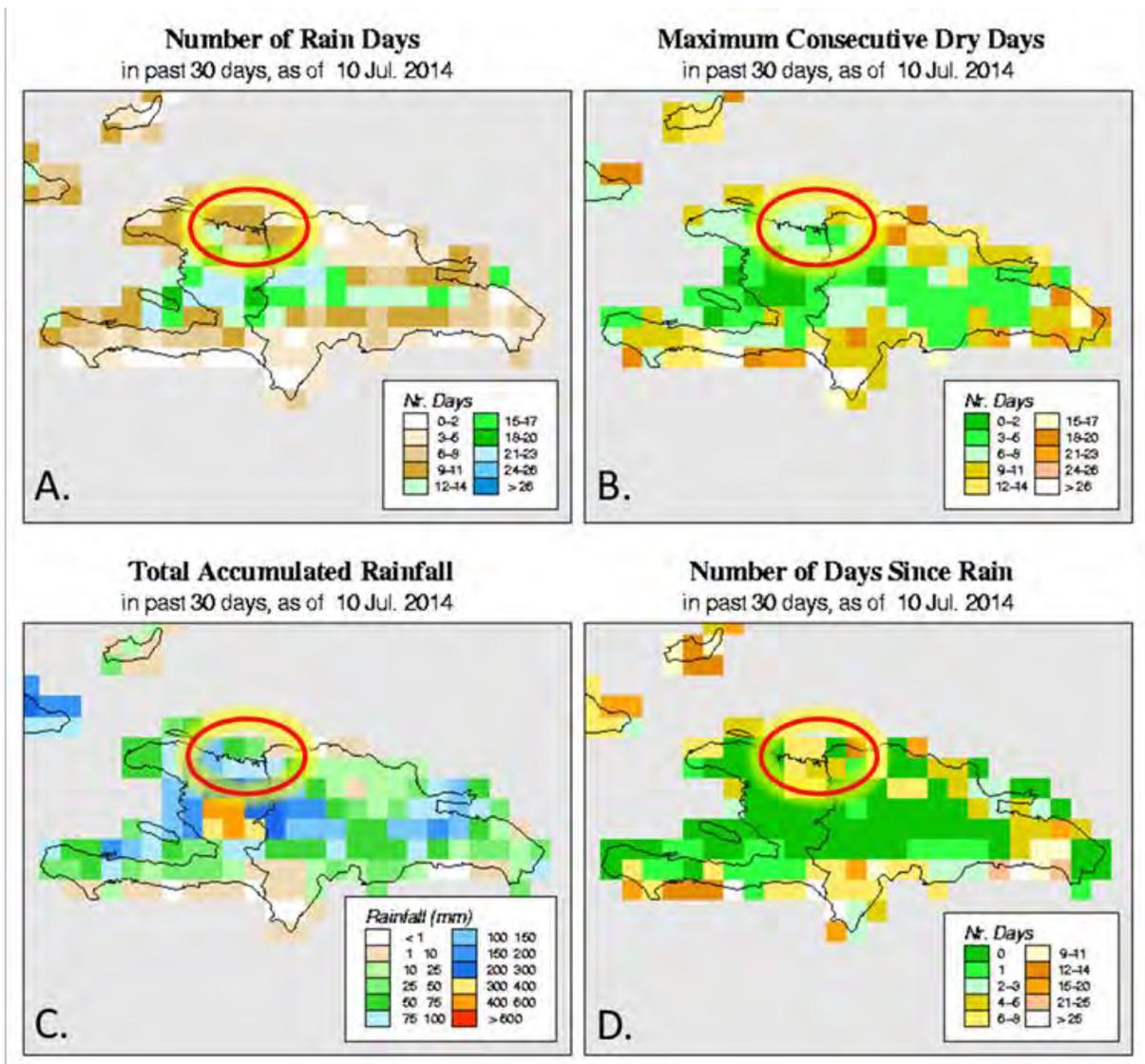


Figure 2.6: The maps above show rainfall data for the 30-day period prior to July 10, 2014. This was one of the driest periods of the first wet season drought of 2014. Unlike the previous drought, however, some measurable amount of rain did fall. Yet when paired with the intense summer sun and resulting evaporation of soil moisture, this precipitation was insufficient to prevent crop failure. These maps show that the North and Northeast Departments saw between 6 and 8 days with rain throughout the 30-day period (A), with the number of consecutive dry days recorded as from 3 to 8 days (B). Total accumulated rainfall in the regions was estimated to be between 75 and 100 mm—still among the lowest in the country. The map shows that as of July 10, 2014, the region had seen only 4 to 9 days since rain (D).

Section 2: Economic and Behavioral Effects of Consecutive Drought-Affected Wet Seasons on Rural Farmers in North and Northeast Haiti

This analysis relies on quantitative and qualitative data on the effects of these two drought periods gained from a survey of 261 rural farmers (chiefly cultivating beans, rice, corn, bananas, or a combination of these crops). These farmers constitute a subset of AVANSE beneficiary farmers, and indeed can be viewed as a representative sample of AVANSE beneficiary farmers who lack access to irrigation infrastructure. While some AVANSE farmers do have partial access to irrigation systems, the farmers surveyed do not.

Section 2.1) Quantitative Data

The objectives of quantitative survey administration were to gain data toward the following:

- 1) To understand, or confirm, if farmers had faced drought conditions.
- 2) To understand how farmers' crops fared over the past two harvest seasons.
- 3) To understand what decisions farmers made in terms of planting and investments due to concerns of drought.

Cumulative Results:

Of the 261 farmers surveyed, 59 (23%) were women and 202 (77%) were men. Of these, 227 (87%) respondents disclosed how large their "gardens", or farm space, were; these farm plots averaged 1.07 hectares in size. Of farmers surveyed, the following cultivate each of the AVANSE central crops: 81 (31%) cultivate rice, 133 (51%) cultivate beans, 40 cultivate bananas, and 165 (63%) cultivate corn (some farmers cultivate more than one crop). A very small number of secondary crops included peanuts and sweet potato, however all farmers are included in the figures above through the crops on which they focus centrally. From a regional standpoint, 136 (52%) were from the extended Caracol area, 25 (10%) were from the Limonade area, 49 (19%) were from the Fort Liberty area, and 51 (20%) were from the Ferrier area.

Objective 1: Did farmers experience drought conditions?

Three questions were administered to clarify farmers' experiences during the past two growing seasons.

1. When asked if they had experienced sufficient, somewhat sufficient, or insufficient rainfall to sustain their farming practices over the past two seasons, 246 farmers (94%) indicated that they had experienced insufficient rainfall, with 11 (4%) indicating somewhat sufficient rainfall, and 4 (2%) giving no answer.
2. When asked if the weather over the period had been too dry to sustain farming practices, had been moderate, or had been unusually wet, 256 (98%) indicated that the weather had been too dry to sustain farming, with 2 (1%) indicating a moderate weather, and with 3 (1%) giving no answer.
3. When later asked if they had faced difficulty farming their crops because of drought conditions in each of the past two growing seasons, 254 (97%) answered in the affirmative, with 1 (.4%) indicating no difficulty, and with 6 (2%) giving no answer.

Objective 2: How did the farmers' crops fare over the past two seasons?

1. When asked if at least some harvest had been lost in each of the past two seasons, 249 (95%) of farmers responded in the positive, with 4 (2%) stating that they had lost no crops in either of the past two seasons, and with 8 (4%) not responding.
2. When asked to rate their cumulative experience in harvesting over the past year, 146 (56%) chose to respond that they had lost all of their harvest, 90 (34%) indicated that they had experienced a bad year in terms of harvest, 5 (2%) stated that they had experienced moderate harvests, and 4 (2%) indicated they had experienced good harvests.
3. When asked a qualitative question regarding the percentage of harvest lost over the past two seasons, a number of farmers responded 100%. This response was analyzed quantitatively by counting the number of times "100%" was chosen. It was used 140 times; 54% of farmers surveyed had lost all of their harvest over the past year.

Objective 3: What decisions farmers made in terms of planting and investments due to fears of drought?

1. When asked if they had foregone planting in the past season due to fears of drought, 40, or 15%, responded in the positive.
2. When asked if over the past year they had chosen to forego planting due to fears of drought, 51, or 20%, responded in the positive.

Conclusions following quantitative data: It is apparent that the vast majority of farmers surveyed experienced drought conditions over the past two seasons, and that 97% faced difficulty farming in each of the two seasons due to drought conditions. Furthermore, the vast majority of these farmers (95%) lost crops due to drought, with 54% having lost all of their harvest income due to drought over the past year. Many farmers seem to be deciding to avoid farming for fear and uncertainty in the possibility of experiencing drought-affected seasonal losses.

Section 2.2) Qualitative Data

While the quantitative questioning did well to confirm the existence of harvest losses as a result of drought conditions, this reality had already become quite clear in the months that followed the droughts given both weather data and lessons learned from farmer engagement. The quantitative data confirmed these assumptions, and served as an opening portion to the administered survey.

The main objective of this research was to better understand the economic effects on, and subsequent behaviors of, the rural farmers who experienced these droughts. The qualitative findings of this research are dramatic. In the highly vulnerable context of farming in Haiti's North and Northeast Departments, two seasons of drought indeed found many families fighting for their very survival. Lacking irrigation infrastructures and emergency systems in these regions increased this vulnerability to unexpected seasonal weather anomaly.

The objectives of qualitative survey administration were to gain data toward understanding the following:

- 1) An estimate of how much investment was lost, on average, per farmer.
- 2) Decisions made by farmers following the drought.
- 3) Further economic effects of the drought on rural farmers and their families.

Objective 1: How much investment was lost, on average, per farmer.

1. Farmers were asked to circle an approximate percentage amount, denoting the percent of their harvest they had lost over the past year, with options given in multiples of ten from 0 to 100. A full 255 farmers, or 98%, responded. The average percent of harvest lost was 88% of expected harvest.
2. Farmers were asked to fill in an estimate of their investment lost due to drought, per season. They were asked to consider the costs of plowing, seeds, fertilizer, and all else purchased or procured, for the purpose of growing crops which were subsequently lost due to drought. The average figure declared was 16,095 Haitian Gourdes, or about \$360 USD.

Objective 2: What decisions did farmers make because of the drought?

1. It was expected, given these drought conditions and the subsequent economic hardship faced by farmers, that other sources of income would have to be developed. It became clear during survey

testing that the sale of livestock would be one of the first supplemental income streams tapped. When asked if they sold livestock, and if so, what type, they responded as follows:

- Farmers who sold at least one cow: 49%
- Farmers who sold at least one horse: 10%
- Farmers who sold at least one goat: 11%
- Farmers who sold at least one pig: 8%
- Farmers who sold at least one piece of the above: 64% (167 respondents)

These data are important, as livestock, in the context of rural agriculture in Haiti, often serve as a primary mechanism for storing capital, often in place of a family bank account—they will sell the adult cow or pig to send a child to school, pay for medical treatment, and meet other large cash needs of the family.

These families likely sold many of these animals at birth. Nevertheless, this remains an unusual, distressed sale; numerous farmers noted that they had sold their livestock at discounted prices. One noted that he sold his goat while it was pregnant; he seemed to disbelieve his own actions when relating the story. Follow-up questioning with a number of farmers showed that the market price for livestock in general had decreased significantly; a result of the surplus on the market and of the distressed sale pricing available.

2. The most significant data gathered in this study came through a series of open-ended questions designed to give the respondent relative freedom to describe the economic effects of the drought on themselves and their families (see the graph on the following page).

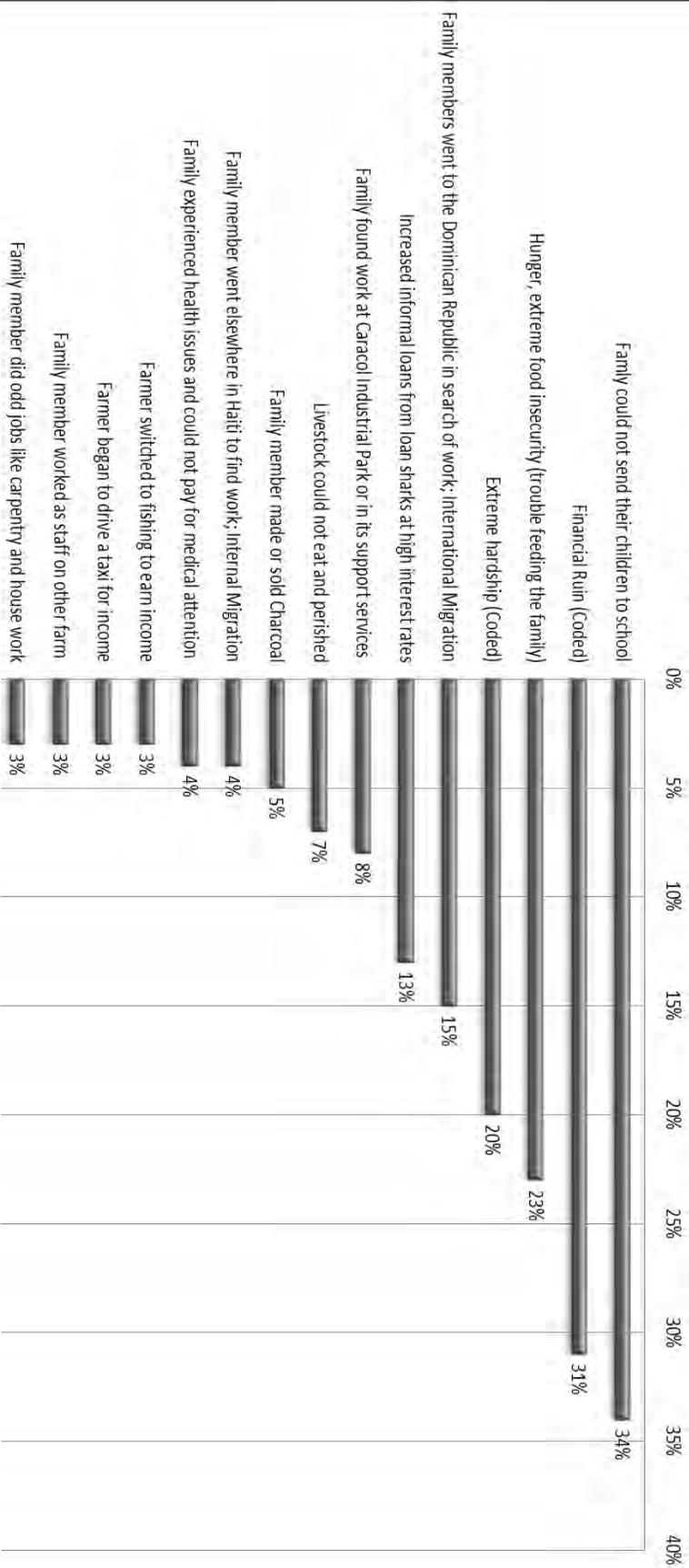
The results of this free-response section are dramatic, as farmers wrote descriptions of the extreme hardship they experienced. Responses either fit directly in to the categories below directly, or were coded into categories in two cases (coded “financial ruin” and “extreme hardship”). Notes on these codings are listed below.⁹

Other Responses: A small number of respondents mentioned an increase in crime and violence, and a decrease in security. One respondent experienced mental health issues due to the stress caused by the loss of investment and harvest during the drought. One respondent experienced the death of a child due to malnourishment following the drought.

Conclusions following from qualitative data: Notable above is the severe hardship faced by the majority of farmer families following their experiences with the droughts (the vast majority wrote in one of the above responses). In the context of rural Haiti, the average investment loss of \$360 USD per season is significant, and could lead to a damaging cycle of increased informal debt with high interest rates. Social losses in the form of schooling and population movement are notable. The consecutive droughts decimated not only two seasons of expected harvest income, but also invested capital, augmenting already high vulnerability. Each of the above experiences holds repercussions which could last for generations; the apparent need to further decrease vulnerability to unexpected anomalies in weather, and irregular seasonal shocks in general, is a central lesson to take away from these responses.

⁹ Coded responses for “Financial Ruin” included responses such as “Sold all livestock”, “Could not pay debt and had to take out more”, “Drought ruined my life”, and so on. Coded responses for “Extreme hardship” included such responses as “Mize”, “Chagren”, “pa ka vi” and so forth.

Economic and behavioral effects of two drought-affected wet seasons on farmer families in the North and Northeast Departments of Haiti



Section 2.3) Interviews held with agronomists and technical specialists from the AVANSE markets and field production teams and with the departmental representatives of the Ministry of Agriculture and of the Ministry of the Environment for the North and Northeast Departments.

AVANSE Staff: Semi-structured interviews and follow-up discussions were held with AVANSE market specialists and agricultural experts. Market specialists noted the failure of harvest and its effect on larger-scale mass market firms. For example, the largest cornmeal producer in the north, which this year entered in to an agreement to supply the WFP with milled, local corn, was unable to meet its contracted delivery requirements. Businesses of all sizes were injured following poor harvest performance; most severely affected were small, highly vulnerable farm-level entities.

AVANSE agriculture experts were interviewed to understand their experience during these consecutive drought-affected wet seasons. Agronomist and former Minister of Agriculture Philippe Mathieu, AVANSE agricultural production team lead, noted that the prolonged nature of this meteorological event could have disastrous effects on agriculture and other economic sectors, as well as a significant impact on the food security of the populations in the North and Northeast Departments. He shared a report written after drought of the second wet season of 2013, which offered insight into the situation as well as possible mitigation measures.

In this work, Mr. Mathieu noted that this wet winter season is usually found to be the safest and most consistent in the northern part of the country. By the second week of November until the end of December, relatively large rains usually bring a minimum of 300 mm throughout the Northern Corridor, to both plain and in the mountainous areas. These rains are generally sufficient to facilitate a significant drop in temperature during this time of year, allowing cultivation of beans, often in association with other crops such as maize and cassava, in the dry plains from Ouanaminthe to Limonade. In some years, the intensity of this rainfall is enough to cause flooding¹⁰.

The trend in 2013, however, was an exceptional situation. From November through December 2013 there was almost no significant rainfall, and that which did come was insufficient to allow a full start of the season where rain-fed agriculture is practiced. Those farmers who had sown crops following sparse and localized heavy rain during November and December often lost their harvest. The only bean crops to have survived were those planted in areas with permanent irrigation infrastructures in place, or else were those to have benefited from a ground-pumped water supply.

Mr. Mathieu stated that some older farmers interviewed by his team remember severe droughts in the past, but that none recalled an instance in which early-season rainfall was so low. He went on to write that the effects of the drought are particularly serious due to water availability, and have caused significant social and economic damage.

Mr. Mathieu's team estimated economic losses at more than 70% in non-irrigated areas and 40% for irrigated areas for the second wet season of 2013. The team noted the risk of the following effects following severe drought:

- Significant reduction of bean production in the Northern Corridor;
- Interruption of the seed cycle for beans, especially between mountainous and lowland areas;

¹⁰ Mathieu, Philippe, "Sécheresse dans les Départements du Nord et du Nord-Est" 2014

- Significant increase in prices of agricultural consumer products such as legumes, grains, and tubers;
- Slowdown in growth of plants such as bananas, cocoa and fruit, with a possible decrease in output;
- Scarcity of opportunities to sell agricultural labor for the poorest farmers;
- Challenges for farmer families and the people of the region over the coming “lean” season;
- Increasing cases of nutritional deficiencies;
- Using income alternatives, such as cutting trees for charcoal and selling livestock, to cover losses;
 - Decline in livestock productivity ;
- Lack of availability of fodder, leading to a nutritional deficit for animals;
- Decline in production and milk and meat;
- Drying of water sources (ponds and other sources) for livestock;
- Significant reduction in the flow of rivers, springs and water sources for the population;
- Difficulty in irrigation plots in irrigated areas, with potential conflicts between users;
- Difficulty for producers to bear the costs of pump-fed irrigation;
- Reduction in groundwater availability;
- Health and security issues concerning coping and survival mechanisms of those affected;
- Substantial decline in revenues from the sale of milk;
- Disruption of seed storage and sales cycles, and difficulty managing seed supply for the next season;
- Depletion of financial reserves, and increases in family debt;

Lastly, Mr. Mathieu noted that it is likely, on the social level and if the trend of drought continues, that migration of youth and agricultural workers to the Dominican Republic will increase thus increasing the deficit of farm labor already found in many parts of the region. Further drought would also result in the mass sale of family livestock, thus reducing family savings. Lacking sufficient resources, some families will not be able to send their children to school.

Mr. Mathieu recommends continued investment in water collection capacities and more permanent irrigation infrastructures. While the soil of the region is high in clay, making it poor in retaining water, this characteristic improves the ability to create regional water collection basins. He also recommended maintenance of any existing infrastructures, and the dissemination of new technology to enable optimal use of irrigation water in parallel with the development of high added-value crops.

Ministry Representatives: The representative of the Ministry of Agriculture for the North Department, the representative of the Ministry of Agriculture of the Northeast Department, and the representative of the Ministry of the Environment for the North and Northeast Departments were interviewed.

Eric Auguste, the Ministry of Agriculture representative for the Northeast Department, expressed deep concern for the livelihoods of rural farmers following the two droughts. He noted that the cutting of mangroves had increase for use as charcoal, and expressed concern that this might damage the future stocks of fish and further injure fisherperson livelihoods. He stated that his greatest challenge currently is controlling the flow of smuggled items in to the country; Mr. Auguste stated that smuggling activities, from the Dominican Republic to Haiti by crossing the Massacre River at night, had increased many fold. His office is, he said, working with the State to develop long-term mitigation strategies for adapting to what may be a longer-term trend.

Eberl Nicholas, the Ministry of Agriculture representative for the North Department, expressed similar concerns. He expressed concern for the coming seasons as well.

Mr. Nicholas said that, over the past year, bean farmers were effected very badly; these farmers had a huge amount of difficulty with their harvest, which may have created a long-term handicap concerning the cycle of agricultural debt, repayment, seed storage, and so on. Mr. Nicholas had visited yam farmers recently in Limonade; he said he was shocked to see the yams so small.

Mr. Nicholas noted the success of existing irrigation infrastructures, such as the one in San Rafael. “They are not perfect,” he said, “But the water they supply has been very helpful to our overall agricultural production.” He then noted the benefit of existing collaboration with the AVANSE project, along a variety of activities including irrigation and drainage ravine development, protection of the environment and of shade-tree agroforestry systems, and a possible distribution of irrigation pumps in zones highly affected by the drought.

Mr. Nicholas expressed concern that the current trend would be longer lasting, and perhaps constitute the development of a trend of dryer conditions and early season termination. He stated, “We think this may have something to do with a longer-term trend, because we have never seen a dry period trend like this before. Farmers had seeds, but they could not plant them. The whole economic chain was affected, and money did not circulate.” He also noted that local banks were becoming more risk-averse, fearing future volatility in agriculture investments. Mr. Nicholas stated that the current trend of drought was the worst he had experienced or had heard of in the region during his 30 year career. He noted that the Ministry was unprepared for the unlikely character of the consecutive premature harvest drought trend.

Jean-Robert Emanuel, the Ministry of the Environment representative for both the North and Northeast Departments, expressed concern regarding the long-term environmental impact of the drought. He noted the cyclical nature of various ecosystems, saying that farmer economic needs may result in increased mangrove destruction through charcoal production, which would in turn cause stress to bird and fish populations. Indeed many of the farmers surveyed reported the need to find alternative income streams, many from fishing.

Conclusions

Meteorological Data

Haiti experienced severe drought conditions during two consecutive wet seasons. These conditions were particularly harsh in the North and Northeast Departments, which contain the entire AVANSE implementation zone. In each case, rainfall per pentadal period fell to less than 50% of historic averages over similar pentadal periods; this lasted for multiple consecutive weeks, resulting in soil water index figures of less than 10% of water holding capacity, designated as “wilting” conditions. This severe dryness also resulted in WRSI nearing 50% of soil water required to successfully bring crops to harvest. In each case these conditions occurred near the end of the wet season and continued in to the harvest

season, thus causing an early end to the growing season and near total crop failure. This reoccurring movement of seasonal timelines give cause to consider “season creep” if the trend continues¹¹.

Each of the two droughts was highly unexpected; each was an anomaly in terms of historic average rainfall, mean rainfall, and rainfall during the same period of the previous year. The two droughts did not occur in the same pattern, with that of the second growing season of 2013, through November and December of that year, coming on slowly while the drought of early 2014 manifested rapidly following above average rainfall. Weekly precipitation was found to be lower than historic averages, and lower than the prior year, but farmers who planted were able to manage their crops for those initial weeks. Conditions worsened, until the North and Northeast Departments experienced numerous weeks in November, December, and January with little or no rain. In the absence of infrastructures to store and maintain water, and the drought became severe, soil water levels became untenable.

In the case of the drought during the first season of 2014, which occurred from May through July and in to the harvest season of August, a different pattern is evident. Early May saw rainfall well above historic averages. Only in early June did precipitation fall to near 50% of historic averages, where it remained through August. Some rainfall did continue; late June and early July saw from 75 to 100 mm throughout the North and Northeast Departments. However the hot summer sun, assisted by the clay-rich, nonabsorbent soil, evaporated soil water rapidly and, by late July, the Soil Water Index was showing wilting conditions throughout the region. Unexpected and quite unusual by historical standards (especially when considering the initial heavy rains of May), the drought decimated the region’s crops. By late July, the WRSI was nearing 50% of soil moisture required to raise crops, and again the season terminated prematurely. The lack of long-term water-saving infrastructures—even rudimentary ones—is particularly tragic because the heavy rains of May could have been stored to mitigate the situation later in the year.

Survey and Interview

Through surveying 261 farmers, the vast majority of whom were affected by two consecutive seasons of drought, and by administering follow-up interviews with AVANSE technical staff and representatives of the Ministries of the Environment and of Agriculture for the North and Northeast Departments of Haiti, a number of economic and social effects of the drought-affected period became clear. Of the farmers surveyed, 97% faced difficulty in cultivating crops due to the drought periods, and 95% lost some amount of their harvests. Of those interviewed, 256 (98%) farmers estimated their percentage of harvest lost over the past year, with an average of 88% of harvests lost; and 251 (96% of those surveyed) estimated investment lost due to drought conditions over the past year per season at an average of approximately \$360 USD. This is significant, as credit and harvest cycles require harvest income in order to pay agricultural debts and reinvest in the new harvest. With this investment lost, farmers and their families were forced to make difficult choices.

The results of the qualitative, free-response portion of the survey serve as a grim reminder of the vulnerability of agricultural livelihoods in the context of rain-fed agriculture in northern Haiti. It is of note that these responses were not chosen from a listing of possible experiences; as these were free-responses, it can be assumed that such hardships were experienced by a larger percentage of the

11 Schwartz, M. D.; Ahas, R.; Aasa, A. (2006). "Onset of spring starting earlier across the Northern Hemisphere". *Global Change Biology* 12 (2): 343–351. doi:10.1111/j.1365-2486.2005.01097.x

affected population. Common responses such as inability to provide education to offspring, shifts in income source to fishing or charcoal making, and migration to the Dominican Republic will carry further economic and social repercussions for years to come. It is essential that, given the possible trend of increased likelihood of future drought, mitigation measures and risk reducing systems be put in place.

In reviewing follow-up interviews with AVANSE agronomists and market specialists, it is poignant to note the similarity between expected post-drought farmer behaviors and actual behaviors as discovered through the use of survey. Many of the economic effects experienced by rural farmers were foreseen by AVANSE technicians. Mitigation measures suggested by this team should continue to be acted upon, in order to mitigate future drought-related risks. Through interviews with Ministry representatives, it is clear that continued collaboration with the Ministries of Agriculture and of the Environment is crucial. These groups must form emergency drought protocol to avoid the anomalous, unexpected, sudden emergence of drought in future seasons.

It is apparent that livelihoods reliant on rain-fed agriculture in the north of Haiti are highly vulnerable to sudden and unexpected weather volatility. Moreover, recent weather data suggest that early seasonal dryness is becoming the norm. An evident lack of irrigation and water storage, be it through pumping systems, informally managed basins, or permanent infrastructures, along with few early-warning or communications protocols to reduce harmful effects once a drought begins, augments this vulnerability. A further challenge lies in the lack of available in-country rainfall and weather data.

Recommendations

This paper recommends that a drought emergency system be developed by the Ministry of Agriculture and the Ministry of the Environment, to include an early drought warning system with appropriate communications ability to alert farmers in drought-vulnerable zones and offer technical assistance. It also recommends that some capacity for localized data collection be developed. As recent seasonal volatility may be an early warning sign of seasonal creep or other long term climatic trends, this notion could be housed and implemented in partnership with the Regional Climate Hub program of the USDA.

In the short term, both pumping systems (where land rights are wholly unclear) and permanent infrastructures for irrigation and water storage should be developed and constructed; the engineers of the AVANSE team are currently developing these infrastructures and should continue in these essential risk-mitigating objectives. Lastly, natural barriers to environmental risks such as mangrove stands and erosion-fighting agroforestry systems should continue to be developed, along with the capacity building of their community-based managers. Many farmers lost seasonal start-up capital and may require assistance to obtain plowing services or other inputs. As increased vulnerability to drought effects education, food security, migration and labor, and human rights, along with other social dynamics, it is essential that the risk profile of rural farmers in northern Haiti to unexpected, anomalous climate volatility be reduced.

ANNEX D: SUCCESS STORIES FROM LAST QUARTER

[see next page]



Published on August 1, 2014

SWEET NEWS FOR CACAO FARMERS

AVANSE and Novella sign cooperative agreement

Cacao’s healthful properties are making global headlines, but here’s one beneficial effect you won’t read about in a fitness magazine: fostering social change.

AVANSE’s just-signed agreement with Les Etablissements Novella, Haiti’s biggest cacao exporter, is expected to have a far-reaching impact on northern Haiti.

“The most exciting part of this agreement is that Novella has agreed to completely review their purchasing system, going from purchasing through many levels of intermediaries to purchasing directly from farmers,” says Stephan Jean-Pierre, acting head of AVANSE’s Market Strengthening Sector.

Novella annually exports some 2,500 metric tons of cacao to Europe and North America. Founded in 1920, the family-held business is now led by its third- and fourth-generation of entrepreneurs. The company has its base in Cap Haitien and operates exclusively in northern Haiti as part of its commitment to supporting the region’s development.

“What this deal is going to do is allow the farmers to capture the full price of the cacao that Novella is paying, which I believe will increase the [purchase] price by 30 to 40 per cent,” adds Mr Jean-Pierre.

A key element of Novella’s cooperation with AVANSE is the use of the Farmer Field Schools which have been training farmers in cacao production. The farmers in several cacao FFS will form into a loose association through which they will pool their cacao production.

They will then sell directly to Novella by-passing middlemen and speculators, while Novella will pay each farmer directly, in some cases using mobile money transmitted via cell phone.

“This will be a major change,” says Mr. Jean-Pierre. “For many decades they have been buying from speculators—now if they manage to buy direct from the farmers, this will be a great thing.”

Daniel Zephyr, one of Novella’s directors, agrees. “If I can see that before I die, I will be a happy man.”

He adds that one of Novella’s goals had been to buy direct from farmers but that the export company hadn’t been able to find a way to do this efficiently.

But now, thanks to AVANSE, Novella can realize this goal. “It is a big challenge, but I’m really excited about it. We’re going to make it work.”

Working directly with farmers will also allow Novella to set up a traceability system that is essential to organic and fair trade certification. This allows the company to tap into more lucrative European and Northern American markets, thereby adding value to the cacao.

“We are going to pursue this,” says Mr Zephyr.

Traceability also allows for better quality control at the farmer level. In short, it means that Novella can seek better prices for its



Daniel Zephyr, one of Novella’s owners, and Bert Laurent, AVANSE’s COP, shake hands after signing the cooperative agreement. Behind are members of AVANSE’s team that put together the agreement.

cacao—something which will benefit both the company and the farmers.

AVANSE programs, through the farmer field schools, are helping cacao farmers increase both production and yield by creating nurseries for new seedlings, training growers in farm management, and introducing them to modern, more effective agricultural methods. The end result of the AVANSE-Novella agreement: more cacao, better prices for both Novella and the farmers.

Fermented cacao commands significantly higher prices on the world market, so another important part of the collaboration between AVANSE and Novella focuses providing technical assistance for fermentation of cacao. Under the agreement, cacao farmers will be able to use the Farmer Field Schools structure to bring their freshly-harvested cacao to Novella’s fermentation plant in Grande Rivière du Nord. Novella plans to set up other fermentation centers in the region.

The AVANSE-Novella agreement will be put into practice this fall, during the next cacao harvest in October-November, with farmers directly supplying Novella with cacao and, in turn, Novella remitting payments direct to farmers’ cell phones.



PLANTING THE SRI SEED

Published on September 1, 2014

Harvest proves the benefits of AVANSE’s rice farming method

Last May, when Frisner Selmour sowed one-third of his rice plantation using methods recommended by the AVANSE agriculture team, he was skeptical. “I hope for a better harvest this season,” he had said at the time, but his voice had lacked conviction. His experience from toiling on his farm had shown him not to expect any huge differences or gains. “Working in the field is very hard work and there isn’t a lot of benefit.”

Mr Selmour is happy he was wrong. The System of Rice Intensification, or SRI, introduced by the AVANSE project and disseminated through the Farmer Field Schools, has shown him new methods can yield a bigger harvest.

“I can honestly say that this new system produces more rice and if it wasn’t for the drought we would have rice in abundance—but still we will have more than usual,” he says. The SRI method, he adds, might be more labor-intensive “but I prefer it because it produces more and better rice.”

Under conventional rice cultivation methods used in Haiti, seedlings are planted randomly and quite close together in saturated soil. SRI’s method involves planting young seedlings in moist soil

about 25 centimeters apart from each other to allow more room for their roots to spread, increasing the leaves’ photosynthetic activity.

A bigger and better harvest opens new possibilities for the 48-year-old farmer whose rice crop was used mostly to feed his family. “I had planted only 30 per cent of my land [with the SRI method] but now due to the good result, I will definitely in the future plant all the land with the new system,” he says. “Then I will produce enough to feed my family as well as to sell.”

The AVANSE team monitoring this year’s harvest notes that SRI has more than doubled crop yields.

“I WILL DEFINITELY IN THE FUTURE PLANT ALL MY LAND WITH THE NEW SYSTEM!”

“In certain plots they have gotten nine tons of rice per hectare, triple what the farmer was used to getting,” says Jean Buddy Lucien, AVANSE’s Rice Specialist.

But it’s not just the farmers and the AVANSE team that have been impressed by these results. Other farmers have taken note too.



Frisner Selmour had only planted 30% of his rice crop with the SRI method promoted by AVANSE. Now with the results of his harvest in hand he is convinced to plant 100%. The SRI method of measured spaced intervals can be clearly seen in the photo above.

“Another farmer friend of mine that I have talked to, having now seen the new method and how it grows better, is convinced,” says Mr. Selmour. “From now on he will not plant any other way than SRI—and I promise him my help and support to start using the new method.”

QUICK FACTS

124 hectares planted using SRI last season

650 estimated hectares will be planted this season



HIGHER BANANA YIELD

Published on October 1, 2014

AVANSE training introduces banana farmers to new propagation method

Paul Kersaint Stinfil picks up a banana cutting, grasps it firmly in one hand. He leans over, picks up a machete, and with a single, swift move deftly slices its top off.

“You hold it up like *this*,” he says, as he picks up a second cutting and repeats his actions more slowly. “Then take a machete and with a fast cut, decapitate the banana.” Mr Stinfil, who works for Haiti’s agriculture ministry, is conducting a training session for forty banana farmers and banana nursery owners. The participants watch with rapt attention as he shows them how to score a cross in the cutting.

Mr Stinfil is demonstrating a new propagation technique known as PIF, or *plantes issues de fragments de tiges*, introduced by AVANSE to help banana growers maximize their production.

“This technique is unknown here in the north,” says Julene Moises, AVANSE’s Banana Lead. “People don’t know it here.”

She adds that the new propagation method being introduced through the AVANSE training sessions boosts crop yields. “While normally a banana sucker can produce up to 12 plantlets, with this method we can even reach up to 50.”

Conventional propagation methods grow plantlets from a whole banana sucker. The PIF method divides the stem into sections. Each sucker is then cleaned, pared down, and decapitated so that the exposed section is scored, essentially dividing it into fragments.

As the training continues, Mr Stinfil invites participants to try slicing and scoring the banana suckers. Those who respond to his challenge immediately realize that this is not as easy as the trainer has made it look. After a few tries, and with encouraging cheers from

those watching, they finally get the hang of it and show off their newly-acquired skill with flourish.

“I’m very pleased with this training,” says Milsame Yanick Jean, one of the female farmers from Grison Garde who tried her hand at cutting the banana corm. Madame Jean has five children and cultivates a variety of crops. She adds that with the improved yield of this propagation method, “I’m going to produce enough to feed my family, but also to sell to make lots of money.”

For the three-day training, AVANSE provided 200 banana suckers for participants to prepare for propagation. Once the corms were ready, the trainees were then shown how to plant them in specially-prepared containers where they will remain, covered with sawdust, for about four months when they will be ready for transplanting.

“This technique not only allows more banana plants to grow with fewer suckers, but they are also more healthy—you cut the cycle of disease,” says Ms Moises.

The training in PIF propagation was so enthusiastically received that places filled up almost immediately—with a long waiting list for the next session. AVANSE plans to organize more training sessions for some 80 farmers and nursery owners over the next three months. Participants who successfully implement the new technique on their banana plantations will be certified by the Haitian Ministry of Agriculture in cooperation with AVANSE.

“This training will help me better manage my plantation and I will considerably lessen the number of suckers,” says twenty-six-year-old Eranseau Lafortune, an agronomy student who already has a banana nursery with 600 banana plants.

