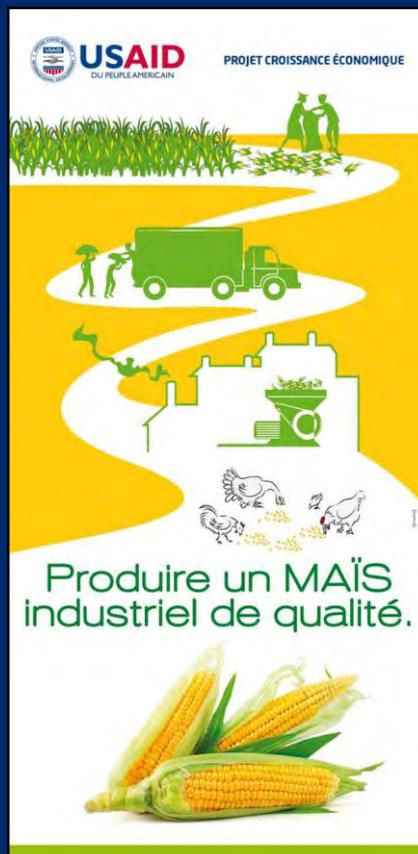




ECONOMIC GROWTH PROJECT

CONTRACT 685-I-00-06-00005-00
TASK ORDER 5

2013 FISCAL YEAR WORK PLAN



September 2012

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Acronyms

AfDB	African Development Bank
AGOA	African Growth and Opportunities Act
ANI	African Natural Ingrédients
ANCAR	Agence Nationale de Conseil Agricole et Rural
ASPRODEB	Association Sénégalaise pour la Promotion du Développement à la Base
APIX	Agence de Promotion des Investissements et des Grands Travaux
BEO	Bureau Environmental Officer
BFPA	Bureau de la Formation Professionnelle Agricole
BDS	Business Development Services
CNAAS	Compagnie d'Assurance Agricole du Senegal
CTS	Centre de Traitement des Semences
DA	Direction de l'Agriculture
DAPS	Direction de l'Analyse, de la Prévision et des Statistiques
DCA	Development Credit Authority
DHORT	Direction de l'Horticulture
DISEM	Division des Semences
E-ATP	Extended Agribusiness and Trade Promotion Project
ECOWAS	Economic Community of West African States
EMMP	Environmental Mitigation and Monitoring Plan
ENEA	Ecole Nationale d'Economie Appliquée
ENSA	Ecole Nationale Supérieure d'Agriculture
FTF	Feed the Future
GFSR	Global Food Security Response
GIE	Groupement d'intérêt Economique
GPS	Global Positioning System
GMO	Genetically Modified Organism
IFAD	International Fund for Agriculture Development
ISFAR	Institut Supérieur de Formation Agricole et rurale
ISRA	Institut Sénégalais de Recherches Agricoles
IRG	International Resources Group
JICA	Japan International Cooperation Agency
LOASP	Loi d'Orientation Agro-Sylvo-Pastorale
MCC	Millenium Challenge Corporation
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organization
OECD	Organization for Economic Cooperation and Development
PMP	Performance Management Plan
PAFA	Projet d'Appui aux Filières Agricoles
PERSUAP	Pesticide Evaluation Report and Safe User Action Plan
REO	Regional Environmental Office
REPROSENER	Réseau de Production des Semences Nerica
SAED	Société Nationale d'Aménagement et d'Exploitation des Terres du Delta du Fleuve
SFZ	Southern Forest Zone
SPCRS	Société de Promotion et de Commercialisation du Riz Sénégalais
SRV	Senegal River Valley
SODEFITEX	Société de Développement et des Fibres Textiles
UCAD	Université Cheikh Anta Diop
UNIS	Union National Interprofessionnelle des Semences
USDA	United States Department of Agriculture
USAID/PCE	USAID Projet Croissance Economique
USAID	United States Agency for International Development
VC	Value Chain
WASA	West Africa Seed Alliance

1. INTRODUCTION

International Resources Groups is pleased to submit this draft Work Plan for Fiscal Year 2013 for Task Order 5 of the USAID Economic Growth Project (USAID/PCE). The task order is carried out under the SAGIC IQC launched in 2006. Task Order 5 began in April 2009 and is scheduled to close in November 2013.

The FY2013 Work Plan is structured according to guidance provided by USAID in 2011. Section 1 of the work plan includes an overview of the context, lessons learned and priorities for the coming season. It concludes with a summary table showing the expected targets in FY13 for our leading indicators. Section 2 presents planned activities according to seven themes: Value Chains, Infrastructure, Seed Sector, Capital Access, Markets and Trade, Policy Reform and Capacity Building. Each sub-section includes a narrative to clarify issues and priorities and a table presenting detailed activities, expected results and milestones in each quarter. Section 3 looks at cross-cutting issues and planned activities including climate change, gender, science and technology introduction, partnerships, communications and small grants. Section 4 summarizes issues and activity plans linked to the project's Environmental Mitigation and Monitoring Plan (EMMP) and Pesticide Safe Use Action Plan (PERSUAP). The report concludes with Section 5 coverage of project Monitoring and Evaluation activities combined with a presentation of the full list of indicators and targets for FY13.

1.1. The PCE Approach

Most agricultural value chain interventions that engage small holder farmers involve efforts to formalize contracting arrangements between smallholder groups and next level buyers, typically involving an advance of capital and intensive training in farming techniques and quality control. However, most attempts to engage smallholder farmers in formalized value chains are focused on targeted high value crops, typically for export, and where there are few opportunities for alternative marketing. There are multiple benefits to the contract farming model, particularly how it helps farmers with access to credit, inputs and knowledge.

The innovation of USAID/PCE has been to apply value chain approaches and various modalities of contract farming to Senegal's domestic cereals markets. Cereals are sold in great quantities globally and in Senegal, but they have relatively low market value. The project's targeted cereals markets – rice, maize and millet – are fundamentally different from export and high value oriented VC chains in one important way: the output has an immediately available alternative local informal market where farmers can sell at any time. The challenge for USAID/PCE is to succeed in structuring value chain arrangements for cereals in such a way that farmers become convinced that formal contracts and modern technologies provide them with a more resilient, more profitable and more attractive option than traditional artisanal markets. Such a shift is essential to compete at scale with well-organized rice and maize import supply chains.

To achieve our goals, the project emphasizes the strengthening of producer **“networks”** through which outreach, training, credit mobilization, quality control, monitoring and consolidation can be organized and coordinated. Networks can take many forms, including private companies who serve a number of GIE and individual farmers, farmer associations and federations that regroup a number of GIE and farmers, or local NGOs. Our diverse set of value chain cost-share partnerships are in place with proven

network leaders who organize an expanding set of services to their members and clients. Through such agreements USAID/PCE indirectly reaches thousands of farmers and households while building the capacity of network leads. The network leads receive PCE support and coaching in many topics including:

- Linkages with banks and other financial institutions to ensure that pre-production financing (or post harvest processing financing) is available
- Building their capacity to conduct their own outreach, training and quality control
- Building their capacity to lead the contracting negotiation and management process
- Introduction of simple, manageable tools for monitoring the production of farmers within their networks
- Ensuring that they have opportunities to link to certified seed suppliers
- Receiving feedback about their needs, learning and adapting as a result of that feedback

USAID/PCE also intervenes with a package of strategically critical and complementary activities at other levels of the value chains, the most important of these being:

- Capacity building within seed networks at multiple levels, including the foundation seed production and distribution role of the state, in this case ISRA
- Collaboration with and support to financial and leasing institutions to expand the overall availability of agricultural financing
- Expansion of co-investment opportunities to meet critical storage and equipment needs, especially for increasing efficiency in harvest, post-harvest and storage needs.

Finally, PCE works to support a number of important “framework” activities, covering policy (PNIA, LOASP, fertilizer reform, etc), communications, information availability (DAPS), and public sector training, all of which seek to improve conditions for investment and development within the FTF target value chains and in the agriculture sector as a whole.

1.2. Results, Lessons Learned and FY13 Priorities

USAID/PCE has now completed three agriculture seasons and a fourth season is underway. The project is making substantial progress in increasing output, quality, sales and financing in the core FTF value chains and uptake of new technologies and systems among our partners is generally strong. This section briefly takes stock of recent results and some of the lessons learned in order to contextualize the proposed priorities and activities for FY13. With only 14-18 months remaining in the project, the key theme for FY13 is **increased empowerment and leadership of value chain development by the stakeholders themselves**. Value chain stakeholders must take on more directly the challenges for continued scale-up, quality, and sustainability. This shift is embedded in the approaches and tools the project team will use.

Scaling up farmer outreach. The continued growth of commercial rice and maize sales for urban and animal feed markets requires a transformation of production practices by tens of thousands of small farmers. During FY12 USAID/PCE pursued the scale up of outreach to farmers across the two priority geographical zones, the Senegal River Valley (SRV) and the South Forest Zone (SFZ). Close to 18,000 farmers participated in structured training sessions and this figure grew to about 33,000 farmers when taking account of all forms of project outreach and support to cereals commercialization programs. A significant portion of the costs for training and outreach were borne by the networks themselves, a strong indicator of the sustainability of our implementation approach.

Working through personnel fielded by a variety of networks, training and field demonstration programs focused on best agricultural practices, post harvest skills and breakthrough seed technologies such as upland NERICA and aromatic Sahel rice varieties. Note that farmers are not selected randomly and training is tightly structured. The approach relies on networks to pre-identify the farmer base to be

trained and to closely monitor attendance and subsequent adoption of technologies and management techniques. In response to farmer preferences, USAID/PCE provided network teams with highly structured and condensed field training content, adapted to local languages, presented in a low cost, illustrated “cheat sheet” format. Half-day sessions are held at nearby demonstration sites and each attending farmer takes home a copy of the material.

For FY13, the project will continue shifting responsibility for training programs and field performance monitoring to the network leaders. The capacity of networks to take leadership for the development of new programs is a critical skill to generate a competitive and responsive supply. Another challenge is to expand the number of farmers who are directly linked to structured, commercially-driven sourcing of their cereals. Indeed, the more aggressive and commercially driven networks, such as the VITAL and CNT rice mills in the SRV, maize buyer firm SEDAB and the newly created FEPROMAS union of maize producers are all poised to grow their contracted farmer base. These partners have identified skills in contract compliance, field monitoring and quality control procedures as critical to their expansion. Such partners will also benefit from continued assistance on using geo-referenced databases to provide market consolidators with a clearer picture of the total farmer population that has adopted improved technologies and is ready to be integrated into sourcing networks.

Contract farming in cereals. USAID/PCE promotes pre-season contracting between producers and various types of “consolidator” entities as a means to improve access to critical inputs linked to seasonal loans. In the maize value chain, the 2011 rainy season corresponded to an expansion from two consolidators to six entities, with four financial institutions involved in financing the program. These contracted networks were put to severe tests: ongoing litigation between contracted parties regarding the price of inputs; severe rain shortfalls and ensuing low yields; high price volatility both locally and on international markets with subsequent renegotiation of fixed price contracts and speculative pressure from informal traders.

USAID/PCE played an advisory role to all parties working through these challenges and encouraged them to sort out differences directly and to take time to address the root causes for the following year. These included the need to improve input procurement planning and transparency, instilling a sense of financial responsibility at the farmer level despite the presence of a project entity, getting banks to adjust lending strategies, and developing a flexible and transparent contract pricing mechanism. The 2011 maize rain season program demonstrated the limited capacities of several networks to oversee a large producer base and, for example, come up with reliable harvest estimates to satisfy the planning requirements of industrial buyers. These lessons hold true in the fast growing irrigated rice sector where new contractual arrangements are being worked out from one season to the next and where significant uncertainty persists around the total commercial output available for sale outside the SRV.

The challenges in 2011 have resulted in a reconfiguration of the maize value chain for the on-going 2012 rainy season. Notably, the creation of FEPROMAS as a federating body for the Saloum networks formerly contracted by SODEFITEX and their success in setting up a fully funded 2,500 ton program is a testimony to the resilience of the value chain model and the level of commitment of the farmers.

Meanwhile, in the Senegal River Valley, the seasonal contracting model was adapted to the needs of the commercial rice sector and great progress has been made in a short period of time. The first experience with an inter-linked storage, buying and financing system facilitated the marketing of paddy rice by producers while securing the supply needs of industrial-scale millers. For the 2012 dry season, over 14,000 MT of paddy rice were commercialized under this contract farming-based approach. Reimbursement of bank loans to contract-secured farmers is close to 100%. This success has led the CNCAS to increase its irrigated rice loan portfolio from US\$ 3.8 million in 2011 to US\$ 6 million for the 2012 rainy season.

The context for contract farming in the SRV is extremely positive with several significant advances made including : (1) greater stakeholder appropriation of structured financing models; (2) the introduction/involvement of new financial products and/or actors (investment bank, warehouse financing system, bank guarantee draft, etc.); (3) the practice of double cropping as credit repayment

terms are shorter thus creating the possibility for farmers to pick up a new credit; (4) the expansion of the inter-linked storage, buying and financing system to other financial institutions such as CMS.

Collaborative learning and adaptation. Building value chains is an iterative process, where stakeholders need to capitalize successes, learn from errors and gradually adapt their initial strategies to more profitable forms of collaboration and synergy. The evolution from the dominant traditional spot transactional model to more integrated approaches requires an informed and recurrent dialogue between actors – so they can forge their own approaches to collaboration. To support this process, every year USAID/PCE convenes stakeholders of a specific value chain to multi-day sessions to examine data generated from the previous season and available statistics. The project uses these gatherings to facilitate debate and discussion until practical solutions emerge.

In FY2012, the project went further and organized events that gave greater public visibility to the current programs. These fora depart from the traditional “project debrief” approach and instead focus on issues and opportunities for cereals value chain transformation and take stock of the technical and managerial challenges that have emerged. For example, one of the conclusions of the rainfed rice forum was that financing certified seed multiplication is a financially sound proposition and should be a priority in promoting the expansion of upland NERICA across the zone.

Yet the fact that the USAID/PCE staff has until now led both content design and debate facilitation carries the risk of value chains sliding back to more traditional approaches, focused on listing constraints rather than working out solutions. In FY13, USAID/PCE will need to get leading value chain stakeholders to take part in setting the agenda and organizing such events.

In FY12, USAID/PCE also experimented with a **collaborative learning exercise with farmer groups** involved in three value chains: rainfed rice, maize and organic sorghum. Through a number of focus group sessions, the project explored farmer opinions about the strengths and weaknesses of the contract farming model and identified a number of household-level behavior changes that stem from collaboration with USAID/PCE. One striking finding concerned the reallocation of women’s labor who participated in the rainfed rice production program. These women realized that they could shift some of their land from millet to rainfed rice and thereby grow enough to meet their household needs instead of producing millet to sell and buy rice. This has led to significant labor savings and improved household food security. In FY13, the project will take this same methodology to the Senegal River Valley to learn more about changes and perceptions within households participating in aromatic rice production and contracting schemes.

Expansion and diversification of agriculture financing tools. Agricultural value chain growth and resilience is directly dependent on a sufficient supply of financial services tailored to the needs of stakeholders involved. The first step for USAID/PCE was to promote contract-based farming as a means to unlock seasonal credit. This has generally been a success and the model continues to grow and is continually adapted to serve different crops, zones and players.

However, growth in production and processing capacity hinges on the increasing use of modern equipment in farming, post-harvest and processing operations. This requires helping Senegalese SMEs to access long term financing arrangements. The 2011/12 experience with a new equipment **leasing scheme** has been a success with acquisition of 10 tractors for maize farmers and financing of a rice mill in the SRV, but the outcome depended heavily on project resources to coach participating SMEs through all the steps and the equipment and leasing companies played a relatively passive role. To grow the leasing market, the project will now shift its attention to strengthening the B2B relationships between suppliers of agricultural equipment and leasing companies and push them to directly engage and assist value chain SMEs to become eligible to lease equipment.

In this same context of increasing ownership and leadership of agriculture financing models, the project is initiating grants to five financial institutions to carry out internal capacity building on agriculture, to train farmer groups and to refine and promote their value chain financing tools.

FY12 also saw the introduction of the **first rain-indexed insurance policies**. Working with a broad consortium, USAID/PCE succeeded in the signature of more than 100 seasonal insurance policies for maize farmers. The policy premiums are rolled directly into seasonal credit agreements with financial institutions so farmers do not need to make an up-front payment to enroll. In FY 2013 the project will focus on strengthening and expanding the agricultural insurance scheme and will introduce a new policy specific to farmers in the Senegal river valley.

Finally, the project is looking at how to get more out of the on-going experience with the Development Credit Authority. The DCA mechanism implemented with USAID/PCE support has experienced a positive outcome in the past years with a relatively high utilization rate compared to 2009. Over 1300 loans worth in excess of \$6.2 million were covered by the DCA in FY 2012. In addition, the DCA played a vital role in facilitating women's access to credit while paving the way for stronger relationships between classic banks and a local women-led MFI, MEC-FEPRODES.

Seed sector. Seed quality, availability and affordably reside at the core of any productivity and quality gains from cereals. The project's success introducing new seed varieties has been central to the commercial results across the rice and maize value chains. However it is equally clear that the project has had to play a lead role in getting local seed companies to step up to these opportunities. The fast growth in demand emphasizes the weak and mainly reactive links between ISRA's foundation seed production facilities and downstream firms. Over FY 2012 USAID/PCE focused on reinforcing seed producer groups to generate clear foundation seed requirements, in line with anticipated growth in demand – and place orders directly with ISRA rather than rely on project intermediation. This ability to manage the seed multiplication supply chain to match the sector's exponential growth will be a critical concern in FY13. This will require actions at both ISRA and seed producer association levels to improve market responsiveness. The associations in particular will need to develop a more regional perspective to sourcing foundation seed material and diversify the variety portfolio they offer local producers. For example, seed associations will need to better exploit the recent ECOWAS rules to source, when necessary, foundation seeds for NERICA beyond Senegal's borders and to access supplies in improved maize hybrids available from other ECOWAS members.

Sustainability. The durability of project interventions resides largely in the emergence of strong leadership within individual value chains. Fundamentally, sustainability occurs when value chain participants see they can expand, penetrate new markets and earn more without artificial subsidies from a project. Leadership in the sustainable adoption of technologies comes mainly from those firms and lead farmers who have experienced clear financial gains and have understood the underlying value chain drivers of this success. Certified seed producers have witnessed an exponential growth of sustainable markets for newly introduced varieties. Commercial maize and irrigated rice producers understand contract compliance as a means to acquire timely inputs to increase production, and subsequently secure market outlets.

The same applies to partner financial institutions that understand the opportunity of growing and diversifying their loan portfolios, adding new credit services while improving their risk exposure. USAID/PCE's role is to reinforce the capacity of these actors to better grasp the collaborative value chain dynamics that have underpinned these successes, and help them pursue their own interests through the structuring of competitive value chains. At present leadership comes from firms and banks involved at production level. This needs to evolve in FY13 and USAID/PCE will promote direct involvement of downstream value chain leaders, namely industrial processors and urban cereal wholesalers, in the contracting process and in the definition of product norms.

USAID/PCE has partnered with value chain actors as direct implementers of its programs. The underlying principle is to get them to introduce and disseminate value-adding technologies rather than create an overreliance on non-sustainable third party support. Partnerships take the form of in-kind and fixed obligation grants, which contribute to cover the introduction and training costs associated with the new technologies and practices. This approach has been successful in many aspects, such as the introduction and mainstreaming of new seed varieties, improved production and post harvest technologies, as well as the adoption of basic contracting and value chain financing mechanisms.

In contrast, we see mixed success in the adoption of information management practices – for example tight management of production forecasts, systematic farmer supervision, GIS mapping and real time database updates, traceable quality testing methods. These soft technologies bring in a level of precision that the prevailing “spot trading” culture has never felt a need for; speculating on scarcity and creating value out of a tightly managed throughput are different games altogether. **As VC marketable output grows, farmer database and supply management will become increasingly critical, especially as commercial relationships with industry and urban distributors fall into place.** Going forward, the project will place an increased emphasis on support to VC networks to master and use these tools.

Resilience to external shocks. The 2011-2012 season was a case study in external shocks to rainfed farming. Late, sporadic and insufficient rainfall led to significant drops in yields. International and national prices rose dramatically in response to global, sub-regional and national uncertainties about total available supply. Less-informed and less-trained farmers were more severely affected because they did not use improved seeds, planted too late, and were not familiar with improved techniques, including conservation farming. Ultimately, farmers had less to sell and save, and quite a few in the maize value chain defaulted on bank loans, setting off a potential spiral of credit contraction. Nevertheless, numerous working sessions with farmers confirmed a strong and even growing interest in the contract farming model. This is in large part because **farmers greatly appreciate the improved and timely access to inputs that come from working in a more structured market format.** Farmers recognize that growth is happening and the trend towards higher prices encourages them to invest. They observe that the market-driven approach gives them greater spending power and, over time, ability to invest more in technologies and equipment that can further enhance their household wealth. Where there is greater household wealth, there is a greater capacity to withstand weather- and market-related shocks.

At a more technological level, the project’s promotion of **improved varieties and certified seed material**, has contributed to improve resilience of individual farmers. It is clear however that USAID/PCE needs to enhance current extension messages for farmers to get the most out of improved seed material. Best practices such as conservation farming, early sowing of upland rice and recourse to improved seeders need to accompany promotional messages. For these gains to spread and to improve farmer resilience, it is essential to support the development of well-managed seed supply chains for strategic cereal crops, capable of consistently meeting market needs with quality material. USAID/PCE is now working with seed association partners to include the creation of buffer stocks of base multiplication seed material able to cover eventual production shortfalls from one season to the next. The development of financing models adapted to seed producers in turn enables them to put this new system of buffer stocks into practice.

The 2011 maize season also highlighted the positive role consolidators can play in limiting the negative impact of climate hazards on supply networks. In the end, network leaders SEDAB and FEPROMAS took steps to minimize the number of credit defaults and have been able to secure **financing and inputs for a 2012 maize program that will exceed the planted areas achieved in 2011.** Finally, all groups are working on adapting contract-pricing methods for 2012 to better respond to price fluctuations caused by uncertain international price conditions. This kind of value chain leadership provides safeguards for individual farmers against the disruptive effect of climate and market shocks.

Government service sustainability. The ability of Government to consistently provide critical services to the cereal value chains has been an issue from day one. The most critical public services are in the seed sector where Government plays a direct role in the supply chain. USAID/PCE stepped in to help ISRA and DISEM upgrade facilities associated with the production of foundation seeds and the certification of commercial seeds. This investment support does not however guarantee that these facilities will be able to cover their operating costs and renew their ageing personnel – a great part of which are nearing retirement age.

USAID/PCE is addressing this situation through the development of a sound PPP framework under which government will feel at ease in transferring strategic services to private operators. Currently the project is in the final stages of closing a concession agreement for private management of the Richard

Toll seed conditioning center. Securing buy-in from both public and private stakeholders has been a lengthy iterative process. However the approach is paying off as the Government is looking to duplicate the approach for a similar facility in Diourbel. DISEM is favorable to open discussions on extending the concession approach to the operation of regional seed labs under its technical oversight. Meanwhile, following the completion of the rehabilitation work at the Fanaye and Niore research stations, ISRA intends to pilot a commercial approach for its foundation seed production activities in order to ensure full cost recovery. USAID/PCE will pursue its support to both stations in the development of acceptable institutional arrangements with the private sector to improve the cost recovery and therefore the sustainability of these functions.

Other government services are not progressing as clearly. Notably, efforts to roll out decrees in application of the agro-sylvo-pastoral law are proceeding very slowly. The National Agriculture Investment Plan seems to be stuck on paper. For Government entities, their ability and motivation to sustain forward motion on these initiatives is difficult particularly in a context of scarce public resources and unstable leadership. Close dependency on project support even for a minimum level of functioning is a serious constraint for any organization. The USAID/PCE team nevertheless places an emphasis on efficiency and ownership in our intervention programs aimed at public partners. The BFPA/IPAR model set up to deliver training programs for the Ministry of Agriculture is a good example. It proves very efficient regarding technical performance, institutional appropriation of the whole process, regular auto-evaluation and close monitoring of impact on the three target agencies (DA, DAPS, DHORT).

Regarding the project's substantial support to improve agriculture statistics, the plan in FY13 is to substantially scale back direct budget support while maintaining critical technical support to address remaining capacity weaknesses that can undermine the quality and accuracy of statistics. The project will also work with the Ministry of Agriculture to find solutions to the systemic budget shortfall to cover the full costs of the annual agriculture survey.

Policy reform measures. Project support to policy reform measures has met with consistently mixed results. Ultimately, policy reforms require action and leadership from government entities and, as highlighted above, frequent leadership changes combined with insufficient resources have often left Ministry of Agriculture technicians unable to maintain momentum on specific initiatives. Where the project has injected large resources, such as the operating costs and training for agriculture statistics, we see a real pay-off in terms of improvements to methodologies, capacity and data quality. In other arenas, such as fertilizer sector performance, the Government's decision to formalize via ministerial decree a National Reflection Committee on Fertilizer and Soil Fertility, constitutes a degree of progress but many uncertainties about the mandate and resources available to the Committee remain.

In FY12, policy support activities were further constrained by the circumstances of the 2012 presidential elections and the consecutive leadership changes. Most of the events that required interaction with some high level decision makers had to be postponed. We also observe that gender is often not perceived as a critical problem especially in male dominated audiences. The attempts to raise it even indirectly in connection with particular issues such as access to land can generate disruptive quarrels and negative perception of development partners considered as having their own agenda.

The project also finds that many people in public services are reluctant to collaborate in the absence of any form of additional compensation. The project's policy team concludes that the absence of a formal framework to anchor our fragmented support to the Ministry for Agriculture does not facilitate any recourse to the administrative authority in case of dysfunctions. In this regard, in FY13, the team will organize periodic sessions under the tutelage of the Secretary General to review progress and obstacles in USAID/PCE-Ministry of Agriculture collaboration.

1.3. Project phase-out considerations

The project is currently scheduled to close at the end of November, 2013. In the absence of an extension, it will be necessary for the project to cease technical field activities no later than September 30, 2013, to ensure an efficient close-out. This section briefly discusses the key project actions in FY13 to prepare for project closure.

The implementation approach of PCE is founded on support to actors embedded directly in agriculture value chains, be they producers, millers, buyers, service providers or bankers. Our team has supported these groups to explore new types of business relationships and partnerships, and to test and invest in new technologies towards a common goal of boosting competitiveness, output and sales. The scale of project interventions has been determined by the limits of our partners to invest and manage in different cereals value chains and by our own technical and resource constraints. Over three years, we have learned which groups and organizations are serious about investing in Senegal's agriculture future.

The project team is comfortable in knowing that these serious partners will carry forward the innovations and management changes introduced by the project with, inevitably, varying degrees of precision and with a healthy dose of on-going adaptation to local circumstances. The fact that the core interventions for value chain development (farmer outreach, demonstration sites, seed multiplication, contracting, quality testing, negotiation for inputs and loans...) have been pursued directly by value chain actors is by far the best bet that local rice, maize and millet value chains will capture a growing share of the national marketplace. Meanwhile, it is encouraging to see local financial institutions taking an increasingly lead role in defining how to link their seasonal and multi-year credit offerings with more formal cereals marketing and consolidation channels, typically linked to some sort of contractual arrangements.

The PCE team understands that while 2013 may be the end of the project, it is not the end of the Feed the Future Strategy. Much remains to be done after 2013. The maize value chain, for example, may be able to reach around 20,000 T of quality maize sales to local animal feed buyers. That is much more than what was sold three years ago (virtually nothing), but still quite far from satisfying the market demand of more than 100,000 T/year. In the irrigated rice value chain, we have seen the project-sponsored introduction of aromatic varieties, linked to integrated contracting, financing and consolidation schemes lead to development of high-quality rice that appeals to urban consumers. As the supply chain becomes more predictable and sophisticated, we can expect farmers to respond with an intensification of their holdings as they plant a true double crop. In parallel, on-going and planned investments to expand total cultivation area in the valley will facilitate further expansion of high-quality rice production. Only then will the Senegal River Valley achieve a level of output that can significantly offset the 800,000 T of imported rice.

We must keep in mind that the project has completed three agriculture seasons and a fourth season is currently underway. The first year, 2009, was a start-up period and our reach was limited. We were also spread more thinly with activities in livestock, dairy, sorghum and cowpea in addition to the FTF priority value chains. We worked with greater focus in 2010 and then even more so in 2011. However, the low rains and low yields in 2011 slowed our progress and forced our partners to rethink their roles and relationships within certain value chains. Although 2012 outcomes look to be highly promising, what we can conclude is that the value chain models and relationships under development are still relatively new and thus inherently fragile.

Even successful seasons bring new challenges that value chain partners have not yet confronted. A good example is the need to develop large-scale storage schemes (tied to robust financing arrangements) to ensure a steady supply beyond the three-month harvest period. The private sector and farmer federations are only now beginning to consider solutions to such a challenge as they face a bumper crop in 2012. Similarly, the level of mechanization is still far from optimal, yet most entities do not possess the financial track record and business plans necessary to rapidly ramp up investment in tractors, threshers, shellers, mills, and other gear.

This discussion serves to illustrate the importance of FY13 as a transition period in the FTF strategy. Our FY 13 phase-out actions are intended to ensure greater ownership of tools and systems by value chain partners, while also setting the stage for future assistance that is adapted to the evolving challenges that these value chains will face as they move to a considerably higher level of productivity and growth. Specifically, we can describe the FY13 transition around the following key actions:

1. **Continue the course of assistance to value chain network partners.** The work plan already describes in detail the planned assistance to value chain partners with an emphasis on implementing quality testing protocols, testing of consolidation arrangements, expansion of seed replication actions, especially for aromatic and Nerica rice and hybrid maize varieties. In addition, the project has planned for support to value chain partners to organize their own “bilans” of the 2012 season with farmer groups and banks, and to use those sessions to plan for 2013.
2. **Intensification of capacity building support with a focus on organizational management.** Over the past three years, a number of new organizations have emerged, notably the maize federation, FEPROMAS, and two new seed associations, REPROSENER (Nerica seeds) and REPROSEM (maize seeds). At the same time, some existing entities have demonstrated strong potential to provide long-term outreach services to farmer groups. In FY 2013, the PCE capacity building team will be providing more intensive support to address organizational governance and service provision to organization members. This is a key phase-out investment as it helps a selection of groups to more clearly define their strategies and operational framework for providing services to members, and, notably, to define how to pay for and sustain such services.
3. **Accompany financial institutions to promote financing models and tools.** The banks and micro-finance institutions involved in value chain financing since 2009 have clearly indicated the importance of using contract-based transactions to secure seasonal credit and other forms of lending. In previous years, our interventions have sought to introduce new models and tools for leveraging bank loans to meet various needs. Recognizing that banks still have a need to build internal capacity and familiarity with these models and tools, our support in FY13 focuses on directly supporting financial institutions to assume a leading role in promoting their financial services and models to producers and millers. This is also the plan for promotion of leasing and agriculture insurance schemes. Thus 2013 represents an important shift away from introduction of new models towards strong internalization and generalization of those models. Again, internal “bilans” are planned to take stock of the 2012 season and help prepare for the 2013 season.
4. **Capitalize our experiences and lessons learned through a variety of mechanisms.** The PCE team will place a strong emphasis on communications and dialogue to effectively capture and share findings and results associated with our work since 2009. This will include field visits with representatives of the Ministry of Agriculture to exchange with beneficiaries and partners, events at regional and national level to explore results, methods and lessons learned, and an intensified communications effort including success stories, production and dissemination of videos, press insertions, debates on local television, and more. The PCE team also plans to dialogue with the USAID Senegal team to identify the specific opportunities to raise the profile of USAID’s results and lessons learned beyond the boundaries of Senegal.

1.4. Overview of Expected Results

The USAID/PCE team has converted its successful strategies and approaches into an ambitious scope of results that makes a substantial contribution towards USAID Feed the Future goals in Senegal. The table below provides a quick look at the expected results for Fiscal Year 2013 as captured in the project's leading indicators.

USAID/PCE EXPECTED RESULTS IN NUMBERS FOR FY 2013

Indicator	FY 13 Targets
Number of rural households benefiting directly	38,500
Number of hectares under improved technologies or management practices	37,880
Number of farmers and others who have applied new technologies or management practices as a result of USG assistance	30,800
Volume and Value of production processed and sold	\$ 27.6 million
	58,000 MT
Value of incremental sales (collected at farm-level) attributed to FTF implementation	\$ 21 million
Value of Agricultural and Rural Loans	\$ 11,000,000
Amount of private financing mobilized with DCA Guarantee	\$ 6,000,000
Number of MSMEs, including farmers, receiving assistance to access loans	13,650
Number of jobs attributed to FTF implementation	7,375
Quantity of foundation and certified seed produced	3725
Numbers of Policies& Regulations in different stages of development	22
Number of public-private partnerships formed as a result of FTF assistance	63
Number of business-to-business partnerships developed	1,925

Note: Refer to Table 12 for a complete list of PCE indicators and target values.

2. PLANNED ACTIVITIES, EXPECTED RESULTS AND MILESTONES

The information presented in this section of the work plan follows the thematic structure requested by USAID in 2011 for all Economic Growth Office projects. There are seven sub-sections as follows: Value Chains, Infrastructure, Seeds, Access to Finance, Market Access and Trade, Policy and Institutional Capacity Building. Cross-cutting issues such as gender and climate change are addressed in Section 3.

2.1. Value Chains

USAID/PCE contributes to the Feed the Future strategy for Senegal by opening sustainable market opportunities for a wide farmer base while building local and national food security and resilience in three priority cereal staples: rice, maize and millet. The project interventions strengthen the competitiveness of local value chains sourcing from the two FTF priority intervention zones, the Senegal River Valley (SRV) and the South Forest Zone (SFZ), so they can compete with the cereal imports currently dominating the country's urban and industrial markets. In FY2013, USAID/PCE's focus remains to have local producers capture market share from the 800,000MT of yearly rice imports, maize imports in excess of 100,000MT and opening up urban consumer and institutional channels to quality processed millet products.

The value chain component of the project engages actors from farm to market, with the objective of structuring inclusive networks capable of pooling quality grains from a supply base composed mainly of small farmers. This is achieved through the transfer of critical productivity technologies and skills, which are immediately put to application in the course of seasonal, contracted commercial programs linking privately managed networks with downstream markets.

The FY2013 value chain program hinges on Senegal's seasonal production cycle. In the case of irrigated rice, the project activities for the year will cover the harvest of the 2012 rain season (December to February), the production and marketing of the dry season cycle (February to July) and the launch of the 2013 rain season in July. In the case of maize, millet and rainfed rice, value chain activities will be structured around the closure and marketing of the 2012 rain season harvest, which habitually ends in March, and the launch of the 2013 cycle, with sowings planned for June.

The value chain program for 2013 will rest on four pillars:

Promotion and expansion of new varieties will be about scaling up the adoption of new aromatic rice varieties in the SRV, upland NERICA in the SFZ and high yielding maize open pollinated and hybrid varieties. In FY2013 the project will put a focus on augmenting geographic coverage and access by women producer groups – involving farmers from these zones in both demonstration and seed multiplication activities. In the case of rainfed rice, the project will support the introduction of recently homologated NERICA-S varieties, adapted to lowland production and therefore more accessible to women farmers.

Field productivity and resilience is a central concern to ensure a consistent and competitive supply. In FY2013, farmer trainings will carry best practice messages directly to the field with a focus on conservation farming practices, other land preparation and hybrid seed technologies that have had proven impacts, both during the 2011 rain season shortfall as well as at the outset of the 2012 season. The objective for the FY2013 will be to raise adoption of these practices and technologies. The project's entry point will remain farmer populations targeted by commercial programs capable of financing equipment and other investments required to mainstream the technologies.

Contract management: USAID/PCE will pursue its collaboration with market consolidators pooling supply from wide farmer bases and will continue to help them adapt their contract

farming practices, pricing policies and supply chain management capabilities. The focus in FY2013 will be about the adoption of flexible pricing arrangements and production monitoring/forecasting skills using databases, geo-referencing and field level data collection and communication by network field agents.

Quality control and traceability have emerged in FY2012 as a central concern of the more mature networks. Although quality issues are built into supply contracts, the development of a farmer friendly set of norms and quality control protocols and traceable documentation systems is to be considered a specific area of concern by USAID/PCE. Activities will cover the development and adoption by leading networks of farmgate norms, training in the application and documentation of testing protocols, minimal storage facility compliance criteria.

The Value Chain program is not a standalone component of USAID/PCE and significant implementation synergies involve other project components (rural infrastructure, seed sector support, capital access, capacity building and market access and trade), the program of which is documented in subsequent sections of this work plan.

In addition, beyond the direct collaborations developed by the Value Chain team with supply chain network partners for the roll-out of this program, the project continues to develop transversal linkages with other Government and Donor led initiatives with converging concerns – which enables the project to leverage both a widened impact and follow through beyond the project's term. These links are listed in the partnership section of this work plan.

Irrigated Rice

The irrigated rice sector has evolved in 2012. The new aromatic rice varieties have been well received by both farmers and the market. Senegalese farmers have reaped substantial gains stemming from higher yields combined with a price premium tied to the imported fragrant rice price. Demand for certified seed is rising and the expanding availability of aromatic rice is opening new Dakar distribution channels. Another positive outcome is the swift take-off of the VITAL mill in Richard Toll, with its innovative financial partnership with CNCAS to contract more than 30,000 tons of rice over two initial seasons. This success has spurred existing mid-sized millers to restructure for growth, and we observe other new rice milling ventures emerging in the Valley. This growth trend will be reinforced in the mid-term by upcoming investments in irrigation infrastructure that will expand total area under rice farming. However significant short-term growth in supply from the valley will be driven more by broader adoption of double cropping of existing fields. The double-cropping of fields will be increasingly possible thanks to the tighter programming and secure markets provided by the contracted financial arrangements proposed by USAID/PCE and its partners.

Despite the project's emphasis on aromatic rice varieties, our work on facilitating miller-farmer-bank collaboration around contracting models is also facilitating scale-up of sales of more traditional local varieties. The project-sponsored farming practice training system (through farmer networks) and more general reinforcement of network production management schemes have contributed to growth in the quality and quantity of the marketable supply base as well as improvements in the predictability of supply. However most of the project's impact to date has been in the delta where the large portion of the commercial production is located. In FY12 the project adopted a deliberate approach to reach more remote areas such as Podor and Matam as well as the inclusion of women and these efforts will be continued and expanded in FY13. Although significant improvements in paddy quality have been made in all implementation zones, there is a recognized need for tighter harvest forecasts and systematic controls at all stages, especially as contracted programs grow.

In FY2013, the USAID/PCE irrigated rice value chain program will continue to pursue its activities and strategies for expansion of aromatic rice production, improvement of contract management skills and the furtherance of paddy rice quality management practices. We note in particular the following plans :

- Renewal of the cost share aromatic rice multiplication program with UNIS-Nord (seed association) with a focus on reaching contracted producers in the Podor and Matam zones as well as women’s groups across the SRV.
- Renewal and expansion of demonstration sites for aromatic rice varieties and the associated farmer outreach and training programs using the “Le Chemin du Bon Riz” best practice format. Expansion will focus again on the Podor and Matam zones where small farmer concentration is highest.
- Assistance to develop a comprehensive listing of farmers and unions at the onset of the harvests in order to communicate estimated aromatic rice availability to SRV millers.
- Assistance to partner networks to improve their production management and forecasting capabilities with a focus on better GPS field area calculation techniques, timely pre-harvest yield assessments and cost effective data communication.
- Introduction through farmer unions and other farmer networks of new best practice training modules on paddy rice testing methods and tools using buyer-defined standards.
- Support to partner mills to implement pilot quality control programs at designated collection points.

This set of activities will be conducted in synergy with the financing approaches developed by the project’s Capital Access team. As an example, the quality monitoring system will contribute to secure the inventory collateral of the commercial credit associated to the purchasing programs of partner networks such as VITAL and CNT.

Rainfed rice

Rainfed rice production in the SFZ remains largely destined for self-consumption by rural households. This is a boon to those households who, in the past, had to buy imported rice using money from their meager sales of millet or other crops. Given the considerable success of USAID’s upland NERICA intervention, both the Government and producers see the potential of a marketable surplus over the near term. The 2011 rain shortfall represented a stumbling block towards this goal but it did not suppress farmer enthusiasm and the PCE team has observed a significant increase in demand for upland NERICA seed for the 2012 rain season cycle. It is clear however that the supply of certified seed of upland NERICA varieties remains a constraint to its expansion as is the limited ability of ISRA to meet the needs of multiplication farms for foundation seeds.

In FY2012 USAID/PCE has expanded the upland NERICA program. This decision followed the debriefing of the problematic 2011 harvest at a regional event, where farmers communicated a renewed interest in the technology, despite significant yield shortfalls due to the drought. Resilience to drought and uneven rainfall is expected to improve by adapting conservation farming tillage and fertilization techniques to upland rice farming practices. The review also noted the importance of training delivery at the farm level with a focus on the practices critical to achieving the best yield from this new seed technology. The 2011 review event also emphasized the importance of strengthening seed multiplication capacity through best practice trainings and adaptation of credit schemes specifically to seed producers. Finally, a review of monitoring data highlighted a continued gender imbalance of upland rice farms and that the promotion of a rainfed production package to improve productivity in the lowlands would better reach women farmers.

All of these recommendations have been taken into account in the rain season 2012 program launched during Q4/FY2012 which will be carried over to FY2013. The USAID/PCE rainfed rice value chain activities during FY13 thus include the following:

- Expansion of upland NERICA coverage initiated during the 2012 rainy season through a combination of direct network partnerships and collaboration with other programs.
- Testing and participatory analysis of the impacts of conservation farming techniques from the current season in order to develop and disseminate best practices on a larger scale in the 2013 rainy season.

- Collaboration and support to the new seed association, REPROSENER, to introduce homologated lowland NERICA-S varieties for adoption by women producers, through a demonstration and seed multiplication program in lowland fields across the SFZ.
- Assistance to local networks to source and process NERICA to meet a CARITAS requirement for 500MT and to develop contracted (market-oriented) commitments for 750MT for the 2013 season.

The focus of the Value Chain component will be on expanding the producer base of both upland and lowland NERICA, with higher yields generating a marketable surplus leading to commercial contracts. To achieve the above activities and continue building long-term sustainability, USAID/PCE will collaborate closely with seed association REPROSENER who will benefit from institutional support and financial coaching from USAID/PCE which will enable it to provide participant networks with an adequate supply of certified seed material.

Maize

Statistics show that commercial maize imports decreased from a peak of 110,000 MT in 2009 to 90,000 MT in 2011 while local procurement of maize by animal feed businesses grew over the same period. This trend has been reversed in 2012 due to the local production shortfall caused by the erratic rain season experienced in 2011, which greatly reduced commercial maize availability in the first quarter of 2012 and had reached 60,000MT as of April 2012.

Maize networks supported by USAID/PCE in 2011 were put to the test: all networks experienced input cost inflation, contract litigation, price volatility and credit collection issues. Despite these severe disruptions, a commercial program is in place for the 2012 rain season with all but one consolidation network on board and projected volumes due to exceed the 2011 program. An unexpected outcome of the FY2012 program has been the creation of FEPROMAS, a federation grouping maize farmer networks in the Saloum region with the ambition to provide consolidation services to members in replacement of their former consolidator partners.

USAID/PCE's strategy for the 2012 rain season will revolve around collaboration and capacity building with FEPROMAS in the Saloum and with SEDAB in the Casamance. Both networks have expanded their contracted farmer base. Other producer network leads have adopted a defensive approach, staying within their established farmer base. SODEFITEX in particular has opted to limit itself exclusively to its captive cotton producer base to promote a maize diversification program. The 2012 season objective is to reinforce the two networks (FEPROMAS and SEDAB) that are taking a more aggressive, growth-oriented stance. Our collaboration with these two groups will include improved production and post harvest logistics and quality control management capacity so they may contract directly with industrial firms. In addition, both networks will be channels for the mainstreaming of climate resilience technologies such as conservation farming and diversified hybrid varieties.

Maize value chain activities in FY2013 will include:

- Introduction of conservation farming to the maize commercial networks through the organization of field training days at some 30 demo sites set up for rain season 2012 combined with development of technical training charts. We anticipate expanding that program to many more contracted farmers willing to adopt CF technologies in the 2013 season.
- An expanded diversification of maize hybrid types available to farmers in the commercial programs. USAID/PCE will support the networks to partner with seed producers to identify and source hybrid varieties available in ECOWAS and beyond. Field testing will be performed on farmer owned production sites during the 2013 rain season.
- Strengthening of network capacity to manage overall production, monitor contracts and generate more accurate harvest forecasts.
- Assistance to FEPROMAS to develop a farmer-managed cereal pooling and marketing system, as a core service that the Federation will provide to the constitutive local networks.

- Support to FEPROMAS and SEDAB to expand their commercial maize contracted farmer networks beyond their immediate catchment areas. This activity will serve the dual purpose of increasing commercial supply and augmenting outreach of basic skills training in contract farming.
- Training of commercial maize networks in quality testing methods using buyer-defined standards. These trainings are the foundation for a pilot industrial maize quality control program which will be carried out at collection points.

The program will benefit from extensive collaboration with the Capital Access team to develop innovative commercial credit systems based on inventory collateral, inspired by the successful VITAL model in the rice sector. The USAID/PCE Capacity Building team will work with the FEPROMAS network on improving contracts and pricing approaches, and general value chain governance.

Millet

Millet remains the country's basic food security staple for most of the rural population. Millet responds well to conservation farming techniques, which yield significant productivity and climate resilience gains when applied alongside striga control techniques. However penetration on urban markets remains challenged by the convenience of rice in terms of ease of preparation and relatively low cost. The processing sector specialized in ready-to cook or to consume (thiakry) millet products is experiencing growth including promising links to upcoming school feeding programs.

USAID/PCE has worked with selected farmer unions to connect them to commercial millet networks supplying processors. Specifically, farmer groups receiving technical trainings on CF techniques, striga control and certified seeds are linked in with consolidation systems for quality millet. This arrangement has led to structured contract farming and financing programs for the participating farmers. In FY2013, the project will pursue work undertaken during the 2012 rain season with seven farmer groups in the SFZ to build technical capacity and develop their contract management skills. A specific set of trainings and support will focus on quality control and traceability in order to provide cereal supplies, which comply with the procurement norms of school feeding programs and similar WFP-backed programs.

Table 1 - Value Chains Activities, Expected Results and Milestones

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Program area: Irrigated Rice Value Chain					
Sub-program area: Expansion of aromatic rice production					
Expansion of multiplication program for aromatics to Middle and Upper SRV and to Women's groups	<ul style="list-style-type: none"> - 20 hectares (100 MT) of certified aromatic rice seed produced by Mid-Upper Valley groups and Women during 2012 rain season cycle. - 200 farmers trained in seed multiplication protocols - Expanded program for 2013 dry season cycle. 	<ul style="list-style-type: none"> - UNIS-Nord multiplication program launched with targeted groups. 	<ul style="list-style-type: none"> - Rain season 2012 certified seed harvest by targeted groups. - Training guides developed with DISEM for Aromatic rice multiplication and Certification. 	<ul style="list-style-type: none"> - Trainings and expanded dry season 2013 multiplication program with target groups launched. 	<ul style="list-style-type: none"> - Dry season 2013 certified seed harvest by targeted groups.
Communication to millers of a seasonal listing of farmers and unions estimating aromatic rice availability across the SRV.	<ul style="list-style-type: none"> - Purchases of aromatic paddy rice by SRV millers reach 40,000 MT over rain season 2012 and dry season 2013 harvests. 	<ul style="list-style-type: none"> - Listing produced in time for Rain season 2013 harvest 		<ul style="list-style-type: none"> - Listing produced in time for Dry season 2013 harvest. 	
Demonstration sites for aromatic rice varieties expanded to Middle and Upper SRV producer networks.	<ul style="list-style-type: none"> - 100 demonstration sites established for dry season 2013 cycle in Middle and Upper SRV. - 8000 farmers trained 		<ul style="list-style-type: none"> - Aromatic rice demonstration sites set up in Podor for dry season 2013 production cycle 		<ul style="list-style-type: none"> - Aromatic rice demonstration sites set up in Matam for rain season 2013 production cycle

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Sub-program area: Contract management skills and network growth					
Reinforcement of network production management and forecasting. <ul style="list-style-type: none"> • DBASE monitoring format • GPS field area calculation • Pre-harvest yield assessment • Data communication and consolidation • Forecast calculation • Actual harvest data collection 	<ul style="list-style-type: none"> - <i>Rain season 2012</i>: Networks generate and monitor group level forecasts first week of December at outset of harvest (accuracy: actual = forecast +/- 20%). - <i>Dry season 2013</i>: networks generate first forecast by May 31st. 	<ul style="list-style-type: none"> - Rain season 2012 harvest forecast published. 	<ul style="list-style-type: none"> - Rain season 2012 harvest data published. 	<ul style="list-style-type: none"> - Dry season 2013 harvest forecast published. 	<ul style="list-style-type: none"> -
Sub-program area: Promotion of paddy rice quality					
“Le Chemin du Bon Riz” best practice training: Expansion of coverage across the SRV with a focus on Podor and Matam.	<ul style="list-style-type: none"> - 15,000 additional farmers trained. - Improvement of paddy quality indicators (homogeneity, humidity, color, foreign matter) and miller productivity. 	<ul style="list-style-type: none"> - Completion of the Rain season 2012 training cycle. 	<ul style="list-style-type: none"> - Launch of the Dry season 2013 training cycle. 		<ul style="list-style-type: none"> - Launch of the rain season 2013 training cycle.
Farmer Unions and other farmer networks training in quality testing methods using buyer defined standards.	<ul style="list-style-type: none"> - 100 network field agents and 5000 farmers trained in farm gate quality testing and traceability methods and analytical technologies. 	<ul style="list-style-type: none"> - Paddy rice quality standard and testing method charts available for field level trainings. 	<ul style="list-style-type: none"> - Field training of farmer groups on contractual quality norms and testing. (2012 Rain season harvest cycle) 		<ul style="list-style-type: none"> - Field training of farmer groups on contractual quality testing norms. (2013 Dry season harvest)
Pilot paddy rice quality control program carried out at collection points by network field agents.	<ul style="list-style-type: none"> - 30,000 tons (25% of commercial harvest) of paddy purchases undergo farm gate quality controls documented in traceability systems. 	<ul style="list-style-type: none"> - Quality control protocol defined and appended to purchasing contracts. 	<ul style="list-style-type: none"> - Completion of 2012 Rain season harvest pilot program. 		<ul style="list-style-type: none"> - Completion of 2013 Dry season harvest pilot program

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Program area: Rainfed Rice Value Chain					
Sub-program area: Expand NERICA rice adoption					
Expansion of upland NERICA coverage to areas not reached to date in the SFZ and introduction of Conservation farming techniques to populations reached by past demonstration program.	<ul style="list-style-type: none"> - 200 demonstration points established including conservation farming technology demos. - Cumulative population of 12,000 farmers reached directly by the demonstration program by end of FY13. 		<ul style="list-style-type: none"> - Assessment of 2012 pilot CF sites set up by USAID/PCE and USAID/Wula Nafaa - Adjustment of NERICA CF recommendations 	<ul style="list-style-type: none"> - NERICA CF training charts developed. 	<ul style="list-style-type: none"> - Demonstration points established.
Introduction of lowland NERICA-S varieties for adoption by women producers.	<ul style="list-style-type: none"> - 50 demonstration/multiplication sites established with REPROSENER. - 2000 women reached. - 20 tons of seed available in the lowland NERICA-S varieties. 		<ul style="list-style-type: none"> - REPROSENER sources 2 tons of certified lowland NERICA-S seed 	<ul style="list-style-type: none"> - Lowland NERICA-S training chart developed. 	<ul style="list-style-type: none"> - 50 demonstration points established and women farmers trained.
Sub-program area: Support commercial consolidation of NERICA rice					
Commercial consolidation of NERICA surplus production for milling.	<ul style="list-style-type: none"> - 500MT of NERICA rice milled and marketed from Rain season 2012 harvest. - 750MT contractual commitments for Rain season 2013 harvest. 		<ul style="list-style-type: none"> - Commercial contracts for 500MT. 		<ul style="list-style-type: none"> - Commercial contracts for 750 MT

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Program area: Maize Value Chain					
Sub-program area: Maize field productivity					
<p>Introduction of conservation farming to the maize commercial networks.</p> <ul style="list-style-type: none"> • Demo sites & field days • Performance report • CF training chart • CF farmer training • CF equipment procurement facilitation 	<ul style="list-style-type: none"> - 2012 season demo sites confirm 20%+ productivity gains attributed to CF - 20% adoption of CF by farmers participating in 2013 rain season program in the Saloum. 	<ul style="list-style-type: none"> - 2012 demonstration site harvest and productivity assessment. 	<ul style="list-style-type: none"> - Conservation farming guidelines chart produced and disseminated by commercial networks. 	<ul style="list-style-type: none"> - 2013 commercial maize program under Conservation farming. 	
<p>Diversification of maize hybrid types available to farmers in the commercial programs.</p> <ul style="list-style-type: none"> • Hybrid variety sourcing • Partnership facilitation • Fixed obligation grant • Test sites and field days 	<ul style="list-style-type: none"> - Demand driven collaboration between FEPROMAS (<i>as project lead</i>), REPROSEM and ISRA to test and certify new hybrids. - Drought resistant hybrids suited for smallholder farmer production identified and testing program launched in rain season 2013. 	<ul style="list-style-type: none"> - Identification of list of hybrid varieties to be tested (within and outside ECOWAS). 	<ul style="list-style-type: none"> - Joint testing protocol between FEPROMAS/ REPROSEM/ ISRA signed. 	<ul style="list-style-type: none"> - Hybrid seed sourced by REPROSEM 	<ul style="list-style-type: none"> - Test sites set up by ISRA and FEPROMAS - Field visits by participant networks held.
Sub-program area: Contract management skills and network growth					
<p>Reinforcement of network production management and forecasting.</p> <ul style="list-style-type: none"> • DBASE monitoring format • GPS field area calculation • Rainfall tracking 	<ul style="list-style-type: none"> - <i>Rain season 2012</i>: FEPROMAS and SEDAB networks generate and monitor group level forecasts first week of November at outset of harvest (accuracy: actual = forecast +/- 	<ul style="list-style-type: none"> - Rain season 2012 harvest forecast published. 	<ul style="list-style-type: none"> - Rain season 2012 harvest data published. 		<ul style="list-style-type: none"> - Rain season 2013 harvest forecast published.

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
<ul style="list-style-type: none"> • Pre-harvest yield assessment • Data communication and consolidation • Forecast calculation • Actual harvest data collection • Data exchange interface with banks 	<p>20%).</p> <ul style="list-style-type: none"> - Acceleration and improveemnt of credit recovery. - <i>Rain season 2013</i>: networks generate first forecast on August 31st. 				
<p>Management system for cereal pooling and marketing by FEPROMAS.</p> <ul style="list-style-type: none"> • FEPROMAS – Farmer network services contract • FEPROMAS – Industrial buyer contract • 2012 consolidation planning • Field purchasing management system • Inventory and delivery tracking system • Fund transfer management system, 	<ul style="list-style-type: none"> - <i>Rain season 2012</i>: New pooling/ marketing services contract framework introduced and applied. - Consolidation storage model developed (<i>See link with Rural Infrastructure section</i>) 	<ul style="list-style-type: none"> - Contracts signed with Industrial buyers by FEPROMAS and SEDAB - Supplier contracts signed between FEPROMAS and founding networks. 		<ul style="list-style-type: none"> - Sales and marketing cost statistics for 2012 season published by FEPROMAS. 	<ul style="list-style-type: none"> - 2013 updated contract framework.
<p>Expansion of commercial maize contracted farmer networks.</p> <ul style="list-style-type: none"> • Village level trainings and sign-up meetings • Organizational training of newly formed networks 	<ul style="list-style-type: none"> - 5000 additional farmers trained by commercial networks in contract farming terms and conditions. - 2000 non-member farmers market maize through commercial networks during 2012 rain season harvest. - 2000 additional members contracted by existing networks for rain season 2013. 	<ul style="list-style-type: none"> - Non member purchasing program (rain season 2012 harvest) planned and launched by commercial networks. 		<ul style="list-style-type: none"> - Farmer training and recruitment campaign by partner commercial maize networks completed. 	<ul style="list-style-type: none"> - New member contracts signed by commercial networks for rain season 2013

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Sub-program area: Commercial maize norms, quality control and traceability					
<p>Commercial maize networks trained in quality testing methods using buyer-defined standards.</p> <ul style="list-style-type: none"> • Maize norm chart and contract annex • Storage norm chart • Trainer and field trainings 	<ul style="list-style-type: none"> - 30 network field agents and 5000 farmers trained in farmgate quality testing, traceability methods and analytical technologies. 	<ul style="list-style-type: none"> - Maize quality standard and testing method charts available - Training of Field agents and contracted farmers – (2012 Rain season cycle). 			<ul style="list-style-type: none"> - Field training of farmer groups on contractual quality norms and testing. (2013 Rain season cycle)
<p>Pilot Industrial maize quality control program at collection points.</p> <ul style="list-style-type: none"> • Farmgate quality control protocols • Traceability reports • Grants (analytical equipment – Rural Infrastructure section) 	<ul style="list-style-type: none"> - System acceptable to Industrial buyers. - 3,000 tons of commercial maize purchases undergo farm gate quality controls documented in traceability systems. - 	<ul style="list-style-type: none"> - Quality control protocol defined and appended to purchasing contracts. 	<ul style="list-style-type: none"> - Completion of 2012 Rain season harvest pilot program. 		
Program area: Millet Value Chain					
Sub-program area: Productivity training					
<p>Promotion of millet Conservation Farming and productivity best practices techniques with farmers involved in commercial millet networks.</p>	<ul style="list-style-type: none"> - 4000 farmers trained - CF adoption rate amongst contracted farmers reaches 40% in 2013 Rain season cycle 		<ul style="list-style-type: none"> - De-brief of results at CF & best practice sites for 2012 - 2013 contracted farmer training in CF 	<ul style="list-style-type: none"> - Facilitation of acquisition of CF equipment by farmers. 	<ul style="list-style-type: none"> -

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Sub-program area: Contract management skills and network growth					
Reinforcement of millet networks' production management and forecasting . <ul style="list-style-type: none"> • DBASE monitoring format • GPS field area calculation • Rainfall tracking • Pre-harvest yield assessment • Forecast calculation • Actual harvest data collection • Data exchange interface with banks 	<ul style="list-style-type: none"> - <i>Rain season 2012</i>: Participant networks generate and monitor group level forecasts first week of November at outset of harvest (accuracy: actual = forecast +/-20%). - Acceleration and improvement of credit recovery. - <i>Rain season 2013</i>: networks generate first forecast on August 31st. 	<ul style="list-style-type: none"> - Rain season 2012 harvest forecast published. 	<ul style="list-style-type: none"> - Rain season 2012 harvest data published. 		<ul style="list-style-type: none"> - Rain season 2013 harvest forecast published.
Sub-program area: Commercial millet norms, quality control and traceability					
Pilot Millet quality control program at collection points. <ul style="list-style-type: none"> • Millet norm chart and contract annex • Farmgate quality control protocols • Traceability reports • Grants (analytical equipment – Rural Infrastructure section) 	<ul style="list-style-type: none"> - System acceptable to millet processors. - 500 tons of commercial millet purchases undergo farm gate quality controls documented in traceability systems. - 	<ul style="list-style-type: none"> - Quality control protocol defined and appended to purchasing contracts. 	<ul style="list-style-type: none"> - Completion of 2012 Rain season harvest pilot program. 		

2.2 Rural Infrastructure & Equipment

The lack of adequate rural infrastructure is a key limiting factor in Senegal's local cereal value chains. The long-term sustainability of the rice, maize and millet/sorghum value chains require that the actors meet critical harvesting, storage and processing issues.

USAID/PCE approaches the three cereal value chains from a perspective of developing integrated solutions that will allow broad networks of smallholder farmers to achieve a scale of consolidation that makes them competitive with imports. The investments required to service the scale of activity generated by the commercial networks precludes closing the gap through direct subsidy by the project. The approach taken by the project is therefore the following:

- Support pilots of post harvest technologies critical to enhancing productivity and product quality through targeted grants enabling partners to showcase community level threshing, quality control equipment and temporary consolidation storage.
- Provide cost shared support to value chain networks to upgrade existing warehouses so they comply with basic HACCP norms and conform to collateral financing access security requirements.
- Promote leasing and other long-term financial services that can rely on the stable commercial revenue streams enjoyed by certain networks to leverage financing of field equipment and mid-term storage projects (see Capital Access section).

During FY13 USAID/PCE will focus on the following interventions pertaining to post harvest equipment, storage and processing facilities:

- Promotion of the use of analytical equipment by all value chain commercial networks (rice, maize and millet) such as humidity testers and, in the case of rice, milling testers for rapid analysis of milled paddy quality attributes.
- Positioning across the SFZ partner networks of maize de-husking and shelling units and associated training of service teams in equipment maintenance and productivity monitoring.
- Support to the improvement of selected paddy rice consolidation points across the SRV to have them conform to HACCP and collateral financing requirements.
- Cost share support to joint-ventures for the development of a large scale paddy storage warehouse.
- Support to maize, millet and NERICA rice networks in setting up HACCP compliant temporary storage and fumigation points.
- Support grants to emerging NERICA rice commercial networks in setting up rice milling services in the SFZ to service commercial contracts.

Table 2 - Infrastructure Activities, Expected Results and Milestones

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Program area: Post-harvest equipment					
Promotion of the use of analytical rice testing equipment .	<ul style="list-style-type: none"> - Humidity and paddy rice milling testers introduced to SRV consolidation teams and used in the course of their activities. 	<ul style="list-style-type: none"> - Identification of local suppliers - In-kind grant to participant networks 			-
Promotion of the use of maize and millet testing equipment .	<ul style="list-style-type: none"> - Humidity testers introduced to SFZ consolidation teams and used in the course of their activities. 	<ul style="list-style-type: none"> - Identification of local suppliers - In-kind grant to participant networks 			-
Promotion of maize de-husking + shelling technology.	<ul style="list-style-type: none"> - 15 additional shellers positioned across commercial maize network. - Standard operating guidelines adopted by harvest teams. - Consolidator networks improve their productivity. 	<ul style="list-style-type: none"> - In-kind grants of maize shelling units. - Standard operation and maintenance procedure trainings completed. 		<ul style="list-style-type: none"> - Additional units procured by networks through leasing or other long term arrangements. 	-
Program area: Storage					
Conformity of rice consolidation points in the SRV	<ul style="list-style-type: none"> - Rice consolidation points in the SRV meet basic HACCP norms according to 	<ul style="list-style-type: none"> - Audit of operating consolidation points against standard. 	<ul style="list-style-type: none"> - In-kind grants for the upgrade of existing facilities. 		-

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
	established standards.				
Model third party storage facility project destined to SRV paddy rice.	<ul style="list-style-type: none"> - A privately managed third party storage facility is established in the SRV 	<ul style="list-style-type: none"> - Construction specs for storage facility meeting HACCP and security norms associated to third party storage service.. 	<ul style="list-style-type: none"> - Cost share grant to selected joint venture. 		-
Equipment of NERICA rice, maize and millet temporary consolidation points.	<ul style="list-style-type: none"> - Commercial maize, millet and NERICA consolidation points meet basic HACCP norms according to established standards. - Implementation of WFP allowable cereal fumigation practices at temporary storage points. 	<ul style="list-style-type: none"> - In-kind grants to adapt consolidation points to standards for 2012 season harvest. 			-
Program area: Processing equipment and facilities					
Promotion of commercial milling of NERICA rice in the SFZ.	<ul style="list-style-type: none"> - Two commercial milling points are established in the SFZ 	<ul style="list-style-type: none"> - In-kind grant of commercial mini-rice mills to network BDS providers. 		<ul style="list-style-type: none"> - Installed mills process NERICA consolidated by partner networks. 	-

2.3. Seed Sector Development

The productivity and competitiveness of most agricultural value chains depends strongly on access to certified seeds and rootstock. In the cereal sector, a central role is attributed to ISRA for the production of breeder foundation seeds and the Ministry of Agriculture's seeds division (DISEM) for the certification of base and commercial seeds. Accredited private seed producers are then responsible for commercial certified seed production and marketing. The Government of Senegal is actively engaged, through DISEM, in gaining the OECD accreditation of its seed certification process, which will enable the country's seed industry to export worldwide. ISRA is looking to make its foundation seed unit more market driven and its board has approved the piloting of business oriented costing models at two of its stations. The Government is also looking to explore collaborations with farmer unions and the private sector for the management of seed processing services throughout the country. These policy initiatives are occurring in the context of rising demand for new productive varieties such as the Sahel aromatic and NERICA upland series – which have been promoted by USAID/PCE partners.

In the course of FY2012, USAID/PCE's activities have had the objective of reinforcing the integration of the institutional and private actors active in the seed sector in order to improve the quality, continuity and diversity of the supply in certified seeds to SRV and SFZ farmers. The following results have been achieved to date with USAID/PCE support:

- ISRA's Fanaye (SRV) and Nioro (SFZ) stations have benefited from renovations, installation of cold storage and irrigation equipment as well as a link to the power grid and back-up electricity supply.
- Three seed certification laboratories (Richard Toll, Kaolack and Kolda) have been re-built or thoroughly renovated and equipped with adequate analytical equipment as well as back-up electrical generators.
- A seed cleaning and processing facility has been built and equipped through a cost-share grant, is now operational in Kaolack.
- SRV seed producers, grouped into a cooperative called COO-SEN for the collective management of the facility, and the Ministry of Agriculture, have developed a comprehensive concession agreement for the Richard Toll facility, based on a comprehensive financial operating and investment plan.
- DISEM has held technical trainings of its laboratory staff and has developed material destined to certified seed farmers – all of which will reinforce its compliance with OECD standards.
- Seed producer associations UNIS-Nord, REPROSENER (NERICA), REPROSEM (maize) and millet seed producers have convened to produce three-year production plans which have led to orders of foundation seeds placed with ISRA in order to support their seed multiplication targets.

In FY2013, USAID/PCE activities in the seed sector will pursue the following objectives:

- Provide technical assistance to ISRA in implementing business oriented foundation seed production practices at the Fanaye and Nioro stations.
- Support DISEM in the implementation of laboratory best practices, operational and traceability documentation guidelines to field controllers, and seed processing facility technical and traceability guidelines.
- Reinforce seed associations in seed supply management and in the diversification of their seed portfolio.
- Complete the Richard Toll seed processing unit PPP agreement and cost-share investments to have a fully operational facility by the end of the financial year.
- Support the construction and equipment of a permanent seed cleaning and processing facility in Kolda.

Table 3 – Seed Sector Activities, Expected Results and Milestones

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Program area: Foundation seed supply / ISRA					
Support to ISRA-Production commercial management pilot for foundation seed supply. <ul style="list-style-type: none"> • Budget and costing acctg framework • GIS based field utilization monitoring and cost allocation 	<ul style="list-style-type: none"> - ISRA-Production generates an operating budget and cost estimates. - ISRA is able to assess and plan resources allocated to foundation seed production. 		<ul style="list-style-type: none"> - Budget and cost allocation framework developed 	<ul style="list-style-type: none"> - GIS based land utilization planning tool developed 	-
Program area: Seed certification framework / DISEM					
Training and monitoring of regional lab technicians in analytical methods, lab benchmarking processes and traceability.	<ul style="list-style-type: none"> - Lab best practice guidelines and benchmarking tool implemented by DISEM at regional labs. - Contribution to Senegal’s application for OECD compliance. 	<ul style="list-style-type: none"> - Lab best practice guidelines documented. 		<ul style="list-style-type: none"> - Lab benchmarking results on 2012 certified seed harvest. 	-
Training and monitoring of field controllers. <ul style="list-style-type: none"> • Field control and documentation guidelines • Trainings • Audit 	<ul style="list-style-type: none"> - Improved traceability of seed certificates issued in Senegal. 	<ul style="list-style-type: none"> - Field controller guidelines and checklists defined by DISEM. 	<ul style="list-style-type: none"> - Results – audit of controller files for rain season 2012 seed production 	<ul style="list-style-type: none"> - Training of seed controllers. 	

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Development of seed processing best practice guidelines and DISEM performance audit checklists.	<ul style="list-style-type: none"> - Best practice guidelines and checklist for seed processing facilities developed by DISEM. - Assessment of current facilities performance. 	<ul style="list-style-type: none"> - Best practice guidelines developed - Training of technical staff of facilities. 	<ul style="list-style-type: none"> - Audit of the Richard Toll and Kaolack seed processing units. 		<ul style="list-style-type: none"> - Training of seed processing staff in view of rain season 2013 harvest.
Program area: Seed multiplication networks					
Implementation of multi-annual seed multiplication programs by seed associations.	<ul style="list-style-type: none"> - All associations update their initial plan to include actual figures and adjusted targets. 			<ul style="list-style-type: none"> - Updated plans published and foundation seed orders placed. 	
Seed associations define and implement best practice frameworks for seed multiplication.	<ul style="list-style-type: none"> - Best practice frameworks are integrated to seed association regulations 		<ul style="list-style-type: none"> - Best practice framework developed by all associations. 	<ul style="list-style-type: none"> - Seed association members trained 	<ul style="list-style-type: none"> - Mid-season implementation compliance survey by associations.
Identification by seed multiplication associations of alternate foundation and commercial seed sources. <i>(linked to NERICA and Maize VC programs)</i>	<ul style="list-style-type: none"> - Seed multiplication companies are able to source complementary supply of foundation and commercial seed for existing and promising varieties across ECOWAS and beyond. 		<ul style="list-style-type: none"> - Identification of alternate sources for NERICA-S and hybrid maize. 	<ul style="list-style-type: none"> - Order placed to complement multiplication program and/or testing program (if required) 	

Key activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Program area: Seed processing services					
Completion of the Richard Toll facility and underlying PPP agreement.	<ul style="list-style-type: none"> - Model PPP agreement between COOSEN and the Ministry of Agriculture. - Facility renovated and equipment procured. 	<ul style="list-style-type: none"> - PPP agreement signed. - In-kind grant for facility. 	<ul style="list-style-type: none"> - Facility installed and operational. 	-	-
Cost share grant for the implementation of a Kolda facility.	<ul style="list-style-type: none"> - A seed processing unit is available in Kolda and functional to process the rain season 2013 harvest. 	<ul style="list-style-type: none"> - Technical and architectural specs and business plan for the investment available. 	<ul style="list-style-type: none"> - Cost share grant agreement finalized. 	<ul style="list-style-type: none"> - Project equipment procurement and building construction launched. 	

2.4. Access to Finance

The objective of improving agricultural productivity to meet market demand for cereals value chains is strongly correlated with the level of private investment. The low level of financing in agriculture is not due to a lack of financial resources, but rather reflects a lack of familiarity among financial institutions and their discomfort with the informal nature of transactions in agriculture products. These factors make agriculture a “high risk” sector in the eyes of banks and microfinance entities. The USAID/PCE approach to improving capital access is based on the argument that the strengthening and increased formalization of relationships among value chain stakeholders creates the conditions for greater and more diverse lending. Indeed, the project’s results to date show that Banks and MFIs are willing to lend when they can understand the terms and conditions between market actors. There has been significant success in using pre-season contracts as collateral for mobilizing seasonal lending. However, lending has to be accompanied by rapid payment arrangements and timely loan reimbursement in order to maintain and grow access to capital. Bank loans and leasing programs for farm and processing equipment are appropriate for a smaller target group, notably for millers and lead farmers who can put together a coherent business plan for recouping the investment cost. Here, the project’s “financial coaching” program is a form of hands-on facilitation and capacity building for a relatively small number of project partners.

Finally, a range of additional mechanisms can and are being used to mitigate risk and thus encourage greater lending. This includes the USAID DCA mechanism which has been highly successful in its use with a few of the banks/MFIs that have negotiated access to the DCA program. Similarly, the project is piloting agriculture insurance for maize and rice growers in close collaboration with multiple agencies and finance institutions. The first rain-indexed insurance policies were issued in 2012 and the prospects are very good for that program to expand in 2013. Another important need involves inventory credit and warehouse storage financing. These tools play an increasingly important role in the FY13 work plan.

Increase the financial support for priority value chains

This theme continues USAID/PCE’s work to increase total credit flows available to farmers, millers and consolidators as such capital is essential to growth. The emphasis remains on refining and supporting the use of value chain specific financing models, with a special interest in the link between financing and pre-season contract arrangements. For the FY 2013 the objective is to mobilize \$6,650,000 of financing. The specific goals for each value chain are discussed below.

Irrigated rice value chain: In FY 2012, three inter-linked storage, buying and financing models were implemented (warehouse financing system, consolidation by a service provider, reverse warehouse financing) in collaboration with key financial partners. These models mobilized over US \$ 9,800,000 in terms of production and commercialization credits (BRM credit line, bank guarantee drafts by Vital’s clients). In FY 2013, the Capital Access team will focus on implementing a risk mitigation framework (quality management, storage, price management, agricultural insurance) and strengthening the capacity of key stakeholders (financial institutions, consolidators, Vital) to deploy and master these tools. The adaptation of these models to MFI (CMS, ACEP, PAMECAS) will be supported through sharing workshops. In addition, targeted support will be provided to millers/consolidators CNT and Naxadi Deret to adapt their farmer lending programs to align with the changing context of the SRV marked by the systematic use of contract farming.

Rain-fed rice: Given the relatively low yields and high household consumption rate estimated at 80% of output, a value chain financing model linked to market opportunities is not appropriate at this time. The rain-fed rice value chain is characterized by a vicious circle, farmers generally consist of women or small family farms with very low debt capacity due to modest yields and small production area. In contrast, Nerica seed variety production is both urgent and lucrative, although seed farmers need appropriate financing arrangements that reflect the lag time between production and sale of seeds. Thus, the FY 2013 for rainfed rice will be on strengthening the financing system for seed production and commercialization.

Maize value chain: In the 2011 rainy season, the numerous shocks to the maize financing system have weakened farmers' capacities to meet their contractual obligations against financial institutions and some consolidators. As a result, producers stopped collaborating and selling to some consolidators. While taking action to recover the amounts due (or possibly illegally expropriated), by SODEFITEX and SOENA, maize producers suspended all commercial relations with these consolidators. This situation allowed the creation of FEPROMAS, a newly created maize producers' entity with an "adapted financing model". FEPROMAS intends to play the role of consolidator and facilitator of access by members in good standing to markets and credit. In Kolda, the commercial consolidator-farmer relationship had a more positive outcome, despite the drop in production and sales. SEDAB, the leading consolidator in Kolda, its producers' network and participating financial institutions such as CNCAS and ACEP, have worked closely to renew the financing arrangements from last season. Today, US\$ 530,000 has been mobilized for the rainy season 2012. In FY 2013, Capital Access activities will focus on supporting the implementation of the value chain financing system by maize value chain actors including FEPROMAS and financial institutions with an objective of US\$1,000,000 of financing mobilized.

Millet value chain: There is still a lack of integration in the millet value chain. The financing system implemented in 2011 mainly focused on the production credit for Thiéré Union members backing 661 farmers for a total of \$76,000 (from ACEP). The 100% repayment rate facilitated the release of US\$86,000 of financing to 35 GIE from ACEP. In the FY 2013, the objective is to mobilize over US\$100,000 for the production and collection of millet.

Seed sector: The importance of the seed value chain in USAID/PCE strategy to increase the competitiveness of supported value chains calls for a strategic implementation of a specific financing system with all stakeholders. This was taken into account in FY 2012 with a variety of thematic meetings with financial institutions, seed professional organizations and technical partners. As a result, in the south, REPROSENER members received CNCAS loans of \$ 23,300 for NERICA seed production. In FY 2013, focus will be on strengthening the relationship between REPROSENER and CNCAS and financial institutions and producers' networks capacities to take initiatives. The objective is to mobilize US \$80,000 to cover the financing needs of REPROSENER and REPROSEM members.

Improving the agricultural financing environment

The implementation of integrated financing models and risk mitigations mechanisms is one of the key USAID/PCE strategies to improve the agricultural financing environment. PCE's Capital Access team will work in the following broad areas of capacity building and facilitation of improved sector level conditions:

- **Financial coaching.** The solvency of a credit application depends on the availability of appropriate financial information. Financial coaching of value chain partners has thus become a critical intervention area for USAID/PCE. The financial coaching program relies on in-country service providers hired under contract to work with several target groups. First, support will be provided to 16 maize value chain partners and 5 irrigated rice value chain partners who have already secured loans with project assistance or will do so in this coming year. In maize, for example, the financial coaching will focus on implementing a financial monitoring for leasing scheme beneficiaries to reduce default risks. Second, the project will continue its program of financial and accounting management for 256 rice producer organizations in the Senegal River Valley. Finally, financial coaching will be offered to two ISRA seed production stations, Fanaye and Niore. This program will focus on assisting ISRA to deploy the new management systems adopted for full cost recovery of their production activities through foundation seed sales. Emphasis will be on the two stations mastering their financial and accounting systems to align their costs and revenues.
- **Capacity building for financial institutions:** Notwithstanding the progress made in expanding financial access for value chains, there is still a lack of financial services tailored to the needs of value chain actors. This situation is partly explained by the limited skills and knowledge of personnel within financial institutions on agricultural financing. Furthermore, financial institutions must expand their presence and interaction with farmer groups regarding the basics of good credit management. To help alleviate this problem, USAID/PCE is negotiating grants to five financial institutions,

PAMECAS, CMS, ACEP, U-MCEC and MEC FEPRODES. The grants include resources to assist the grantees to: (1) implement a mass financial coaching program intended for farmers; (2) organize internal training workshops on value chain financing tools and approaches; (3) implement integrated financing models for millet, maize and rice value chains. The USAID/PCE team will support this process by holding a workshop and training sessions for financial institution's lead trainers and by elaborating a value chain financing tools and approaches guide for use in their internal training.

- **Development Credit Authority (DCA) facilitation and design.** The USAID/PCE scope of work calls for the project to collaborate with USAID to support design and use of the DCA mechanism for agriculture investments. This includes coaching and training for participating financial institutions as well as trouble-shooting when obstacles arise. The DCA mechanism experienced a positive outcome in the past year with a relatively high utilization rate compared to 2009. A total of 1315 loans were covered by the DCA during FY 2012 for a total of US\$ 5,731,894. In addition, the DCA played a vital role in facilitating women's access to credit while paving the way for stronger relationships between classic banks and a local MFI. The relative success of the DCA program has led financial and leasing institutions to express an interest in developing new types of DCA agreements tailored to their clients' needs. In addition to on-going facilitation, the FY 2013 focus will be on supporting USAID to define new DCA mechanisms and their operational implementation.

Development and adaptation of new financial products

Like many African countries, Senegal does not yet possess the full range of financial products suitable for the needs of agriculture value chains. Although insurance programs exist on paper, they have not yet been successfully deployed for farmers. Similarly, equipment leasing programs are in their infancy and there is a need to expand its availability and engage relevant stakeholders to assume greater leadership in outreach and design of leasing arrangements. As output increases and contracting continues to take hold, there is a growing need to adapt and test in "field conditions" appropriate financing tools and arrangements to cover the costs of storage facilities and warehoused cereal stocks. Finally, the project will continue to explore in FY13 its support to a Mutual Guarantee mechanism in partnership with MEC Delta in the SRV.

- **Agricultural insurance to reduce risk of weather-related losses.** As lending in maize and rice increases, producers, buyers and banks are all facing an increased exposure to weather-related risks. Climate change could also lead to increasing irregularity of rainfall into the future. Thus there is a need to continue expanding and testing appropriate insurance programs to cover these risks and make all involved, especially farmers, more resilient to climate change. In FY12, USAID/PCE worked with a number of partners to design and initiate a rain-indexed insurance policy for maize producers. This includes the National Agriculture Insurance Company (CNAAS), the national meteorological services (to operate new semi-automated rain gauges), CIRAD, ISRA, PlaNet Guarantee (field outreach and design), and financial institutions. FEPROMAS leadership participated in extensive training on the program and then led information sessions with farmer groups. Just over 100 policies were issued for the 2012 rainy season. The focus in FY13 will be to evaluate the 2012 program and to expand coverage to reach at least 1500 farmers in the 2013 rainy season. Meanwhile, a pilot program is also foreseen with CNAAS to cover at least 1000 rice farmers in the SRV to cover risks from flooding and birds.
- **Scaling up equipment leasing schemes in rice and maize value chains.** It is acknowledged that the lack of equipment credit is a major constraint for mechanization of agriculture and a hindrance to growth for SMEs. Given this situation, the leasing scheme successfully implemented by USAID/PCE in Niore (acquisition of tractors for maize farmers) and in the SRV (financing of a rice mill), is now seen as one alternative to overcome the problem. In FY 2013, focus will be on strengthening the B2B relationships between suppliers of agricultural equipment, producers' networks and leasing companies for the scaling up of this scheme at national level. Through a series of workshops and meetings, leasing companies will take the lead in presenting to prospective value chain borrowers the opportunities and obligations of using leasing arrangements to acquire much-needed farm, post-harvest and processing equipment.

- **Warehousing financing pilot program and joint venture for storage infrastructure.** In the SRV in 2012 the project successfully implemented three inter-linked storage, buying and financing systems that experienced a positive outcome with the mobilization of over US\$ 9,800,000 of financing for production and commercialization. As result, some financial institutions (like CMS) expressed an interest in implementing this financing system to boost their loan portfolios in the rice value chain. In the FY 2013 USAID/PCE will focus on developing a joint-venture between a rice mill and a paddy rice consolidator for the implementation of a warehouse financing system involving a rice mill (Vital) combined with a scheme to secure financing for construction of appropriate warehousing.
- **Mutual Guarantee Cooperative Lending Scheme (MGCLS).** The MGCLS was legally created in July 2011. It represents a new mechanism (based on experience in France) for creating a joint-risk credit guarantee among eligible members who choose to join the structure. Members pay a fee to join and those fees help to offset the risk of non-reimbursement among members. It is particularly useful in reducing the costs of lending and borrowing for short-term loans and does not require any direct collateral on the part of individual members. The MGCLS was launched with a USAID/PCE grant of US\$ 50,000 in collaboration with MEC DELTA, a micro-finance institution, the Association Solidaire du Delta (ASDEL), and PINORD. The membership fees and USAID's contribution served to establish an escrow account to cover loan defaults. In the FY 2012, 107 rice farmers received loans worth US\$ 61,744 that were backed by the MGCLS. In the FY 2013, our activities will focus on capitalizing lessons learned from the implementation of the MGCLS and the monitoring of its use to boost rice production and commercialization lending.

Table 4 – Capital Access Activities, Expected Results and Milestones

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Theme 1: Increase financial support for priority value chains					
Irrigated rice value chain					
Strengthening of existing inter-linked buying and financing systems	At least US\$ 4,500,000 in loans mobilized for pre-harvest credit and working capital intended for rice-processing factories, producer organizations, etc.	<ul style="list-style-type: none"> - Workshop on the capitalization and lessons learnt of the model CNCAS-Vital-OP; - Financing mechanism commercialization and consolidation of rainy season 2012 	<ul style="list-style-type: none"> - Commercial contracts for the dry season 2012 signed - Dry season 2012 bank loans released 	<ul style="list-style-type: none"> - Preparation of financing mechanisms and financial intermediation for paddy production, commercialization and collecting operations for rainy season 2013 	<ul style="list-style-type: none"> - Rainy season 2013 bank loans released - Commercial contracts signed
Support for the extension and improvement of existing supplier finance products.	<ul style="list-style-type: none"> - \$ 250,000 in credit mobilized to partially cover working capital needs for paddy collection by Naxadi Deret and CNT. 	<ul style="list-style-type: none"> - Business plans available for Naxadi Deret and CNT - Design of paddy rice collecting financing system for Naxadi Deret and CNT 	<ul style="list-style-type: none"> - Financial intermediation for Naxadi Deret and CNT to for consolidation credit line 	<ul style="list-style-type: none"> - Credit contract signed and \$ 250,000 of bank loans released for Naxadi Deret and CNT 	<ul style="list-style-type: none"> - Monitoring and analysis of results with partners
Rain-fed rice value chain					
Support to increase the rain-fed rice value chain productivity	<ul style="list-style-type: none"> - A least two farmers acquire agricultural equipment to improve their productivity 	<ul style="list-style-type: none"> - Selection of farmers 	<ul style="list-style-type: none"> - Business plans elaborated to support the financing demands; - Buyer/producers receive investment code exoneration. 	<ul style="list-style-type: none"> - Credits mobilized for the acquisition of two tractors 	<ul style="list-style-type: none"> - Farmers receive tractors

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Maize value chain					
Strengthening of existing financing models	- Production and commercialization financing of US\$1,000,000 mobilized for FEPROMAS members and SEDAB producers' network		- Financial intermediation activities and monitoring for the release of the production financing for FEPROMAS and SEDAB producer's network	US \$1,000,000 of financing mobilized for FEPROMAS members and SEDAB producers'	
Expand maize farm equipment financing program	- 5 producers benefit from the leasing/equipment credit scheme to acquire agricultural equipments	- Selection of eligible farmers	- Business plans elaborated - Farmers receive investment code exoneration	- Financing mobilized for the acquisition of equipment	
Seed Value Chain					
Financing system for the production and marketing of rice , maize, and millet seeds	- \$40,000 mobilized by REPROSENER for production and sale of Nerica seeds. - \$40,000 mobilized by REPROSEM for the production and sale of maize seeds		- Selection of farmers to be involved in production and marketing of Nerica and maize seeds for the rainy season 2013 ;	- Financial intermediation and monitoring of credit release to REPROSENER and REPROSEM seed farmers	- Workshop on lessons learned
Millet Value chain					
Strengthen the millet financing program	- Mobilization of US\$ 100,000 in credit for commercial millet farmers		- Workshop on lessons learned from 2012 season - Financial intermediation to secure loans	- Release of loans	

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Theme 2: Improving the agriculture financing environment					
Financial coaching for SRV rice millers and other SRV VC partners	<ul style="list-style-type: none"> - Organizational, management and financial planning capacities improved for 5 five strategic partners (CNT, Mbodji et Frères, GIE Thiaytou, IAC, Naxadi Deret). 	<ul style="list-style-type: none"> - Strategic plans are available for the partners supported - First implementation progress report 	<ul style="list-style-type: none"> - second implementation progress report 	<ul style="list-style-type: none"> - third implementation progress report 	<ul style="list-style-type: none"> - Workshop on outcomes and lessoned from coaching program
Financial coaching for maize leasing scheme beneficiaries	<ul style="list-style-type: none"> - 11 farmer beneficiaries improve their solvency and financial management capacities and meet their contractual obligations vis-à-vis Locafrique 	<ul style="list-style-type: none"> - Performance contracts signed between Financière Africaine (financial coach), PCE and maize farmers; - Business plans elaborated - Financial management handbooks available - First implementation progress report 	<ul style="list-style-type: none"> - Improved cash management systems implemented - Strategic plans and financial management procedures implemented - second implementation progress report 	<ul style="list-style-type: none"> - Third implementation progress report 	<ul style="list-style-type: none"> - Participatory evaluation of the performance contracts and the financial coaching program
Financial Coaching for ISRA seed production stations at Nioro and Fanaye	<ul style="list-style-type: none"> - Seed stations elaborate and implement improved business and financial management plans - Contracts in place to supply seed growers 	<ul style="list-style-type: none"> - Performances contracts negotiated and signed with ISRA for the improvement of the management of Nioro and Fanaye Stations 	<ul style="list-style-type: none"> - Strategic plans available for the 2 stations ; - A financial management framework is operational 		<ul style="list-style-type: none"> - Workshop on increase financial and planning capacities organized
Strengthen SRV rice producer financial management capacity	<ul style="list-style-type: none"> - Over 250 producers organizations have stronger accounting and financial management skills 	<ul style="list-style-type: none"> - Credit and monitoring report of producers organizations for the 2012 dry season available 	<ul style="list-style-type: none"> - Progress report available - Economic analysis report for 2012 dry season 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> - Economic analysis report of the 2013 rainy season

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Capacity development for financial institutions partners	<ul style="list-style-type: none"> - 8 financial institutions (banks, MFIs and leasing companies...) develop and implement internal training and farmer training program on agricultural value chain financing - 1500 producers receive training from banks/MFIs 	<ul style="list-style-type: none"> - Training of trainers sessions on value chain financing with financial institution agents - PCE team formulates information guide on agricultural value chains intended - Definition of content of mass financial training for farmer groups 	<ul style="list-style-type: none"> - 10 training sessions for financial institution staff held - 700 producer borrowers participate in training led by banks/MFIs 		<ul style="list-style-type: none"> - 23 training sessions on value chain financing approaches and tools held - Completion of producer training by banks/MFIs (reach 1500)
Development credit authority	<ul style="list-style-type: none"> - A least \$3,500,000 of loans covered by the DCA 	<ul style="list-style-type: none"> - Training workshop on the DCA for CBAO - Strategic frameworks for new DCA mechanisms designed 	<ul style="list-style-type: none"> - New DCA implementation in collaboration with USAID 	<ul style="list-style-type: none"> - Training sessions on the DCA instruments organized for new DCA users 	<ul style="list-style-type: none"> - \$3,500,000 loans covered by the DCA
Theme 3: Development and adaptation of new financial products					
Agriculture insurance for maize and rice value chains	<ul style="list-style-type: none"> - 1500 policies issued for maize producers - 1000 insurance policies issued to SRV rice producers 	<ul style="list-style-type: none"> - Partnership framework for the implementation of the insurance program in the rice value chain defined ; - Workshop on lessons learned from first season of maize index insurance pilot program and new guidelines/directions defined 	<ul style="list-style-type: none"> - Outreach and training sessions on agricultural insurance implemented in the SRV - Information and training sessions held in the maize extension areas 	<ul style="list-style-type: none"> - Agricultural insurance products commercialized 	<ul style="list-style-type: none"> - Capitalization workshops held with all stakeholders
Scale up of agriculture leasing program	<ul style="list-style-type: none"> - Leasing companies assume leadership of effort to promote and 	<ul style="list-style-type: none"> - Workshop on lessons learned from existing leasing program 	<ul style="list-style-type: none"> - Four training workshops on the leasing process for maize and rice farmers led 	<ul style="list-style-type: none"> - Four training workshops on the leasing process for 	<ul style="list-style-type: none"> - Workshop on lessons learned from scale up effort

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
	expand agriculture leasing opportunities	<ul style="list-style-type: none"> implemented - Identify business leaders to promote leasing - Formulate institutional framework for promotion of the leasing scheme at a national level 	by leasing company with APIX	maize and rice farmers led by leasing company with APIX	
Financing program using warehouse receipts model	<ul style="list-style-type: none"> - Warehouse financing pilot with VITAL/CNCAS/GIE Theytou including \$300,000 mobilized for paddy collection and \$200,000 for construction of storage infrastructure 	<ul style="list-style-type: none"> - Capitalization report on various warehouse financing models - Economic and technical model designed and formalized with partners - Business model and business plan of the construction of the storage infrastructure is available - Banks loan or leasing credit mobilized to finance the construction of storage infrastructure 	<ul style="list-style-type: none"> - A quality management system is operational - Storage infrastructure for the warehouse financing pilot program in place 	<ul style="list-style-type: none"> - Monitoring of the warehouse financing pilot program 	<ul style="list-style-type: none"> - \$ 500,000 mobilized through the new warehouse financing system implemented - Capitalization workshop on constraints and lessons learned
Development of joint venture at the rice processing stage	<ul style="list-style-type: none"> - A joint venture pilot is developed between a rice-mill and a paddy rice consolidator. 	<ul style="list-style-type: none"> - Formalization of the technical assistance plan with different partners for the implementation of the joint-venture 	<ul style="list-style-type: none"> - The joint-venture implemented and operational 	-	-
Support for the use of the Mutual Guarantee Cooperative Lending Scheme (MGCLS)	300 rice producers and members of the MGCLS receive and reimburse their seasonal credit	<ul style="list-style-type: none"> - Review of 2012 experience with stakeholders - Training session for MGCLS personnel 	<ul style="list-style-type: none"> - Loans for 2013 dry season issued 	<ul style="list-style-type: none"> - Loans for 2013 rainy season issued 	<ul style="list-style-type: none"> - Lessons learned report prepared and disseminated

2.5. Market access and trade

The value chain approach is a market driven concept and its success depends on the capacity to integrate contracting stakeholders from field to fork into an uninterrupted and efficient supply chain. The Feed the Future strategy for Senegal seeks to foster the inclusion of small-scale farmers into such win-win systems, enabling them to capture market value from opportunities in the commercial rice, maize and millet sectors. The USAID/PCE work on irrigated rice, maize and millet seeks to position these products for the urban market, notably Dakar. For rice and industrial maize, the effort reflects an import-substitution strategy whilst for millet the objective is to penetrate the processed food industry as well as institutional distribution channels such as school feeding initiatives. In all cases, the quality and traceability requirements to succeed are strikingly similar to those that are needed to penetrate international markets.

Developing a productive and well-funded supply base is not sufficient to achieve successful market penetration of urban and industrial supply channels. Integration of end-market players as contributing stakeholders requires USAID/PCE and its partners be proactive in building awareness on the existence of local supply alternatives, get their buy-in and foster collaborations. Since the onset of the Feed the Future initiative, USAID/PCE has therefore supported stakeholders in the rice, maize and millet value chains to make their presence felt in targeted markets.

During FY2012, the project contributed to reinforce such bottom-up linkages by getting value chain actors involved in transactional cooperation and contracting, price monitoring and benchmarking, enforcement of quality norms, logistics integration, product promotion and branding. Specific achievements from FY12 include:

- Facilitation of maize value chain integration through joint programming meetings between industrial buyers and consolidators at the onset of the 2011-2012 commercial season as well as between producer groups and input suppliers when developing an input procurement plan for 2012.
- In the rice sector, USAID/PCE successfully brokered a partnership between CNCAS and rice miller VITAL to secure the seasonal loans to farmer unions with in-kind rice payments.
- Development of new contract formats in the irrigated rice, industrial maize and millet sectors which favor direct contractual links between farmer-led organizations and industrial processors, integrated programming as well as more flexible pricing arrangements.
- Development and dissemination to producers of a pricing model for imported maize, which enables the tracking, on a daily basis, of the impact of fluctuations in maize futures on local maize prices.
- Introduction of quality management tools as a complement to the first generation of contracts promoted by the project. These basic norms and quality control practices were the subject of field trials within select rice and maize partner networks.
- At FIARA 2012, USAID/PCE supported a high visibility branded promotional effort around “Le Village du Riz Sénégalais”, a large booth and a series of communication events that enabled producers of aromatic rice from the Senegal River Valley and NERICA rice from the Southern zones to build market awareness and establish links with the urban market.
- Support to a NERICA promotional stand at the Kolda annual agriculture trade fair.
- Consumer focus group tests to confirm the commercial acceptability of upland NERICA varieties. The tests were conducted by Africa Rice using their consumer auction methodology, tested previously on the Sahel aromatic varieties.
- Testing of various logistics approaches for temporary consolidation and storage along with associated collateral financing in the SRV, through the VITAL procurement network based on locations owned by farmer Unions and private operators. In the SFZ these tests involved third party temporary storage points developed for millet and sorghum farmers at the Kaolack port.

- Internal trade corridors used by local cereal traders were monitored to assess transport flow based on three indicators: the number of checkpoints, the cost incurred from illicit payments, and lost time caused by these controls.

In FY2013 the project will pursue this agenda with a view to reinforce linkages, improve underlying processes and their appropriation by stakeholders across the value chain. Key activities in FY13 include:

- Facilitation of **industry meetings between farmer groups, consolidators and buyers to coordinate supply programs, assess availability and pricing intentions, and agree on quality control indicators, procedures and benchmarks.** Such meetings will be conducted in all four value chains targeted by the project, although discussions will vary in scale, with irrigated rice programs exceeding 10,000MT and the nascent NERICA commercial pooling initiative starting out at 500MT.
- **Collaborative assessment of the current contract formats and identification of adjustments to the clauses and their structure.** Newly adopted formats will be picked up by the value chain component for dissemination across farmer networks.
- **Testing of the new maize pricing model as a negotiation tool** during the upcoming 2012-2013 marketing season. The objective of the project is for farmers and industrialists to reach consensus on the structure of the pricing model so that it can become a truly appropriated price benchmark for both parties. The opportunity of developing a similar benchmark for regular and fragrant rice will be considered.
- Assistance to commercial networks to adopt **strict and statistically sound quality control procedures, and rigorous documentation methods,** which enable traceability and procurement management. The system will be benchmarked against exacting standards such as the WFP food procurement norms and the quality safeguards of industrial food and feed processors.
- USAID/PCE in partnership with local rice producers in the Senegal River Valley is already developing a **branding program** of aromatic rice bags. This aromatic rice branding program will be completed and expanded to maize and Nerica rainfed rice seed producers in order to promote origin-awareness with the end-buyers. The cost related to the development of the branding is to be shared with each partner.
- USAID/PCE will take opportunity of the **FIARA 2013** fair to promote cereals through the sponsoring of its partners to create exhibition and sales venues dedicated to each value chain rice, maize, and millet. The degree of sophistication and size of each “village” will depend on the involvement and commitment of our partners through discussions, joint organization, and a cost sharing approach.
- USAID/PCE will promote NERICA rice by supporting REPROSENER promotional actions at **regional trade fairs across the SFZ.** This activity will be complemented by a market study focusing specifically on the rice marketing channels in the SFZ urban centers
- **Consolidation logistics and storage** will focus on developing a set of HACCP inspired standards for the renovation of existing facilities and the development of low-cost temporary storage at consolidation points. Investment joint ventures between large-scale buyers such as VITAL and local partners facilitated by the Capital access team will serve to generate technical standards that will be shared with the industry to orient further investments in storage capacity so they will comply with collateral financing security requirements.
- The internal corridor study will be shared with value chain actors who will assess the need for further monitoring and see how such monitoring can be internalized in their logistics management.

Table 5 – Market Access and Trade Activities, Expected Results and Milestones

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Program area: Value chain integration					
Value chain stakeholder coordination workshops and industry briefings.	Producer-buyer meetings held to prepare harvest season, address specific issues and debrief seasonal results.	Rice, maize and millet pre-season buyer/producer meetings.		Rice, maize and millet end of season buyer/producer meeting.	-
Development of improved contract and pricing practices by stakeholders.	Standard purchasing contract formats including flexible pricing clauses.	2012 rain season harvest purchasing contracts signed (Rice, Maize, Millet).			- 2013 rain season harvest purchasing contracts signed.
Commodity pricing models.	Maize pricing model adopted as benchmark by both buyers and producers. Paddy rice pricing model proposed to industry.	Field to warehouse pricing model adopted by partner networks.		Maize and rice pricing models adapted following review by value chain stakeholders.	
Program area: Quality management					
Quality control norms and testing methods for locally procured cereals.	Value chain contracting parties in rice, maize and millet adopt a standard quality chart, testing procedure and traceability standard. Standards are benchmarked against WFP and Industrial buyer norms.	Draft standards and procedures adopted as basis of contractual quality assessment.		Standards and procedures benchmarked against buyer norms.	-

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Program area: Product Promotion					
Enhancing branding capacities of aromatic rice producers	Option1: Common aromatic rice brand developed and adopted by rice millers Option2: Miller – owned brands developed by leading rice mills.	Brand designs completed.	New branding is marketed through distribution network	Brand recognition assessment.	-
Enhancing branding capacities of maize producers	- FEPROMAS branded bags enhance supplier recognition with industrialists and wholesale clients.	- Logo is created and designed in FEPROMAS maize packaging	Maize is marketed with new branding	- Brand recognition assessment.	-
Enhancing branding capacities of rain fed nerica variety rice seeds producers	- Branded certified NERICA rice seeds get brand recognition with SFZ farmers.	- Logo is crafted in packaging dedicated to seeds for nerica variety rice	-	- REPROSENER markets rainfed Nerica variety rice seeds with new branding	- Brand recognition assessment.
Sponsor participation for cereals producers/processors at Fiara 2013 Event.	- To create sales and business opportunities for cereals producers and marketers	-	- Framework of collaboration with partners is finalized (upon discussions with partners and co sharing arrangements villages of maize, millet and rice will be set up)	- Participation of USAID/PCE partners at FIARA 2013 to showcase products and create new business opportunities	-
Promotion of NERICA rice	- NERICA stands at regional	-	-	- Kolda trade fair	-

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
at regional trade fairs across the SRV	trade events (Kaolack, Tamba, Kolda).				
Study of marketing channels for commercial rice distribution in Southern Senegal	- Priority market linkages and pricing structures defined and communicated to producer networks.	-	- Study completed and debriefed at NERICA events.	-	-
Program area: Consolidation storage norms					
Cereal consolidation storage norms and technical recommendations.	Temporary consolidation storage norms meeting buyer standards are implemented by networks.	Draft norm and assessment checklist produced.	Commercial network consolidation points adapted to standard norm.		- Formal benchmarking of standard by WFP and other institutional buyers.

2.6. Policy reform

2.6 AGRICULTURAL POLICY REFORM

USAID/PCE work on policy reform is broken into 5 areas: LOASP, PNIA, fertilizer policy and sector reform, agriculture statistics, and strengthening of organization and dialogue among producer groups in core value chains. Over the past year, all programs involving close collaboration with Government entities have been impeded by special circumstances, notably the organization of the presidential election and its direct consequences on project ability to mobilize stakeholders as well as on the leadership within Government entities. For example, for the LOASP process, the structure of thematic groups was officially changed but no progress was made to implement that decision and engage the thematic groups. Similarly, the unclear distribution of overall coordination responsibilities was a constraint to effective progress on finalizing, implementing and monitoring the PNIA.

The project's approach on policy reform is a blend of assistance in support of the broader processes of creating a sound operating environment for agri-food actors alongside targeted efforts on selected aspects of policy reforms that are directly linked to the development and competitiveness of core FTF value chains. Looking forward, emphasis remains on facilitating policy dialogue and debate on topical issues such as land reform, promoting platforms of regular consultations within and across stakeholder groups and supporting efforts to improve the overall operating environment. To promote effective accountability and more efficient collaboration with our public partner institutions, the team intends to experiment with holding debriefing encounters each quarter or semester with high ministerial authorities such as the Secretary General or the Number 1 Technical Advisor.

Agricultural statistics

Over the past three years USAID/PCE has assisted the Direction de l'Analyse, Prévision et Statistiques (DAPS) of the Ministry of Agriculture to adopt key methodological innovations for the national agricultural survey system including the introduction of new household variables in the questionnaire, improved sampling methodologies combined with an extension of the survey sample, the use of GPS devices for area measurement, and use of double entry methods for survey data to reduce recording errors. The project and the Ministry have also been collaborating on the design and testing of a crop area estimation model based on satellite imagery with technical guidance from Michigan State University (MSU).

The final results of the 2011-2012 agricultural survey, officially approved in March 2012, indicate a 25% drop of total acreage compared to the previous season. While decreased production is attributed to poor rainfall and input supply problems, significant fluctuation in planted area is unusual and the Direction of Agriculture was requested to provide detailed explanations as to what may have caused this drop. The adoption by DAPS of improved survey methods and data management protocols may have simply led to a more accurate analysis of true acreage planted. The statistical uncertainties associated with the household annual survey illustrate the potential usefulness of the complementary investment by USAID in the satellite imagery analysis.

In FY 12, USAID/PCE also provided training through MSU to DAPS for management and analysis of agricultural survey statistics. This effort is important for boosting the capacity at DAPS to effectively organize and then analyze the wealth of data collected from the more than 6000 households surveyed each year.

A key lesson from 2012, and previous years, is that the investment in improvements to the agriculture survey may not be sustained when the project withdraws its cost-share support. Going forward, it is critical that the Ministry of Agriculture ensures more adequate funding from the regular national budget. These are not huge sums, perhaps \$250,000 each year, but they are essential to cover the costs of maintaining a good sample frame, of surveyor field costs, of data entry costs, and to properly fund field

supervision and quality control. In the same vein, it is essential that the Government mobilize its financial contribution in a timely manner to ensure an early start to the annual survey as it is a process that can take years.

It is equally important to note that the on-going effort to measure area under production with free satellite data could very well lead to a significant drop in annual survey costs. If the methodology, which will be fully tested this season, proves adequately accurate in statistical terms, it could open the door to a vast reduction in time spent measuring farmer plots. This will be a significant area of collaboration and dialogue with the Ministry over the coming fiscal year.

Based on the above, the operational priorities for FY13 include:

- Continued capacity building of DAPS personnel for more efficient management and valorization of agricultural survey results in collaboration with MSU.
- Coaching to the technical staff at DAPS to produce analytical papers on topical issues such as security using the data from the household questionnaire
- Refinement of the satellite imagery system for crop area estimation via ground-truthing data collection from “large blocks” of contiguous farmland.
- Assessment with Ministry of Agriculture of the accuracy and cost effectiveness of the satellite imagery data capture system and the operational implications of its integration as a permanent and formal tool for national agriculture statistics.
- Support advocacy and lobbying efforts for increased Government funding of the agriculture survey.

Fertilizer

In early 2012 the results, conclusions and recommendations of two studies on the fertilizer market and subsidy system were shared and validated at a two-day national stakeholder workshop. This event, which was founded on a number of preliminary meetings, involved about sixty participants from Ministerial departments, agricultural support institutions, private sector and producer organizations. The outputs including a detailed report and a validated action plan were submitted to the Ministry of Agriculture. One of the by-products of this process was the formalization, via Ministerial decree, of a National Reflection Committee on Fertilizer and Soil Fertility. This committee was initially created informally in 2011 in response to the USAID/PCE study of the fertilizer sector. The decree also mandates the Committee to address the issue of chemical fertilizer quality control in the country. The new membership structure is made of 23 institutions chaired by the Director of Agriculture and ICS (Industries Chimiques du Sénégal) acts as Secretary. It is unclear at this stage to what extent the committee will be able to assume a true operational role and be able to fulfill its challenging mandate. It is the project’s intent to encourage and support the Ministry and the Committee to move forward as quickly as possible on key recommendations stemming from the January 2012 workshop.

With respect to fertilizer subsidies, there are considerable differences of perspective among the value chain private sector partners USAID/PCE is assisting. It appears that most irrigated rice producers are strongly opposed to the subsidies as they do not ensure adequate volume and timely delivery to meet the needs across the SRV. In contrast, within the maize value chain, most farmer leaders hold out hope that the subsidy can help allay the costs of high quality seed and certain fertilizers. Yet, they too recognize that the government does not have the resources to subsidize 100% of the real demand even within the commercial maize “sub sector”. This situation does not facilitate things for decision makers.

Looking at FY13, USAID/PCE priorities are to:

- Get buy-in of the new ministerial authorities concerning the main conclusions of the fertilizer study and to provide their full support to the National Committee;
- Support the National Committee in implementing the action plan formulated in December 2011, with focus on reviewing procurement and subsidy modalities, advising distributors for more efficient geographical dispatching, verifying weight conformity of bags and collecting samples for quality control.

LOASP implementation

The support of USAID/PCE since May 2011 made it possible for the Ministry of Agriculture to produce the first agricultural report covering the 2004-2011 period, the formulation and adoption of an action plan for concretizing government commitments, and the organization in October 2011 of a national forum on the LOASP with the participation of Parliament representatives. The Ministry of Agriculture subsequently submitted a priority action plan for 2012-2013 to USAID in November 2011 and USAID formally responded with a commitment to assist the Government of Senegal in three priority thematic areas (out of the 9 themes for LOASP implementation): formal recognition of agricultural professions; land tenure reform and financing of rural development.

One of the challenges facing the Ministry has been to harmonize the various long-term planning documents generated in recent years. To that end, USAID/PCE assisted the Ministry to organize a 4-day workshop in 2012 to harmonize the Ten-Year Strategic Framework (CSD) 2011-2020 with other strategic orientation documents of the agricultural sector. The CSD is now considered a core reference framework, which constitutes an additional step in the LOASP implementation process as it clearly integrates the actions necessary for LOASP implementation.

The project team continues to experience uncertainty regarding our ability to effectively support the LOASP implementation in light of the recent reconfiguration of various ministries involved in steering the implementation process, as well as the unclear distribution of lead responsibilities.

The USAID/PCE operational priorities in FY13 include:

- Support to the three thematic groups already identified for formulating relevant application decrees;
- Encourage the Ministry of Agriculture to initiate a critical reflection on the efficiency of the current operational structure and how it could be improved.
- Reinforce effective bearing of the activities programmed in FY 2013 by the ministerial authorities.

National Agriculture Investment Plan - PNIA

In FY12 USAID/PCE assisted the PNIA technical committee to review the implementation strategy, the status of progress in various sectors and the action plan for 2012 at a workshop in February 2012. The main outputs included a draft implementation strategy, a revised coordination and monitoring structure, and a 2012 action plan. USAID/PCE subsequently organized two regional Forums on the PNIA targeting grassroots actors in the irrigated rice and maize value chains. The gatherings, comprised largely of producer organization representatives, and held in the SRV (Ndiaye) and in Kaolack, served to present and discuss with each group how the PNIA was formulated, the current status of project constituencies, the governance system, the distribution of roles and responsibilities, the allocation of resources across sectors, the implementation procedures and how the grassroots actors in both value chains can get involved and take advantage of the opportunities offered.

All the preparatory work has been completed to support DAPS for the organization of a national PNIA forum scheduled in January. The DAPS postponed that event and it is now scheduled for September 2012.

The project's priorities for FY13 include:

- Support to the PNIA Technical Committee to implement the current action plan;
- Promote wide information sharing through adequate communication channels and tools.
- Link the rain-fed rice actors to the process through a regional forum in the southern zone.

Organizational structuring and governance in FTF value chains

Collaboration, dialogue and negotiation are necessary for different value chain participants to work out effective roles and relationships and to build trust. In the FTF value chains, the producers represent a critical and large group in the value chain, yet they also represent the weakest link. Internal consultation across farmer groups is problematic and many groups have not yet even defined what types of services a federation or cooperative can reasonably offer to its members.

Over the past year, USAID/PCE has taken steps to engage the producer level in rice and maize value chains on how they can effectively engage when asked to be part of multi-stakeholder consultative mechanisms. For example, the recent revitalization of the irrigated rice inter-professional organization, CIRIZ, initiated by SAED in March 2012, seeks to have meaningful and representative producer buy-in. This somewhat top-down approach could, however, limit effective appropriation by the direct actors, in particular the producers. USAID/PCE therefore is working mainly to connect producer organizations to each other and to promote effective ownership by these ultimate grassroots stakeholders of the broader “organization” process. A tentative step in this direction involved an initial meeting with producer organization representatives in Dakar after the rice competitiveness forum in January.

In the last two months of the current fiscal year, PCE, with the assistance of an independent consultant, is engaging maize producers to discuss how they would like to get themselves organized and for what purpose in order to help them fulfill their own goals.

For FY13, PCE will focus on the following:

- Reinforce the overall value chain governance system by facilitating the emergence of strong producer organizations.
- Make sure that grassroots producers groups in the rice sector are not left behind in the CIRIZ revitalization process led by SAED for irrigated rice and the CLCR setting under PNAR for rain-fed rice;
- Facilitate dialogue between federative organizations and their village level members for greater organizational efficiency;
- Support the concretization of recommendations expected from the on-going expert mission on the maize sector structuring.

Table 6 – Policy Reform Activities, Expected Results and Milestones

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
LOASP					
Support to the LOASP implementation process	The LOASP 2012-2013 priority action plan gets concretized with respect to land reform, agricultural professions and rural financing	A revised implementation strategy for LOASP is adopted	The second LOASP annual report is formulated and validated Thematic studies to inform the formulation of new decrees are completed and shared by working groups	Three new application decrees are produced by the thematic groups and validated by stakeholders	The 3 new application decrees are signed and published
PNIA					
Support to the PNIA 2012-2013 action plan implementation	The Technical and Steering Committees are put to work and PNIA starts to feature prominently in the annual policy agenda of all institutions involved.	Publication of the PNIA national forum proceedings	The National Steering Committee validates a revised PNIA implementation strategy and timeline.	A communication plan for PNIA is adopted	A formal Civil Society Group of dialogue on PNIA is set up and an a short-term work plan defined
Regional forum for rain-fed rice actors in the southern zone	The objectives of PNIA, its operational procedures and the opportunities it offers are well understood by the agri-food actors in the remote southern zones, which	-	Forum held for rain-fed rice actors in the SFZ The policy and institutional	-	-

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
	contributes at least to develop a feeling of inclusion.		constraints facing Nerica producers are analyzed.		
AGRICULTURAL STATISTICS					
Support to DAPS for the 2012 national agriculture survey.	Timely production of the agriculture survey statistics. The new leadership of the Ministry adopts a strategy to cover the chronic shortfall in funding of the annual survey	Support DAPS to organize a seminar with Government authorities and other stakeholders to discuss sustainability issues and funding alternatives	Progress Report of the 2012 national agriculture survey submitted to USAID/PCE by DAPS	2012 survey results are published (not later than march, 31th 2012)	Final report for the 2012 national agriculture survey submitted to USAID/PCE by DAPS
Capacity reinforcement of DAPS in the management and analysis of agricultural statistics	More efficient agricultural statistics system that produces relevant analytical papers useful to inform policy decisions, which would generate greater interest of Government and development partners in DAPS		Trip of Dan Clay from MSU for support to finalize the 2011 survey Master File development	Trip of David Megill from MSU for follow up support on variance estimation and weighting procedures.	Analytical paper on food security validated with stakeholders and finalized
Satellite imagery applications for crop area measurement	National roll-out in 2013 of a new survey methodology that combines field-based data collection with satellite data analysis as a means to generate results faster and for lower cost.	Interpretation of large block field data finalized and compared with satellite data to refine crop signatures.	Ministry of Agriculture validates or rejects the satellite-based model for crop area estimation		The satellite-based model for crop area estimation is formally integrated in the statistics system of DAPS

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
FERTILIZER SECTOR					
Fertilizer action plan implementation and follow-up	Policy reform initiatives are taken with respect to subsidies and market regulation constraints facing private operators	<p>Second annual meeting of the Fertilizer Committee (November)</p> <p>A report on lessons learned on the 2012 distribution program is submitted to the Ministry of Agriculture by the Fertilizer Committee</p> <p>National stakeholder seminar on the fertilizer subsidies and market regulation constraints facing private operators</p>	<p>Recommendations of the Fertilizer Committee for the 2013 growing season are formulated and submitted to the Ministry of Agriculture.</p> <p>Stakeholder meeting to prepare the 2013-2014 growing season</p>	<p>The norms and procedures for fertilizer quality control adopted by ECOWAS are shared with national stakeholders</p> <p>Fertilizer stock inspection and sample collection on the field completed by the committee (May-June)</p>	Results of the field inspection and quality controls from fertilizer samples validated and submitted to the Ministry of Agriculture
ORGANIZATIONAL STRUCTURING OF CORE VALUE CHAINS					
Connecting grassroots producers organisations to the rice inter profession restructuring process	Small producers and their organisations effectively participate in the CIRIZ revitalisation process led by SAED for irrigated rice, and the CLCR setting up process under PNAR for rain-fed rice.	The new statutes of CIRIZ and internal procedures are shared with producers groups in SRV.	The College of irrigated rice producers is structured and set up.		Rain-fed rice actors in the southern zone have a structured consultation framework in place

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Organisational structuring of maize producers	Producers get organised in a way that allows them to influence decisions in the maize sector and develop a collective bargaining power in their relationships with the other value chain actors.	Detailed action plans for structuring the maize sector in the central and southern zones are formulated.	The action plans are validated by stakeholders for each zone. launched	-	A formal consultation framework for the maize value chain is set up.

2.7. Institutional and Human Capacity Building

USAID/PCE has developed and supported needs-based capacity development activities for various groups including professional organizations, private agri-food value chain actors, training institutions, rural support agencies and government. Such capacity building emphasizes bolstering the ability of primary producers to operate more efficiently, to understand and meet quality standards, to get organised as market actors and to capture business opportunities.

Capacity building at the farmer level involves numerous practical challenges: the heterogeneity of agro-food stakeholders spanning from illiterate grassroots producers to senior policy experts, the large array of needs even within each category of actors, the need to efficiently manage partners' expectations and promote ownership of support programs.

Experience shows that defining appropriate contents of training programs requires an iterative and participatory process involving the prospective trainers and trainees as well as key stakeholders. We also note that training aimed at rural producers is difficult to organize during the first and fourth quarters of our financial year due to their seasonal calendar, which implies the need to concentrate most of the annual activities in the second and third quarters.

Ministry of Agriculture

The capacity-building program for the Ministry of Agriculture was launched in FY11 with an emphasis on three departments: Agriculture (DA), Analysis and Statistics (DAPS) and Horticulture (DHORT). The program aims at creating a critical mass of competent human resources equipped with professional skills required to inform policy decisions, to coordinate sector development programming and to manage public agri-food support institutions. The program is coordinated by the Ministry's professional training office, the BFPA, with support from a local think-tank and training group, IPAR. A steering committee and technical committee ensure that all target departments are active in defining goals, trainings and assessment of results. For each thematic training session, an iterative mechanism is in place to clarify needs with the selected training partner and to make sure that proposed contents are adequate.

For FY 2013, USAID/PCE will continue its collaboration with BFPA and IPAR. Four new training themes are expected to be selected by the technical committee during or shortly after an evaluation and planning workshop scheduled for late September 2012. The training themes will be based on the needs assessment report of 2010 and on the findings of the FY12 program evaluation. USAID/PCE will also support BFPA to fully institutionalize this coordinated training plan with a view to maximize the chances for such training to be integrated into the national Consolidated Investment Budget (BCI).

ANCAR

Over the past two years, the technical advisory staff of ANCAR in all agro-ecological zones received in-depth training on practical methods and tools for operational responses to concrete preoccupations of farmers and other emerging actors in the rural economy. The prerequisite was to increase the professional capacity of field technicians to understand the dynamics of agricultural production systems and to conduct participatory assessment of needs for impactful advisory services. All the training sessions took place in the fields for concrete applications in selected rural sites. No further trainings for ANCAR staff are planned in FY13. Instead, the project will be focusing its resources and time on the Ministry of Agriculture, on producer groups and on a handful of value chain organizations.

ENSA Agribusiness Master's degree

The first cohort of 14 students enrolled in the new Master's degree program on Agribusiness at ENSA (Ecole Nationale Supérieure d'Agriculture) and fully sponsored by USAID/PCE are in the final stage of the curriculum and will graduate at the end of the current academic year. The good design and high profile of the program allowed ENSA to win grants from other international partners and to integrate

new Network for Excellence in African Universities that offers graduate agribusiness training. The project now considers the ENSA graduate degree program as a completed activity. The only remaining activity in FY13 is to conduct an evaluation of the placement system and of the professional performance of the first cohort of graduates. Our exit should not jeopardize the program that has already secured grants from international partners, mainly to support mobility of both trainers and learners within a network of African Universities engaged in graduate agribusiness training.

Private Agri-Food Value Chain Actors

Support to the team effort for promoting more efficient agri-food value chains put emphasis on strengthening producers' networks and equipping them with simple tools for operational management of their activities. This contributes to preparing exit through increased capacity of partner organization to become more professional market actors. Contract farming as an approach to value chain development cannot be limited to the legal dimension of formalized agreements on rules and roles that frame the relationships between producers and buyers. In the particular context of import substitution markets for cereals, the two years of experience in the maize sector underscores the need to address other critical dimensions that have impact on contract enforcement and overall performance. An important aspect to prioritize is promoting a progressive shift from short-term market relationships to effective business partnership. For each of the core intervention sectors, stakeholder seminars will be organized to consolidate the value chain development spirit through open dialogue for problem solving, collective learning and capitalization of experiences.

Six partner institutions were selected, namely Feptides on irrigated rice marketing, the Union of Thiarié on managing the millet value chain production and marketing segments, the Group of Boubou Dème on industrial maize production and marketing, Kissal Patim on operational governance and professionalization of upland rice producers' networks, Reprosener on developing the seed business for Nerica rice, and Kasec for improved access of millet and maize producers to reliable certified seeds. The baseline assessment of these institutions was completed in July 2012 as cross-team collaborative effort. The results will inform future support activities required to upgrade their capacity for increased professionalism, but also in the perspective of USAID Forward.

In FY13, based on the baseline assessment and in collaboration with the value chain team, targeted support will be provided to the selected partner organizations for institutional capacity development. Interventions in each case will address the weaknesses identified, taking into account the stage of development and the operational objectives.

Seed sector development

REPOSENER which is a strategic partner for seed sector development in the upland Nerica sector was supported for organisational and managerial capacity reinforcement. The training workshop was attended by 19 representatives of network members from all Nerica producing zones across the country (SFZ, Central and Eastern zones). An important aspect of the discussions was about moving from a simple interface with external partners to become a platform of business development services for affiliated groups to better capture the emerging market opportunities. Network animators in both rain-fed and irrigated rice sectors have been trained as trainers for seed multiplication. They are equipped with technical guides and visual tools designed for long-term utilisation.

Access to good quality seeds is a critical factor of agricultural productivity and the first condition for expanding adoption of improved new varieties. Seed being a value chain by itself, interventions need to be at multiple levels. Priority will be given to field multiplication, processing units, and seeds laboratories. For field multiplication, we will train a critical mass of seed multipliers with focus on aromatic rice varieties, Nerica and maize. Concerning the processing units, support priorities are about strengthening the management of 3 seed treatment centres in Richard Toll, Kolda and Kaolack. For seed laboratory technicians who received training in July 2012, emphasis will be on monitoring effective utilisation of tools provided for the strict respect of quality norms and detecting gaps where reminder and additional capacity reinforcement are needed.

Table 7 – Institutional and Human Capacity Building Planned Activities and Expected Results

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
CAPACITY DEVELOPMENT FOR MINISTRY OF AGRICULTURE					
Capacity-building program for the Ministry of Agriculture based on the 2010 needs assessment study	The Ministry of Agriculture’s Training Office, BFPA, takes full ownership of the program and makes sure that it is effectively impactful as pledged by the Steering Committee and instructed by the Minister in the letter 01941 dated 12 August 2011.	Finalization of the annual program contents with BFPA and IPAR Identification & selection of trainers	Training completed on the first theme in two sessions of 5 days each	Training completed on the second theme in two sessions of 5 days each	Training completed on the third and fourth theme in two sessions of 5 days each Assisted auto-evaluation of the program completed
ENSA AGRIBUSINESS MASTERS DEGREE					
Coaching of the 14 finishing agribusiness students of ENSA on their final research papers and practical internship assignments	Smooth phasing out of USAID/PCE support to the program.	Graduation ceremony	-	-	-
In-depth evaluation of the ENSA agribusiness placement system and professional performance of the first graduates	ENSA gets clear advices on what adjustments are needed for the agribusiness program to reach the desired level of Excellency.	Consultant selected and methodological approach finalized	Seminar to review and validate first conclusions held	Report finalized and shared	-

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
CAPACITY DEVELOPMENT FOR PRIVATE AGRI-FOOD VALUE CHAIN ACTORS					
Coaching and monitoring of institutional capacity-building for 7 selected organisations (Feprodes, Repeosener, Kasec, Boubou Dème Group, Thiare Group, Kissal Patim and Fepromas)	The target institutions become more professional, the new FTF indicator on institutional capacity build-up is informed	Action plan completed and institutional support activities launched for each partner		Second OCAT-based assessment completed for the six institutions	-
Capitalization of Conservation Farming experiences	Knowledge on CF is systematized and made widely available for increased productivity and resilience of rain-fed agriculture.	Technical guides for CF in upland Nerica production completed	Training completed for the SFZ	Training completed for the Central zone	-
Technical training for upland Nerica and lowland rice producers.	The usual random trials and errors are avoided for the adopters of the new but rapidly expanding Nerica varieties in the SFZ. Women more involved in lowland rice farming are not left out.	Consultant selected and technical guides completed	Training completed for the SFZ	Training completed for the Central zone	-
Joint definition of product quality norms and marketing requirements for core value chains	More effective collaboration and business relationships for joint capturing of market opportunities	Methodological approach defined	Process completed for the maize value chain	Process completed for the irrigated rice value chain	Process completed for the irrigated millet value chain

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Overall value chain stakeholders forums for collective learning and capitalisation of contract farming experiences (Ateliers-bilans)	These forums will contribute not only to the continuous learning and capitalization process but also to consolidating stakeholder dialogue platforms.	Forum organized for the millet sector in collaboration with CLUSA & PAFA (December)	Forum organized in collaboration with CLCR and ANCAR for rain-fed rice (February) PCE-led Forum organized for the maize sector (March)	Forum organized in collaboration with CIRIZ for irrigated rice in April	-
Strengthening of FEPROMAS on organisational development and associative governance	The new regional maize producers' organisation is properly managed and becomes an efficient platform of services for its members.	Consultations completed on support contents and modalities	Support program launched	-	Assisted evaluation of progress
Organisational evaluation of upland rice producer networks	The process of structuring rain-fed rice production to move it beyond subsistence and turn it into a real value chain is kick started.	Consultant identified and hired	Assessment completed for both SFZ and Central zone	-	-
Integrated Pest Management in the rice and maize production	Limited, safe and efficient utilisation of chemical pesticides	Compilation of existing didactic material and training tools from PDMAS and other sources	Training of trainers in the irrigated rice and maize sectors (separately)	Training of trainers in the rain-fed rice sector	
SEED SECTOR CAPACITY DEVELOPMENT					
Seed production training for aromatic rice varieties, Nerica and maize	Farm gate seeds meet the minimum quality standards required for certification	Technical guides completed	Training completed for both producers and field controllers for aromatic rice	Training completed for both producers and field controllers for maize	-

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Managerial performance evaluation and technical strengthening of seed treatment centers supported by USAID/PCE	The Seed Treatment Centres are set to emerge as efficient business enterprises.	Consultant selected and support material preparation completed	Organizational and management evaluation completed for both Richard Toll and Kolda	Training on best practices completed for both Richard Toll Kolda	
Technical skill reinforcement of DISEM seed lab technicians	A quality compliance culture is developed and rooted in the national seed analysis and certification system.	Collaborative assessment of progress and constraints in applying skills and seed lab management norms following the Hoffman audit mission and training in July 2012		Reminder and Complementary training workshop in domains where weaknesses still exit	

3. CROSS-CUTTING THEMES

3.1. Climate Change Adaptation

USAID/PCE addresses climate change through a range of adaptation-related activities that respond to the risks associated with changes in rainfall patterns (timing, quantity, intensity) or temperature that could undermine overall long-term agriculture productivity. Project interventions focus on four broad Climate Change themes : farm-level actions to improve resiliency to a changing climate; improved access to appropriate seed varieties, and to high quality and certified seeds; rain-indexed crop insurance; and awareness raising of agriculture technicians and planners of the risks and strategies associated with short and long-term adaptations to a changing climate. These activities are scoped to boost availability of cereals to rural households and to ensure a stable supply for urban and animal feed markets.

USAID/PCE’s increased focus on Climate Change adaptation complements FTF’s focus to scale up impacts by adding an element of long-term sustainability to Senegal’s food security model.

The expected outcomes of project interventions in climate change adaptation are also captured in the three following standard indicators: (i) Number of people with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance; (ii) Number of climate mitigation and/or adaptation tools, technologies and methodologies developed, tested and/or adopted as a result of USG assistance; and (iii) Number of stakeholders implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance. Please refer to Table 12 in the Monitoring and Evaluation section of the WorkPlan for target values for the indicators.

Regarding the agricultural insurance program, USAID/PCE worked with a number of partners to launch the first practical experience in Senegal with a rain-based index insurance system, structured specifically for maize farmers. The program met with numerous constraints and although it was officially rolled out, the number of policies issued for the 2012 rainy season is only 110, much less than the goal of 2,000. For the 2013 rainy season, the focus will be on broadening the number of policy holders. The 2013 season will also serve to compare and contrast the effectiveness of two rain measuring methods, the current method that relies on recently installed rain gauges, versus a system that combines the satellite data with data from the rain gauges. Project partners Planet-Guarantee, CIRAD, Swiss Re, and EARS will take the lead on testing this hybrid option. Notwithstanding the difficulties encountered in rolling out the program, all project partners including CNAAS, financial institutions (ACEP, CMS) and ANACIM express a strong and genuine interest to continue using the system as a way to reduce portfolio risk. For farmers, their experience with the 2011 drought has raised their interest so we expect a much larger number of policies in 2013. In FY 2013, USAID/PCE plans to expand the availability of the rain-index insurance for maize value chain to the regions of Tambacounda and Kolda. In the North USAID/PCE will give support to CNAAS to implement and expand the agricultural insurance to cover rice farmers against covariance risks (including drought, flood, etc.).

Table 8 – Climate Change Activities in FY13

Activities and tasks	Expected Results
FARM-LEVEL INTERVENTIONS TO IMPROVE RESILIENCY	
<ul style="list-style-type: none"> - Expansion of coverage of NERICA across the SFZ alongside demonstrations and introduction of Conservation farming in NERICA upland rice best practice trainings. 	<ul style="list-style-type: none"> - Increase in adoption of upland NERICA rice production across the SFZ both within and outside USAID/PCE supported networks. - Increase in mean yields and reduction of variances at NERICA farms adopting CF techniques.

Activities and tasks	Expected Results
- Mainstreaming CF technologies, including mechanized systems, to the commercial maize and millet networks of the SFZ.	- 40% adoption rate of conservation farming with commercial maize farmers.
- Expansion of “Le Chemin du Bon Riz” best practice training for irrigated rice (including water management optimization) to upper valley smallholders.	- 8000 small farmers in a zone prone to drought adopt better crop management practices to adjust to climatic fluctuations.
- Improvement of yield calculation and seasonal forecasting through accurate field measures, systematic yield assessment and swift data collection.	- Faster response time to regional and zonal shortages.
INCREASED AVAILABILITY OF CLIMATE-ADAPTED VARIETIES OF CERTIFIED SEEDS	
- Introduction of the NERICA-S varieties adapted to lowland production.	- Increase in lowland rice production yields ahead of the current 1,5 ton yield expectancy.
- Identification and testing by commercial producers, in partnership with seed firms and ISRA, of drought resistant and small farmer friendly maize hybrids.	<ul style="list-style-type: none"> ✓ Farmer networks take the lead in speeding up and intensifying identification and homologation of adapted hybrids. ✓ New set of climate resilient hybrids accessible to farmers at a reasonable cost.
- Expansion of aromatic Sahel rice multiplication fields to the Upper SRV: Podor and Matam.	✓ Increased access to higher yielding and higher value aromatic rice varieties in SRV subzones where smallholder population is highest.
- Capacity building of seed associations in irrigated rice, NERICA rice, maize and millet to produce and update seed production forecasts and to calculate foundation seed requirements and buffer inventory levels of multiplication material.	<ul style="list-style-type: none"> ✓ Coherent market led seed multiplication sequencing and planning adapted to expected growth in demand. ✓ Visibility and management of buffer inventories at each multiplication stage.
- Increase in seed cleaning and processing capacity by the completion of the Richard Toll and the Kolda facilities and the development by DISEM of standard operating procedures to ensure conformity and boost productivity at Rtoll, Kaolack and upcoming Kolda unit.	✓ Doubling in capacity to process seed production to enhance response capacity in case of climatic shock.
RAIN-INDEXED CROP INSURANCE PROGRAM	
Development of agricultural insurance (climate risk) reduction and resilience strategies	<ul style="list-style-type: none"> - Agricultural insurance program implemented with CNAAS in the irrigated rice value chain with 1000 policies linked to credit distributed. - Rain-based index insurance covers 1500 maize farmers
- Study of existing calamity and guarantee funds associated with the LOASP.	Synergies are developed between the new agricultural insurance scheme and the LOASP implementation process.

Activities and tasks	Expected Results
CAPACITY BUILDING ON CLIMATE CHANGE ADAPTATION ISSUES	
<ul style="list-style-type: none"> - Training of 25 senior officers from the Ministry of Agriculture on climate changes and its implication for the agricultural sector (Element added to the FY12 program for delivery in two sessions of 5 days each scheduled respectively for August and September 2012) 	<ul style="list-style-type: none"> ✓ Rural development professionals are better equipped for climate change mainstreaming in agricultural policies and programs.
<ul style="list-style-type: none"> - Capitalization of Conservation Farming experiences 	<ul style="list-style-type: none"> ✓ Knowledge on CF is systematized and made widely available for increased productivity and resilience of rain-fed agriculture.

3.2. Gender

USAID/PCE's primary gender concern is to expand opportunities for women-owned businesses and for cooperative organizations that assist women to benefit from project actions in FTF priority value chains. This implies ensuring women are reaping the benefits from project investments, notably as participants in structured farmer networks for commercialization, as well as through actions that improve women's access to seasonal credit, small business loans, and other forms of financing, such as equipment leasing. Finally, women are a target for dialogue on constraints to investment and growth in cereals value chains through the project's policy reform component.

During FY12, USAID/PCE value chain activities engaged women as part of the development and training of farmer supply networks. This includes the following activities and outcomes:

- Collaboration and support to two women-dominated irrigated rice producer networks organized by the Union des Femmes Productrices de Ross Bethio and FEPRODES. The two groups provided training to 2,370 women in rice production best practices and on performance associated with certified seeds. Both organizations also participated in the FIARA 2012 to promote aromatic rice production with FEPRODES marketing 70 MT through the event. FEPRODES is also in discussion to supply the VITAL mill with paddy rice in the upcoming season.
- In NERICA rice, women producers represented 51% of the 3,868 farmers who benefited from either training or access to certified seed of the new upland variety and this proportion will be maintained through the present cycle of trainings and dissemination activities which should bring total outreach to nearly 8,000 farmers.
- In maize and millet the proportion of women farmers attained is much lower at 6% and 15%, respectively.
- In terms of female leadership role at the supply chain level, it is important to note that Ms. Nimna Diayte of GIE Boubou Deme was elected President of the recently formed FEPROMAS, which groups the principal maize producer networks of the Saloum. She joins Penda Gueye-Cisse, who is founder of FEPRODES and board member of UNIS-Nord (the association of seed producers currently supplying the SRV), as a recognizable and forceful leader.

In FY 13, USAID/PCE will strive to improve the representation of women in these commercial cereal value chains through targeted interventions that include the following :

- Cost-share partnerships with women rice producer networks in the SRV to promote seed multiplication of the coveted Sahael aromatic seed varieties. This effort will offer the women members both additional income and priority access to what is fast becoming a high value commodity.
- Training and contract expansion activities targeting the upper Senegal River Valley (Podor and Matam) where the proportion of women producers is higher than in the Ross Bethio-Dagana zone.
- Support and training around the multiplication and dissemination of NERICA-S varieties for lowland farming in the Casamance, a sector traditionally populated by women farmers.
- FEPROMAS, under the leadership of Ms. Nimna Diayte, will actively seek linkages beyond the traditional maize commercial networks of the Saloum and seek to integrate more women led farms and organizations in the maize sector traditionally dominated by women.

With respect to credit access, USAID/PCE continues its role in facilitation access to the DCA mechanism. FEPRODES, a women's federation based in St. Louis, is a partner of USAID Senegal for a special Development Guarantee for Women. The micro-finance arm, MEC-FEPRODES received an Ecobank financing of US\$ 400,000 under the portable DCA mechanism in order to reach many of its female members and thereby ease the economic inclusion of women in agricultural value chains. Today, the collaboration between Ecobank and FEPRODES allowed the latter to overcome the everlasting guarantee issue with the pledge of its loan portfolio as substitute of classic guarantee. In FY 2013, USAID/PCE will implement a grant for MEC FEPRODES to: (1) implement a mass financial coaching program intended for farmers; (2) organization of workshops on value chain financing tools and approaches; (3) implement integrated financing models for irrigated rice value chains. In addition, specific support will be provided in terms of financial advice to enable FEPRODES to boost its lending portfolio in the irrigated rice value chain.

3.3. Science, Technology and Innovation (STI)

The primary contribution of USAID/PCE to the cross-cutting issue of STI is its work through development of commercially-viable and competitive cereals value chains to rapidly introduce improved seed varieties as well as improved farming techniques and post-harvest handling technologies. The project's approach of working through structured farmer networks supported by market-oriented consolidation groups has proven to be a strong vector for the rapid dissemination and expansion of these techniques and seed varieties.

Project interventions in FY 12 in support of science and technology introduction for FTF value chains covered a wide array of technologies:

- Broad expansion of newly developed aromatic Sahel rice varieties (S177, S328, S329) from Africa Rice which led to more than 2,000 hectares sown in the first two cycles of production and led to gains in farm gate prices exceeding 20% compounded by productivity gains with reported yields at 7 tons per ha compared to the current average inferior to 6 tons per ha.
- Rapid testing and introduction to Senegalese farmers of the upland Nerica varieties across the South Forest Zone from Fatick to Kolda which has so far reached 3800 farmers.
- Mechanized land preparation using tractors acquired by leading maize farmers. The tractors were made possible through a financial and business planning coaching program that resulted in a combination of traditional loans as well as a number of leasing agreements.
- Maize de-huskers and shellers have helped farmers improve productivity and commercial quality though adaptations to standard motors have been made to adjust cooling systems to field conditions.

- Adapted seeding and other mechanized land preparation technologies for upland rice and maize have been disseminated and adopted by local upland rice farmers as well as other projects active in the zone.
- Farmer networks have begun to implement farmer databases including geo-referencing and area mapping of farms using GPS technologies to improve precision of area estimates and provide field traceability.
- Quality control procedures have begun to be introduced in the field, upon harvest and at processing points with the introduction of humidity testing technologies.
- DISEM has been supported in its effort to raise the standard practices of its seed labs through new equipment and training of its personnel in standard lab procedures, results benchmarking and traceability documentation.

During FY13, USAID/PCE will continue its support to technology adoption and dissemination, again with a focus on seeds, farm management techniques, mechanization (tractors and post-harvest equipment), and database management. Specific plans include:

- The multiplication and demonstration of aromatic Sahel varieties with target women farmers and upper SRV farmer groups to increase coverage and adoption beyond traditional commercial rice networks.
- Expansion of upland NERICA demonstration sites and number of farmers reached as well as an update of the technical message to include Conservation farming techniques to improve resilience of the crop to rainfall fluctuations.
- Introduction of NERICA-S varieties adapted to lowland conditions to women farmer groups in the SFZ through demonstration points.
- Maize producer networks will partner with seed producer organizations and ISRA to field test promising hybrids and develop a functional supply chain to ensure full take-up of successful varieties.
- Expansion of maize shelling and de-husking equipment in the Kolda region.
- Introduction of temporary storage methods to meet food safety requirements of buyers. This may include specific fumigation protocols compatible with the food industry.
- Network databases will be expanded to include modules enabling rainfall monitoring, crop forecasting, field marketing and quality control.
- Quality control methods will be introduced to commercial networks and will include systematic sampling, analytical testing of humidity, traceability documentation techniques and simple statistical results analysis.
- Full implementation by DISEM labs of the standard practices including lab performance audits conducted by the central office personnel.

3.4. Communications

USAID/PCE is a leading player in the promotion of cereal value chains in Senegal and has introduced a number of innovative approaches and tools that are changing, for the better, ways of doing business in maize, rice, and millet. Major successes have been noted:

- Rapid uptake of aromatic rice varieties in the northern river valley is leading to significant upgrading of quality and sales to urban consumers
- A breakthrough in rainfed Nerica rice varieties in the South is improving both household incomes and food security
- The application of the contract farming model to cereals is leading to increases in lending and investment and resulting in better quality production and higher;

- New financial tools such as agriculture insurance and equipment leasing .have moved off the whiteboard and into reality and show considerable promise for future expansion;
- The support to emerging seed producer associations is leading to a more healthy and focused supply chain system

USAID/PCE generates many examples of success to communicate to a variety of interest groups and the project has reached a phase where it is urgent to capitalize on project approaches and lessons learned over the past three years. In this fourth year, the project will continue to use a variety of formats to communicate and discuss project actions, results and lessons with a wide range of audiences including USAID and US-based decision makers, Senegalese government officials and technicians, the private sector, civil society and the general public as a whole.

In FY12, USAID/PCE successfully produced a steady stream of communications products and events, including the following:

- Short videos posted on You Tube regarding:
 - The payoff from supporting a contract farming model in the maize value chain to substitute Senegal's maize imports with a high-quality local product for the animal feed industry ;
 - The rapid and large scale introduction of new upland rice seed varieties in southern Senegal to help farmers generate higher yields, develop seed production enterprises, and increase rice available for self consumption in deprived areas.
- High profile events where stakeholders across the different levels of the value chain came together to brainstorm, exchange, and showcase products and results.
- Generation of printed materials to accompany events and communications actions. This includes fact sheets, press releases, large-format posters, inserts into local newspapers and business magazines and more.

During FY13, USAID/PCE intends to continue increasing the visibility of project interventions, strategies, partners and results. We will be using a blend of formats and venues to stimulate dialogue and share information on key issues and findings relevant to the project objectives, and to share and disseminate best practice information to different targeted audiences.

The project will produce communication material and engage promotion activities “for and by” the partners. Field visits will be organized to reach a large audience of stakeholders including government officials, private sector, and civil society. The project is supporting USAID/PCE in launching a Feed the Future Senegal web site that will be able to reach an international audience with a rich content related to all USAID/Senegal FTF projects. Also, to capitalize on USAID/PCE experience, a TV program is planned to reach a wide audience around key project successes and lessons learned and as one tool for engaging our beneficiaries and partners in the communications agenda.

Specific communications activities in FY 13 include:

COMMUNICATION TOOLS:

Elaboration of Information Notes. Thematic analysis on successful approaches and processes initiated by USAID/PCE will be developed so as to inform stakeholders in a perspective of capitalization and continuous improvement. Those thematic analyses or information notes will serve to familiarize readers, mostly technicians, academics and investors, about the context and constraints to cereal value chain growth and about the project’s approaches and results in overcoming those constraints.

Website. USAID/PCE is taking the lead in developing an Internet portal for the Feed the Future Senegal projects. The website will showcase all Feed the Future Senegal projects and activities for a large and international audience. PCE support will ensure final design of the website and recruitment of a third party service provider to serve as webmaster. USAID Senegal will be responsible for overall validation and monitoring of the web site.

Success Stories. All year long, USAID/PCE will convert its results into success stories that relate the impact of USAID investments on project beneficiaries by narrating individual stories . At least six Success Stories will be generated, one every two months. These success stories, like thematic fact sheets, will be disseminated in both paper and electronic format.

Films. The project is planning four short films for broad dissemination including local TV and YouTube, to capture the approaches and benefits from USAID's Feed the Future investments. Films will be in French and if necessary sub-titled in English to maximize the potential audience. The topics will be selected to align with the project's information notes and thematic analyses as discussed above. Possible subjects include a breakdown of how the integrated financing model was designed and rolled out for the irrigated rice value chain.

Electronic Newsletter. Given the large number of on-going project activities, USAID/PCE will initiate a project electronic newsletter that captures the same types of information that USAID receives every two weeks for the Feed the Future bi-weekly, but expanded to capture additional details. It will be an opportunity to allow beneficiaries, partners, and our technical staff to communicate on our efforts and successes. The goal is to generate a newsletter each quarter.

FIELDS VISITS:

Government, stakeholders and USAID field visits. USAID/PCE will organize dedicated field visits for government representatives, other stakeholders, including the press, and USAID staff. Those visits will serve to explore in a more hands-on and interactive way the approaches, activities and beneficiary impressions of USAID/PCE activities. The visits will also serve the goal of informing USAID and the Government of Senegal of possible future investment needs in agriculture. For those visits, USAID/PCE will select the most relevant daily newspaper and magazine journalists to ensure public information dissemination.

We foresee 3-4 field visits during FY13 in the northern valley for irrigated rice, the rain fed rice in the south, and the maize production zones

DISCUSSION ON AGRICULTURE COMPETITIVENESS:

Sponsoring of a TV program. USAID/PCE proposes to partner with a national TV **station** to produce a quarterly program of one hour on agriculture competitiveness issues based on lessons learned by USAID/PCE throughout its ongoing activities.. This will be an opportunity for USAID/PCE to initiate debate on agriculture issues and how to increase productivity and competitiveness. Project beneficiaries, Government, stakeholders, USAID and specialists will be invited on the TV set in a debate format. The program is mainly dedicated to the general public interested by agriculture matters.

3.5. Partnerships

The USAID/PCE team considers partnership and cost-sharing as essential to project sustainability and scale-up. While the project has considerable resources of its own, there are many other investors, both projects and private, involved in our key value chains. Through active partnering, we increase our probability of establishing a consistent approach to value chain development and we ensure, particularly with private sector, that the investments of today will be pursued and maintained.

The following table includes most of the partners that USAID/PCE will work with in FY 13 in some form of structured collaboration and, in some cases, through a cost-share arrangement. In most instances, the partnership takes the form of an MOU. In many instances (with producer and seed network leaders, millers, and financial institutions) USAID/PCE negotiates some form of cost-share arrangement that is structured to assist the partners to undertake training/outreach activities and also to help them overcome risk and knowledge barriers associated with investments in technologies and improved management practices. The table does not include obvious institutional partners such as the Ministry of Agriculture as such, but there are numerous instances of collaboration and cost-sharing with government agencies and projects and these are captured in the table.

Table 9 – USAID/PCE Partnerships in FY13

USAID/PCE Partners	Area of collaboration
SEDAB and FEPROMAS, SODEFITEX, Groupe Tool Baye, Tamedou & Fils, RESOPP. <i>Industries:</i> Grands Moulins, Sedima, Avisen, NMA, Sentenac.	Cost share partnership with selected consolidators to develop and support farmer networks in the maize value chain including contracted sourcing of maize. With SEDAB and FEPROMAS includes collaboration on farmer database management and monitoring as well as investments in quality monitoring equipment and post-harvest handling equipment. Coordination of supply and sourcing programs across the industry. Development of common quality control norms and testing protocols.
CARTAS, ASSOLUCER, COOPAD, GIE FDL, GIE KISSAL PATIM, SYMBIOSE, YARAAMA	Cost share partnership to develop and support farmer networks for Nerica rice and Nerica seed production including organization of field demonstrations and training.
FEPRODES, CNT, GIE Naxadi Deret, Mbodji & Frères, Union FP Ross Bethio, GIE Ngora Fanaye, Cooperatives de Dagana, Podor & Matam, GICOPA, GIE Malal Yoro Gueye, VITAL.	Cost share partnerships for irrigated rice in the SRV including (i) set-up of demonstration sites for aromatic rice, production and post-harvest practices and quality management; (ii) creation of geo-referenced databases of producers to ensure planning and monitoring; (iii) development of a quality standard; (iv) assistance for access to seasonal credit. Miller owned networks also collaborate with USAID/PCE in the promotion and branding
VITAL Agro-industries, Neha, CCBM	Collaboration with large-scale industrial rice milling to develop and implement contracted rice sourcing models with local farmers and integrate them with value chain credit models.
UNIS-Nord (irrigated rice), REPROSEM (maize), REPROSENER (NERICA rice)	Seed producer associations supported partnering with USAID/PCE to increase volume of certified seeds in critical varieties, secure multi-year requirements plans based on market demand and development of best practice frameworks.

USAID/PCE Partners	Area of collaboration
CIRIZ, PNAR, CLCR Société de Promotion de la Commercialisation du Riz Sénégalais (SPCRS)	Collaboration with stakeholder and government institutions promoting the rice sector to reinforce market integration and provide strategic insights.
IFAD/PAFA	Introduction to project supported farmer groups of USAID/PCE developed millet/sorghum conservation farming, certified seeds and value chain contracting and marketing. Integration of millet/sorghum producer groups supported by USAID/PCE in the «tables-filières » process Millet value chain forum
CLUSA	Millet value chain forum
USDA/ AFRICARE/ PRODIAKT	Commercial maize market linkages with supported producer groups
SAED	Technical assistance to small scale rice producer groups to introduce value chain contracting and financing mechanisms; post harvest quality assessment and monitoring .
JICA/PAPRIZ	Collaboration on the identification and introduction of rice milling technologies, milling standards and warehouse construction program.
Spanish Cooperation	Synergies with the Spanish Cooperation rice warehouse construction program for the introduction of warehouse receipt systems in the SRV.
AFD	Collaboration with the 3PRD project in the SRV to introduce a market driven quality.
Agripro, Matforce, Sismar, Foland	Promotion of mechanized land preparation and cultivation – promotion of improved post harvest processing of maize and rice. (Demonstration sites). Development of training and maintenance protocols.
DAPS	Agricultural statistics
IPAR	PNIA process
Direction de l'Agriculture (DA)	Fertilizer sector reform
CLCR and ANCAR	Rain-fed rice forum
CIRIZ	Irrigated rice value chain forum
Diagne et Frères, GICOPA, GIE Mbodji& Frères, GIE Naxadi Deret, GIE Thieytou, CNT, IAC	Financing coaching and assistance for access to credit (production and commercialization).
SEDAB	Support to develop financing model including contracted sourcing of maize.
FEPRODES, CNT, Diagne et Frères, GICOPA, GIE Malal Yoro Gueye, GIE Naxadi Deret, ASPRODEB, Union FP Ross Bethio, GIE Ngora Fanaye	Cost share partnerships for irrigated rice in the SRV including (i) set-up of demonstration sites for production and post-harvest practices and quality management; (ii) creation of georeferenced databases of producers to ensure planning and monitoring; (iii) development of a quality standard; (iv) assistance for access to seasonal credit.

USAID/PCE Partners	Area of collaboration
SAED	Technical assistance to small scale rice producer groups to introduce value chain contracting and financing mechanisms; post harvest quality assessment and monitoring.
PALPS (Programme d'Appui à la Lettre de Politique Sectorielle)	<ul style="list-style-type: none"> • Strengthening institutional and technical capacities of MFIs; • Development of new financial products in response to the agricultural and rural demand; • Strengthening Bank/MFIs linkage.
CGERS (Centre de Gestion et d'Economie Rurales)	<ul style="list-style-type: none"> • Improvement of accounting and financial information of players in the rice value chain
CNAAS (Compagnie Nationale d'Assurance Agricole du Sénégal) PlaNet Guarantee	<ul style="list-style-type: none"> • Agricultural Insurance
ECOBANK, BRS, CNCAS, CBAO, ECOBANK, BRS, MEC FEPRODES, MEC DELTA, CMS, PAMECAS, U-IMCEC, ACEP	<ul style="list-style-type: none"> • Developing financial services for agricultural value chains
Locafrique and Agripro	<ul style="list-style-type: none"> • Promotion of Leasing

3.6. Small Grants

The Small Grants Fund was set up in 2009 as a mechanism to assist local enterprises who shared the project's goal of testing technology innovations that can improve product quality, operational efficiency and overall marketability. The Small Grants Request for Applications focused on the development and the dissemination of technical and technological innovations and on the promotion of innovative local products. Technology innovations are often not supported through traditional credit arrangements and broad adoption is often constrained by lack of practical experience with such technologies. In this sense, the Small Grants Fund was designed to serve to help provide a demonstration effect and also collect important data on the costs and returns of investments in new technologies. The Fund was open to proposals in all of the value chains that were supported under the SAGIC IQC, that is, not limited to cereals value chains.

To date, 10 projects have been supported under the Grants Fund in four value chains: irrigated rice, rainfed rice, maize and banana. The initial total cost of these ten projects was about US \$618 831 (332 653 000 FCFA) with a contribution of US \$ 313 985 from the Small Grants Fund (51%). To date, the total amount disbursed is about 99 399 072 FCFA (66% of the total amount).

In FY12 five projects were finalized and are now in the process of close-out. Four projects are due to be closed by the end of the first quarter of FY13. The last project, the Agricultural Mutual Guaranty Scheme, is planned to continue until the end of the PCE contract.

All closed grants are the subject of an evaluation to capitalize on the lessons learned from the innovation process and on the returns associated with the investments. These evaluations also

serve as input for planned communications in FY13 to share the lessons from the Grants Fund with interested stakeholders. Planned activities in FY 13 include:

- A tour with political authorities and technical partners to present the rice husk-based biogas project implemented with rice miller CNT. Given the unique nature of this project, a film will be produced and presented during the restitution of the technical, environmental and financial evaluation, scheduled to be held in the second quarter. Note that this field visit with government representatives will also serve to look at the experience with our support to the Agricultural Mutual Guaranty mechanism developed with MEC Delta in the rice value chain.
- A marketing and promotion campaign with the three women's groups based in Podor, Koungheul and Kaolack who received grants to improve and expand their infant cereal production capacity. This communication campaign will be organized in the second quarter with a focus on nearby opportunities with nutrition projects and programs, pharmacies and hospitals, and local residents.
- A short film will focus on technologies developed in the organic banana production with GIE Nguéne and EST.
- For the rainfed rice seeder, a film is in production by the promoter and will be presented during a workshop organized by PCE for capitalization.

Table 10 - PCE Small Grants for Technology Innovation

Promoter	Project Title	Total Cost (US\$)	Grant Amount (US\$)
Comité Villageois de Développement de Mampatim Sud Est et GIE Douwa Diaby	Improving rainfed lowland rice in Mampatim and Bagadadji	24 963	17 512
Coumba Nor Thiam SUARL	Support for the experimentation of a unit for electricity production from rice husks	305 504	73 064
GIE N'SAMM	Support for increasing supply of quality infant flour	31 266	19 742
Ets Keur Yaye Aby Ndao		24 508	16 585
GIE Xaritu Xaleyi		29 292	20 976
Baobab des Saveurs	Launching of a cereal bar made from local products	24 251	16 094
Hydro Bati Mec	Conception and test of a rainfed rice seeder for increasing rice productivity	34 289	23 699
Mutuelle d'Épargne et de Crédit du Delta (MEC DELTA) / Action Solidaire du Delta (ASDEL)	Implementation of a leverage fund for rice production	44,191	41,491
GIE de Nguéne II	Support for improving the productivity of quality organic banana	73 386	51 273
EM Seeds and	Promotion of organic inputs for	33 327	26 042

Promoter	Project Title	Total Cost (US\$)	Grant Amount (US\$)
Technologies (EST)	banana		
TOTAL		616 831	313 985

4. Environmental Mitigation and Monitoring (EMMP)

Many of the activities foreseen as part of the USAID/PCE, including studies, research, policy dialogue and reform, capacity building and institutional strengthening, all key to lasting impact in the food security/agriculture sector, were determined to be “**categorical exclusions**,” which by definition do not have an impact on the environment or on the local population. They can and are proceeding without further direct compliance measures.

However, in preparing the amendment to the SO 11 IEE, USAID issued a “**negative determination with conditions**” per 22CFR216.3(a)(2)(iii) for the following activities linked to the GFSR, and thus to the USAID/PCE scope of work under Task Order 5:

- Irrigation and support to increased efficiency in existing irrigated areas
- Support to improved rainfed agricultural practices
- The multiplication and distribution of seeds of staple food crops
- The increased use of organic and inorganic fertilizer
- Improving farm to market roads
- Construction of food storage warehouses and cold storage facilities
- Activities supporting the development of entrepreneurial capabilities and/or small to medium-scale enterprise developments for the private sector and farmer associations.

Furthermore, the amended IEE includes the following conditions for these activities:

- Although expansion **within the boundaries of the existing irrigated schemes** is allowable, no expansion on to new sites and in particular, on undeveloped wetlands, can be undertaken as this would change the determination to a positive one (22CFR216.2(d)(ii) and would therefore require carrying out an environmental assessment (EA).
- This determination specifically excludes seeds resulting from the genetic modification of living organisms (**GMOs**).
- Promoting and/or procuring **fertilizers** will be done in conjunction with the guidance available in the Africa Bureau Fertilizer Information Sheet.
- No funds may be expended on **pesticide procurement or use**, until after an amendment to this IEE is approved that addresses the pesticide procedures outlined under 22 CFR 216.3(b) and a PERSUAP is completed and approved by the Mission Environmental Officer (MEO) and the Africa Bureau Environmental Officer (BEO).
- **Construction activities** will be conducted following environmentally sound practices presented in USAID’s *Environmental Guidelines for Small-Scale Activities in Africa*, (Chapters 3 and 16). Prior to constructing facilities in which the total disturbed surface area exceeds 10,000 square feet, if any, the program will conduct a supplemental environmental review according to guidelines in the *Africa Bureau Environmental Procedures Training Manual* (Annex G). Construction may not begin until such a review is completed and approved by the REO.

Based on these determinations, in 2010, IRG prepared and submitted to USAID an Environmental Mitigation and Monitoring Plan as well as a Pesticide Evaluation Report and Safe User Action Plan (PERSUAP). USAID subsequently approved the EMMP and PERSUAP and the project team actively applies the measures identified in those documents. The following paragraphs discuss issues and actions as necessary for USAID/PCE in FY 2012.

SMALL-SCALE IRRIGATION

USAID/PCE does not engage in the development of irrigation schemes for small holder farmers. Rather, the project collaborates with smallholders and other farmers involved in public irrigations schemes in the Senegal River Valley that are monitored by SAED which has been mandated by the Government of Senegal to oversee the irrigation network's management and expansion according to environmental norms.

Action: Project sponsored trainings to irrigated rice producers are consistent with the irrigation guidelines set forth by SAED.

In FY 13 USAID/PCE will also monitor the investments undertaken in FY12 at ISRA's stations in Fanaye and Niore where irrigation equipment was replaced.

Action: USAID/PCE will continue to monitor the performance of rehabilitated research fields to ensure the installed equipment properly regulates water flow and associated drainage.

GENETICALLY MODIFIED ORGANISMS (GMOs)

USAID/PCE does not work with GMOs. The project works to improve farmer access to non-GMO certified seeds of productive varieties of cereals adapted to Senegal's climate. Specifically, the project supports Senegal's seed sector in the multiplication and distribution of improved rice, maize, millet and sorghum varieties that have been duly approved by the national research body ISRA, in accordance with the national seed legislation. Foundation seeds for in-country multiplication by seed producers may also be sourced from out of Senegal suppliers such as the AfricaRice network for NERICA seeds, which is now an accepted practice per the ECOWAS seed framework endorsed by Senegal. USAID/PCE's maize program involves the sourcing by farmer networks of maize hybrids imported through government certified import channels.

FERTILIZER

USAID/PCE supports value chain networks where lead consolidators provide fertilizer sourcing, distribution and financing services to a wide base of farmers. The network procurement plan, distribution to farmers and field application of fertilizer is performed according to the guidelines set by ISRA and conveyed by the extension agency ANCAR for the soil types found in the various ecological zones.

Action: Training documentation disseminated by value chain network agents through field days and demonstrations supports national fertilizer use guidelines.

Action: All fertilizer procured directly by USAID/PCE for use in field demonstration sites is selected in accordance with technical recommendations by ISRA and is submitted to prior approval by USAID.

SMALL-SCALE CONSTRUCTION

Possible small-scale construction activities of USAID/PCE are limited to seed laboratories and small-size warehouses. These facilities are expected to involve work on an area that is less than 10,000 square feet. The EMMP contains a checklist of measures that USAID/PCE will apply to any small-scale construction activity.

Action: When participating in the costs for small-scale construction, USAID/PCE will recruit a third party project monitoring consultant who will be responsible for the identification and oversight of environmental risk mitigation measures as required by USAID guidelines and defined in the EMMP.

PESTICIDES

Pesticide application recommendations to farmers included in USAID/PCE funded documentation will reflect the PERSUAP guidelines.

Action: Review and update as needed of existing and projected training tools (documents, posters, radio broadcast content, videos and slideshows) to incorporate the development of IPM skills such as good field sanitation and surveillance, use of certified seeds free of weeds, manual weeding, conservation farming, mulching, fertilizing, good water and soil management.

Action: Ensurance that any pesticides recommended in training programs and promoted through production programs will reflect the approved pesticide list established by USAID/PCE's PERSUAP.

Action: Training plan for pesticide safe use practices and IPM concepts and applications, in order to strengthen the capacity of VC management team as well as cascading implementing partners (Private firms, NGO's, ANCAR, ISRA) and field agents, to ensure the dissemination of a consistent technical message.

Action: Ensuring training plan covers best practices in the safe usage of pesticides during storage of cereals as well as safe field application techniques and the use of adequate protection by farmers, in particular at demonstration sites supported by the project.

5. Monitoring and Evaluation (M&E)

Context and thematic priorities for FY13

In FY12, IRG updated and submitted to USAID an updated project Performance Management Plan. The update focused on adjustments to targets for selected indicators, the removal of one indicator about post-harvest losses, and the replacement of an indicator on institutional capacity building. The revisions to the indicator list reflect adjustments made at the global level for FTF indicators, thus ensuring that the project stays in line with the priority metrics for FTF. The PMP update process also served to revisit with technical staff our indicator definitions as well as indicator data quality and collection standards.

Looking forward, the first key function for the M&E team is to ensure that project documentation is properly organized and archived and transmitted to USAID. The team is already working with short-term local consultants to finalize a new archiving system and to enter all past documentation into it. This work will flow directly into an improved document transmission and dissemination system in FY13. Similarly, the project M&E team is focused heavily on ensuring quality and completeness of our indicator data, as well as periodic audits of indicator data (data quality assessments).

The bulk of the project's indicator data comes from information generated by project partners working with farmers and farmer groups. Thus a major on-going concern for our M&E system is **capacity building of our value chain partners** to capture accurate data and then organize and analyze that data for various purposes, such as tracking of training and generating accurate harvest, sales, loan and gross margin figures. For the coming fiscal year, this means the project is deepening its investment in outreach and training in data collection and management for farmer networks and other partners, such as millers in the Senegal River Valley.

Participatory learning and analysis of project activities and results is another core priority for our M&E system in FY13. The closer the project gets to the end, the more important it becomes to use a combination of field assessments and learning events to generate and discuss results and findings. This effort builds on the project's on-going collaborative learning model that is anchored by annual value chain events involving all stakeholders (farmers, consolidators, millers, traders, banks, etc.). A 2012 participatory analysis with farmer groups in maize, organic sorghum and rainfed rice provided extremely useful insights on how these farmers view the contracting system, articulated financing, and other dimensions of the USAID value chain approach. In FY13, we intend to expand on that analysis, to look at household dynamics and responses to project interventions in the irrigated rice value chain. We will also be intensifying our analysis of project-supported farmer households in all FTF value chains.

Finally, the M&E team plans to work with our technical teams and partners to generate a number of spatialized products to serve both operational and communications purposes. This includes mapping of financial service locations, of storage facilities, of certified seed producers and of 2011 and 2012 production/harvest areas and volumes.

Table 11 – M&E Activity Calendar

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Project reporting, documentation and quality assurance					
Quarterly Project progress reporting	Project progress reports are regularly and timely transmitted to USAID	Annual report submitted	Q1 report submitted	Q2 report submitted	Q3 report submitted
Dissemination and archiving of project documentation	Key project reports and deliverables are available through various channels	Documents for FY2012 are uploaded to FTF Senegal website, to DEC and to MRR websites	An updated CD with project reports and deliverables is transmitted to USAID and partners		
	A comprehensive SAGIC IQC document archive is finalized and brought up to date	The document archive and associated tracking database is finalized and operational	Quarterly update of the archive	Quarterly update of the archive	Quarterly update of the archive
Data quality assessments	IRG and partners maintain high degree of rigor in support of indicator data quality and archiving.	An updated Data Quality Assessment manual is produced and validated internally	DQA undertaken and report issued for a sample of partners	DQA undertaken and report issued for a sample of partners Corrective actions from previous DQA complete and verified	DQA undertaken and report issued for a sample of partners Corrective actions from previous DQA complete and verified

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Capacity building of project partners for performance monitoring					
Capacity Building activities for Partners in the areas of Performance Monitoring and Evaluation	A Guide for monitoring the Production process to the benefit of Producers organizations is validated by the networks of partners	Workshops are organized for each value chains to validate a Manual for Production Monitoring	A Manual in local language is transmitted to partners		-
Support for the development of autonomous system for production managing	Organizations and networks involved in project's interventions continue to use the approach and Monitoring tools developed by the project		Three Workshops are held with value chains actors to capitalize on the Approach and in tools developed	Workshop are organized to reinforce partners capacities in implementing and developing a M&E System	
	Seeds networks have an adapted, efficient and functional system to manage seed production	Networks Partners and Seed Conditioning Center (KASEC, CTS,...) Staff participate to a workshop training in monitoring seed production process and ensuring quality and traceability	DISEM Staff is trained in using a module for Certification Process Management and Traceability		
Development of Platform to support Contractualization and Commercialization	Database module for Traceability management are developed for partners networks	Partners in Millet networks participate in a Traceability and Quality Management training session	Partners in Irrigated rice network participate in a training session in Traceability and Quality Management	Partners in Maize network (SEDAB, FEPROMAS,...) participate in a training session in Traceability and Quality Management	
	Networks have access to communication system in supporting contractualization		A session is organized for the development of an exchange platform for Maize value chain Actors		

Key Activities	Expected Results	Milestones by quarter			
		Q1	Q2	Q3	Q4
Participatory Learning from Project Activities and Results					
Socio-economic framing assessment with irrigated rice farmers and millet farmers	Qualitative analysis based on focus groups of how farmers are being affected by and perceive the benefits and risks from their collaboration and support from PCE	Implementation of assessment using methodology similar to analysis conducted for maize and rainfed rice	Dissemination and discussion of findings with stakeholders between the two seasons Adaptation of project efforts in 2013 based on findings		
Analysis of participating farmers	A report that provides a more in-depth look at the characteristics and motivations of farmers that have participated in contract farming programs with PCE	Study design	Study implementation	Report finalization, dissemination and discussion with partners	
Cartography					
Production of mapping database	A mapping of financial services point is validated		A database of financial services points is validated by PCE technical staff		
	A mapping of infrastructures is validated		A database of storage points is transmitted		
	A mapping of consolidation point is transmitted to partners (Vital, FEPROMAS,...)	A mapping system for consolidation point is transmitted to FEPROMAS and SEDAB	A mapping system for consolidation point is transmitted to Vital and others consolidators		
Production of Data on 2012 and 2013 campaign	Data on 2012 and 2013 agricultural campaign are shared with technical teams and partners	A mapping of farmer population supported by the project is produced for the different value chains	A Mapping of Yields and Productions for 2013 Campaign is validated by PCE technical staff		

5.1. Project indicators and targets

Table 12 presents the FY13 targets for the updated list of USAID/PCE indicators per the revised PMP.

Table 12 – FY12 Indicator Targets

N°	Indicator Title	Target FY 2013
1	Gross margin per unit of land or animal of selected product	
	Irrigated Rice GM	775
	Upland Rice GM	430
	Maize GM	461
	Millet GM	173
2	Number of individuals who have received USG supported long-term agricultural sector productivity or food security training	0
	Male	0
	Female	0
3	Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	38,500
	Male	32,725
	Female	5,775
4	Number of farmers and others who have applied new technologies or management practices as a result of USG assistance	30,800
5	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	1,540
6	Number of members of producer organizations and community based organizations receiving USG assistance	38,500
7	Number of food security private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving USG assistance	1,925
8	Number of stakeholders implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance	30,800
9	Number of hectares under improved technologies or management practices as a result of USG assistance	37,880
	Irrigated Rice (ha)	19,200
	Upland Rice (ha)	4,480
	Maize (ha)	7,800
	Millet (ha)	6,400

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N°	Indicator Title	Target FY 2013
10	Number of technologies or management practices in one of the following phases of development	9
	<i>in Phase I: under research as a result of USG assistance</i>	0
	<i>in Phase II: under field testing as a result of USG assistance</i>	0
	<i>in Phase III: made available for transfer as a result of USG assistance</i>	9
11	Number of rural households benefiting directly from USG interventions	38,500
12	Numbers of Policies/Regulations/ Administrative Procedures in each of the following stages of development as a result of USG assistance in each case	22
	Stage 1: Analyzed	5
	Stage 2: Drafted and presented for public/stakeholder consultation	5
	Stage 3: Presented for legislation/decreed	3
	Stage 4: Passed/approved	3
	Stage 5: Passed for which implementation has begun	6
13b	Score, in percent, of combined key areas of organization capacity amongst USG direct and indirect local implementing partners.	45%
14	Value of incremental sales (collected at farm-level) attributed to FTF implementation	\$21,032,000
	Millet	
	Volume	3,700
	Value	1,295,000
	Maize	
	Volume	11,100
	Value	3,441,000
	Upland Rice	
	Volume	600
	Value	168,000
	Irrigated Rice	
	Volume	67,200
Value	16,128,000	
15	Value of Agricultural and Rural Loans	\$11,000,000
16	Number of MSMEs, including farmers, receiving USG assistance to access loans	13,650
17	Number of MSMEs, including farmers, receiving business development services from USG assisted sources	38,500
18	Amount of private financing mobilized with DCA Guarantee	\$6,000,000
19	Number of trainings of MFI and bank personnel related to agricultural lending	9
20	Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation	\$2,520,000
21	Number of public-private partnerships formed as a result of FTF assistance	63
22	Number of business-to-business partnerships developed	1,925
23	Number of jobs attributed to FTF implementation	7,375
24	Volume and Value of production processed and sold	58,000 T

Economic Growth Project Task Order 5 2012 Work Plan

N°	Indicator Title	Target FY 2013
		\$27,628,000
	Millet	
	Volume	3,100 MT
	Value	\$1,364,000
	Maize	
	Volume	8,900 MT
	Value	\$3,204,000
	Rice	
	Volume	46,000 MT
	Value	\$23,060,000
	Upland Rice	
	Volume	300 MT
	Value	210,000
	Irrigated Rice	
	Volume	45,700 MT
	Value	\$22,850,000
25	Quantity of foundation seed produced	105
26	Quantity of certified seeds produced by public and private sectors	3,620
27	Number of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance	38,500
28	Number of climate mitigation and/or adaptation tools, technologies and methodologies developed, tested and/or adopted as a result of USG assistance	12