



EXPANDED AGRIBUSINESS AND TRADE PROMOTION (USAID E-ATP)

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RICE VALUE CHAIN DEVELOPMENT PLAN UPDATED FOR FY 2012



May 2012

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ACRONYMS

AI	Avian influenza
ATP	Agribusiness and Trade Promotion Project
AU-NEPAD	African Union's New Partnership for Africa's Development
BNDA	Banque nationale de développement agricole
CAADP	Comprehensive Africa Agriculture Development Program
CADP	Commercial Agricultural Development Project
CBO	Community-based organization
CIR-B	Comité interprofessionnel de la filière riz du Burkina Faso
E-ATP	Expanded Agribusiness and Trade Promotion Project
ECOWAP	ECOWAS Agricultural Policy
ECOWAS	Economic Community of West African States
ESOP	Entreprises de services et organisations de producteurs
ETD	Entreprises territoires et développement
FCFA	West African franc
FIARA	Foire internationale agricole et des ressources animales
GHFSI	Global Hunger and Food Security Initiative
GS-RDI	Green Sahel and Rural Development Initiatives
IICEM	Initiatives intégrées pour la croissance économique au Mali
JAAL	Journées agro-alimentaires de Ouagadougou
JARDA	Jigawa State Agricultural Development Association
MIS	Market information system
NAFASO	Neema agricole du Faso
NAIP	National Agricultural Investment Programs
NGO	Nongovernmental organization
PCE	Projet croissance économique
PIVA	Partner Institutional Viability Assessment
PPP	Public-private partnership
RIFAN	Rice Farmers Association of Nigeria
SIAGRI	Salon international de l'agriculture de Bamako
SOCAFON	Société de coopératives des forgerons de Niono
SRI	System of Rice Intensification
ToT	Training of trainers
UEMOA	Union économique et monétaire ouest africaine

USAID United States Agency for International Development
USG United States Government
VCDP Value Chain Development Plan

EXECUTIVE SUMMARY

This Value Chain Development Plan (VCDP) for the United States Agency for International Development (USAID)-funded Expanded Agribusiness and Trade Promotion (E-ATP) Project presents an overview of the project and describes the key components of the rice value chain, in accordance with project objectives. This report begins with an overview of the rice value chain in West Africa. It outlines opportunities and challenges facing value chain actors who seek to improve competitiveness and play a role in addressing regional food security. For each component, the VCDP presents key objectives and project activities, along with a detailed activity plan for FY 2012.

The project's primary objective is to increase the value and volume of intra-regional agricultural trade in staple food products in West Africa, in support of the Global Hunger and Food Security Initiative (GHFSI) (now Feed the Future). Implementation is based on agricultural investment programs at the national and regional levels. Reflecting the priorities of the mobilizing programs of the Economic Community of West African States (ECOWAS) Agricultural Policy, which is known as ECOWAP, and of the Comprehensive Africa Agriculture Development Program (CAADP), E-ATP is designed to improve the efficiency of intra-regional trade by addressing a set of critical constraints, including:

1. A poor enabling environment, especially policy implementation
2. The absence of well-developed links across regional value chains
3. Limited market information and support services such as finance
4. Physical and policy barriers and poor private sector practices in supply chain management, which contribute to very high transport costs

E-ATP focuses on activities in key value chains (rice, millet/sorghum, and poultry) and along key trade corridors where it can have a catalytic impact in helping West Africans develop durable solutions to these constraints. Five established outcomes (listed on page 2) will contribute to meeting the project's objectives.

A regional consultative workshop of rice value chain stakeholders in January 2010 identified changes needed in the industry and necessary actions to realize those changes. Analysis of the workshop's major findings shows that rice producers in the region have achieved regular annual increases in rice production. While some increases are attributed to improved yields, most are the result of expanded areas of production. These production increases have failed to spur investments in mechanized or commercial rice production or in larger-scale processing and milling capacity. The question is whether these production increases are sustainable in the absence of major improvements by actors responsible for linking producers to markets. In addition, while these increases are important, they have not kept up with the growing pace of rice consumption. The absence of sector investment is due to: 1) weak markets and distribution of rice seed, 2) limited commercial rice production, 3) limited large-scale processing and poor marketing, and 4) an enabling environment fraught with challenges.

Through E-ATP's vision for improvements in the regional rice value chain, and thus regional food security and increased competitiveness, the VCDP aims to improve free trade in rice and ensure continual upgrades in the effectiveness and efficiency of operations linking seed development, seed production and distribution, rice production, and processing and marketing to regional end-markets.

With a focus on addressing these and other challenges, the rice VCDP offers a plethora of options for providing technical and financial support to better enable farm businesses and related enterprises to scale up operations and compete in the growing West African regional market. The objective of the VCDP is to build the institutional, organizational, and individual capacities of rice value chain actors to ensure sustainable regional trade, in terms of both volume and value. The E-ATP strategy contributes to the project's five outcomes, based on four main components:

1. **Upgrading commercial market channels for local and regional rice seed and rice production to better compete with imported rice.** Activities include 1) conducting market studies for rice and rice seed, 2) organizing investor forums, 3) promoting model operations, 4) developing a Who's Who Guide, and 5) organizing learning network forums.
2. **Increasing regional supplies of harvest, post-harvest, and processing equipment.** The project will promote regional distribution and after-sales services of mechanized rice harvesting, post-harvest, and processing equipment to enhance local and regional rice production quality and competitiveness in line with the imported rice market segment. Scheduled activities include a regional market assessment for equipment and support for equipment suppliers.
3. **Increasing regional trade in rice and rice seed.** The project participates in cereal exchanges (*bourses céréalières*), facilitate trade relations, promote rice consumption and rice seed, and facilitate dialogue between the private sector and government authorities.
4. **Leveraging E-ATP's cross-cutting resources.** Technical resources that cut across the project's three value chains cover a variety of areas, including finance, policy, public-private partnerships (PPPs), organizational strengthening, transportation, market information systems (MIS), and gender. Each resource center is involved in implementing this VCDP.

E-ATP's strategy is implemented in close collaboration with several bilateral and regional programs whose initiatives in the rice value chain are supported by USAID and other donor and national structures. For each component, this plan presents objectives followed by the activities required to meet those objectives. The last section of the VCDP presents a synthesized three-year Rice Value Chain Development Plan and the FY 2012 Annual Rice Value Chain Development Plan.

I. INTRODUCTION

This document outlines the value chain development plan for E-ATP's rice value chain program. It presents an overview of the E-ATP project and the rice value chain, which is a key component for realizing the project's objectives. It includes an overview of the rice value chain in West Africa and outlines opportunities and challenges for actors in the value chain who are working to improve competitiveness and play a role in addressing regional food security. Lastly, this VCDP presents the key objectives and project activities for the remainder of the project, along with a detailed activity plan for the remainder of FY 2012.

I.1 OVERVIEW OF THE E-ATP PROJECT

The E-ATP Project expands on the requirements of the Agribusiness and Trade Promotion (ATP) Project, which was launched in 2008. Both projects contribute to achieving the 6 percent agricultural growth target set under CAADP (part of the African Union's New Partnership for Africa's Development, known as AU-NEPAD).

E-ATP's primary objective is to increase the value and volume of intra-regional agricultural trade in staple food products in West Africa, in support of GHFSI and the ECOWAP Investment Plan.

The implementation of ECOWAP/CAADP is based on the realization of agricultural investment programs at the national level (National Agricultural Investment Programs, known as NAIPs) and at the regional level. At the regional level, three mobilizing programs complement the NAIPs: 1) the promotion of strategic products for food sovereignty, 2) the promotion of a global environment conducive to regional agricultural development, and 3) the reduction of food vulnerability and the promotion of sustainable access to food. These mobilizing programs are designed to accelerate the implementation of the regional agricultural policy. They reflect the ECOWAS Commission's strategic priorities for transforming the West African agricultural sector.

Reflecting the priorities of the ECOWAP/CAADP mobilizing programs, E-ATP is designed to improve the efficiency of intra-regional trade by addressing a set of critical constraints, including:

1. A poor enabling environment, especially policy implementation
2. The absence of well-developed links across regional value chains
3. Limited market information and support services such as finance
4. Physical and policy barriers and poor private sector practices in supply chain management, which contribute to very high transport costs

E-ATP also has an avian influenza (AI) component focused on approaching AI from the producer organization' standpoint, finding ways for poultry producer organizations to raise knowledge, promote implementation of good biosecurity practices, and partner with the public sector to respond to and contain outbreaks.

I.2 PROJECT STRATEGY

E-ATP focuses on activities in key value chains (millet/sorghum, rice, and poultry) and along key trade corridors where it can have a catalytic impact in helping West Africans develop durable solutions to constraints. This will drive substantial increases in intra-regional trade during the life of the project and make these increases sustainable after the project has ended. E-ATP addresses a range of cross-cutting issues, including gender, the environment, and public-private alliances.

I.3 EXPECTED OUTCOMES

E-ATP implements integrated activities and programs to contribute to the following outcomes:

- **Outcome 1.** Significant reduction in the incidence of physical and policy-related barriers to moving agricultural and related commodities regionally in West Africa, with a special focus on facilitating the trade in staple foods from surplus to deficit areas.
- **Outcome 2.** Enhanced linkages among agricultural producers and agro-input suppliers, agro-processors, and distributors.
- **Outcome 3.** More effective advocacy by regional private sector and other nongovernmental actors for regional and national policies in support of an environment conducive to increased regional agricultural trade.
- **Outcome 4.** Improved efficiency of trade transactions and regional market access, in particular through the improvement of regional MIS and facilitation of market linkages.
- **Outcome 5.** Enhanced capacity of private poultry and animal health sectors to reduce the risk of AI outbreaks and transmission, and the capacity to recover after highly pathogenic avian influenza outbreaks.

2. RICE VALUE CHAIN IN WEST AFRICA

In 2009, with funding from GHFSI, USAID organized an analysis of the rice value chain in five West African countries (Ghana, Liberia, Mali, Nigeria, and Senegal). In addition, a regional rice value chain analysis was developed from a composite of country studies and additional literature and through consultations with value chain actors, technical experts, and other regional stakeholders. This process produced a comprehensive vision for the future of the rice value chain in the region and identified challenges to becoming a more competitive, dynamic industry that is better able to maximize the productivity of its actors and help mitigate regional food insecurity.

The E-ATP Project, to complement GHFSI efforts and expand first-hand understanding of the rice value chain, conducted a similar analysis of the rice value chain in Burkina Faso.

These studies provided the requisite material and contacts for organizing a regional consultative workshop of value chain stakeholders, which the project held in late January 2010 in Accra, Ghana. Over 30 participants, representing leading private sector actors, professional organizations, government officials, and USAID-funded bilateral programs from across the region, attended the two-day workshop. The objective was—within the context of the findings of the studies—to agree on necessary changes in the industry, on actions to facilitate these changes, and on the means by which the project or other organizations could support stakeholders in this process.

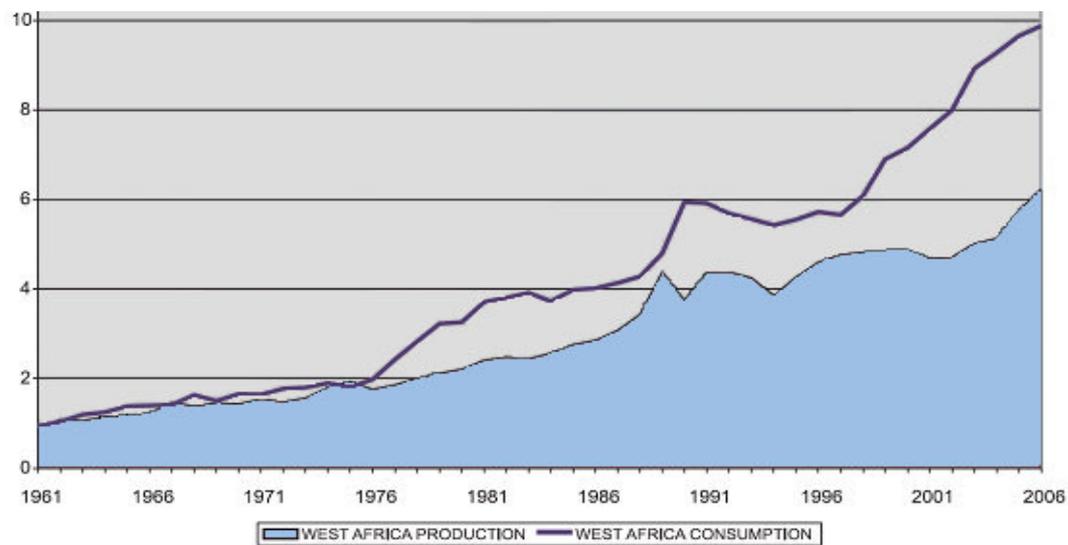
The remainder of this section of the VCDP summarizes the findings of these efforts and outlines the overall project strategy aimed at addressing key findings that fit with the regional mandate and particular objectives of E-ATP. The detailed objectives and activities that comprise this strategy are presented in the following section.

2.1 WORKSHOP AND ANALYSIS OF MAJOR FINDINGS

Across the region, rice producers have achieved regular annual increases in rice production. While some increases are attributed to improved yields, most are the result of expanded areas of production. Such increases are important but they have not kept up with the growing pace of rice consumption (see Figure 1). Furthermore, these production increases have failed to spur investments in mechanized or commercial rice production or in larger-scale processing and milling capacity. This raises the question of whether these production increases are sustainable in the absence of major improvements by actors responsible for linking producers to markets.

Reasons for this absence in investment and upgrading vary from country to country, but they have important commonalities that are summarized on the following page.

FIGURE I: REGIONAL RICE CONSUMPTION AND PRODUCTION¹



Weak markets and distribution of rice seed. In general, there are weak connections between the varieties of rice seed that are developed and multiplied and the characteristics of finished rice sought by an increasing number of urban and wealthier consumers. Throughout the region, there are important differences in consumer preferences. A critical starting point for a more competitive sector is to link the right variety of rice seed to these various end-markets and make it available to capable producers. Major obstacles to doing this include:

- Seed research policies that are disconnected from or developed without contributions from private sector actors who could provide guidance about end-market requirements and future opportunities
- Extensive government control and involvement in seed multiplication and distribution, which minimizes private sector actors who could be more effective in linking seed supplies and market demand
- A lack of transparent (or underdeveloped) grades and standards and policies for certifying rice seed, creating additional risks for commercial seed producers considering investing in production and distribution
- A lack of application or harmonization of existing grades among West African countries, including standards and certification policies, limiting opportunities for commercial seed producers to develop competitive businesses and play a critical role in filling gaps in seed supply

Limited commercial rice production. In addition to the challenges of accessing rice seed, commercial producers have limited access to other agricultural inputs and mechanized equipment. In most countries in the region, national governments either play a considerable role in the distribution of inputs or overly regulate the sector in favor of limiting the number of actors allowed. As a result of those government regulations, there are only a few new entrants in these markets, and competitive dynamics that might push actors to compete on the basis of product quality and proximity to producers are generally absent.

¹ "African Rice Trends," Africa Rice Center, 2007.

Government subsidy programs are also partially responsible for the lack of equipment distribution channels; this problem is compounded by the relatively small markets for equipment in any given country. A successful supplier will likely need to target markets in several countries; it will then be forced to grapple with these countries' various trade policies and restrictions.

Commercial producers are also constrained by a lack of coordination and cooperation with value chain actors closer to consumer markets. This absence often results in one or more of the following:

- Failure to transmit end-market quality and variety requirements to producers, thus limiting their ability to improve practices and make decisions about which varieties to produce
- Lack of access to information on trends and innovations in the industry, which further diminishes producers' ability to improve operations and respond successfully to future challenges and changes in the sector
- Reduced incentives or opportunities to aggregate harvested paddy rice
- Limited incentives to invest in storage capacity

Limited large-scale or industrial processing and poor marketing. The same lack of coordination and cooperation between producers and buyers mentioned above is a critical constraint for processors and marketers. It negatively affects their ability to ensure continued supplies from producers and limits their involvement in the process of improving paddy rice quality, which would enhance their own productivity and competitiveness in the market.

In general, processing capacity in the region suffers from the following conditions and constraints:

- Poor quality or inappropriate rice processing equipment, which compromises the ability to consistently produce sufficient and good-quality rice, which in turn reduces competitiveness (particularly in terms of cleanliness and uniformity) in fast-growing rice market segments
- Limited large-scale processing capacity, including for hulled and parboiled rice, which prevents actors from accessing larger markets and making profitable investments in supply-chain management
- Limited access to finance for long-term investments to improve productivity, quality, and capacity

For marketers, general constraints include the following:

- Lack of transparent or existing grades and standards
- Lack of awareness of the variations in consumer preferences and competitive factors that determine the profitability of opportunities for rice in end-markets across the region

Poor enabling environment. In addition to the range of government actions highlighted above that create disincentives for commercial actors in the value chain, the regional enabling environment for expanding intra-regional trade and improving the competitiveness of commercial operations presents the following challenges:

- Poor infrastructure for irrigated farming, transportation, and the provision of power (and in general for processing)
- Lack of producer land rights, which limits access to finance
- A host of informal and formal barriers to trade

These barriers represent major systemic obstacles to trade in the region and typically include:

- Opaque procedures for obtaining import duty exemptions, which are often reserved for those with political connections
- Variability in tax and tariff structures across the region
- Informal seasonal bans on trade in cereals
- Lack of recognition of seed certification policies, which hinders cross-border rice seed trade

Many of these obstacles are linked to country policies aimed at protecting domestic production and achieving national self-sufficiency in food production, including rice. The aim of national self-sufficiency is not entirely practical, however, given some countries' lower assessed production potential.

What seems more practical is a long-term goal of achieving *regional* self-sufficiency in rice, with commercial flows of rice and rice seed efficiently linking surplus and deficit areas across the region. Actors in countries with comparative advantages in producing and processing rice can generate sufficient returns on investments by tapping into markets in multiple countries. Furthermore, the goal of regional self-sufficiency is the policy and program cornerstone outlined by CAADP, AU-NEPAD, the *Union économique et monétaire ouest Africaine* (UEMOA), and ECOWAS.

2.2 VISION

Within its context and mandate, E-ATP's vision for the regional rice value chain is improved regional food security and value chain competitiveness through free trade in rice. Additionally, E-ATP seeks continual upgrades in the effectiveness and efficiency of operations linking seed development, seed production and distribution, and rice production. Improving regional food security and value chain competitiveness can be achieved through processing and by marketing to regional end-markets. Important elements of this vision include:

- An enabling environment with predictable policies that support the private sector and generate incentives for investment in the sector
- An expansion of actors actively investing and upgrading operations to improve their competitiveness in regional end-markets
- Collaboration and learning between value chain actors and public institutions that increasingly view themselves as part of a regional industry

3. E-ATP STRATEGY, OBJECTIVES, AND ACTIVITIES TO DEVELOP THE RICE VALUE CHAIN

3.1 E-ATP STRATEGY

The E-ATP strategy to bring about its vision and contribute to project outcomes during its last year has four main components:

- Upgrading commercial market channels for local and regional rice seed and rice production to better compete with imported rice
- Increasing regional supplies of harvest, post-harvest, and processing equipment
- Increasing regional trade in rice and rice seed
- Leveraging E-ATP's cross-cutting resources

These components are analyzed below, along with details of specific activities to be undertaken.

3.1.1 COLLABORATION WITH NATIONAL AND REGIONAL PROGRAMS

E-ATP's strategy will be implemented in close collaboration with several bilateral and regional programs whose initiatives in the rice value chain are supported by USAID and other donor and national structures. As a regional program, E-ATP will ensure that its activities complement and add value to the aims of national and regional programs by contributing in one or more of the following ways:

- Facilitating connections between stakeholders and programs in countries across the region to promote shared learning, sustainable interactions, and collaborative efforts to address shared challenges
- Intervening to promote and support investments and trade relations whose success hinges on the realization of multi-country or regional business strategies (e.g., regional equipment supplies)
- Facilitating actors' and programs' access to regional public institutions that are key E-ATP partners in addressing policy issues (e.g., ECOWAS, UEMOA, and the Africa Rice Center)
- Supporting regional institutions to expand their collaboration with value chain actors and provide technical and informational resources
- Coordinating with regional programs to ensure complementary aims and responsible use of resources

3.1.2 OVERVIEW OF E-ATP RICE STRATEGY COMPONENTS

Component 1: Upgrading commercial market channels for local and regional rice seed and rice production to better compete with imported rice

The growth in rice consumption across the region has primarily been fueled by increased urbanization and rising incomes. Consumers in these market segments are the principal buyers of imported rice. The project will focus on helping actors who seek to compete with imported rice

market segments to increase their participation in market channels. This set of value chain actors generally includes commercial seed suppliers, producers, processors, importers, and traders, as well as private sector suppliers of equipment and other inputs. These actors will also be the primary focus of project activities aimed at increasing intra-regional trade (see below).

This strategy has three key advantages:

1. The economic opportunities in these market channels have the potential to generate sufficient incentives for actors to invest in upgrading their operations in order to better satisfy market requirements. The project will be able to leverage these incentives through support that minimizes risks and/or increases learning to succeed in promoting upgrades.
2. The types of upgrades most likely required for local and regional rice to compete with imported rice (e.g., larger-scale processing, greater mechanization, cooperative trading relationships) address some of the major constraints in the overall value chain and can serve as models.
3. While end-markets will largely continue to be national, there are potential incentives for channeling rice production from one country to satisfy the particular consumer preferences in markets elsewhere in the region. For example, rice productions from the Burkina valleys of Koû, Sourou, and Bagré; the Senegal River Valley; or Mali's Office du Niger are recognized as having strong export potential in several regional markets. By focusing support on actors in these market channels, the project has the best chance of increasing intra-regional trade and of mobilizing key actors to address regional trade barriers.

The key objectives of this component of E-ATP's rice value chain strategy include:

- Promoting investments and/or upgrades by key private sector stakeholders in the region to serve as business models that are better able to compete in imported rice market segments
- Promoting the emergence of national and regional forums or learning networks of leading private sector actors (seed suppliers, commercial producers, processors, traders, financial institutions, etc.) and relevant national and regional public structures to facilitate flows of information on technical innovations, market opportunities, and the availability of other material resources.

Component 2: Increasing regional supplies of harvest, post-harvest, and processing equipment

The lack of appropriate, good-quality mechanized equipment was identified as a major constraint to improving the productivity of producers and processors and improving overall rice quality levels. The entry and growth of equipment distribution firms are hampered by two main factors:

1. Potential equipment suppliers would likely need to establish agricultural equipment distribution networks in multiple countries at once in order to generate sufficient revenues to make the investment worthwhile. The costs of logistics and setting up operations, and the lack of information on existing and potential buyers, make such efforts expensive and risky.
2. Compounding the risks to potential suppliers are periodic government equipment subsidies that distort commercial markets by undercutting suppliers and tainting markets with unrealistic expectations.

Nevertheless, there exists an unsatisfied demand for equipment among actors in rice and other agricultural sectors in the region, which E-ATP will leverage to induce regional and/or foreign suppliers to expand distribution in this market. Project activities will support selected suppliers by

minimizing the risks of market entry through market studies and improving the chances of long-term success.

The project's objective for this component is to promote regional distribution and after-sales services of mechanized rice harvest, post-harvest, and processing equipment that will enhance the quality and competitiveness of local and regional rice production so that it can better compete in imported rice market segments.

Component 3: Increasing regional trade in rice and rice seed

E-ATP has adopted a two-fold strategy to promote regional trade in rice:

- First, the project aims to facilitate transactions and support long-term trade relations among targeted actors, helping them take advantage of opportunities to expand in regional market channels so they can better compete in imported rice market segments. To achieve this aim, E-ATP employs Market Facilitators in key regional markets to identify opportunities and facilitate deals. The project also supports local and regional MIS to ensure that these systems are made available to all actors. Lastly, the project will facilitate intra-regional trade relations by supporting potential trading partners to participate in multi-country trade forums.
- Secondly, E-ATP is assisting targeted actors in consolidating and voicing their particular concerns, first at the national level with local government authorities and then at the regional level. The rationale for this approach is that resolving or initiating dialogue on national issues is a necessary precursor (in many instances) to achieving results on a regional level. For example, achieving greater transparency and awareness by actors involved in national grades and standards and trade policies is often necessary before actors and authorities can effectively address the challenges of harmonization among countries.

Through learning and trade forums, value chain actors will be able to begin outlining plans to address some of the more identifiable barriers to trade, such as informal seasonal restrictions. To do this, the project will support leaders among the targeted actors and associations who are best able to mobilize and lead collaborative efforts.

3.2 COMPONENT I: UPGRADING COMMERCIAL MARKET CHANNELS FOR LOCAL AND REGIONAL RICE SEED AND RICE PRODUCTION TO BETTER COMPETE WITH IMPORTED RICE

3.2.1 OBJECTIVE 1: PROMOTE MODEL INVESTMENTS BY ACTORS COMPETING IN IMPORTED RICE MARKET SEGMENTS

E-ATP will promote investments and/or upgrades by key private sector stakeholders in the region that can serve as models of business that are better able to compete in imported rice market segments. This promotion will be through commercial rice seed and rice production and distribution that correspond to varieties and varietal characteristics sought by consumers. The types of investments and upgrades to be promoted include:

- Higher-volume commercial rice production of varieties to compete in imported rice market segments
- Provision of mechanized harvest and post-harvest services
- Supply-chain management practices such as contract farming or improved coordination between producers, processors, and traders

- Practices for aggregating production for commercial channels
- Larger-scale/industrial processing of rice and parboiled rice
- Marketing and/or market development activities aimed at increasing the market share of locally and regionally produced rice in imported rice market segments

Activity 1: Business transaction follow up

This third year, the project will continue establishing business linkages for key actors and following up on stakeholders' trade transactions in target countries. The project will also explore opportunities for actors to conclude contract farming or to participate in business trips. E-ATP plans to:

- Set up a paddy rice supply channel for a milling factory (Koama Industries)
- Promote competitiveness factors (price, quality, variety, marketing) to help local/regional rice producers compete in consumer markets
- Reduce gaps in the competitiveness of current local/regional rice production to satisfy one or more of these markets

Expected results: increased volume and value of rice trade, promoted through commercial transaction follow-up and business linkages in the region.

Key partners and collaborators:

- Rice producer organizations: national associations, agricultural investment groups
- Rice mill firms and parboiled rice processors and their organizations
- Rice wholesale traders: import/export
- Individual lead firms with a regional scope of operations (e.g., Novell, Finatrade, Olam, Koama Industries)

Activity 2: Disseminate business model—Koama Industries

In order to encourage value chain actors to upgrade operations, the project will promote model operations to other regional actors filling similar functions in the value chain. Once a model is identified, E-ATP promotes it through study tours, development and dissemination of case studies, and presentations at industry forums and training sessions.

The Koama Industries model showcases improved supply chain management. Koama Industries is a small, Ouagadougou-based processing firm that markets reasonably priced, high-quality white rice and parboiled rice. With support from E-ATP, Koama Industries successfully increased its daily milling capacity from 7-8 to 10.5 tons. Its marketing plan reflects the firm's intention to supply paddy to national and regional markets. In addition, the company is researching markets outside of Burkina Faso in order to potentially extend its sales of white rice and parboiled rice to these markets.

Expected results: actors with greater awareness of innovations and competitive operations in their industry; actors who invest in and upgrade operations; access to finance for actors' investments; bilateral programs with access to and awareness of regional resources to support their programs.

Key partners and collaborators:

- Bilateral programs in target West African countries

- Key private operators such as Koama Industries
- Individual private sector firms with existing or potential model operations
- Inter-professional organizations such as agricultural investment groups and national associations

Recommended environmental determination: categorical exclusion

Activity 3: Disseminate business models—NAFASO

In 2010, E-ATP identified *Neema agricole du Faso* (NAFASO) as a lead agricultural enterprise in the region. It is a seed enterprise based in Bobo Dioulasso, Burkina Faso. The NAFASO seed business model uses a form of contract farming with cereal seed multipliers and a seed distribution network with regional retail outlets in the Hauts Bassins region. In 2009, NAFASO produced more than 346 tons of seed, of which 63 tons was certified rice seed.

A case study was conducted, which showed interest in disseminating this small enterprise model. Because of NAFASO's innovation and its "win-win" approach, the project plans to get Togo and Benin involved in this approach to seed dissemination. The project will help develop long-term trade relations between value chain actors participating in market channels that compete with imported rice (e.g., commercial producers of rice seed, seed distributors). The project will build the capacity of firms and organizations that could benefit from NAFASO's technical and commercial skills.

Expected results: intra-regional trade in the seed industry; sustainable relationships for commercial exchanges; and collaboration among key value chain actors to address the market for quality seed.

Key partners and collaborators:

- Agricultural enterprises: *Entreprises de services et organisation des producteurs* (ESOP) in Togo and Benin led by *Entreprises territoriales et développement* (ETD)
- Individual lead firms such as NAFASO and Agro-Production
- Bilateral programs in target West African countries
- The West Africa Seed Alliance
- The Alliance for a Green Revolution in Africa
- National and regional inter-professional associations

3.2.2 OBJECTIVE 2: PROMOTE EMERGENCE OF REGIONAL LEARNING NETWORKS AND FORUMS

E-ATP will support the leadership role of stakeholders and institutions that are best able to ensure future mechanisms for sharing information and promoting continual learning among actors. This support may take the form of technical assistance, grants, and/or organizational capacity building. The project will promote the dissemination of new technologies, including through collaboration between private sector actors (processors, equipment manufacturers, technical and financial partners, etc.).

Activity 1: Disseminate parboiled rice technology

A critical role of the project is to facilitate sustainable exchanges between value chain actors in the region. To do this, E-ATP will promote dissemination of improved parboiled rice technology, providing actors with access to the latest innovations and information that affect the competitiveness and growth of their operations. The project will also help develop discussion topics, presentations, and other materials.

To promote the emergence of professional parboiled rice processors (or to strengthen existing ones), E-ATP will:

- Organize training of trainers (ToT) on improved parboiled processing technology, followed by cascade trainings
- Participate in trade fairs to exhibit materials and make rice equipment available to those who want to buy it
- Support parboiled rice processor organizations and stakeholders by providing them with a sample of materials and demonstrating high-quality rice processing using appropriate equipment

The objective of the FY 2012 training is to reinforce rice parboilers' technical capacity to improve parboiling techniques, empowering them to produce local rice that can compete with imported rice. The training will also equip participants with the capacity to disseminate these techniques in their home countries. E-ATP will monitor the cascade training to ensure quality.

Expected results: Parboiled rice processors in the region who are well-trained to produce high-quality products for regional markets. Approximately 600 female parboilers in each country (Ghana and Togo) will be trained.

Key partners and collaborators:

- Inter-professional organizations, particularly processors
- Bilateral programs in target West African countries
- National projects and nongovernmental organizations (NGOs)
- Regional and national public institutions (e.g., ECOWAS, UEMOA, ministries of agriculture and trade)

Activity 2: Introduce SRI in Benin, Burkina Faso, Ghana, Senegal, and Togo

The System of Rice Intensification (SRI) has been shown to help farmers increase paddy yields by 35 to 100 percent in comparison with traditional flooded rice production. The potential benefits of SRI also include better rice quality and reduced production costs, both of which can improve the competitiveness of local rice and help increase regional trade. The essential components of SRI are:

- Ensuring careful planting of young seedlings: singly with wide spacing
- Keeping the soil moist but well-drained and well-aerated
- Adding compost or other organic material

Due to demand from partners, the project will introduce SRI in Benin, Burkina Faso, Ghana, Senegal, and Togo. These additional SRI activities will greatly benefit productivity in the West African rice value chain.

Expected results: ToT programs to train an average of 30 trainers per country; each of these 30 trainers will in turn train about 20 people each, generating a total of about 3,000 trained rice farmers.

Key partners and collaborators

- Inter-professional organizations: agricultural investment groups and national associations
- National and regional professional associations

- Regional institutions (projects and NGOs)
- Bilateral programs in target West African countries
- Key private operators and firms
- Individual private sector firms with existing or potential model operations

Recommended environmental determination: Categorical exclusion

3.3 COMPONENT 2: INCREASING REGIONAL SUPPLIES OF HARVEST, POST-HARVEST, AND PROCESSING EQUIPMENT

3.3.1 OBJECTIVE: PROMOTE REGIONAL DISTRIBUTION AND AFTER-SALES SERVICE OF MECHANIZED RICE HARVESTING, POST-HARVEST, AND PROCESSING EQUIPMENT

E-ATP will promote the regional distribution and after-sales services of mechanized rice harvest, post-harvest, and processing equipment that will enhance the quality of local and regional rice and improve its ability to compete in imported rice market segments.

Activity I: Establish business linkages for post-harvest equipment for Faso Jigi

The preliminary assessment and value chain development plan in FY 2010 identified a lack of appropriate mechanized harvest, post-harvest, and processing equipment as a key constraint in the rice value chain. E-ATP conducted an assessment of a potential supplier in the region and explored challenges to regional distribution of equipment.

The FY 2012 activities focus on facilitating access to improved equipment. The *Union de cooperatives Faso Jigi du Mali* (Faso Jigi) has over 5,000 members; the group has marketed thousands of metric tons of dehulled rice. Faso Jigi requested E-ATP support to research suppliers of harvest and post-harvest equipment. The union is looking for quality equipment to support members' harvest and post-harvest work, as well as assurance that maintenance services will be available after purchasing the machinery. Faso Jigi has 70 million FCFA in guarantee funds that it could make available to its member cooperatives to facilitate access to farm equipment. The union has started negotiations with banks to develop an agricultural credit tool focused on facilitating access to farm equipment.

The objective of this FY 2012 activity is to facilitate access to information about harvest and post-harvest machinery. In FY 2012, E-ATP will undertake the following specific sub-activities:

- Review the acquisition of harvest and post-harvest equipment program documents
- Develop a terms of reference for the recruitment of a regional consultant who will develop the criteria to be followed during the selection of equipment and equipment suppliers
- Facilitate the supply and sales of equipment by supporting contract development
- Help Faso Jigi implement its agricultural mechanization program in order to improve rice, cereals, and shallot productivity
- Facilitate loan conditions with banks
- Ensure commercial linkages with equipment suppliers
- Ensure that spare parts and after-sales services are available at an affordable price

Expected results: investment by Faso Jigi in agricultural mechanized equipment; adequate equipment for members; well-mechanized rice farmers who can upgrade food crop production. In addition, this will serve as business model and apply to other actors and producers' organizations.

Key partners and collaborators:

- Mali's Office du Niger agricultural producers organization: Faso Jigi
- Equipment importers and regional manufacturers such as the *Société de coopératives des forgerons de Niono* (SOCAFON) and *Mali-Tracteur*
- Foreign equipment manufacturers (e.g., Indian, Taiwanese and other firms with a demonstrated expertise in rice equipment appropriate for the West African market)
- Financial institutions such as the *Banque nationale de développement agricole* (BNDA) and the microfinance bank Nyesigiso
- Bilateral programs in target West African countries, including *Initiatives intégrées pour la croissance économique au Mali* (IICEM) and *Projet croissance économique* (PCE)

Recommended environmental determination: categorical exclusion

3.4 COMPONENT 3: INCREASING REGIONAL TRADE IN RICE AND RICE SEED

3.4.1 OBJECTIVE: PROMOTE INTRA-REGIONAL TRADE

E-ATP will promote intra-regional trade of rice and rice seed.

Activity 1: Hold rice trader exchange events (exhibitions, commercial linkages)

In an effort to link commercial producers with processors and traders serving imported rice market segments, the project will support these actors' participation in national and regional exchanges. At present, *Afrique Verte* (an international NGO), through its national representatives, organizes national, regional, and international cereal exchanges.

Key E-ATP actors, with assistance from the project, are expected to participate in the following commercial events: the *Journées agroalimentaires de Ouagadougou* (JAAL) in Ouagadougou, Burkina Faso (November 25 to December 4, 2011); the *Foire internationale agricole et des ressources animales* (FIARA) in Dakar, Senegal (February 2012); and the *Salon international de l'agriculture de Bamako* (SIAGRI) in Bamako, Mali (April 2012).

Following the actors' participation in these exchanges, the project will facilitate trade evolution among partners and identify support mechanisms, as necessary, to ensure that initial trade transactions develop into longer-term partnerships that could serve as models for others in the region.

Expected results: development of long-term trade relations among commercial rice producers and processors and traders.

Key partners and collaborators:

- Bilateral programs in target West African countries
- *Afrique Verte* and its national representatives

- National and regional inter-professional organizations
- Trader and processors organizations

Recommended environmental determination: categorical exclusion

Activity 2: Trade exchange visit and market prospection

Many rice traders and processors aim to expand their networks of potential business partners in the region. E-ATP beneficiaries such as Koama Industries and certain parboiled rice traders have requested support to carry out trips to explore potential markets. These trips would help them expand rice supply and distribution networks in Burkina Faso, Ghana, Mali, and Togo. Koama Industries, a Burkinabé rice processing firm, is requesting assistance to negotiate with a network of rice producers in Togo. A Malian trader identified by the project works in parboiled rice sourced from the Kou Valley of Burkina Faso and markets his parboiled rice primarily to Guinea. This trader is interested in increasing the volume he markets, potentially by expanding his business into the Sourou Valley of the country.

The objective of this activity is to increase trade in paddy rice and parboiled rice throughout the region. The project will work towards this objective by undertaking the following sub-activities:

- Conducting preliminary discussions with the potential business partners regarding timing and focus of trips
- Undertaking due diligence trips to help businesses explore potential market opportunities
- Facilitating business meetings among actors
- Assessing meetings, identifying business contacts to be monitored for progress, and monitoring these contacts
- Coaching potential business partners once contact has been established

In addition, E-ATP's Market Facilitators will identify trade opportunities and collaborate with other members of the project team to promote long-term trade relations. Of particular importance will be trade relations among actors participating in local and regional rice market channels and competing in imported rice market segments.

Expected results: long-term intra-regional trade relations, sustainable forums for commercial exchanges, collaboration among key value chain actors to address trade barriers.

Key partners and collaborators:

- Bilateral programs in target West African countries
- Individual value chain actors: seed suppliers, processors, importers, and traders participating in local and regional rice market channels and competing in imported rice market segments
- National and regional interprofessional associations

3.5 COMPONENT 4: LEVERAGING E-ATP'S CROSS-CUTTING RESOURCES

E-ATP has technical resources that cut across its three value chains, including finance, policy, PPPs, organizational strengthening, transportation, MIS, and gender. Each resource center will be involved

in implementing this rice VCDP. The Rice Value Chain Leader will be responsible for coordinating these resources. Details on the implications of each resource are presented below.

Finance. Given the emphasis on promoting investments, the project's financial and technical resources will be instrumental. Although the project's finance component was phased out in December 2011, limited activities are continued in the following areas:

- *Business planning:* providing advice and support for business planning by model actors making investments or upgrading operations
- *Access to finance:* contributing to the financial aspects of activities and materials to promote business in the first quarter (after which the Finance Advisor left the project).
-

Policy. These technical resources will mainly be used to help value chain actors improve their understanding of and ability to influence policy decisions in the following manner:

- *Policy information:* assisting actors in identifying national and regional sources of policy information and in understanding policy implications for their businesses
- *Strategic planning and implementation:* helping identify priorities and develop actors' plans to promote particular policy objectives; helping actors identify national and regional authorities with whom to conduct policy-related discussions; and advising on measures to support actors' ability to keep abreast of policy developments and promote policy objectives

PPPs. There will be numerous strategic opportunities for E-ATP to establish PPPs with dynamic lead firms whose investments have the potential to serve as models and achieve key strategic objectives (e.g., increasing collaboration between buyers and suppliers, accessing regional markets). E-ATP will pay particular attention to opportunities to partner with 1) regional rice importers actively investing in local and regional rice production and marketing, and 2) equipment suppliers interested in developing regional distribution and after-sales service networks.

Organizational strengthening. There is a dearth of existing professional associations for actors participating in market channels and competing in imported rice market segments. The project's organizational strengthening resources will be instrumental in building the capacity of the *Comité interprofessionnel de la filière riz du Burkina Faso* (CIR-B) to formalize and achieve specific objectives in line with the E-ATP rice value chain strategy. These objectives include promoting the emergence of trade, sustainable and growing learning networks, and groups of actors focused on policy issues.

Transportation. E-ATP is pursuing a strategy to reduce transportation barriers—this strategy cuts across all project value chains. It is expected to result in benefits for all actors. The Rice Value Chain Leader will identify strategic opportunities for actors to participate in activities such as 1) road shows that are designed to promote the application of existing trade policies, 2) transport cost studies, and 3) trainings for drivers on their rights and duties.

MIS. The project's MIS Specialists will support the rice value chain strategy by incorporating information about supply and demand (bids and offers) for rice and rice seed in target market channels into national and regional E-ATP MIS partners through the Esoko and MANOBI platforms.

Gender. Men and women at times experience different constraints to their participation in market channels that compete in imported rice market segments. The project's Gender Specialist will help identify relevant instances and then tailor project activities to include all actors, regardless of gender.

4. RICE VALUE CHAIN DEVELOPMENT PLAN

4.1 THREE-YEAR VALUE CHAIN DEVELOPMENT PLAN

TABLE I: THREE-YEAR VALUE CHAIN DEVELOPMENT PLAN

FY Activities	2010		2011				2012			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1: Upgrading commercial market channels for local and regional rice seed and rice production to better compete with imported rice										
Objective 1: Promote model investments by actors competing in imported rice market segments										
Market studies for rice and rice seed	>	>								
Investor forums		>	>	>						
Promotion of model operations		>	>	>	>	>	>	>	>	>
Objective 2: Promote emergence of regional learning networks and forums										
<i>Who's Who Guide</i>	>	>				>	>			
Learning network forums	>	>	>	>	>	>	>	>	>	>
Component 2: Increasing regional supplies of harvest, post-harvest, and processing equipment										
Objective 1: Promote regional distribution and after-sales service of mechanized rice harvesting, post-harvest, and processing equipment										
Regional market assessment	>	>								
Support to equipment suppliers		>	>	>	>	>	>	>	>	>
Component 3: Increasing regional trade in rice and rice seed										
Objective 1: Promote intra-regional trade										
Participation in cereals exchanges		>		>		>		>		
Intra-regional trade forums			>	>	>	>				
Facilitation of trade relations	>	>	>	>	>	>	>	>	>	>
Objective 2: Reduce barriers to intra-regional trade										
Dialogue between private sector and government authorities	>	>	>	>	>	>	>	>	>	>
Component 4: Leveraging E-ATP's cross-cutting resources										
Finance. Perform at least one business plan and leverage financial resources				>	>	>	>	>	>	>
Policy. Facilitate dialogue between private sector and government authorities focused on rice seed			>	>	>	>	>	>		
PPPs. Elaborate one PPP (a partner of Africa Rice Center or NAFASO)			>	>						
Organizational strengthening.										
▲ • Perform progress PIVA* of CIR-B			>	>	>	>				
▲ • Elaborate an advocacy plan										
▲ • Undertake capacity building plan										
Transportation. Facilitate transport and logistics costs assessment		>	>							

MIS. Support CyberSemences of Africa Rice Center and rice MIS			>	>	>	>	>	>	>	
Gender.										
▲ • Promote gender mainstreaming										
▲ • Support the establishment of national association of Burkinabé parboiled rice women processors			>	>	>	>	>	>	>	

* Partner Institution Viability Assessment

4.2 FY 2012 ANNUAL RICE VALUE CHAIN DEVELOPMENT PLAN (OCTOBER 2011–SEPTEMBER 2012)

TABLE 2: FY 2012 RICE VALUE CHAIN DEVELOPMENT PLAN (OCTOBER 2011–SEPTEMBER 2012)

#	ACTIVITY	Relationship to Indicator #	Relationship to Deliverable #	Timeline FY 2012											
				Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Apr 12	May 12	Jun 12	Jul 12	Aug 12	Sep 12
1	VCDP update		36												
2	Business transaction follow up Monitoring of commercial transactions	1, 15													
3	Dissemination of business models: ▲ • NAFASO model • Koama Industries model • Mini-rizerie RWK model	11, 13, 17	40												
4	Business linkages for post-harvest equipment: Faso Jigi/PACCEM	1													
5	Dissemination of parboiled rice technology and dissemination of related equipment: ▲ • ToT training in Ghana ▲ • ToT training in Togo ▲ • Parboiled rice equipment dissemination (Benin, Burkina Faso, Ghana, Senegal, Togo)	13, 17	43, 45												
6	Introduction of SRI in Benin, Burkina Faso, Ghana, Senegal, and Togo: ▲ • SRI ToT training in Ghana and cascade training ▲ • SRI ToT training in Benin and cascade training ▲ • SRI ToT training in Togo and cascade training	12, 13, 14	43, 45												
7	Rice trader exchange events (exhibitions, commercial linkages): ▲ • JAAL in Ouagadougou (Nov. 25 to Dec. 4, 2011) ▲ • FIARA in Dakar (Feb. 2012) ▲ • SIAGRI in Bamako (Apr. 2012)	1													

#	ACTIVITY	Relationship to Indicator #	Relationship to Deliverable #	Timeline FY 2012											
				Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Apr 12	May 12	Jun 12	Jul 12	Aug 12	Sep 12
8	Trade exchange visits: <ul style="list-style-type: none"> ▲ •Koama Industries in Togo and Ghana for paddy rice ▲ •Rice trader from Bamako in Burkina Faso: Bama and Sourou 	1													
9	Wrap-up of cascade training in Nigeria Visits in Lagos State (CADP), Abuja State (RIFAN), Jigawa State (GS-RDI and JARDA), Kano State (CADP)	12, 13, 14	43, 45												
10	Training of processors on best practices and good hygiene, in cooperation with AAFEX														
11	West Africa Cereal Grains Network														
12	Regional workshop training on contract farming in cooperation with AAFEX (Burkina Faso, Côte d'Ivoire, Mali, Senegal)														