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2013 West Africa Rice Annual

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Report Highlights:

Post estimates MY 2012/13 milled rice production will reach 4 million tons in selected West African countries, recovering from last year's drop to 3.6 million tons. During MY 2011/12, Cote d'Ivoire temporarily suspended custom duties and negotiated imports from Thailand, dramatically increasing supply. While both Senegal and Cote d'Ivoire fixed prices to limit high food prices. MY 2011/12 rice imports reached 4.2 million tons, a 43 percent increase compared to the previous year in selected countries. Post reported on USAID and USDA efforts to improve the rice sector.

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List of Acronyms

ARM	<i>Senegalese Agency for Market Regulation</i>
CILSS	<i>Permanent Inter-State Committee for Drought Control in the Sahel</i>
CIR-B	<i>Comité Inter Professionnel du Riz du Burkina</i>
CPI	<i>Counterpart International</i>
FAS	<i>Foreign Agricultural Service</i>
FFPr	<i>Food for Progress</i>
GOBF	<i>Government of Burkina Faso</i>
GOCI	<i>Government of Cote d'Ivoire</i>
GOM	<i>Government of Mali</i>
GOS	<i>Government of Senegal</i>
GOT	<i>Government of Thailand</i>
ISRA	<i>National Institute for Agricultural Research</i>
JICA	<i>Japan International Cooperation Agency</i>
LDC	<i>Louis Dreyfus Commodities</i>
MCC	<i>Millennium Challenge Corporation</i>
PCE	<i>USAID's Economic Growth Project</i>
PRP	<i>Projet Riz Pluvial</i>
SDTM	<i>Société de Distribution de Toutes Marchandises</i>
SNDR	<i>Revised National Development Strategy for the Rice Sector in Cote d'Ivoire</i>
SRV	<i>Senegalese River Valley</i>
SPCRS	<i>Société de Promotion et de Commercialisation du Riz au Sénégal</i>
USAID	<i>U.S. Agency for International Development</i>
USDA	<i>U.S. Department of Agriculture</i>

I. Executive Summary

Milled rice production for MY 2011/12 (Oct 2011-Sept 2012) in selected countries reached 3.5 million tons, well below average levels representing a 13 percent decrease compared to MY 2010/11. As mentioned in previous reports, poor rainy season affected cereal production across the Sahel.

In response, Post estimates MY 2011/12 rice imports to increase 43 percent compared to the previous year, when there were poor harvests and cheaper Indian rice. In MY 2011/12, Cote d'Ivoire and Senegal, the two biggest rice importers in West Africa, increased imports by 64 and 55 percent, respectively. *Government of Cote d'Ivoire* (GOCI), in agreement with rice stakeholders, decided to import 240,000 tons of rice from Thailand. GOCI also removed custom duties for three months to spur cheaper imports. In addition, Senegal and Cote d'Ivoire, both fixed maximum rice prices.

GOCI is also promoting foreign investment in the rice sector. In January 2013, Louis Dreyfus Commodities (LDC) signed an agreement with GOCI to invest \$60 million starting this year to increase paddy rice production by 300,000 tons in the North. GOCI will lease 100,000 – 200,000 hectares to LDC.

Post concurs with the *Permanent Inter-State Committee for Drought Control in the Sahel* (CILSS) estimates that MY 2012/13 production rebounded to 4 million tons of milled rice, just below Post's previous estimate. (See Table 1). Rice production in the Sahel increased 12 percent in MY 2012/13 compared to MY 2011/12 due to good rainfall except in Niger where there was severe flooding and limited production at just 3,000 tons.

With the bounce back in production, Post believes that imports may decline by 7 percent in MY 2012/13, with anticipation of a good rice harvest and abundant supplies in the market.

U.S. Department of Agriculture – Foreign Agricultural Service (USDA FAS) *Cochran Fellowship program* will send ten Fellows from Senegal, Burkina Faso, and Cote d'Ivoire to the U.S., to attend a two-week training program this year and learn about rice improvement of post harvest technologies and marketing. This training will complement efforts made by *USAID's Economic Growth Project* (PCE) and USDA-FAS to improve the rice sector and increase local rice production in Senegal and the sub region.

NOTE – Please refer to the previous annual rice GAIN reports for more information on rice agricultural systems, consumption and marketing.

*West African countries included in this report: Burkina Faso, Chad, Cote d'Ivoire, Gambia, Guinea-Bissau, Guinea-Conakry, Mali, Mauritania, Niger, Senegal and Togo

II. Production

After a devastating cereal crop in MY 2011/12, MY 2012/13 milled rice production could reach MY2010/11 pre-drought levels of 4 million tons. Senegal's rice production is projected to increase 60 percent followed by Mali (16 percent), Burkina Faso (15 percent), and Cote d'Ivoire (9 percent).

A. Burkina Faso

Post lowered MY 2012/13 milled rice production to 180,000 tons *Government of Burkina Faso* (GOBF) estimates. However, 180,000 tons is 15 percent higher than MY 2011/12 levels.

Burkina Faso is characterized by three types of systems of rice production with most production lying in the west and east-central provinces. This coincides with areas least affected by rainfall because of the availability of irrigation.

A program funded by the Taiwanese government for the promotion of rain-fed rice called Rain-fed Rice Project (*Projet Riz Pluvial*) (PRP), aims to increase area from 1,500 ha to 7,500 ha (2009-2013). It has already reached 5,000 ha in MY 2012/13. The project provides inputs and credit for the first year, and it is up to the farmer to repay loans and continue to receive inputs and credit. For every hectare, PRP provides 50 kg of seeds, 150 kg of NPK, and 100 kg urea. For every 100 hectares of rice, PRP constructs a warehouse, grain bins and a place to dry the rice.

B. Cote d'Ivoire

Government of Cote d'Ivoire (GOCI) estimates MY 2012/13 milled rice production at 500,000 tons, up 10 percent from MY 2011/12 production (456,000 tons). Cote d'Ivoire was less affected by the drought in MY 2011/12 when production dropped only 14,000 tons from MY 2010/11.

Cote d'Ivoire launched its Revised National Rice Strategy for the period 2012-2020 to reach its goal of 2.0 million tons of milled rice. This program may be difficult to accomplish considering all the necessary ground work, i.e., reorganize and build capacity of the extension service, create seed packaging centers and rehabilitate land.

In January 2013, *Louis Dreyfus Commodities* (LDC) signed an agreement with GOCI to invest \$60 million in northern Cote d'Ivoire to produce 300,000 tons of paddy rice. GOCI will lease 100,000 to 200,000 ha of land to LDC; The project anticipates starting this year.

The African centric magazine, *Jeune Afrique*, reported that two other groups (Olam and Mimran) are also interested in investing in the sector and are willing to request 150,000 ha from the government.

C. Mali

Despite French and African forces battling Islamic extremists in the North Mali, rice production has managed to increase. *Government of Mali* (GOM) estimates a 16 percent bump in milled rice production for MY 2012/2013 at 1.3 million tons. However, production is still 13 percent below MY 2010/11 levels, falling short of its national target of 2.7 million tons by 2013 using rain-fed, total water control, and floating rice production systems.

D. Senegal

Government of Senegal (GOS) announced a 60 percent jump in milled rice production to 443,000 tons for MY 2012/13 compared to 276,000 tons in MY 2011/12. Moreover, MY 2012/13 estimates exceed 2010/11 levels (411,000 tons) by 8 percent.

GOS's strategy to increase milled rice production to a national self-sufficiency goal of 1 million tons by 2015 will not be met. In fact, Senegal extended its projection to 2018. In February 2013, the Ministry of Agriculture announced during a workshop on the validation of the *National Strategy for the Development of Rice* (SNDR) that a partnership with the *Japan International Cooperation Agency* (JICA) had been developed to achieve self-sufficiency in rice production by 2018 keeping the same 1.0 million tons objective.



Photo 1: Land preparation for rice planting in the Senegal River Valley (SRV)
(Source: FAS Dakar)

Improvements in infrastructure have focused on rice production in the Delta region (northeast of Saint Louis, extending to Richard Toll/Ross Bethio) with GOS upgrading canals and pumping/water-distribution infrastructure in collaboration with the *Millennium Challenge Corporation* (MCC), whose \$540 million grant has been underway since 2010. Final design studies are completed and works have begun in the pilot project; works in the Delta were expected to begin in January 2013 (selection of a contractor for major earthworks contracts are in the final stage, and contractor mobilization was expected by April 2013).

Post participated in a guided tour by USAID's Economic Growth Project (PCE) that showcased efforts to lift the rice sector in the Senegal River valley. Other participants included banks, officials from the Ministry of Agriculture, Industry, and Commerce, extension services, donors, private processors, producers and media. PCE's mission is to stimulate rice production and marketing as well as access to capital. PCE efforts pertain to the entire value chain. On the production side, they include:

- Reinforcing the seed sector and increasing availability of fragrant rice varieties by rehabilitating the Agricultural Research Institute of Senegal (ISRA) seed research center in Fanaye for development of seed foundation, and seed treatment and test centers at Richard Toll with the acquisition of a new seed sorting and packaging unit. PCE contributed to increasing the development and availability of 43 rice varieties in which 21 are rain fed and three are fragrant varieties (Sahel 177, Sahel 328, and Sahel 329). PCE assisted in the development and promotion of fragrant rice varieties in which tests show are more appreciated by consumers than Thai rice. ISRA is testing U.S. Jasmine rice varieties with registration possible by 2014. (See Photo 2 and 3)
- Capacity building of the rice producers' network using a technical itinerary named, "Chemin du bon riz" or "Road to good rice," to help farmers produce good quality rice and increase yield.
- Assisting in the acquisition of small instruments, such as humidifiers and huller machines to improve quality control.
- Facilitating access to credit for processing companies from institutions, like *Locafrique* (www.locafrique-sf.com), in the form of leases to buy equipment. Banks also provided loans to purchase agricultural equipment. (See photo 4 and 5)

- Developing a crop insurance system with stakeholders.



Photo 2: Rice varieties developed at ISRA's research station in Fanaye
(Source: FAS Dakar)



Photo 3: Seed treatment at the treatment center in Richard Toll

Industrial millers have entered the market using modern equipment, such as *Naxari Deret* and *Vital*. (Photos 4 and 5) However, operating costs continue to be bogged down by the high cost of water and electricity. PCE estimates fragrant rice production in 2013 may reach 40,000 tons.



Photo 4: 1,500 ton capacity silos at Vital rice company in Mbane
(Source: FAS Dakar)



Photo 5: Naxari Deret rice processing equipment

Table 1: MY 2012 - 2014: Area Harvested, Production, Imports and Consumption

Count ries	Area Harvested 1000 HA			Production, Milled 1000 MT			Imports 1000 MT			Consumption 1000 MT		
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Burkina Faso	110	130	130	157	180	180	390	270	280	420	450	475
Chad	155	156	158	118	116	120	30	20	20	123	130	135
Cote d'Ivoire	323	415	498	456	500	600	1,400	1,150	1,100	1,400	1,700	1,800
Gambia	40	45	54	11	25	30	100	100	100	110	120	130
Guinea-Bissau	120	135	135	105	119	120	150	100	100	220	230	240
Guinea-Conakry	831	846	846	1,098	1,110	1,100	340	360	300	1,360	1,390	1,410
Mali	520	600	620	1,130	1,310	1,350	180	100	100	1,400	1,450	1,480
Mauritania	35	45	45	85	110	110	100	100	100	170	180	190
Niger	22	22	22	8	3	20	230	280	280	283	281	300
Senegal	110	139	150	276	443	475	1,200	1,000	1,000	1,325	1,400	1,450
Togo	45	49	49	73	80	80	100	100	100	168	170	180
Total	2,311	2,582	2,707	3,517	3,996	4,185	4,220	3,580	3,480	6,979	7,501	7,790

Source: CILSS data and FAS Dakar estimates

Note: Data for 2012, 2013, and 2014 correspond to the marketing year period (Oct from previous year to Sept the same year), i.e., MY 2012/13 (Oct 2012-Sept 2013)

III. Consumption

Post estimates per capita consumption in the Sahel at 7.5 million tons for MY 2012/13, a 7.5 percent increase from MY 2011/12. With most West African countries establishing policies to boost rice production and encourage farmers to produce more rice by subsidizing inputs and equipment, local production and consumption have increased more often to the detriment of millet production. New consumers are eating rice and current ones are eating more.

A. Burkina Faso

MY 2012/13 rice production, 180,000 tons, may only cover 40 percent of Burkinabe rice needs estimated at 450,000 tons. Domestic consumption of milled rice is estimated between 400,000 and 450,000 tons per year.

However, per capita consumption has increased 33 percent since 2000 and is estimated to reach 25 kg/person/year in MY 2012/13.

There is a shift in consumption from traditional cereals to rice, as people prefer its cooking qualities and minimal preparation time. Consumers prefer the *New Rice for Africa* (NERICA) rice variety. Most rice consumed is 25 percent broken and, unexpectedly, the more wealthy consumers prefer 100 percent broken. Parboiled rice is produced and mainly consumed in rural areas.

Rice is the fourth most popular household staple after millet, sorghum and maize. Cheaper imported rice is preferred because it swells more when cooked as there are better drying techniques in Asia. Thus Burkinabe consumers feel they get more food for their money.

B. Cote d'Ivoire

Post believes that MY 2012/13 rice consumption will expand to 1.7 million tons (76 kg per capita per year). Rice is the most consumed staple food followed by corn (40 kg per capita per year) and wheat (17 kg per capita per year).

Consumer's preference for rice depends on levels of economic and social well-being of the population. Four percent of the population living in urban areas consume up to 15 percent broken rice while the 70 percent living in the rural area consume the 16-25 percent broken rice. Only 25 percent of the population consumes more than 25 percent broken rice.

C. Mali

Maliens prefer local rice which is the most popular cereal consumed in urban areas. Rice consumption is estimated to reach 1.4 million tons in MY 2012/13. In Bamako, more than half of consumption is satisfied by imports. According to Government sources, the Malian crisis may have decreased availability of rice for vulnerable populations with cereal price spikes of 54 percent in Gao, and 16 - 29 percent in Segou and Timbuktu compared to Bamako.

D. Senegal

Senegal has the highest per capita consumption of rice in the region reaching 50 to 100 kg/year in MY 2012/13 with rice consumption forecasted to reach 1.4 million tons in MY 2012/13. There is great interest in fragrant rice in Senegal, where production is increasing with approval of three new varieties Sahel 328, 329, and 177.

(See photo 6)



Photo 6: Senegal River Valley fragrant rice in 5 kg bag processed by the Coumba Nor Thiam company

(Source: FAS Dakar)

However, the quantity of fragrant seed is not enough to satisfy demand completely. This represents a good opportunity for rice traders to increase sales and consumption of locally produced rice.

IV. Trade

MY 2011/12 milled rice imports into West Africa exploded by 43 percent from the previous year. As the drought struck much of the Sahel in MY 2011/12, Burkina Faso lead its neighbors with the highest percentage increase during MY 2011/12 with 70 percent followed by Mali (67 percent), Cote d'Ivoire (64 percent), and Senegal (55 percent). However, in terms of quantity imported, Cote d'Ivoire imported the most (1.4 million tons) followed by Senegal (1.2 million tons). Cote d'Ivoire and Senegal reacted to the cereal crisis by importing larger than usual quantities. GOCI, in agreement with stakeholders, negotiated to buy large quantities of rice from Thailand. In addition, GOCI suspended custom duties for three months which also contributed to increased rice imports.

Post believes that rice imports will retract roughly 15 percent in MY 2012/2013, as normal production levels are expected to resume.

NOTE: For information on cross-border flows of agricultural products, we recommend reading the USAID funded report, *Cross-border Trade and Food Security in West Africa: Case of the Western Basin* (2009).

A. Burkina Faso

Reacting to a 12 percent drop in rice production in MY 2011/12, Burkina Faso ramped up imports by 161,000 tons or 70 percent more, in MY 2011/12 for a total of 390,000. (See table 1)

Generally, 250,000 tons of rice are imported each year from Pakistan, India, Thailand and Vietnam in 25kg and 50kg bags and via the ports of Cote d'Ivoire, Ghana, and Togo. During the dry months, rice is typically imported from Mali, Benin, Togo, and Ghana. Post estimates MY 2012/13 imports to ease back towards normal levels at 270,000 tons.

Customs duties for imported rice from non-WAEMU countries are set at ten percent for all grades.

B. Cote d'Ivoire

In terms of quantity, Cote d'Ivoire imported the most rice (1.4 million tons) during MY 2011/12, a 64 percent increase from the previous year.

The top rice exporters to GOCI were Vietnam (30 percent), Thailand (26 percent), and India (21 percent).

However, at the beginning of the MY 2012/13 (Oct- Nov 2012), Cote d'Ivoire imported a large quantity of rice (about 423,000 tons) from Vietnam (38 percent), India (30 percent), and Thailand (28 percent), increasing India's market share by 9 percent. Most imported rice stays in the country which contributes to increased rice consumption. Typically about 80 percent, or 1 million tons, of rice consumed in Cote d'Ivoire is imported annually of which 100,000 tons is re-exported by train or road to Burkina Faso and Mali (25 percent broken rice), and Ghana (5 percent broken rice).

There are about ten major rice importers in Cote d'Ivoire. The Lebanese-owned *Societe de Distribution de Toutes Marchandises* (SDTM) is the leading importer with more than half of the market share, working with distributors across the country.

Trade sources reported that in July 2012, GOCI imported 240,000 tons of rice for a total value of \$145 million negotiated with the *Government of Thailand* (GOT). This comes under the GOCI policy to make life more affordable for the masses. The first shipment is expected to arrive at the beginning of February.

Rice is imported in bulk (cargo rice – similar to brown rice) or prepackaged in 50 kg, 25 kg and 5 kg bags. Imports are monopolized by large companies, and customs duties are set at ten percent for all grades imported from non-WAEMU countries. On August 2012, GOCI announced a temporary suspension of custom duties on imported rice.

C. Mali

In MY 2011/12, Mali imported about 13 percent of its needs (180,000 tons) using a few rice importers. Imports arrive mainly from Cote d'Ivoire by train or truck and from Dakar by train. Post estimates MY 2012/13 imports will decrease by 44 percent or by 80,000 tons.

Mali custom duties for imported rice are set at ten percent.

D. Senegal

Typically, Senegal imports about 70 percent of its rice for domestic consumption. It imported 1.2 million tons of milled rice during MY 2011/2012 showing a 55 percent increase from the previous year, but just 200,000 tons will be saved for stock to cover three months of consumption. A small quantity (6,500 tons) was exported to Mali and Turkey during MY 2011/12. According to Senegalese consumers, rice consumption is increasing since rice dishes are less expensive than millet-based ones.

In MY 2010/11, Thailand was the top supplier with 40 percent of the market share followed by Vietnam (28 percent) and Brazil (12 percent). However, in MY 2011/12, as the Government of Thailand held back its rice exports allowing India to become the top supplier by releasing its exports with 46 percent of the market share followed by Thailand (16 percent) and Vietnam (11 percent). Meanwhile, the US supplied only 2 percent of total imports (15,000 tons). According to the *Senegalese Agency for Market Regulation* (ARM), Senegalese importers have noted that Indian rice is cheaper, and its quality is ordinary. A 50 kg bag of Indian rice costs \$26 compared to \$42 for Thai fragrant rice. With Senegal's lower purchasing power, most Senegalese cannot afford actual fragrant rice prices. Unless Thailand decreases its prices, Senegalese importers will continue to buy from India.

Thirteen private companies share Senegal's import market with the largest controlling 24 percent. Importers buy shiploads of rice through a cluster of twelve brokers located in Switzerland rather than directly from exporting countries, which they then store in their own warehouses in Dakar compared to smaller importers that deal with container-sized transactions.

In Senegal, tariffs on rice vary according to grade. Customs duties are set at 10 percent for all grades. There is no surtax on broken rice which fixes its maximum tariff at 12.7 percent compared to 27.7 percent for brown rice and 32.7 percent for semi-milled rice. There is no value-added tax applied to rice imports.

V. Policy

To fight against food insecurity and price increases during MY 2011/12, governments in Senegal and Cote d'Ivoire fixed price ceilings, while Cote d'Ivoire went a step further by removing custom duties for three months.

A. Cote d'Ivoire

In reaction to the drop in cereal production in West Africa and to stabilize rice prices during MY 2011/12, GOCI implemented several policies to secure rice for its citizens and keep rice prices low:

- In April 2012, the Ministry of Commerce, in agreement with stakeholders (importers, wholesalers, retailers, and consumers), fixed the maximum price for all rice sold on the market. This Memorandum of Agreement was reviewed for a period of three months, renewable by tacit agreement and revisable according to national and international economic conditions, including the international price and sociopolitical environment.
- The price margin per type of rice and seller was set at:

- **25%, 5%, 100% broken rice**

Wholesaler \$0.01 (5 F CFA)/kg; sub wholesaler \$0.014 (7 F CFA)/kg, Retailer \$0.04 (20 F CFA)/kg

- **wholegrain rice**

Wholesale \$0.014 (7 F CFA)/kg; sub wholesaler \$0.016 (8 F CFA)/kg, Retailer \$0.046 (23 F CFA)/kg

(\$1= 500 F CFA)

- In August 2012, GOCI announced a temporary suspension of all tariffs on imported rice (12.5 percent) for three months to make it more affordable. According to Ivorian rice traders, imports climbed to 250,000 tons during this period, introducing new actors to the rice sector to take advantage of this opportunity to

buy cheap rice. Traditional rice importers complained the measure unfairly caused them to have to sell their existing stock at a loss. To be competitive with all the new rice traders, they had to sell their rice at a reduced cost thus saturating the market. Subsequently, this measure was cancelled after three months of operation.

- GOCI is encouraging private investors in the rice sector to boost production by leasing farmland. In January 2013, Louis Dreyfus Commodities signed an agreement with the Ministry of Agriculture to invest \$60 million in rice production, starting this year.

B. Senegal

On April 2012, in reaction to the drought, GOS fixed maximum prices for rice sold in the local market:

- Non-fragrant rice: \$0.56 (280 F CFA)/ kg in Dakar region and \$0.60 (300 F CFA)/kg in all other regions.
- Fragrant rice: \$0.87 (435 F CFA)/kg in Dakar region and \$0.90 (450 F CFA)/kg in all other regions.

Senegal renewed its strategy to increase milled rice production to 1 million tons, but pushed the deadline back three years to 2018. Post thinks this is optimistic as there are many challenges to face. First, farmers need to produce rice twice a year (rain-fed and irrigated season). This might be difficult because farmers do not have enough time to sell their rice and receive a new loan and begin replanting. Rice stakeholders, mainly producers and processors, do not have enough funding to operate as they should. New to Senegal, modern milling and processing companies have to buy enough stock to produce large quantities of milled rice. However, banks shy away from providing risky loans to farmers, as well as industrial companies that require too much operating capital. They need to work on a type of agreement that will be profitable to all parties. Post believes that a funding mechanism should be developed to guarantee actors in case of nonpayment from third-parties. Another fact to take into consideration is that most small rice processors (non industrial) are self-sufficient and do not want to grow beyond 20 or 30 percent of their capacity.

VI Marketing

A. Burkina Faso

In Burkina Faso, there is a lack of available storage, and farmers are often obligated to sell to the first buyer who comes along. Consumers see imported rice as having better quality, and consumption continues to rise while exerting pressure on the price.

B. Cote d'Ivoire

To promote local rice consumption, the *Revised National Development Strategy for the Rice Sector in Cote d'Ivoire* (SNDR) plans to sell and distribute locally produced rice using rice importers' distribution channels.

The Cote d'Ivoire network of distribution consists of importers and distributors (wholesalers, semi-wholesalers and retailers) using modern (supermarkets/ hypermarkets) and traditional (open markets, small shops) channels. Rice can be imported by bulk or pre-packaged. It is then sold in country or exported to neighboring countries (Mali, Ghana, and Burkina Faso).

The *Establishment Sylla et Frères* (ESF) is considered the leading rice distributor offering different types of packaging depending on the type of rice, i.e., luxury, semi-luxury, and broken rice ranging from bags of 5x5 kg to 50 kg.

As mentioned earlier, the temporary removal of custom duties allowed new actors to get involved in the rice business. This saturated the market making it difficult for existing traders to sell existing stock at the fixed price without losing money.

C. Mali

Mali's main stakeholders in the rice sector include farmers, boutique millers, and collectors (buyers at the farm-gate or at the weekly markets in major production zones and transport it to major market centers), wholesaler/importers, semi-wholesalers, and market retailers/sorters (located in open-air markets or in neighboring store fronts and purchase rice from rice collectors or semi-wholesalers in the capital). Traditional, small-scale trade represents the largest channel handling 80 percent of the total trade.

D. Senegal

Industrial rice processors only mill 40 percent of the local paddy rice because of the lack of consistent good quality of paddy rice. The remaining is processed using small equipment. Seventy five percent of the rice produced in the SRV is consumed in the valley between Richard Toll, Ross Bethio, and Saint Louis. The residual is sold in the traditional open air market mainly in Touba and Tambacounda.

Industrials are facing many problems ranging from branding, packaging, supply, logistics, and distribution. One of the major problems is the poor quality limiting its penetration in the bigger cities, such as Dakar.

USAID PCE conducted many activities to improve marketing locally-produced rice:

- **Branding:** PCE helped farmers promote local rice at agricultural trade events and in collaboration with a Senegalese private company, developed models of rice sacks. These can be used by all rice processors as they would only need to add their logo and brand name. (See photo 7 and 8)



Photo 7: Vital rice bag

(Source: FAS Dakar)



Photo 8: CNT rice bag (generic bag developed in partnership with PCE)

- *Commercialization:* PCE is helping develop a contracting model for use between rice processing companies, banks and producers. Farmers contract loans from the bank and repay with rice stock. Banks can transfer the stock to industrial companies that will, in turn, have enough stock to mill and supply the market. Once the industrial companies sell the rice, they pay the banks in cash. This type of agreement allows industrials to work without disbursing their own funding and bank to secure their loan. Processors maintain possession of the rice, but do not have ownership unless there is a default.
- *Production and storage:* PCE works with rice farmers to improve quality during production and storage. PCE distributed humidifiers to farmers to test the quality of rice during storage before selling to processors. In contrast, Vital marketing manager said that by improving paddy rice quality, they can produce more whole grain rice. Unfortunately, Senegalese consumers have a huge preference for broken rice.

Processors are reluctant to sell local rice in large cities such as Dakar because of inability to supply enough stock continually, as well as the high cost of transportation (\$15 per ton from Saint Louis region to Dakar) that may increase prices. Senegalese think that local rice should be cheaper than imported rice. They prefer to sell in local markets in other regions i.e., Diourbel, Touba which are less demanding in terms of quality.

In 2012, Vital, one of the more modern rice processing companies in the Senegal River Valley (SRV), 50,000 tons capacity per year, purchased 20,000 tons of paddy rice from 110 farmer organizations. The equivalent of 10,000 tons of milled rice was sold in ten regions under the label, *Rixel*. Vital's equipment was bought in Brazil and has a sophisticated sorting system using lasers detect poor quality grains. Therefore, with the quality of rice produced in the SRV, they said that they had many losses and must return these poor stocks to producers.

To help distribute local rice in Dakar region, the *Société de Promotion et de Commercialisation du Riz au Sénégal* (SPCRS) tested a strategy consisting of buying local paddy rice and milling it through local millers and using importers' distribution channels to market the rice. SPCRS spent \$60,000 has been used to finance this project. However, Post thinks that this strategy can be useful to producers and sustainable if SPCRS has enough funding to buy sufficient quantity of paddy rice.

The Spanish cooperation has built 17 warehouses to store paddy rice in the department of Dagana. However, producers need training in storage management to mitigate any deterioration of the paddy rice. Rice bags are stored on the floor with no pallets which could damage the quality of rice. (See photos 9 and 10).



Photo 9: A warehouse built by the Spanish cooperation
(Source: FAS Dakar)



Photo 10: Rice storage

VII- US

Iali

A. Senegal

In Senegal, Counterpart International (CPI), with USDA funding worth 64,000,000 FCFA (\$128,000), contributed significantly also to the rice sector. Through the USDA *Food For Progress* (FFPr) project, CPI supported five processing units by focusing on the following aspects:

- Acquisition of appropriate equipment to improve rice quality
- Provision of working capital to increase production capacity units supervised by the project
- Training in marketing and marketing plans for a better visibility
- Support in rice packaging for to improve bag presentation that meets minimum requirements of the market
- Support for participation in national fairs to increase the market share of each rice processing unit working with the project.

This assistance allowed rice processing units to significantly increase paddy rice processing capacity and improve business strategies. For example, one processor Pellital Ltd., from its inception in 2008, was only processing 120 tons of paddy rice but now is able to process up to 960 tons with a conversion factor of 65 percent on average. Pellital also increases its sales capacity from 78 to 620 tons of milled rice for total revenue of 135,500,000 FCFA (\$271,000). In addition, rice millers were able to sell rice byproduct to some Senegalese animal feed company. About 300 tons of rice bran (a byproduct derived from the processing) was sold by Pellital for a total of 19,500,000 FCFA (\$39,000).

CPI provided 38,000,000 CFA (\$76,000) worth of loans to various rice processing units through the USDA funded FFPr project using guarantee funds located at local banks or credit unions with a reimbursement rate of 95% percent.

B. Mali

In Mali, the 2010-2013 USDA Food for Progress program implemented by *Aga Khan Foundation* (AKF) aims to increase agricultural production in rice, millet, sorghum and vegetables. From 2010 to 2012, about \$88,700 was devoted to the rice sector in the Mopti region. Activities included training 3,800 farmers on new improved technologies on rice production and use of good quality improved seeds.

In two years, AKF also provided loans to 3,200 farmers for a total value of \$1.4 million to purchase inputs. For MY 2011/12, yield on irrigated rice has improved 16 percent compared to MY 2009/10 increasing farmers' revenue 127 percent. Rice production under controlled and uncontrolled submersion didn't provide expected results due to an unfavorable rainy season in MY 2011/12. However, farmers managed to adopt new production techniques which will be applied in the future and provide better yields.

In addition to rice production, the project has conducted many activities on rice marketing. These activities are implemented by the NGO ACDI/VOCA. Among them:

- Training 2,070 rice producers in agribusiness and marketing, and 50 cooperative leaders on best techniques of rice packaging and storage

- Organizing exchange visit for 50 rice producers in Sikasso to meet with small agricultural business companies, and a workshop to link rice traders, processors, and farmers
- Developing business plans of five rice cooperatives

In addition, a rice value chain study conducted by ACDI/VOCA started this week, on April 2nd, and is planned to end on April 30th.

VIII- Production, Supply and Demand Data Statistics in 1000 HA, 1000 MT, and MT/HA:

Burkina Faso	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	110	110	154	130		130
Beginning Stocks	8	8	10	135		135
Milled Production	157	157	220	180		180
Rough Production	242	242	338	277		277
Milling Rate (.9999)	6,500	6,500	6,500	6,500		6,500
MY Imports	260	390	250	270		280
TY Imports	260	390	250	270		280
TY Imp. from U.S.	0	0	0	0		0
Total Supply	425	555	480	585		595
MY Exports	0	0	0	0		0
TY Exports	0	0	0	0		0
Consumption and Residual	415	420	420	450		475
Ending Stocks	10	135	60	135		120
Total Distribution	425	555	480	585		595

Chad	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post

Area Harvested	165	155	156	156		158
Beginning Stocks	0	0	0	25		31
Milled Production	103	118	114	116		120
Rough Production	172	197	190	193		200
Milling Rate (.9999)	6,000	6,000	6,000	6,000		6,000
MY Imports	20	30	10	20		20
TY Imports	20	30	10	20		20
TY Imp. from U.S.	0	0	0	0		0
Total Supply	123	148	124	161		171
MY Exports	0	0	0	0		0
TY Exports	0	0	0	0		0
Consumption and Residual	123	123	124	130		135
Ending Stocks	0	25	0	31		36
Total Distribution	123	148	124	161		171

Cote d'Ivoire	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	323	323	400	415		498
Beginning Stocks	51	51	350	348		268
Milled Production	456	456	566	500		600
Rough Production	702	702	871	769		923
Milling Rate (.9999)	6,500	6,500	6,500	6,500		6,500
MY Imports	1,400	1,400	1,150	1,150		1,100
TY Imports	1,450	1,450	1,150	1,150		1,100
TY Imp. from U.S.	0	10	0	0		0
Total Supply	1,907	1,907	2,066	1,998		1,968
MY Exports	27	29	30	30		30
TY Exports	25	27	30	30		30
Consumption and Residual	1,530	1,530	1,700	1,700		1,800
Ending Stocks	350	348	336	268		138
Total Distribution	1,907	1,907	2,066	1,998		1,968

The Gambia	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post

Area Harvested	65	40	88	45		54
Beginning Stocks	35	35	46	36		41
Milled Production	46	11	65	25		30
Rough Production	71	2	100	38		46
Milling Rate (.9999)	6,500	65,000	6,500	6,500		6,500
MY Imports	155	100	135	100		100
TY Imports	135	100	135	100		100
TY Imp. from U.S.	0	0	0	0		0
Total Supply	236	146	246	161		171
MY Exports	0	0	0	0		0
TY Exports	0	0	0	0		0
Consumption and Residual	190	110	200	120		130
Ending Stocks	46	36	46	41		41
Total Distribution	236	146	246	161		171

Guinea-Bissau	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	120	120	125	135		135
Beginning Stocks	20	20	25	55		44
Milled Production	105	105	129	119		120
Rough Production	175	175	215	198		200
Milling Rate (.9999)	6,000	6,000	6,000	6,000		6,000
MY Imports	150	150	130	100		100
TY Imports	150	150	130	100		100
TY Imp. from U.S.	0	0	0	0		0
Total Supply	275	275	284	274		264
MY Exports	0	0	0	0		0
TY Exports	0	0	0	0		0
Consumption and Residual	250	220	259	230		240
Ending Stocks	25	55	25	44		24
Total Distribution	275	275	284	274		264

Guinea	2011/2012	2012/2013	2013/2014
	Market Year Begin: Oct 2011	Market Year Begin: Oct 2012	Market Year Begin: Oct 2013

	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	831	831	846	846		846
Beginning Stocks	75	75	75	73		73
Milled Production	1,097	1,098	1,135	1,110		1,110
Rough Production	1,662	1,664	1,720	1,682		1,682
Milling Rate (.9999)	6,600	6,600	6,600	6,600		6,600
MY Imports	340	340	340	360		360
TY Imports	340	340	340	360		360
TY Imp. from U.S.	0	0	0	0		0
Total Supply	1,512	1,513	1,550	1,543		1,543
MY Exports	80	80	80	80		80
TY Exports	80	80	80	80		80
Consumption and Residual	1,357	1,360	1,395	1,390		1,410
Ending Stocks	75	73	75	73		53
Total Distribution	1,512	1,513	1,550	1,543		1,543

Mali	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	500	520	650	600		620
Beginning Stocks	267	267	129	177		137
Milled Production	1,132	1,130	1,430	1,310		1,350
Rough Production	1,742	1,738	2,200	2,015		2,077
Milling Rate (.9999)	6,500	6,500	6,500	6,500		6,500
MY Imports	150	180	100	100		100
TY Imports	150	180	100	100		100
TY Imp. from U.S.	0	0	0	0		0
Total Supply	1,549	1,577	1,659	1,587		1,587
MY Exports	0	0	0	0		0
TY Exports	0	0	0	0		0
Consumption and Residual	1,420	1,400	1,560	1,450		1,480
Ending Stocks	129	177	99	137		107
Total Distribution	1,549	1,577	1,659	1,587		1,587

Mauritania	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA	New	USDA	New	USDA	New

	Official	Post	Official	Post	Official	Post
Area Harvested	27	35	26	45		45
Beginning Stocks	10	10	10	25		55
Milled Production	85	85	62	110		110
Rough Production	142	142	103	183		183
Milling Rate (.9999)	6,000	6,000	6,000	6,000		6,000
MY Imports	85	100	100	100		100
TY Imports	85	100	100	100		100
TY Imp. from U.S.	0	0	0	0		0
Total Supply	180	195	172	235		265
MY Exports	0	0	0	0		0
TY Exports	0	0	0	0		0
Consumption and Residual	170	170	162	180		190
Ending Stocks	10	25	10	55		75
Total Distribution	180	195	172	235		265

Niger	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	24	3	27	1		8
Beginning Stocks	0	0	0	5		7
Milled Production	55	8	69	3		20
Rough Production	85	13	106	5		33
Milling Rate (.9999)	6,500	6,500	6,500	6,500		6,500
MY Imports	275	280	280	280		280
TY Imports	275	280	280	280		280
TY Imp. from U.S.	0	0	0	0		0
Total Supply	330	288	349	288		307
MY Exports	0	0	0	0		0
TY Exports	0	0	0	0		0
Consumption and Residual	330	283	339	281		300
Ending Stocks	0	5	10	7		7
Total Distribution	330	288	349	288		307

Senegal	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA	New	USDA	New	USDA	New

	Official	Post	Official	Post	Official	Post
Area Harvested	110	110	125	139		150
Beginning Stocks	108	108	297	250		193
Milled Production	299	276	374	443		475
Rough Production	440	406	550	651		699
Milling Rate (.9999)	6,800	6,800	6,800	6,800		6,800
MY Imports	1,200	1,200	1,000	1,000		1,000
TY Imports	1,200	1,200	1,000	1,000		1,000
TY Imp. from U.S.	0	41	0	20		20
Total Supply	1,607	1,584	1,671	1,693		1,668
MY Exports	10	6	20	100		50
TY Exports	10	23	20	5		50
Consumption and Residual	1,300	1,328	1,450	1,400		1,450
Ending Stocks	297	250	201	193		168
Total Distribution	1,607	1,584	1,671	1,693		1,668

Togo	2011/2012		2012/2013		2013/2014	
	Market Year Begin: Oct 2011		Market Year Begin: Oct 2012		Market Year Begin: Oct 2013	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	45	45	40	49		49
Beginning Stocks	0	0	0	5		10
Milled Production	73	73	78	80		80
Rough Production	112	112	120	123		123
Milling Rate (.9999)	6,500	6,500	6,500	6,500		6,500
MY Imports	130	100	100	100		100
TY Imports	130	100	100	100		100
TY Imp. from U.S.	0	0	0	0		0
Total Supply	203	173	178	185		190
MY Exports	0	0	0	0		0
TY Exports	0	0	0	0		0
Consumption and Residual	203	168	178	175		180
Ending Stocks	0	5	0	10		10
Total Distribution	203	173	178	185		190