

3 Cameroon: Revolving funds make a difference

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3.1 The Cameroonian context

3.1.1 Targeting food insecure regions

Cameroon has 18 million inhabitants, 62% rural, 1.1 million farms have less than two hectares, but an average of seven members per household. Most farms (72%) manage both crops and livestock; 25% are specialised in crops only (Annuaire Statistique du Cameroun 1999). Agriculture contributes 20% of the gross domestic product and employs 60% of the workforce (Annuaire Statistique du Cameroun 2000).

Of the 9.2 million hectares of agricultural land only 1.8 million are farmed. There are big government and private farms and smallholder farms. Commercial farms deal with export crops like cocoa (620,000 farmers), cotton (330,000 farmers), rubber, sugar cane, banana, oil palm, tea and tobacco. These companies play a big role in the economy. Smallholder farms produce staple food with 72% producing maize or sorghum, 71% groundnut, 58% root crops like taro or coco yam, 56% plantain, 53% bean or cowpea and 52% grow vegetables. Many also grow cassava, sweet potato or potato, among many other crops. Nearly 70% of the food produced is eaten on-farm (Annuaire Statistique du Cameroun 2000).

Most of Cameroon has two rainy seasons, although the north has only one (June to November), with rains being more erratic in the far north.

Because of the low use of farm inputs and low soil fertility, the yields of most staple food crops are low in Cameroon, two tons per hectare for maize, 0.8 for sorghum, 0.8 for groundnut, 12 for cassava and 14 for plantain.

Food production is lower than demand with import making up the difference. In Central Africa, rice imports increased 14-fold between 1961 and 2007, rising from 32,100 to 470,974 tons while per capita cereal production shrank from 157 to 84.9 kg (MARD 2009). This is also true for Cameroon which imported 300,000 tons of rice in 2009 while only producing 100,000 tons of paddy.

Although major roads are pretty good in both northern and southern Cameroon, links between the regions are poor, apart from air travel. With increasingly erratic rainfall hurting agriculture in the drier north and no possibility of transporting food from

Cameroon's major port in Douala, FAO took steps to help northern and far northern Cameroon become food secure. The seed enterprises described in this chapter focus on these two zones.

3.1.2 Seed industry

There are no private seed companies producing or selling seed in Cameroon. State seed agencies have stopped producing seed and their land is now used by smallholder farmers either free of charge or for rent. Currently farmer seed producer groups are the only ones producing and selling seed.

Multinational companies like Pioneer Seed tried to produce seed on government-owned land but failed as seed production costs were high and farmers could not afford to buy seed at the proposed prices. The authors believe that smallholder seed enterprises can sustain quality seed production with supportive government policies and perhaps subsidies.

3.1.3 Seed legislation

A law signed in 2005 created a fund to support the seed industry, seed research and to improve the conservation of farm-saved seed. A second law signed in 2005 describes seed certification, quality control and marketing.

The law recognises two types of seed: certified and local, with no intermediate category. The Ministry of Agriculture and Rural Development is planning to conduct seed inspection and certification. For now, seed quality control is limited to seed germination and purity as the necessary equipment is not yet in place. Once everything is set up, seed certification will begin before planting (declaration of the intent to produce seed) followed by at least three field visits, sampling at harvest, laboratory analysis and issuing certificates. So by law, seed sold has to be certified, but as the seed demand far exceeds supply and the certification system is not yet operational, there is no enforcement of the regulation and any seed is accepted for sale. Quality seed is currently produced

(Table 3.1) and sold in labelled bags. It has been tested for seed germination and purity, but is not certified. In the future, this intermediate class of

Table 3.1: Seed produced (tons) in northern and far northern Cameroon

	2007	2008	2009
<i>Maize</i>	230	202	207
<i>Sorghum</i>	41	18	16
<i>Millet</i>	4	3	0

quality declared seed (QDS) may be proposed for inclusion in the law. QDS has to be produced and used only in its production zone, but with quality control (FAO 2006).

Fraud control is not yet implemented. Inspectors recently received training with FAO support. A laboratory will be available soon and better seed inspection and certification will soon be implemented.

In 2001, a law was issued on seed prices but the seed must be produced under specific terms of references to earn these prices. As no seed producer is meeting these, prices are determined by the markets. Seed prices depend on the vendor and can be twice the seed producer's price.

3.1.4 Creating a sustainable seed production and supply system

When state agencies stopped producing seed there were no alternative sources. To address food insecurity in northern and far northern Cameroon the FAO started two projects, Appui à la multiplication et à la diffusion de semences améliorées et saines de riz (2004 to 2006) and Appui aux Organisations Paysannes pour la multiplication et la diffusion de variétés précoces de maïs, de sorgho et de mil dans les provinces du Nord et de l'Extrême Nord (2006 to 2008). Both regions are prone to drought and needed support in grain production. The Institute of Agricultural Research for Development (IRAD) had developed drought tolerant and short cycle crop varieties of maize, sorghum and millet and seed was available, albeit not in farm communities. State facilities for irrigation (dams and water reservoirs) were available.

The two FAO projects aimed to strengthen cereal seed production and dissemination by farmer seed enterprises. Seed producer groups were formed and officially registered as Common Initiative Groups (groupements d'initiatives communes or GICs) and established their own revolving funds for seed production and marketing.

Common features of the farmer seed enterprises. Five out of the six farmer seed enterprises we visited were created during FAO projects. These enterprises have sustained their activities after the rice project ended in 2006 and the sorghum, maize and millet project ended in 2008. They all created and are managing their own revolving funds.

The seed produced was meant for local farmers of each project area, but some was sold to Chad and Niger. Before the project, paddy yields obtained with local seed in irrigated plots were below four tons per hectare while yields with quality seed were at least eight tons.

Evolution of the Common Initiative Groups. In 2006, by the end of the two-year rice project, 33 groups produced rice seed. From 2007 to 2009 another 48 groups registered, bringing the total to 81 groups

Table 3.2: Newly registered rice seed producer groups

Area	2005	2006	2007	2008	2009	Total
Lagdo	0	4	4	3	3	14
Maga	4	12	12	3	7	38
Yagoua	4	9	9	2	5	29
Total	8	25	25	8	15	81

(Table 3.2).

During the second project 117 sorghum, maize and millet groups registered in both 2007 and 2008. After the project ended another 71 groups registered, for a total of 305 groups (Table 3.3). All the groups we interviewed said that demand for seed is still greater than supply. They are optimistic about the future and plan to expand their enterprises.

Structure. All newly established enterprises are organised in a similar way with a president, a secretary, a treasurer and an accountant. They are officially registered as common initiative groups. The group members conduct all activities together, including seed production (ploughing, nursery, planting, harvesting, seed treatment and packing) and marketing (sales in markets or to farmers). Basically, the group members are the enterprises' staff. However, during labour-intensive activities such as ploughing or harvesting, the groups hire labourers. Specific details for each enterprise are described below.

Capacity. The farmer groups received training in seed production, processing, packaging and marketing. They also learned how to manage a farmer seed enterprise and how to set up and manage a revolving fund. They received quality seed, fertilisers, pesticides and bags for seed packing. SEMRY (Society for the Expansion and Modernization of Rice in Yagoua) and MEADEN (Mission for the Development of the Northern Province) wrote leaflets on seed production and distributed them to all farmers. All the groups consider themselves competent to produce and market their seeds, but would still like some refresher courses.

Table 3.3: Newly registered maize, sorghum and millet seed producer groups

Area	2007	2008	2009	Total
North	32	41	35	108
Far north	85	76	36	197
Total	117	117	71	305

Setting up the revolving funds. The project helped the groups open a bank account and advanced them money to plant and market their first seed crop. After selling the seed from the first harvest the groups deposited the amount advanced into their accounts, adding another 15% of the seed sales to it. This money was then available for the next campaign. The groups were trained in managing this revolving fund. To increase their revolving funds each farmer of the group contributes a certain number of rice bags decided by the group. All rice bags are then sold and the collected funds are used for the revolving funds.

Seed inspection and certification. In the FAO project areas (from the Lagdo Dam in the north to Maga in the far north), the seed inspection service (Service Regional de Contrôle des Intrants et des Produits Agricoles), based in Garoua, has two inspectors and one lab technician. The laboratory is under renovation and expects new equipment. Each farmer of a group planning to produce seed has to declare the

location of his or her plot, its size and the crop. Currently the staff makes three inspections (at planting, before flowering and at harvest). Seed samples are analysed in the laboratory for purity and germination. Labels and packaging are only for seed with more than 87% germination. Soon the inspectors also intend to inspect markets, looking for fraudulent seeds.

3.2 The Aoudi Sanger Federation

3.2.1 History

The Aoudi Sanger Federation was created in 1994 and hosts 14 unions with 2,000 members. The federation is based in Garoua-Sangeri, registered as a Common Initiative Group (GIC) and operates at the national level. The federation was created by former SEMRY and MEADEN employees who knew seed production. Because of its role in foundation seed production, it was included in both FAO projects.

The federation obtains breeder seed from IRAD and produces foundation and quality seed of maize, rice, sorghum, cowpea and groundnut, the main crops in northern and far northern Cameroon. The seed is produced on its own land during the rainy season (June to December) only. Seed production has increased over the years and amounted to 30 million FCFA (\$71,400) in 2009. Some of the federation members also produce quality seed on their own land. The federation is currently circulating a survey form to the 14 member unions to assess the total area under cultivation and total seed production.

The federation has noticed that some of the varieties in circulation are not pure and give low yields. They are still roguing them and are looking for sources of pure breeder and foundation seed of the varieties that they grow.

So far, the federation has produced 24.4 tons of quality maize seed and 5.6 tons of rice seed, but its main importance is the production of foundation seed (Table 3.4).

In 2009, they produced and sold 10 tons of foundation and 15 tons of quality maize seed, besides one ton of foundation and three tons of quality rice seed.

Table 3.4: Foundation seed produced, Aoudi Sanger Federation

	2005	2006	2007	2008	2009
<i>Maize*</i>	()	()	()	()	()
<i>Rice</i>	()	()	()	()	()
<i>Sorghum</i>	()	()	()	()	()
<i>Millet</i>	()	()	()	()	()
<i>Cowpea</i>	()	()	()	()	()
<i>Groundnut</i>	()	()	()	()	()

*in tons, with area cultivated (hectares) between brackets

3.2.2 Structure

The founders of the federation work there, along with several casual labourers. The federation plans to increase its farm size.

Fertilisers, herbicides and pesticides are used. Irrigation is not used and a big store has already been built.

Individual members also grow vegetables and rear small animal raising.

3.2.3 Cash flow

The federation has a revolving fund, successfully implements farm activities and markets its seeds without any external support. It is planning to increase its revolving fund in 2010.

3.2.4 Marketing

Main clients are the 2,000 members of the 14 unions, who are all seed producers. Other clients for quality seed include local seed and grain producers. In 2009, quality seed was also sold to relief agencies for Chad (Table 3.5).

To boost its seed sales, the federation organises radio campaigns and participates in seed fairs and agricultural shows. The federation also organises open days to demonstrate quality and transparency.

The federation intends to increase the number of member groups to 124 and of member farmers to 3,000. The federation also plans to evaluate some Nerica rice varieties for yield potential in the region and set up a commission for investigating fraudulent sales of seed. It will lobby for a clear definition of seed and grain to avoid grain being sold as seed.

Table 3.5: Clients from the Aoudi Sanger Federation

	1994	2009	2015
<i>Members</i>	1	1	1
<i>Companies</i>	-	-	5
<i>Agrodealers</i>	-	-	6
<i>Relief agencies</i>	-	2	3
<i>Women and youth groups</i>	-	-	4
<i>Individual farmers</i>	-	3	2

*Past, actual and projected importance of seed buyers, 1 being the most important

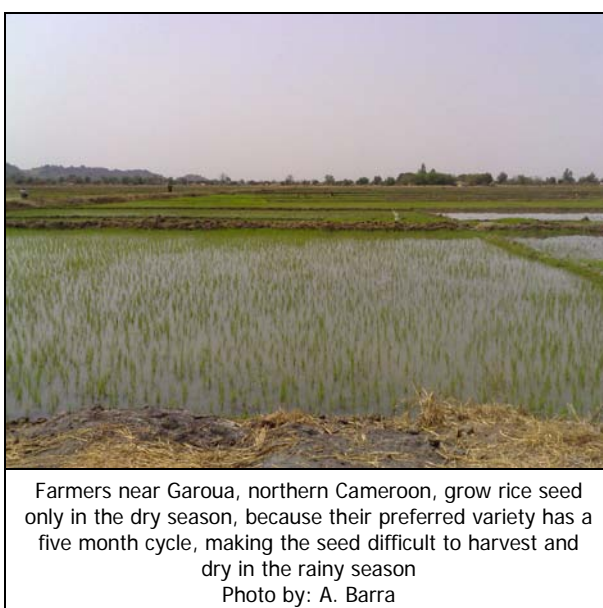
3.3 The Rice Seed Producers Union of Gourougou

3.3.1 History

The Lagdo Dam was built in north Cameroon in the early 1980s to generate electricity and to irrigate newly established rice farming areas. Currently, only 800 of the potential 17,000 hectares are used to produce irrigated rice.

The Rice Seed Producers Union of Gourougou was created in 2006 with FAO support. The men's group (Semence Riz Hommes de Gourougou) had 14 members and the women's group (Aoudi-Roobe de Gourougou) had 13. They produced rice seed on plots near their villages and sold to farmers producing paddy in the Lagdo Dam area, 60 km from Garoua. The FAO encouraged the groups which quickly understood that good revenues could be made from rice seed.

Two rice varieties known in the area are grown: IR 46 for the rainy season (June-November) and ITA 300 for the dry season (December-May). ITA 300 is preferred for the dry season because of its high yield and short cycle, but pure seed is currently not available. Currently, farmers produce seed only during the dry season. Seed of IR 46 could be grown during the rainy season, but it is highly susceptible to rice blast (a fungal disease). The seed yield varies from 4.2 to 6.0 tons per hectare.



3.3.2 Structure

MEADEN is a government institution that manages the Lagdo Dam area. It cleans irrigation canals, manages the water (against fees) and gives technical advice to rice producers. However, farmers are responsible for buying inputs and for ploughing their plots. It grants land for seed production to selected groups free of charge. Being on good terms with MAEDEN is important, as no land means no seed production. Each group has five hectares of land and each member farms 0.25-0.36 hectares.

The seed producers buy foundation seed from the Aoudi Sanger Federation and have diversified activities (e.g. rearing animals, growing vegetables). Quality seed is stored in a warehouse until it is sold. A bigger warehouse is now being built.

They use fertilisers and pesticides, but machinery is not available in this area. Quantities of seed produced depend on the land available and the two groups plan to acquire more land.

3.3.3 Cash flow

The groups have established a revolving fund, although the farmers think the fund needs to be increased, which they plan to do after the next harvest. To increase their revolving funds each member contributes a certain number of rice bags decided by the group. All rice bags are then sold and the collected funds are used for the revolving funds. The groups have a bank account and can apply for a loan. However, they avoid taking loans as they are expensive (18-30% interest).

Each member of either the men's or the women's group claimed an annual income of about 1 million FCFA (\$2380) of which one fifth (\$475) came from producing rice seed. The other 80% came from producing millet, maize, groundnuts, cowpeas, sorghum, onions and livestock.

3.3.4 Marketing

At the start of the project some seed was sold to the FAO. Besides sales to local paddy producers, in 2009 some seed was sold in Niger to the Niger Basin Project. Farmers continue buying quality seed for its expected yield gains that can reach three tons per hectare, valued at a minimum extra income of 300,000 FCFA per hectare (\$714). Farmers who reaped higher yields spread the news to others. Rice seed prices have been stable since 2006 at 200 FCFA per kg (\$0.48) as opposed to 100-150 FCFA (\$0.24-\$0.36) for rice grain. The union also promotes seed at field days.

At the beginning of the project, FAO provided bags for packing the seed, of two kg for maize seed and five kg for rice seed. Sales increased thanks to the prestigious FAO logo on the bags, promising high quality. The farmers are now planning to produce other bags with the same logo.

3.4 The Sayem Seed Producers Union

3.4.1 History

The Sayem Seed Producers Union (Union de groupements de multiplicateurs de semences de Maga) comprises three rice producer groups with 12 to 16 members. The groups were created in 2006 with FAO support and are legally registered. The union is based in the Maga area, 300 km from Garoua, in the far northern region of Cameroon.

SEMRY is a government institution aimed at improving and expanding rice production in the Yagoua region. It provides ploughing services, irrigation water, cleaning of the

irrigation channels and technical backstopping. The government built a dam in Maga in the 1980s which pumps water from the Logone River specifically to irrigate rice. SEMRY manages 11,500 hectares with 6,200 allocated to rice producers at Maga, although the area has a potential of 20,000 hectares of irrigated rice (MARD 2009). When the irrigated area is increased to 20,000 hectares, the union will be able to increase its production.

Before the project, paddy yields obtained in Maga with local seed were below four tons per hectare while they now reach eight tons because of access to quality rice seed.

One rice variety, IR 46, has been grown in the Maga area since the beginning of the FAO project. Two cropping seasons are possible but land is scarce and “the union produces seed only in the dry season (December to May). Rice seed harvesting, drying and packing is also risky during the rainy season (June to November) as occasional rains occur near the end of the season and can damage the seed.

Farmers would also like to have other varieties, especially ITA 300 which is high yielding and grows in the rainy season.

Since the Sayem Union was established, they produced about 490 tons of quality seed (Table 3.6). The union produces more than 70% of the total seed needed

Table 3.6: Quality rice seed produced, Sayem Union

	2005	2006	2007	2008	2009
<i>Tons</i>	72	132	109	-*	176
<i>Hectares</i>	15	22	21	-	22

for the Maga region and the group plans to meet the regional need for quality seed.

3.4.2 Structure

Land is the main limitation to producing rice seed in the Maga region, since all 6,500 hectares are distributed to farmers who want to produce rice. Land is allocated based on family size, but no farmer can access more than two hectares. Land is owned by SEMRY which grants each producer or group plots for a fee of 51,000 FCFA per hectare (\$121). SEMRY also allocates land directly to the union for seed production and its members also apply as individuals to SEMRY for land for paddy or seed production. Since its creation the union has planted 22 hectares.

For both quality seed and paddy production, fertilisers are used but urea is expensive and not always available on time. Pesticides are also used. Machinery for harvesting and threshing is not available. The groups store their own seed until it is sold.

Irrigation permits a second growing season per year, but farmers in the Maga region currently grow rice only during the dry season because the rice varieties they use have a long cycle and if grown during the rainy season, occasional rains towards the end of the season may alter the quality of the grain as drying becomes uncertain and difficult. Farmers buy the foundation seed for quality seed production. Farmers also raise livestock and have other activities.

3.4.3 Cash flow

The revolving fund is big enough to grant interest-free loans to members. The fund is also used to support social activities, such as weddings, funerals, school fees and receiving visitors. Members who benefited such grants pay back to the group. For now, seed supply is still below the demand.

3.4.4 Marketing

At the beginning of the project quality seed was sold to FAO. Currently, all seed is sold to local farmers, who are attracted by the high yields, as demonstrated at field days. Occasionally, quality seed or paddy is also sold in Niger (Niger Basin Project). The union is looking for big customers, but it is aware that the main limitation will be access to enough land to produce the quantities requested. Seed produced is stored and marketed collectively.

Seed price has been stable since the union started and is currently 400 FCFA per kg (\$0.95) while paddy is sold for 150-210 FCFA (\$0.36-0.50). The seed price is location dependent. The one produced in the Maga area is double compared to this sold in the Lagdo Dam area. The members earn a substantial income from rice seed, but also from paddy (at least two hectares per member), fishing, livestock and vegetable growing.

3.5 The Jomookoum-Aye Seed Producers Group

3.5.1 History

The Jomookoum-Aye group was created in 2006 by the FAO and is based in Maroua (100 km from Garoua). The farmers created a revolving fund to sustain their seed enterprise. It started with 16 members, but only five men and one woman are currently active. Other people left the group because they could not contribute to the revolving fund or buy farm tools, or because they were discouraged by the hard work.

The varieties were introduced during the FAO project and originate from IRAD. At the beginning the group grew three hectares of maize seed only, in 2009 they added six hectares of sorghum and cowpea (Table 3.7). Severe droughts in the area can devastate crops, as in 2009.

Table 3.7: Quality seed produced, Jomookoum-Aye group

	2007	2008	2009*
<i>Maize*</i>	2.0 (3)	6.0 (6)	3.0 (5)
<i>Sorghum</i>	-	-	0.5 (3)
<i>Cowpea</i>	-	-	3.0 (3)

*in tons, with area cultivated (hectares) between brackets

3.5.2 Structure

Farmers rent the land for seed production as a group or individually. Seed is grown only during the rainy season (June to December). To increase seed production the group plans to produce some seed under irrigation by pumping water from a river. They have already bought the pump. The group is also planning to acquire more land.

Seed is produced near the villages. Fertilisers are used but it is hard to get them on time at an affordable price. Pesticides are also used. Harvesting and threshing machinery are not available and harvest is done manually. Seed is not treated.

The group has a storehouse, but is building a bigger one.

Group members also have other activities, including individual seed production, shop keeping, livestock and vegetable production.

3.5.3 Cash flow

This group has its own revolving fund and a bank account. They tried to avoid bank loans, but in 2009 they had to take one, because they began to build a new storehouse with their revolving fund and did not have enough money for the operations they plan to increase this year.

3.5.4 Marketing

Seed is sold to local farmers. In 2009 the group sold one ton of maize seed to a project called PARFA. Prices of treated seed have been stable since the beginning at 500 FCFA per kg (\$1.19) and demand for seed is high. The seed bags were provided by FAO, creating consumer confidence in the seed. In future, new bags should be produced with a national logo.



Signboards announce the seed varieties grown and a contact telephone number. Photo by: A. Barra

3.6 The Agrelenas Seed Producers Group

3.6.1 History

The Agrelenas group (groupement de producteurs de semences de maïs de Nassarao-Garoua II) was created in 2006 by the FAO and is based in Garoua. This group started with 12 members but now has eight men and one woman.

Table 3.8: Quality seed produced, Agrelenas group

All varieties used were brought from IRAD during the FAO project.

Foundation seed is secured from the Aoudi Sanger Federation in Garoua (Section 3.2). Three maize varieties

are used: CMS 90-15, CMS 85-01 and CMS 87-04 which yield on average three tons per hectare. The rice variety used is IRAT 112 which yields on average 4.5 tons per hectare. The maize and rice seed produced has slowly increased (Table 3.8).

	2007	2008	2009
<i>Maize*</i>	2.5 (2)	2.0 (2)	3.0 (4)
<i>Rice</i>	3.0 (0.5)	4.5 (1)	5.0 (1)
*in tons, with area cultivated (hectares) between brackets			

3.6.2 Structure

The group does all its activities together. Land is rented and is difficult to find near their homes around Garoua. The group has to rent it farther and farther away due to competition and prices. When some landlords see that seed production is lucrative they decide to keep the land to start producing seed themselves. The group rents twelve hectares of land at 20,000 FCFA (\$48) per hectare. The group has still not been permanently settled on land.

Farmers buy foundation seed to grow quality seed production during the rainy season.

Fertilisers are used when they are available on time and affordable. Pesticides are also used. Farm machinery is not available and all work is done by hand. They have a storehouse and are building a bigger one.

Most of the members of this group were involved in maize, rice and off-season sorghum grain production. Income from seed is now 40% of their income. Some of the members produce vegetables, some keep animals such as cows, goats, sheep and chickens.

The group is currently investing in a store and has acquired two bulls for ploughing the land. It will significantly increase its revolving funds and agricultural land. It has acquired a water pump for vegetable production as a group.

3.6.3 Cash flow

The group has a revolving fund and is successful without outside support. It has a bank account and access to micro-credit. They have not used bank loans. The revolving fund holds a minimum of 700,000 FCFA (\$167) for production and marketing. Members can also get loans without interest from this fund for funerals, school fees, Ramadan and Christmas.

3.6.4 Marketing

Until now, the group has produced 7.5 tons of maize and 12.5 tons of rice on 12 hectares. Initially the seed was sold to local farmers, the FAO project and the Ministry

of Agriculture, but currently only to local grain producers. The seed is produced during the rainy season (June to December) only.

The price of seed has been stable at 500 FCFA per kg (\$1.19) against 100-200 FCFA per kg for grain (\$0.24-\$0.48) at the beginning. The group stressed that the seed bags provided by the FAO were good publicity. They plan to produce similar bags.

3.7 Challenges and strengths of the seed enterprises

Limited access to land. In the government managed areas (SEMRY or MEADEN) land is ploughed and distributed to common initiative groups or farmers according to availability and other criteria (such as family size). In Maga two rice seasons are possible and farmers and common initiative groups have to pay 51,000 FCFA (\$121) per hectare, but land is still not available to grow rice during the rainy season. For farmers outside the government managed plots, access to land is uncertain, especially near the farmstead (Goufo 2008). Long distances increase transport costs. In the government strategic plan (MARD 2009) irrigated land will be increased in the Lagdo area to 5,000 hectares; it is now 800. In SEMRY available land will be increased from 11,500 hectares to 20,000.

Availability of farm inputs. All common initiative groups complained of high input prices, especially for fertilisers. The price of NPK doubled in 2007, and it was often not available on time.

Availability of machinery. Machinery for ploughing, harvesting, and threshing are not available for hire. For ploughing the groups buy ox teams; they hire casual labourers to help with the harvest.

Revolving funds. Revolving funds for seed production were the base for success of all these enterprises. Some common initiative groups, not described in this chapter, failed because they did not set up a rotating fund. The successful ones all set up funds of at least 700,000 FCFA (\$1670). Such a small fund is used exclusively for production and marketing. Groups with bigger funds make short-term, interest free loans for school fees, funerals and weddings. All groups are planning to increase their funds after the next harvest.

Availability of pure foundation seed. Some of the foundation seed is not pure, which explains the low yield in some cases. Seed growers need pure seed lots which give higher yields and quality of a level acceptable to the seed inspectors.

Need to better organise the seed industry The unions want the government to better organise the farmer seed growers by clearly distinguishing seed and grain and by controlling fraud. The seed growers intend to set up a commission to improve the collection, storage and marketing of seed to avoid seed being sold as grain.

Factors of success. The seed producers said that the key factor to success was group solidarity and motivation followed by the high incomes they were able to achieve. The continuous visits of the FAO project manager (who continues to supervise activities) had initially motivated them and showed them that seed production was important. Most members have made a major purchase (a house, a shop, or a motorbike). All members have added new activities such as individual seed production, animal keeping, grain and vegetable production.

The successful revolving fund and self financing led to success; all farm operations are now self-funded. All the common initiative groups are planning to increase the fund beyond the current minimum of 700,000 FCFA.

High seed quality (all the seed produced is inspected by the government) was also important. Most grain producers got higher yields and returned to buy open pollinated seed. Farmers who used the quality seed and got higher yields spread the news to their neighbours, increasing demand and markets.

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