

# ISSD Africa

## Synthesis paper



## Making business out of low-profit seed

### Background

Seed production and marketing for a profit (seed entrepreneurship) provides for efficiency and sustainability in service provision towards seed clients. Making a profit from seed production and marketing is clearly easier for some crops than for others. For hybrid maize, hybrid vegetables, and potatoes, profit margins are attractive, and national and international companies are competing with each other through their own breeding, seed production and seed marketing programmes.

For other crops, the business case for the production and marketing of seed is much less obvious. Open-pollinated varieties (OPVs) of cereal crops such as rice, millet or sorghum provide a much weaker incentive for seed

entrepreneurship. The business case for cassava cuttings or sweet potato vines is also not obvious. Cowpea and common bean seed are likewise less attractive for commercialization.

Farmers would benefit from a reliable availability of good quality seed for these crops and a continuous supply of varieties with different traits, adapted to continuously changing agro-ecological conditions and market demands. To achieve this, a functioning market with seed entrepreneurs seeking to make a profit out of seed production and marketing is needed.

This paper addresses the question: *'How can the production of crops with low profit margins on seed be turned into a business?'*

*Production of seed of climbing beans, Burundi*

Photo: ISABU



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**Table 1. Case studies**

Case	Country/area	Organization
1 Rice seed production by the farmer's association Bwima Bwa Ningi	Imbo, Burundi	IFDC, Burundi
2 Bean seed production by individuals and farmers' groups	Muhinga, Ngozi and Makamba; Burundi	IFDC, Burundi
3 Sorghum seed for the brewing sorghum chain, Brarudi	Chibitoke, Burundi	IFDC, Burundi
4 Production and marketing of cassava cuttings by a farmers' group	Koranga district, Tanzania	Ministry of Agriculture, Livestock and Fisheries of Tanzania, District Agricultural Office
5 Millet seed production by the Cinzana seed producer cooperative	Cinzana, Mali	Institut d'Economie Rurale – (IER), Cinzana
6 Millet seed production by the Pobe-mengao seed producer cooperative)	Pobe Mengao, Burkina Faso	Alliance for a Green Revolution in Africa (AGRA)
7 Production of cassava cuttings in South Sudan	Central Equatorial State, South Sudan	AGRA

## Activities undertaken

To answer the question, a number of cases have been documented, which show how seed producers can effectively create a business out of low-profit seed. These case studies are outlined in Table 1 above.

## Outcomes and lessons learned

### *Strategies for low-profit seed business*

Based on the case studies, various strategies have been identified that support seed producers in making a business out of low-profit seed. These strategies are described and illustrated below, with examples from the case studies.

#### 1 Targeting local non-satisfied demand in local seed production

National seed companies cater for a limited number of crops, and in particular those crops that are in relatively high and homogenous demand across an entire country, and that have good profit margins. National seed companies that, for example, produce hybrid seed, need to choose whether to invest their efforts in increasing their hybrid maize seed business, or in diversifying their crop portfolio to include the production of crops with lower profit margins. Expanding the business component with the highest profit margins quickly takes priority. This leaves certain crops, such as OPV cereal crops, root and tuber crops and pulses, unaccounted for. There are, however, clients who are willing to pay a modest premium for high quality seed of these crops. This is where local seed producers can direct their business. Examples are the production of common beans by local seed producers – individuals and groups – in Burundi (Case 2); and the production of cassava cuttings by individual producers in South Sudan (Case 7) and by groups in Tanzania (Case 4).

Within communities, individual or groups of seed producers can be identified who are recognized as a source of seed and a source of new varieties. These individuals and groups are an entry point for professionalization of local seed production. Provided they are motivated to professionalize their seed operations, they can be supported to make their seed activities more business oriented, to serve a larger clientele. In Integrated Seed Sector Development (ISSD) Uganda, this has proven to be an effective approach to increase the availability of seed with low profit margins.

#### 2 Producing seed as part of seed producer association activities

Seed can be produced without a strong profit incentive if it is aiming in the first place to solve issues of seed availability for seed producer associations or cooperatives. In these cases, part of the seed is simply 'marketed' internally to group members. Those who produce the seed can be rewarded by the group. In the event of seed surpluses, these can be sold to outsiders.

This has been the strategy of the Bwima Bwa Ningi farmers' association in Burundi, which began to solve difficulties in accessing rice seed, and is now an acknowledged source of quality rice seed in Burundi (Case 1).

#### 3 Integrating seed production in the production to consumption value chain

When seed production and marketing are integrated into the broader production-to-consumption chain, it solves the constraint of an unsure market for seed. For example, in the local sourcing of sorghum for Brarudi, the largest brewery in Burundi, a particular variety is sought, the local seed of which is poorly available (Case 3). However, by integrating the distribution of the seed in the contract farming system, a seed market is created. It secures the market for the seed producers who are exclusively asked





*Participatory field evaluation of improved cassava varieties by cassava-cutting producers and researchers, Mkuranga, Tanzania*

to produce the seed required to feed the chain. They do not need to worry about the farmers' willingness to pay for the seed, as it is integrated in the contract farming system that producers aiming to supply the brewery receive seed on credit, to be reimbursed upon delivery of the sorghum to the brewery. For the seed users, this makes the seed readily available at a relatively low cost. Similarly, sunflower seed gets produced and distributed in Uganda as part of the oil processing chain.

In Burundi, the Bwima Bwa Nyingi farmers' association produces quality seed, and is currently expanding into the production of certified seed for the Société Régionale de Développement de l'Imbo (SRDI), for distribution to its contracted farmers. As a result, Bwima Bwa Nyingi has secured a sizeable market. In addition, they produce for other clients.

#### **4 Diversifying the seed crop portfolio**

Once a business is running well on the seed of a specific crop, such as maize, a seed enterprise can consider adding additional crops to their portfolio, even if the profit margins are lower than for maize. Seed crop portfolio diversification reduces the dependency on a single crop.

This is an important strategy in view of the erratic market demands of both institutional buyers and individual seed clients. In one year, cassava cuttings may make the seed business thrive if a new resistant variety becomes available; the next year, it could be common beans, if there is a drought and farmers need to restock on seed. Seed projects and programmes come and go, and can suddenly increase the demand for seed of a particular crop. This was the case, for example, with the Ebola epidemic in Sierra Leone and Liberia, which triggered institutional demand for large volumes of millet, sorghum and cowpea seed. Seed companies in Burkina Faso were able to respond promptly to this demand and capture this suddenly emerging market.

#### **5 Producing seed as a side business to grain production**

Another diversification option is to focus on producing seed as a side business to grain production. This greatly reduces the business risk, and small additional margins on the seed add to the general farm income. This strategy is used, for example, for cassava in Tanzania (Case 4), but it is also the model for sweet potato in the same country. Producers in Burundi continue to produce sorghum grain for delivery to the brewery in addition



to producing sorghum seed for the local market (Case 3). Similarly, bean seed producers in Burundi produce for both the seed and the grain markets simultaneously (Case 2). The seed component can over time develop into the main income generating activity. In Tanzania, for example, the production of cassava cuttings has become an important business because brown streak disease is forcing producers to regularly renew their cuttings from a reliable clean source. Being able to shift between the production of grain and seed is an important risk management strategy for seed businesses producing low-profit seed.

#### 6 Linking to public institutes that delegate seed clients

Seed clients often refer to the national research programmes or officers of the ministry of agriculture for their occasional seed purchases of low-profit seed. Research programmes have difficulties responding to such demands, as they mostly concentrate on selecting and popularizing new varieties, and on the production of early generation seed.

Seed producers with good linkages to these public institutes can obtain a wider client base, as public bodies can refer clients to them for quality seed. A reference from a public institute is good publicity as seed clients do place considerable trust in the judgement of public officers.

Seeking collaboration and maintaining good working relationships with public institutes that have a role in the seed sector is a strategy to improve the reputation and market reach of low-profit seed businesses. Additional potential benefits of good relations with the public sector include better access to early generation seed, increased chances of receiving support from projects and programmes in seed business development, and first access to new varieties.

#### 7 Targeting the institutional market

The institutional market for seed is comprised of national and international public and non-governmental projects and programmes, who buy seed for their seed subsidy, marketing or distribution schemes. Even though it is often considered to be a 'non-sustainable' market, it must be recognized that for much of the 'low-profit seed' crops,

*Bean seed production by a women's group, Burundi*



Photo: Cyriaque Simbashizubwoba, IFDC

institutional clients make up a substantial proportion of the market. For example, the millet seed marketed by the seed producer association Pobe Mengao is largely (75%) sold to institutional clients (Case 6).

Whereas individual producers have home-saved seed and neighbours as fall-back options, institutional buyers who aim to distribute or sell seed have no choice but to buy it in the market. In addition, institutional buyers should be more concerned about buying poor quality seed than individual seed users. Individual buyers can recognize the quality of seed from their own field or a neighbouring field from observation, and can decide whether such a field is an appropriate source of seed. An institutional buyer will have to rely on the reputation of a more specialized seed producer, possibly with the addition of external quality assurance. Also, institutional buyers need seed in a certain bulk, which only a specialized seed producer can provide. Finally, projects and programmes have fewer difficulties with paying for the seed compared to individual clients.

One challenge is that the demand of the institutional market is highly erratic, and the response to this demand is highly opportunistic. More often than not, institutional buying of seed is through tender procedures, competing for price rather than quality. In addition, tender notices often appear too late for seed producers to adapt their cropping plan, and only seed already produced can be offered. The combination of short-notice tenders, price competition, little consideration for quality, and at times obscure procurement procedures, make the institutional market difficult to navigate for professional seed producers.

Still, the institutional market is the largest market for low-profit seed. It may not be sustainable, but it is the basis of low-profit seed entrepreneurship in many countries. Projects and programmes could be more aware of their essential role in stimulating seed entrepreneurship. Furthermore, they can become even stronger drivers of seed entrepreneurship development once they understand the potential of their purchasing power, and refrain from ad-hoc seed procurement through open tendering. They would do better by rewarding emerging seed entrepreneurs who produce seed professionally with forward contracts against negotiated prices. In particular, forward contracts that are closed before the seed production season are needed, so that the seed entrepreneurs can actually anticipate and adapt their seed production to the institutional demand.

### **8 Demonstrating the added value of quality seed**

When there is a low demand for a product, it is necessary to demonstrate its added value compared to its alternatives. To sell low-profit seed, seed producers need to invest time and some seed in demonstrating the additional yield that can be obtained through the use of their higher quality seed.

Rice seed producers in Burundi made particular efforts to demonstrate the added value of their seed to potential clients by setting up demonstrations and organizing field days (Case 1). Similarly, cassava cuttings are being promoted in South Sudan by roadside demonstration plots (Case 7). Such demonstrations and field days serve a double purpose of demonstration, and trust and relationship building with potential clients.

### **9 Obtaining access to new varieties first**

A major driver for seed clients of low-profit seed is generally not the quality of the seed as such, but the variety itself. In particular, the emergence of new varieties drives seed demand. As such, producers of low-profit seed do well to maintain relations with public institutes releasing new varieties, so that they have initial exclusive access, and can make their business succeed.

At the same time, the public services releasing varieties can consider the professional seed producers of low-profit seed as their most important partner in variety distribution. To encourage professional seed multipliers to play a role in variety distribution, it may be useful to give them exclusive access to newly released varieties to help them optimize their returns on low-margin seed.

In Tanzania, the public research system is partnering with groups producing of cassava cuttings in the selection of new varieties (Case 4). This does not only provide good feedback on the desirability of the traits of the candidate varieties, it is also the first step in the multiplication and distribution of the new material among farmers.

### **10 Securing access to breeder seed or pre-basic seed, multiplying several seed generations**

In addition to needing access to new varieties, seed enterprises also require access to a reliable source of guaranteed clean early generation seed. Seed producers of low-profit seed do well to obtain pre-basic seed or even breeder seed directly from research organizations, so that they can multiply twice, or even more often, before retailing. In such circumstances, they have full control over the production process, and also will be able to reduce investment costs. It decreases their dependency on intermediary, mostly public, agents who jeopardize the business by delivering early generation seed late.

The success of the rice producers' association in Burundi is based on their access to pre-basic seed from research organizations, from which they produce basic and certified seed (Case 1). The SRDI had been producing its own basic and certified seed, but stopped this activity and has become the principle client of the seed producer group Bwima Bwa Ningi, buying back the seed for distribution to farmers.





*Demonstration of added value of quality rice seed, Bwima Bwa Ningi group, Burundi*

### *Not-for-profit seed production as a social service*

There are situations where making even a modest profit out of seed is not an option. Depending on the local economic and customary reality, there are crops for which seed is not a traded commodity. For example, banana suckers are usually given away, rather than sold, in many areas, especially where the crop has a long tradition, such as in Tanzania, Uganda, Rwanda and Burundi. In Burundi, cassava cuttings are also rarely sold.

Seed-related customs are not rigid though, and can change over time. In Tanzania, cassava cuttings are becoming a traded good because of the spread of cassava mosaic and brown streak disease, while banana suckers are also gradually becoming a marketed product in the north of the country.

Where seed is not being sold, seed production and variety distribution will need to be seen as a social service, rather than a business. One example of this is the production and distribution of cassava cuttings of disease-resistant and -tolerant varieties in Burundi.

The production of seed as a social service is not as sustainable as for-profit seed production, as it depends on voluntary efforts rather than monetary incentives. As such, it needs to be stimulated when the need arises; for example, when new diseases emerge, improved varieties with disease resistance need to be distributed quickly, as soon as they are available. Similarly, varieties

with improved nutritional value, such as iron and zinc rich beans, or pro-vitamin A rich sweet potato, can be the subject of deliberate campaigns of variety promotion based on seed production as a social service.

### *Public-private partnerships*

In general, it can be concluded that profit can be made from low-profit seed, both locally as well as at national level. The low-profit seed business is, however, not without risk, and the additional profits obtained, in comparison to producing at a lower risk for the consumption market, are only modest. Public-private collaboration is important to assist low-profit seed entrepreneurs in maintaining their business, and contributing to making high quality seed available.

The public role can take different shapes. Low-profit seed businesses can be supported in different ways, including capacity building on seed technology and seed business management; exclusive first access to new varieties emerging from public programmes; good access to early generation seed; client referrals; and most importantly, forward contracts from institutional buyers, including the public sector. Governments need to play an important role in setting out directions for the way in which public and non-governmental resources are spent on seed, to ensure it stimulates seed business development.



## Next steps

The following areas need attention:

- **Development and implementation of guidelines for good seed procurement practices by projects and programmes, which contribute to seed business development.**

Institutional buyers such as development and relief projects and programmes are important clients for seed with low profit margins. Their purchasing power can be channelled so that it promotes the business development of emerging professional seed producers, thus contributing to commercial and professional seed sector development.

- **Piloting of smart subsidies, which stimulate making business out of low-profit seed.**

In many countries, resources are allocated to subsidize the cost of seed. Often, this is done without due consideration of how this will stimulate, or hamper, the development of a dynamic professional seed sector that is driven by individual entrepreneurship.

- **Support for public-private collaboration to stimulate seed entrepreneurship in low-profit seed.**

Low profit margin seed producers can benefit from, and need to rely on, close linkage with public institutes. They require access to foundation seed, and can benefit from privileged access to new varieties. In this manner, they can contribute to the promotion of varieties derived from the public domain.

- **Integration of seed business advice for low-profit seed in seed entrepreneur training and coaching methods and materials.**

Making a successful business out of low-profit seed is challenging, and this paper has presented a number of strategies that can be followed. These strategies can be integrated in training and coaching for emerging seed entrepreneurs.

*Sorghum seed, South Sudan*



Photo: David Ndung'u, AGRA

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ISSD Africa is a community of practice that unites African seed experts, seed programmes and associated organizations, and which aims to increase farmers' access to quality seed through the development of a market-oriented, pluralistic and vibrant seed sector in Africa.

The ISSD approach is a farmer-focused and demand-driven seed sector development approach, which caters for the diversity of seed demands. Through this approach interventions are designed that are tailored to specific crops, value

chains and seed systems. It is a seed sector-wide and inclusive approach.

ISSD Africa is coordinated by a consortium of Wageningen Centre of Development Innovation (CDI) of Wageningen University & Research, the Royal Tropical Institute (KIT), the Future Agricultures Consortium and Tegemeo Institute of Agricultural Policy and Development in Nairobi Kenya.

For more information on our ISSD portfolio please visit our website [www.ISSDseed.org](http://www.ISSDseed.org).

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