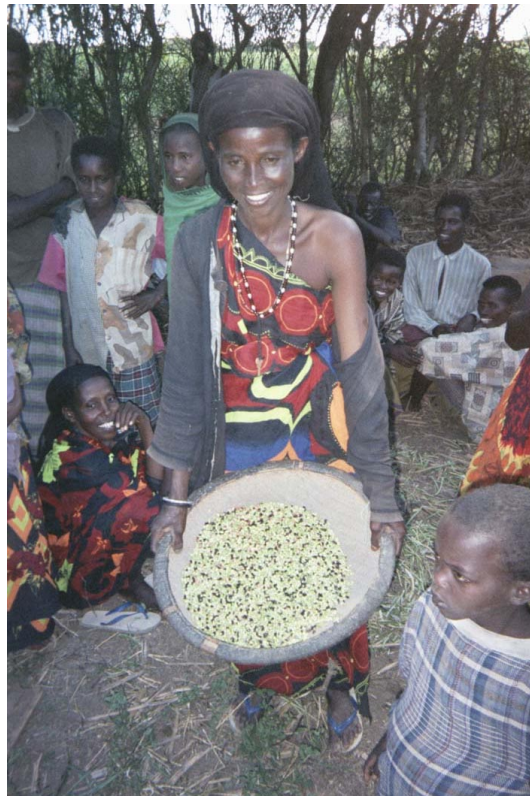


**SEED SECTOR STUDY
OF SOUTHERN SOMALIA:
SUMMARY OF MAIN FINDINGS**



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1. Introduction

The Seed Sector Study of Southern Somalia¹ was commissioned by the Somalia Unit of the European Commission (EC) to assess the impact of relief seed interventions, and whether seed distributions are the most appropriate way of providing assistance to farmers. The study was prompted by a growing awareness within the Somali Aid Coordination Body (SACB) and among agencies distributing seed that implementing relief seed projects is not at all straightforward, and that farmers do not always plant the seed provided. In addition, there are concerns over the sustainability of continued seed distributions.

The full report describes the pre-war formal seed sector in Somalia, the present local seed system (including the role of traders), and the impact of relief seed interventions, and makes suggestions for an enhanced strategic approach to household seed security. This summary highlights three key points:

- Seed interventions in southern Somalia have been dominated by emergency seed provisioning (ESP), but seed capacity building (SCB) is now more appropriate in areas where the security situation is relatively stable.
- SCB interventions should be based on an understanding of the strengths and weaknesses of local seed systems.
- Efforts to strengthen the capacity of local seed systems need not necessarily focus exclusively on seed; seed systems can also be strengthened through enhancing broader agricultural production systems. A more integrated approach to agricultural rehabilitation is therefore required.

2. Emergency seed provisioning (ESP) and seed capacity building (SCB)

Existing guidelines² recommend that ESP should be carried out only as a short-term intervention, and that alternative interventions for SCB should be implemented in the longer term to allow farmers to access seed in a more sustainable way. In southern Somalia, ESP has been implemented every year since 1991, with no alternative interventions explicitly aimed at building seed capacity.

3. The impact of emergency seed provisioning

The two most common justifications for providing relief seed are that there are problems with seed availability; and/or seed saved by farmers is of poor quality. Neither of these conditions presently exists in southern Somalia. Although some farmers may find it difficult to access seed, good quality, appropriate seed is certainly available through local

¹ The study began in September 2000 with a review of the literature, and consultations with agencies in Nairobi. For security reasons, the initial field visit (September 2000) was re-routed to Somaliland. In December 2000, the main rain-fed sorghum belt was visited. Information gathered through discussion, interviews and personal observation was complemented by quantitative data collected by a seed survey implemented among over 100 farmers across eleven regions, with the help of FSAU Field Monitors and local NGO staff affiliated with CARE.

² ODI, 1996. 'Seed provision during and after emergencies'. *Good Practice Review 4*, Relief & Rehabilitation Network. London: ODI.

seed systems. ESP has greatest impact when responding to problems of availability, not problems of access.

3.1 Seed needs assessment. In Somalia, as elsewhere, seed interventions are largely based on an *assumed* rather than an *actual* need. It is generally presumed that, if a harvest is good, the need for seed distribution is low; if a harvest is poor, the need increases. Thus, seed availability is determined by food availability. However, this fails to take account of how small-scale farmers retain and acquire seeds (see Section 4). Although relief inputs of food might be required, seed-related responses often require a more developmental approach. Rather than starting with the assumption that relief seed is needed following a poor harvest, agencies should start with the assumption that seed is *not* needed. The report puts forward a simple tool that agencies can use to test this assumption.

3.2 Seed procurement. Agencies have increasingly sourced seed locally within southern Somalia. But what does ‘local’ mean? A ‘local’ seed variety is one that has been adopted by many farmers within a specific agro-ecology, and that is appropriate to the particular farming system in which it is used. Cropping systems are dynamic, and ‘local’ varieties may change over time.

For large-scale traders, the relief seed system offers significant financial benefits, and competition for contracts is fierce.³ In some cases, agencies have been allowed to buy seeds only within certain areas, and there has been conflict over the award of tenders. Collusion among different parties in the procurement, delivery and distribution of seed consignments has certainly occurred in the past.

3.3 Targeting. Identifying and targeting vulnerable households for relief distributions is a complex and contentious task. For all the effort agencies expend in identifying vulnerable households, inputs are invariably redistributed within communities⁴. Household targeting has reportedly been most successful when village development committees (as opposed to village elders) select beneficiaries, and then handle distribution at community level.

The seed survey revealed no discernible difference between the seed aid better-off farmers received, and that received by poorer ones. Given that ESP is most appropriate in response to problems of seed availability rather than problems of access, geographical targeting is the logical approach for ESP interventions.

3.4 Receipt and use of seed aid by farmers. While many of the more recent seed distributions are thought to have had relatively little effect, farmers in different locations reported particular occasions when seed aid was very much needed, and had a positive impact. These occasions tend to be when there is an absolute lack of available seed, caused by massive population displacement and the suspension of farming over a wide area for at least two seasons. In Baidoa District in 1993, for example, relief inputs were greatly appreciated by farmers returning to their homes after a two-year displacement. In such situations, seed may be needed by all farmers within the affected area in order to restart agricultural production. For crops such as sorghum or maize, which have a high multiplication rate, there is rarely a need to continue relief distributions for more than two

³ Grain traders routinely charge more than double the grain price for ‘seed’ that is in fact no different to grain.

⁴ Narbeth, S. 2001. ‘The targeting of emergency food distribution in Somalia: vulnerability, redistribution, and beneficiary participation’ Nairobi: WFP Somalia.

seasons. Relief seed inputs are most likely to be eaten rather than planted when they are provided in areas where seed is already available.

4. Local seed systems and the potential for seed capacity building

SCB aims to enhance local seed systems by building on their strengths, and addressing their weaknesses. Since local seed systems form an integral part of broader cropping systems, SCB interventions need not necessarily focus on seed *per se*, but on the general improvement of agricultural production. SCB not only addresses seed quality and availability (particularly *varietal* availability) within functioning production systems, but also aims to allow farmers to *access* seed in a more sustainable way.

Understanding the strengths and weaknesses of local seed systems is essential for the design of appropriate SCB interventions. The following analysis of seed systems in southern Somalia is based on five key aspects, which also provide potential entry points for SCB interventions.

4.1 On-farm seed management by farmers. Unlike formal-sector seed systems – in which seed production and multiplication are undertaken separately from grain production – seed management (multiplication, selection, drying, storage) is an integral part of household agricultural production. Seed selection by farmers at harvest time promotes good-quality seed; although seed-borne diseases like sorghum smut and farm pests pose serious problems, farmers generally know about good seed-management practices. The amount of seed saved after harvest is determined by the size of the land to be sown the following season (generally about four times the amount required for a single planting). Seed is mixed with ash, and placed in sacks, drums, plastic containers or clay pots, depending on the amount and the containers available. Women look after the seed in the house.

Ideally, farmers aim to maintain stored seed throughout the year, replacing stocks after each harvest. Thus, some of the seed selected from the *Gu* season harvest will be used for planting (and replanting) in the *Deyr* season, and some will be kept until the *Deyr* season harvest, when it will be replaced with freshly-harvested seed. Similarly, some of the seed from the *Deyr* season harvest will be sown in the *Gu* planting season, and ideally some will be saved up until the *Gu* harvest, and then replaced. In this way, even if a harvest fails farmers will often have seed stored from the previous harvest. In practice, however, not all farmers are able to save seed throughout the year, and some acquire seed off-farm (see next section). While it is relatively easy to store seed from *Gu* to *Deyr*, some farmers find it difficult to save seed over the longer *Deyr–Gu* period, mainly due to pest damage in storage or more general problems relating to poverty.

4.2 Seed providers and off-farm seed provision. Farmers most often obtain seed off-farm by acquiring it from petty traders in the local marketplace. Relief seed distributions provide the second most common means of getting seed, but even without such inputs farmers effectively acquired seed from other farmers in the *Gu* and *Deyr* 2000 seasons.

Southern Somalia (but not Somaliland) has a well-developed seed-marketing system that functions through networks of small-scale traders – all women – who specialise in marketing seed in addition to grain. They buy grain at harvest time from farmers in the

surrounding villages, and pay a premium of 20%–25% for good-quality seed. The traders transport seed on donkey carts and store it in 200-litre drums, keeping different varieties in different drums. The largest of the petty traders in Baidoa has a maximum capacity of about 50 drums. The capacity of seed traders is limited by the amount of capital they have to buy seed, and their storage capacity. The lack of pesticides (and knowledge about how to use them) also poses a problem.

4.3 Local institutions and internal linkages. Trade networks and the social networks linking traders, farmers, relatives and neighbours are essential aspects of local seed systems. In the event of drought or even flooding, they enable the movement of seed between surplus and deficit areas, provided that there is adequate security to allow people to move safely, and for markets to function. In rain-fed areas, localised drought is so frequent that there is almost always a demand for off-farm seed in one area or another, providing a reliable business for petty traders. Rather than undermining these traders by distributing free seed inputs, agencies should support and promote them.

4.4 Seed quality and the diversity of crops and varieties. Seed selection by farmers and petty traders generally ensures that the quality of seed is good, but there are problems with seed-borne diseases in some areas, and pest damage, both on farms and in storage, needs to be addressed. Another weakness of the local seed system is the limited diversity of crops and varieties.⁵

4.5 External linkages. One of the factors limiting the diversity of crop and varieties in southern Somalia is the region's relative isolation from other areas of agricultural production. Whereas farmers in Somaliland have links with the Ethiopian highlands and are historically connected with the Arab peninsula, the main farming communities in southern Somalia (Rahanweyn and Bantu) are surrounded by predominantly pastoral groups, and have few linkages beyond those internal to the region. There is potential to increase crop and varietal diversity and to promote innovative agricultural practices through external market linkages and agricultural research, extension and technology exchange.

5. Types of seed capacity building interventions

Efforts to strengthen the capacity of local seed systems need not necessarily focus exclusively on seed; through enhancing broader agricultural production systems, seed systems can also be effectively strengthened. Three different types of intervention can enhance the capacity of local seed systems: increasing access to seed and other inputs; introducing appropriate agricultural technologies; and improved marketing. The table overleaf presents a summary of projects that agencies might implement.

5.1 Increasing access to seed and other agricultural inputs. Since seed multiplication is an integral part of crop production, addressing production constraints such as drought and pests will increase access to own-saved seed. Drought can be addressed by irrigation pumps provided through loan schemes, pests through pest-control schemes. Specific problems of household seed storage, particularly over the long gap between the *Deyr* and *Gu* seasons, can be tackled with appropriate, locally-available containers, for example

⁵ Increased diversity generally makes agricultural production more resilient.

200-litre drums, and affordable seed treatments and associated training. Providing food reduces the likelihood that family members will consume household seed stocks.

Access to off-farm seed can be increased by providing farmers with the means to acquire seed from traders and other farmers. Seed vouchers have been used successfully in other countries, but have yet to be tested in Somalia. For ease of implementation, voucher schemes can also be linked to seed fairs, where beneficiaries can exchange their vouchers for seed from local farmers and traders. The seed providers then redeem the vouchers for their cash value from the implementing agency. A pilot project is required to test whether such an approach would work in Somalia.

Strengthening the existing local seed trading system can increase the availability and quality of seed in local markets. Appropriate storage facilities and the correct use of chemical seed treatments can improve seed quality and reduce spoilage. Timely credit services may allow experienced traders to respond more effectively to anticipated seed demand.

5.2 Introducing appropriate agricultural technologies. Appropriate pest control, storage facilities and seed treatments have all been mentioned above. The narrow range of crops and varieties grown in S. Somalia can be addressed by introducing novel seed types in small quantities for farmers to test. CARE has successfully sold one-kilo packets of tested, improved sorghum varieties through small-scale petty traders.

5.3 Improving input/output marketing. One of the most important assets for farmers in times of stress is cash: with cash, farmers can normally obtain food, labour, seed and other necessities. Although markets can be disrupted and/or distorted by local security considerations and price fluctuations, and are potentially subject to monopoly control, farmers must still have access to them. There is the potential to link Somali farmers to high-value export markets for products such as sesame, where they have a comparative advantage. Promoting such markets, however, means ensuring that existing power relations do not marginalise those groups of farmers (for example Bantu and Rahanweyn) who are already most vulnerable.

6. Monitoring, evaluation and follow-up assessment. In addition to monitoring the impact of specific interventions, particular attention also needs to be paid to the pilot testing of new approaches, such as seed fairs and vouchers and the appropriateness of new agricultural technologies. Before introducing a new technology, it must first be tested on farms over a number of seasons. Adequate attention also needs to be given to the ways in which new technologies are disseminated, and to the training needs of farmers and small-scale traders.

Continuous monitoring of cropping patterns and seed systems is also an essential component of disaster preparedness. A more detailed understanding of local seed management systems allows appropriate and timely interventions to be identified and implemented when the need arises.

Suggested approaches to seed capacity building

Entry points	Access to agricultural inputs	Appropriate technologies	Input/output marketing
Seed management by farmers	<ul style="list-style-type: none"> • relief food distribution • relief seed distribution • seed fair/vouchers • address production constraints, e.g. loans for irrigation pumps, ploughing 	<ul style="list-style-type: none"> • improved seed storage (e.g. seed treatment, providing containers) • technologies to address production constraints, e.g. farm pest control 	<ul style="list-style-type: none"> • seed fair/vouchers
Seed providers and seed provision	<ul style="list-style-type: none"> • seed fair/vouchers • capacity-building for petty seed traders (e.g. credit, storage) 	<ul style="list-style-type: none"> • improved seed storage for petty traders (e.g. seed treatment, containers) 	<ul style="list-style-type: none"> • seed fair/vouchers • enhanced market infrastructure
Local institutions and organisations	<ul style="list-style-type: none"> • capacity building for farmer organisations and associations, where these exist 	<ul style="list-style-type: none"> • enhanced linkages with agricultural researchers and research centres 	<ul style="list-style-type: none"> • capacity building for traders, e.g. training in pest control, business loans
Seeds and varieties	<ul style="list-style-type: none"> • farmer-managed trials of promising new crops and varieties • sale of small packs of improved varieties 	<ul style="list-style-type: none"> • testing and introduction of appropriate crops and varieties • improved seed quality through IPM 	<ul style="list-style-type: none"> • sale of small packs of appropriate improved varieties
External linkages	<ul style="list-style-type: none"> • operational agencies to collaborate with agricultural research centres to access new seed types and other agricultural technologies, e.g. through technical backstopping to NGO projects 	<ul style="list-style-type: none"> • enhance capacity of local professionals through links with agricultural researchers and research centres 	<ul style="list-style-type: none"> • links to urban and export agricultural markets, provided that prevailing power dynamics are such that vulnerable groups will not be further marginalised