

### THE ROLE OF RELIEF SEED AND VOUCHER PROGRAMME IN INPUTS MARKET DEVELOPMENT

A synthesis of FANRPAN country reports on the importance, impact and improvement of relief seed systems in the SADC region.

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***Distribution of relief seed following natural disaster has become a common phenomenon in the SADC region, and many member states have had government, donor and NGO support in place for decades. However, a 1999 report published by the FAO\*(1990) on relief seed and fertilizer systems referred to "inconsistent, incoherent and inappropriate seed approaches", and highlighted a number of lessons learned.***

Country researchers were therefore contracted by FANRPAN to analyze the current relief seed systems in four countries: Malawi, Mozambique, South Africa and Zambia. The results are intended to provide a baseline overview for policy makers and related stakeholders. For this study, "relief seed" is considered to represent seed donated by seed companies; seed procured and donated by governments and NGOs, and seed distributed free or partly subsidized, directly or through voucher systems.

The study addressed the following issues:

- a. The importance of relief seed by volume and value in overall seed trade;
- b. Its impact on the evolution of domestic and regional seed trade; and
- c. Opportunities for improving relief seed development impacts.

The researchers secured information by reviewing data from governments and seed companies, and by interviewing stakeholders. The relief seed situation is different in each of the four countries but one common factor is maize is the dominant species in relief seed distribution. Apart from South Africa,

the informal seed systems through farmer-saved seed or community seed are still a major source of seed for planting.

For Malawi, Zambia and Mozambique, the study confirmed that the key problem has not yet been resolved, namely, to have a vibrant, competitive seed sector that will ensure seed security. The key prerequisite is a viable market made up of farmers who have been uplifted from a cash-strapped situation. Achieving this objective requires major policy reforms. Some progress has been made especially in Zambia, but it is naturally difficult to allocate credit correctly to government policies, private sector initiatives, or encouragement from the African Seed Trade Association (AFSTA).

It has also become evident that a degree of dependency on relief seed has been created amongst farmers, NGO distributors and seed companies.

Some key recommendations

- Link relief seed practices to a seed security development programme that will facilitate the establishment of a viable seed trade industry.
- Improve the early warning systems, analysis of the impact of disasters, and analysis of post-distribution of relief seed.
- Set minimum quality standards for relief seed and increase government capacity to monitor them.
- Encourage relief systems to offer beneficiary households a choice of varieties, OPV and hybrids.

- Increase the range of seeds to be included in relief and starter packs so as to extend food security throughout the year.
- Strengthen links between informal and formal seed systems.
- Stock emergency supplies of quality foundation seed of key varieties.

#### Relief seed importance in overall seed trade

Each of the four-targeted countries has a different profile in terms of relief seed distribution and its impact on the formal seed industry.

Crop production in **Malawi** takes place on 2.65 million hectares, and the national seed requirements for the 10 major species of grains and legumes amount to some \$57 million, excluding vegetables. The formal commercial seed market for these species is estimated at \$11 million or 19% of the total. Maize is the dominant crop, with a requirement of 32,000 metric tons (MT), which in 2005/6 included 7,790 MT of commercial sales and 7,800 MT of relief seed. Thus, maize relief seed comprised 24% of the total national maize seed and 50% of seed provided through the formal sector. More than 20 NGOs are involved in the relief seed and food business.

The seed markets for groundnuts, pigeon peas, rice, and beans are served mostly by the informal seed sector and the farmers' seed group, ASSMAG. The same applies to vegetatively propagated crops like cassava, sweet potatoes and potatoes. Seed and planting material for these crops were distributed for relief purposes, including 11 MT of potato tubers. In the absence of adequate data, no quantification of volumes, value or percentages was possible.

The government of **Mozambique** initiated a seed assistance programme in 1975 and a semi-commercial company, SEMOC, was established to distribute seed of public varieties. By 1990, the volume of seed distributed reached 14 000 MT for a range of food crops. This volume diminished to only 3,000 MT in 1995 due to scaling down of relief operations. SEMOC was subsequently acquired by SeedCo of Zimbabwe and is presently rebuilding its market. Mozambique is at an early stage of formal seed trading and no comprehensive seed statistics could be obtained.

The Programme on Malnutrition (PAM) in **Zambia** coordinates about 90% of relief seed, while the Ministry of Agriculture and Cooperatives (MACO)

handles fertilizer and some seed distribution. In 2005/6, members of the seed trade association marketed about 7,500 MT of maize seed directly, with an estimated value of \$8.6 million, while another 3,000 MT worth \$3.5 million were distributed through the PAM and the MACO. The balance came from the informal sector. Relief maize seed constituted 29% of formal maize seed distribution and 25% of total market requirements, in terms of both volume and value. In 2005/6, PAM also distributed relief seed of cowpeas, rice, sorghum, soya beans and millet, as well as 45,000 sweet potato vines, 7 million cassava cuttings and 2,000 banana plants. The FAO provided cassava and vegetable seeds. No comprehensive statistics on these species were available.

The situation in **South Africa** is quite different. The private seed sector started over 100 years ago and has been marketing adequate volumes of seed for all major food species. Some free seed has been given to NGOs and a few government agencies and NGOs have procured seed for free distribution to communities. However, relief seed has always been a negligible part of the seed industry. The involvement of commercial companies in relief seed is related primarily to the sale of seed for relief purposes in neighboring countries. This aspect will be dealt with in the next section of this brief.



#### Impact on the evolution of the domestic seed trade

Increased liberalization of the Malawian seed industry saw increased activity of the private sector and the establishment of a national seed trade association, STAM, in 2006. An estimate of formal seed trade in 10 major food crop species puts turnover at \$11 million or 19% of the total potential market. Procurement of some 7,800 MT of maize seed for relief purposes has undoubtedly had positive spin-offs for some seed companies, especially those that also stock open-pollinated varieties of grain and legume seeds. However, the shift in emphasis by government and NGOs to open-pollinated

maize varieties for relief reduced the market share of hybrids from a peak of 40% in the 1990s to 25% in 2005 and an estimated 13% in 2006, with a concomitant negative effect on companies that specialize in hybrid maize seed.

**Mozambique** is still at an early stage of private sector involvement, and the volume of relief seed varies between 100 and 3,000 MT per year. SEMOC was a major producer and distributor of relief seed but saw its operations reduced by over 75% when relief activities were curtailed. Research-

ers indicated that NGOs presently play a disproportionately large role in relief seed.

**Zambia** created an enabling environment for seed companies, and both domestic and regional seed companies are active. Procurement of some 3,000 MT of maize seeds by government's PAM and MACO benefited companies that market the seed of major grain crops. Details of the share of seed sold for relief purposes were not available for individual companies but the picture for 2004/5 indicated total relief seed of 6,400 MT, imports of 290 MT and exports of 22,300 MT. The positive outcome of promoting active maize seed companies was that Zambia has become self-sufficient in, and a net exporter of, maize seed.

The **South African** seed industry supplies all the formal seed required for crop production. Minor domestic relief seed practices have had a negligible impact on the evolution of trade. However, sale of seed to NGOs, relief organizations and regional government procurement agencies has become a major financial activity for a small number of companies. Over 18,000 MT of maize seed were sold for this purpose in 2005/6, as well as significant volumes of groundnuts, beans, cowpeas and sorghum. Details are contained in the next section.

#### Impact of relief seed on regional trade

No information is available to distinguish between export of seed for commercial or for relief purposes in **Malawi**, where 500–1,000 MT of maize seed, and minor volumes of cowpeas and beans, were exported, and in **Mozambique**, where Pannar exported an average of 500–750 MT of maize and small volumes of other seeds.

**Zambia** has been exporting an average of 13,000 MT of maize seed and some beans and sorghum. Most of the maize exports were destined for Zimbabwe for distribution as subsidized seed.

**South African** companies exported over 18,000 MT of maize, and significant volumes of sorghum, groundnut, bean and cowpea seeds for relief purposes in 2005/2006, at a total estimated value of \$57 million. Maize seed exports for relief comprised 81% of total maize seed exports by volume and 70% by value, while the total 27,000 MT agronomic relief seed exports comprised 19% of this South African market sector (domestic and export). The primary recipients were Zimbabwe and Angola. Although data were available only for the past two years, the impression was that South Africa has increasingly benefited from relief seed sales.

The Zambian and South African relief seed does not necessarily reflect a growing volume of relief seed in the region; more likely, their exports filled the gap left by the virtual collapse of the Zimbabwean seed industry, which had been a major seed provider to the region.

#### Opportunities for improving relief seed trade

The relief seed systems in the three countries where relief seed is distributed differ and a degree of country-specific solutions may be required. However, the issues and deficiencies raised by researchers and NGOs showed much common ground. Common problem areas identified include:

- The early warning systems are inadequate and the impact of disasters should be properly investigated on-site, and affected households identified, while strengthening collaboration between parties. Little analysis of informal seed availability is being done.
- Ad hoc interventions in a chronic problem situation tend to disrupt both formal and informal seed systems.
- There is an inadequate link between the formal and informal sectors. Little is known about informal seed availability; almost all relief seed procurement is from the formal sector; and distribution occurs through the formal seed or government sector, or NGOs.
- There is a risk that unknown, un-adapted varieties may be distributed, and this risk is aggravated by the focus of some procurers on least-cost seed and open-pollinated varieties. The range of suppliers, crops and varieties in relief seeds remains limited.
- Procurement on the basis of least cost has the risk of substandard quality and some fears were expressed on the capacity of governments to monitor seed quality, especially as varietal purity mostly requires grow-outs, and as relief distribution may occur in haste. The many links in the system makes it difficult to identify where a lapse in quality occurs. Quality declared seed is not as reliable as certified seed. Although no quantifiable evidence was obtained to indicate that substandard seed is a major problem, it remains a cause for concern.
- There has been very little post-distribution analysis on the impact of relief seed operations.
- The need for seed safety stocks was indicated but no practical solutions were proposed for stocking and cost recovery, and this may need to be limited to foundation seed stocks.



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