Agricultural Input Trade Fairs and Vouchers in Mozambique: Experiences and lessons learned

ICRISAT/ODI Working Paper

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Executive Summary

This report describes recent experiences with agricultural input trade fairs (ITFs) and vouchers in Mozambique. Since 2002, ITFs and vouchers have been the preferred mechanism for responding to emergency needs within the agricultural sector. After four years of ITF/voucher implementation and a sense of frustration with repeated emergency interventions in response to chronic problems, there is an on-going debate as to how best to modify the approach and what objectives ITFs should fulfill.

Section 1 describes the current early warning systems in Mozambique and the ways in which emergency needs are assessed. The observation that the ITF/voucher approach is not fully integrated into these systems suggests that ITFs and vouchers have merely replaced the earlier 'seeds and tools treadmill' that existed from 1998 up to 2002. An historical analysis of emergency seed interventions in Mozambique shows how the development of the formal seed sector has been closely linked with the provision of relief seed. There is pressure from some stakeholders for this link between formal seed sector development and emergency seed interventions to continue under the ITF approach, but whether this is the most appropriate option for the future is questioned.

Section 2 of the report describes how the current ITF/voucher approach is implemented, the types of vendors who take part, and the inputs that are provided. Section 3 discusses the key issues arising from the ITF/voucher experience in Mozambique, where it is the very advantages claimed by the broader literature about seed fairs and vouchers that have proved to be the most controversial. The apparent 'normalization' of ITFs and vouchers in Mozambique allows for more developmental objectives to be realized through innovations in the way in which ITFs and vouchers are programmed, but there is a lack of consensus as to precisely what the objective of ITFs and vouchers ought to be. There has been a lot of pressure from the seed companies and agents to organize ITFs and vouchers in ways that favor the formal seed sector (e.g. by controlling prices, restricting the participation of non-local traders, and – most recently – new requirements for the registration of vendors). However, until the formal seed sector is better able to provide high-quality seed for a range of varieties that are well-adapted to locally specific conditions, farmers are likely to continue to be disappointed by formal sector seed.

In terms of market development, it was widely felt that ITFs and vouchers encouraged commercial activity at a local level, despite the observation that the majority of the proceeds from ITFs do not necessarily remain in the local communities. However, the most successful ITFs (in terms of levels of participation and overall turn-over) are those that take place in areas where markets are already well-developed.

ITFs provide a good opportunity to promote awareness about HIV/AIDS, but – somewhat surprisingly – no formal effort is currently made to promote agricultural extension messages at the fairs. As such the fairs are presently a missed opportunity for promoting accurate information about 'improved' agricultural technologies. There is also the opportunity to modify the ITF/voucher approach to provide a social protection mechanism for vulnerable farmers. In Mozambique, however, social protection is not yet on the agenda of MINAG, and agricultural staff are, in general, not familiar with the rationale or the approaches to social protection that are currently being promoted in other sectors or in other countries.

The report presents five different objectives that an ITF/voucher approach could potentially fulfill:

(i) *Emergency response to address lack of access to inputs:* While there appears to be a move towards addressing alternative, more developmental objectives, it is also necessary to recognize and respond to a real emergency as and when this might occur.

(ii) *Social protection mechanism for vulnerable farmers:* There is a need to recognize that some farmers are chronically vulnerable and may require long-term assistance to enable them to emerge from chronic poverty and food insecurity. Lessons from Malawi's Starter Pack Programme can be useful is assessing whether ITFs and vouchers could provide an appropriate social protection mechanism for vulnerable farmers.

(iii) *Promotion of rural trade and agricultural marketing:* Another option is for the current ITFs to evolve into 'development fairs' to promote rural trade in general and the marketing of agricultural products in particular. This implies that the fairs should not only provide an opportunity for farmers to purchase inputs, but also to sell their outputs, such as livestock and grain surpluses.

(iv) *Promotion of the formal seed sector:* If the objective of the ITF/voucher approach is to promote the seed sector (whether formal or informal), it is essential that this is based on an accurate understanding of farmers' seed preferences and requirements. The evidence available to date suggests that ITFs and vouchers offer limited opportunities for substantial increases in the sale of formal sector seed. At the same time, the formal seed sector appears to be incapable of supplying enough beans and groundnuts to meet the demand from farmers, and the germination rates of formal sector seed is often well below acceptable standards.

(v) *Promotion of crop and varietal diversity:* There is considerable experience with fairs that aim to promote crop and varietal diversity, particularly in Latin America. Promoting agricultural diversity has the potential to strengthen local seed systems and increase resilience to drought and other disasters.

The report makes the following recommendations:

a) Strong leadership will be required to overcome the current lack of consensus surrounding the way forward for ITFs and vouchers and to ensure that the approach evolves to meet a clearly articulated objective. This report puts forward a number of options regarding possible objectives. Any decisions regarding the future direction of ITFs and vouchers in Mozambique must necessarily be based on credible and well-documented evidence.

b) Regardless of which option is chosen, there is a need to undertake more consistent monitoring, evaluation and analysis to ensure that lessons are learned and shared across different parts of the country and that the approach is achieving the desired impact.

c) In addition to regular monitoring, we recommend that a study should be undertaken to understand how farmers actually make use of the inputs acquired from ITFs, and what impacts the ITF/voucher approach has on agricultural production, markets, food security and vulnerability.

d) Greater attention could be given to integrating the ITF/voucher approach within existing needs assessment, early warning, and decision-making structures such as the ICRISAT seed needs assessment methodology, DAP, GAPSAN and SETSAN. In the case of the ICRISAT methodology, some clarification may be necessary regarding the practical use of the local agricultural system profiles for needs assessment.

e) In organizing the ITFs, we recommend that as much information as possible is given to farmers concerning the inputs available, the prices, and how to use them (for those inputs which are unfamiliar). This will ensure greater transparency and choice to farmers.

f) ITFs should be seen as an opportunity for promoting accurate information about 'improved' agricultural technologies. We recommend that greater attention should be given to using ITFs to promote agricultural extension messages.

g) In addition to seed quality, it is necessary that much greater attention is given to the local adaptability of seed provided through ITFs.

h) In terms of seed quality testing, we recommend that – as well as distinguishing formal and informal sector seed - testing should distinguish informal sector seed which comes from grain markets from that which comes from local farmers' fields, and that the results of seed quality tests should be made available to those concerned.

i) More generally, we recommend that much greater effort should be placed on ensuring the quality standards of formal sector seed, both for seed which is provided through ITFs and other formal sector seed channels.

Acronyms

ABIODES	*Associação Pela Agricultura Biológica, Biodiversidade e Desenvolvimento Sustentável* Association for Organic Agriculture, Biodiversity and Sustainable Development
ADEM	*Agência de Desenvolvimento Económico de Manica* Agency for Economic Development of Manica
ATAP	*Associação dos Técnicos Agro-Pecuários* Association of Agro-Pastoral Experts
CCM	*Conselho Cristão de Moçambque* Christian Council of Mozambique
CFSAM	Crop and Food Supply Assessment Mission
DAP	*Departamento de Aviso Previo* Early Warning Department
DDA	*Direcção Distrital de Agricultura* District Agricultural Directorate
DEC	Disaster & Emergency Committee (OECD)
DINA	*Direcção Nacional de Agricultura* National Agricultural Directorate
DFID	Department for International Development (UK)
GAPSAN	*Grupo Aviso Previo Segurança Alimentar e Nutrição* Early Warning Working Group for Food Security and Nutrition
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
INGC	*Instituto Nacional de Gestão de Calamidades* National Disaster Management Institute
ITF	Input Trade Fair
MONAP	Mozambique-Nordic Programme
MT	metric tonnes
Mts	*Meticais*
NGO	non governmental organization
ODI	Overseas Development Institute
PESU	*Programa de Emergencia em Sementes e Utencilios* Emergency Programme for Seeds and Tools
PROAGRI	*Programa Agrario de Moçambique* Agricultural Development Programme
SEMOC	*Sementes de Mocambique lda* Seeds of Mozambique, Ltd.
SETSAN	*Secretariado técnico de Segurança Alimentar e Nutrição.* Technical Secretariat for Food Security and Nutrition
Sida/ASDI	Swedish International Development Agency. *Agencia Sueca para o Desenvolviemnto Internacional*
SPA	*Serviço Provincial de Agricultura* Provincial Agricultural Service
SNS	*Serviço Nacional de Sementes* National Seed Service
UCEA	*Unidade de Coordenação de Emergência Agrária* Emergency Coordination Unit for Agriculture

Exchange rate to US dollar = 23,500 Mts

1. The changing context of emergency needs assessment and seed interventions in Mozambique

1.1 Introduction

Agricultural input trade fairs (ITFs) and vouchers have been implemented in Mozambique since 2001, initially on a pilot level, and subsequently scaled up as the preferred mechanism for responding to agricultural emergencies at national level. Since 2001, a total of over 225 ITFs have taken place, providing almost US $ 950,000 worth of agricultural inputs through the use of vouchers distributed to over 100,000 farmers affected by drought.[1]

This report describes emergency seed interventions in Mozambique, specifically focusing on recent experiences with ITFs and vouchers. We examine the reasons for the shift from the direct distribution of emergency seed kits to ITFs and vouchers, and highlight the perceived advantages and disadvantages of the ITF/voucher approach. The report documents the lessons emerging from Mozambique's experience with ITFs and vouchers, explores options for future development, and makes a number of recommendations. It is not intended as an evaluation or an impact assessment, for which more detailed quantitative data would be required.

The insights presented in this report are based on informal semi-structured interviews carried out in six districts across Mozambique's three southern provinces, together with the results of a quantitative survey covering 18 fairs in six provinces (Devji, 2004), and a review of relevant literature and documentation. The semi-structured interviews were conducted by the authors in late May / early June, 2005. Annex 1 lists those individuals who were interviewed. The survey was conducted by ICRISAT-Mozambique in February-April 2004 and focused on the types of vendors and seed being sold at the fairs. The survey covered a total of 105 vendors, and 118 seed samples were collected and tested by the National Seed Service. The results of the survey were supplemented by observation and informal conversations with those involved in the ITFs.

1.2 Emergency needs assessment and early warning information systems in Mozambique

Since the end of the war in 1992, floods and drought have been the main types of emergencies affecting Mozambique. Some of the largest rivers in southern Africa flow through the country (e.g. Limpopo, Incomati), and when the water levels rise there is an increased risk of flooding. Yet drought is also common, particularly across the sandy soils in the southern and central parts of the country where annual rainfall is less than 700mm and falls in a single rainy season (November to March). Given Mozambique's vulnerability to natural disasters such as flood and drought, particular emphasis has been placed on developing the information systems necessary to predict such risks and provide a detailed analysis of vulnerability and food insecurity.

Mozambique's early warning system has been through a number of changes over the years, partly in response to changing information needs since the end of the war, but mainly due to the vagaries of donor funding. An Early Warning Department (DAP) exists within the National Agricultural Directorate (DINA) of the Ministry of Agriculture (MINAG) to predict the size of harvests and provide advance warning of a disaster situation, particularly those with slow onset

[1] These figures are drawn from data provided by UCEA, ActionAid and SPA: see Table 1.

such as drought. DAP relies on information gathered by the District Agricultural Department (DDA) who supposedly use monthly crop production questionnaires to monitor the progress of the agricultural growing season. In practice, these data are not collected systematically: rather than relying on quantitative data, monitoring appears to be based on qualitative observations made by agricultural staff. When an emergency threatens, *ad hoc* data are collected through sector-based surveys that are implemented through various agencies, including the FAO-WFP Crop and Food Supply Assessment Mission (CFSAM).

The Early Warning Department is loosely affiliated with the Technical Secretariat for Food Security and Nutrition (SETSAN), specifically SETSAN's Early Warning Working Group for Food Security and Nutrition (GAPSAN) [2]. Annex 2 provides further details about SETSAN. SETSAN is increasingly focusing on problems relating more to chronic vulnerability and food insecurity rather than acute problems relating to so-called emergencies. Among many of the agencies working in Mozambique (particularly those in the agricultural sector) there is a strong sense of frustration with the repeated implementation of emergency interventions (particularly in response to drought) which are seen to have little impact on alleviating the problems that relate to more structural aspects of poverty, weak markets, and HIV/AIDS. In an effort to address these issues, SETSAN is developing action plans for small-scale projects and recommendations for policy change at the district level.

At the district level, crop information collected by the DDA is also used to determine possible areas of need later in the season. This is complemented by informal reports made by extension workers and community leaders who keep the DDA constantly informed about the state of crops and their probable yield. Information from the DDA is reported to the Provincial Director of Agriculture (DPA) through the Provincial Agricultural Office (SPA). The progress of the rainy season is monitored very closely, and in 2005 the DPAs of drought-prone provinces were expected to make weekly reports to the Office of the President (José de Graça, personal communication). When drought conditions are apparent, the *ad hoc* District Emergency Committee comes together. This consists of representatives from various different government departments and NGOs working within the district. The District Emergency Committee determines which parts of the District are most affected by the disaster, establishes the criteria through which those households most affected by the disaster will be identified, and then helps to verify the beneficiary lists that are compiled by local leaders, village secretaries, administrative post heads, traditional chiefs, etc. Poorer households are generally deemed to be the most needy, and usually include female headed households and widows. The Committee determines the most appropriate interventions and organizes for these to be implemented. The way in which ITFs and vouchers are organized is described in Sections 2.2 and 2.3.

At present, the planning of emergency interventions in the agricultural sector is not well integrated within the national system for early warning or the existing structures for designed to address vulnerability and food security, despite the fact that these systems are increasingly considering emergency interventions other than food aid. Also, there is no apparent linkage between the ITF/voucher approach and the seed needs assessment methodology developed by ICRISAT (ICRISAT 2002), for which local agricultural system profiles have been developed for disaster-prone districts. We therefore recommend that greater attention is given to integrating the ITF/voucher approach within existing needs assessment, early warning, and decision-making

[2] DAP staff are part of GAPSAN, but DAP information has yet to be fully incorporated into GAPSAN. There are plans to bring DAP within the new SETSAN structures at the provincial level.

structures such as the ICRISAT seed needs assessment methodology, DAP, GAPSAN and SETSAN. In the case of the ICRISAT methodology, some clarification regarding the practical use of the local agricultural system profiles may be necessary.

1.3 Early emergency seed interventions and the formal seed sector in Mozambique

Assistance to farmers by means of seeds and tools distribution was officially started in 1988 with the creation of the Emergency Programme for Seeds and Tools (PESU – *Programa de Emergencia para Sementes e Utencilios*) using funds from the Mozambique-Nordic Program (MONAP)[3]. The objective of this programme was to assist small-scale farmers affected by drought and civil war. Technical assistance to PESU was provided through the Finnish agricultural agency, Finagro. Seeds were imported from neighboring countries (mainly from Seed Co, Zimbabwe) due to the low capacity of seed production of the National Seed Company (ENS – *Empresa Nacional de Sementes*), the official seed production company of Mozambique, and distributed to farming areas in bulk. Displaced families returning to liberated areas were provided with seeds and tools to help them to re-establish their agricultural activities. Each year, an estimated average of 1.2 million families received assistance from this program (Howard et al 2001).

At the same time (1988), the Nordic countries also supported the development of the seed sector. The Swedish government, through the Swedish International Development Agency (Sida) (*Agencia Sueca para o Desenvolvimento Internacional*, ASDI) contracted the Swedish seed company, Svalof-Weilbul, to assist in the creation of SEMOC (*Sementes de Mocambique lda*) within the existing National Seed Company (Helder Gemo, personal communication). Following the model of Svalof- Weilbul, SEMOC was established as the sole formal sector seed company responsible for the production of all seed required in the country. The Danish government, through DANIDA, contracted the Danish Seed Testing Station to assist in the development of the National Seed Service (SNS – *Servico Nacional de Sementes*) as the organization mandated to control seed quality. Further details on the formal seed sector are provided in Annex 3.

Other funds to assist drought- and war-affected farmers with seeds and tools were provided by international NGOs (World Vision, CARE, Action Aid, World Relief etc.), both independently and through PESU. For greater transparency and administrative convenience, the NGOs proposed to organize seed distribution through the use of pre-prepared kits containing seeds and tools. The seed kit approach was adopted by PESU and the seed companies prepared the pre-defined kits for different zones. The kits contained seeds of maize, cowpea, groundnuts, beans and vegetables, together with various tools. SEMOC, under Svalof management, grew rapidly to take the leadership of this business, and almost all of SEMOC's sales - about 90% - was sold to the emergency programs (Howard et al. 2001). Most of SEMOC's seed was imported from neighboring countries, with some local production. SEMOC's annual seed sales steadily increased up to about 14,000 tons in 1993 and then steadily decreased to about 3,000 tons in 1997 when PESU phased out (Britt Granqvist, personal communication). These figures vividly illustrate the degree to which the establishment and evolution of SEMOC was dependent on the emergency response programs. After 1996-7, the Nordic assistance to SEMOC and SNS phased

[3] Other supporters of PESU were the African Development Bank (7 million US$ in 1995) and JAICA (Japan International Cooperation Agency) with 2 million US$.

out, and SEMOC was bought by Seed-Co. (Zimbabwe)[4]. SEMOC continued preparing emergency seed kits through tendered contracts with NGOs and FAO until the introduction of ITFs and vouchers in 2001.

1.4 The transition from seed kits to agricultural input trade fairs and vouchers

In February 2000, devastating floods affected large areas of the Limpopo and Zambezi valleys. Once immediate humanitarian needs had been met, attention soon turned to the need for seeds to allow farmers to re-plant their farms once the waters had receded. The widely publicized funding appeal for seeds and tools prompted the publication of an open letter from concerned stakeholders – including those who had been involved in the earlier seed distributions described above – to relief and humanitarian agencies, warning against the delivery of seed of inappropriate crops and varieties (ICRISAT 2002). The letter was essentially a plea to avoid the many mistakes of the earlier emergency seed distributions. Yet the same seed kit approach was used in response to the floods, under the leadership of FAO's Emergency Division (TCOR). An Input Distribution Unit (IDU) was created inside the FAO delegation in Maputo composed of expatriate FAO staff and local DINA staff from the Ministry of Agriculture to provide technical assistance to the seed distribution programs that were implemented largely by NGOs.[5] Because of the high demand, seed had to be procured from multiple sources at short notice and inevitably some of the seeds were of low quality (especially maize and cowpea) and were not appropriate to local growing conditions (World Bank 2003).

By 2001, after 12 years of seed kits distribution, those involved in emergency seed provisioning were ready to try a new approach. There was a widely shared sense of frustration over the fact that the delivery of seed kits to farmers was always late, and that the types of seeds being distributed were not necessarily appropriate for all parts of the country. ActionAid had been involved in direct seed distribution, but realized that it was not sustainable on a long term basis, and became suspicious when farmers started asking for seeds and tools on a regular basis. Although no formal post-distribution survey was carried out, ActionAid staff suspected that farmers were not actually planting the seeds provided through the seed kits, and started to search for alternative interventions. The ActionAid country manager had heard about the use of seed fairs elsewhere and sought further information as to how a similar approach might be implemented in response to drought in northern Mozambique. At that time, the main source of information in Mozambique concerning the use of seed fairs and vouchers in emergencies was ICRISAT's newly-established office in Maputo.

Following the floods of 2000, USAID provided funding to ICRISAT for a 2-year project titled 'Linking relief seed distribution to trade and market development' (2001-03). This project aimed to develop and promote a comprehensive plan for emergency seed interventions that would not undermine commercial and local-level seed systems. One of the four components of this project was to test and develop a seed fair/voucher approach that would provide farmers with a greater

[4] In 1998 51% of SEMOC shares were bought by Seed-Co of Zimbabwe and the Mozambican government lost the primacy of the company (World Bank 2003).
[5] IDU's tasks were subsequently taken over by the Emergency Coordination Unit for Agriculture (UCEA) which was established in 2003-04 and managed by the DINA staff previously employed by IDU, with some assistance from FAO.

choice of seed, and also support farmer and commercial seed systems.[6] The development of ITFs and vouchers in Mozambique followed the CRS model (Remington et al 2002). The head of the Emergency Coordination Unit for Agriculture (UCEA) was invited to Kenya to observe CRS seed fairs, together with an ICRISAT employee. They learnt about fairs from first-hand experience in Kenya, and also from CRS reports about seed fairs and vouchers in other countries. This experience allowed them to draft guidance notes for the implementation of what was subsequently to become known as input trade fairs (ITFs) and vouchers in Mozambique.

In 2001, FAO was motivated to implement the ITF/voucher approach and supported the first pilot seed fairs in the districts of Maringue (Sofala province) and Macossa (Manica province) using Italian Cooperation funds. The donor stipulated that the fairs should be implemented by an NGO, and the contract was awarded to Kulima, an agency working with a network of local NGOs. Training was provided by ICRISAT to DDA and Kulima staff who then selected the beneficiaries and informed farmers and local traders. Local NGOs working with Kulima then distributed the vouchers and implemented the fairs. The approach was seen to be successful, and was subsequently replicated by IDU/UCEA staff in Maputo Province using funds from PROAGRI. After these experiences, the Ministry of Agriculture – through DINA - recognized the ITF/voucher system as the preferred mechanism for assisting farmers affected by disaster in Mozambique. This public endorsement by the Ministry, combined with the level of frustration with the earlier seed kits, prompted a rapid change from seed kits to ITFs and vouchers. At present, all emergency seed interventions use the ITF/voucher approach. The only direct seed distribution that goes on presently is not for emergency needs but for development purposes in promoting specific crops or varieties.

At the same time, ActionAid's first pilot ITF/voucher intervention was implemented in Maganja da Costa (Zambezia). The ActionAid staff tasked with implementing this reported that it was initially very difficult to convince their fellow ActionAid staff that it would work. Logistics, administrative and financial staff were particularly resistant, largely due to concerns about possible corruption (Eduardo Costa, personal communication). To prevent misuse, the vouchers were printed in South Africa at great expense, and it was later realized that this was not necessary.

The main perceived advantages of ITFs and vouchers in this early period were that seed could be provided on time and farmers could choose the crops and varieties that were appropriate to their needs, thus addressing the two major problems that had been associated with the direct distribution of seed kits. In terms of development, the fairs were initially recognised as a way of promoting local seed trade and production, though it is only now (some four years later) that mechanisms for linking ITFs and vouchers to local seed production groups are beginning to be explored in practice[7].

[6] The other three components were to develop a methodology for assessing seed needs, the establishment of a seed supply database, and follow-up on specific policy recommendations.
[7] CRS guidelines warn against linking emergency seed fairs with support to community seed multiplication or seed banks that are not based on agro-enterprise analysis (Bramel et al 2004: 166).

2. Agricultural input trade fairs (ITFs) and vouchers, 2001-2005

2.1 Scale of implementation of ITFs

Table 1 shows the number and size of ITFs that have been organized in Mozambique since 2001. The ITF/voucher approach was implemented on a pilot scale in 2001 and 2002, and then subsequently scaled up quite considerably. The pilot fairs implemented in the first year have been described above. In 2002 and 2003, NGOs implemented ITFs and vouchers, under the supervision of the DDAs. A lack of capacity (in terms of trained staff and equipment) meant that it would have been difficult for DDA to implement for themselves on a broader scale. However, the implementation through NGOs proved to be very expensive, and often they relied on DDA for assistance. With decentralization, DDA capacity was increased so that they were able to implement themselves on a broad scale in 2004.

Table 1. Input Trade Fairs implemented in Mozambique (December, 2001-March, 2005)

Year	Donor	Implementing agencies	Season*	No. of fairs	Value of inputs (US$)	No. of beneficiaries
2001	COSV	Kulima and local NGOs	First	6	31,595	2475
	DEC	Action Aid	First	2	12,766	1000
	PROAGRI	DDA	First	2	7468	900
	Total			10	51,829	4,375
2002	PROAGRI	DDA	First	31	57,000	7050
	Total			31	57,000	7,050
2003	COSV	ActionAid, Kulima, IPM, ADCR, LWF, Caritas, Muchefa	Second	17	51,609	7660
	DFID	ActionAid, Kulima, CCM, Caritas, APROS	Second	9	40,021	4950
	DFID	CARE, Mahlahle, Vet-Aid, Handicap Intl, Kulima, Muchefa, ATAP, ADCR, Caritas, IPM, Pro-Lide, Aceagrarios, ASA, CCM	First	67	265,353	20820
	Swedish Aid	ADCR, Caritas, CCM	First	8	32,340	4000
	Total			101	389,323	37,420
2004	DFID	ASA, Kulima, Aceagrarios, CCM, ADEM, ADS, DDA, Umokazi	Second	28	112,382	13,900
	Swedish Aid	CARE, ATAP, Malhalhe, Vet-Aid, Kulima, Machefa, Caritas, ADCR, Pro-Lide, ActionAid	Second	22	88,936	12,000
	South Africa	DDA	First	37	129,829	15,900
	Provincial funds	DDA	First	9	34,468	5400
	Total			96	365,615	47,200
2005	South Africa	DDA	Second	22	82,468	10,200

* First season fairs are held between August and December for the main cropping season.
Second season fairs are held between February and March for vegetable seeds and other inputs.

Source: Compiled from data provided by UCEA, ActionAid, and SPA.
(US$1 = 23,500Mt)

2.2 Needs assessment and targeting of beneficiaries

If an emergency intervention is considered necessary by the DPA, then the DDA and/or the *ad hoc* District Emergency Committee will prepare a contingency plan that includes a certain number of ITFs, based on the number of people affected. The recommendation concerning ITFs is conveyed through the Provincial Agricultural Service to UCEA (often as early as May or June), who will then respond once the level of funding available for emergency agricultural interventions is known (by about July or August). As soon as it is known that there will be funding available for ITFs and vouchers, a Fair Preparation Group is formed at District level. In some cases, the Fair Preparation Group might be formed before the *ad hoc* District Emergency Committee is formed, and the Fair Preparation Group more or less merges into the District Emergency Committee. This level of advance planning suggests that ITFs and vouchers have become the 'normal' response to so-called emergency situations.

The actual number of ITFs that are organized depends mainly on the level of funding allocated. Once UCEA has informed the DPA how many people can be supported at provincial level, then the DPA will use the available figures to determine how many people can be supported in each district. In 2004-5, some provinces (e.g. Manica, Maputo) organized ITFs with funding that was allocated from the provincial agricultural budget,[8] in addition to the ITFs that were funded from national funds allocated through UCEA. This allocation of provincial funds indicates the value accorded to the ITFs and the degree of local government ownership that has been achieved. Once the number of people to be supported in each district is known, the DDA will decide roughly where these will be located, and for each fair an Organizing Committee is assembled. The Organizing Committee holds meetings in each of the beneficiary communities to verify the beneficiary lists, agree on a precise location for the fair, and determine what kinds of inputs are likely to be required by the beneficiaries.

The way in which the beneficiary lists are drawn up and verified varies slightly between provinces and districts and depends on the planning time available before implementation. Ideally, a draft list of 'affected people' is compiled by community leaders, and this is then verified in public meetings involving DDA staff and anyone from the community who wishes to attend. Each name from the list is called out and members of the public will 'vote' as to whether or not the person should be included, according to whether or not they are considered to be deserving and ensuring that only one member from each household is included. The total number of people on the beneficiary list depends on the level of funding available for the fairs[9]. Given that each fair might include four to six communities, the same number of meetings will be held over the course of several days. Each meeting takes about half a day and involves up to about 150 people, depending on the size of the community. The precise location of the fair will also be agreed at these meetings, which generally take place about a month prior to the fair itself. If there is insufficient time for these public verification meetings to be held, then the beneficiary lists will be verified by DDA staff and members of the Organizing Committee, but this less transparent

[8] In the 2004 main season in Manica Province, four additional fairs were held using funding from an FAO food security project and the provincial PROAGRI budget. In Maputo Province, 5 additional fairs were organized, providing for a total of 3,000 beneficiaries and costing 450 million Mts (90 m Mts per fair) with funding from PROAGRI money allocated to the Province.

[9] Under the FAO project, the amount of 90 m Mts. is allocated per fair. Once the number of seed fairs has been decided for the district, then the total amount of funding for the district as a whole will be known and it is up to the DDA staff to decide on the relative size of each, provided that the overall budget is within the total amount allocated.

process has reportedly resulted in problems when it comes to the distribution of the vouchers. ActionAid has developed a methodology for the selection of beneficiaries, but guidelines have yet to be completed.

2.3 The logistics of an input trade fair

The Fair Preparation Group and the Organizing Committees are responsible for ensuring that people are informed about the forthcoming ITF. Information is spread through informal channels of communication to farmers (both beneficiaries and non-beneficiaries), local traders, and others. In some areas, the members of the Organizing Committee will travel around the local area a few days prior to the each fair to ensure that people know. Provincial agricultural staff are responsible for informing the seed companies and seed company agents; this is usually done by letter, and then the DDA staff follow up by telephone and other means to confirm that arrangements and ensure that the agents are aware about the types of inputs that will likely be required.

In the case of the ITFs coordinated by FAO and UCEA, funding is transferred to the DDA bank account in advance and the vouchers are delivered from Maputo to the DDA office. The day before the fair, the DDA staff organize the vouchers according to the allocations per community. The fair site is prepared the day before by members of the Organizing Committee who set up an enclosure with a single entrance.

On the day of the fair, speeches are made to welcome everyone and explain what will happen (Fig 1). In some cases, each of the input vendors (there are rarely more than 12 vendors per fair) is given the opportunity to publicly inform the beneficiaries about their products (Fig 2). However, in Zavala District we were informed that the seed companies felt that they were disadvantaged by these announcements because the price of their seed was inevitably higher than the price of the seed (or grain) provided by local farmers and traders. For this reason, the seed companies insisted on not announcing seed prices, so the practice was discontinued. However, for greater transparency and choice to farmers, we recommend that as much information as possible is given to farmers concerning the inputs available, the prices, and (for those which are unfamiliar) how to use them.

Figure 1. Explaining about the seed fair

Figure 2. Vendors promoting their products at the beginning of the seed fair

Figure 3. Distributing vouchers before the seed fair start

Each beneficiary is given a booklet of vouchers worth a total of 190,000 Mts. Although initially the vouchers were given for free, the current system involves a contribution of 20,000 Mts by each beneficiary. The DDA staff undertaking the voucher distribution note the serial number of each booklet against the name of the beneficiary (Fig 3). While the vouchers are being distributed, the vendors are allowed into the enclosure to set up their stalls or arrange their products. Each vendor and his or her wares are registered and checked for quality and appropriateness by members of the Organizing Committee (Fig 4). The items brought for sale are listed and weighed and the prices noted. At the end of the day the amount of each product sold is also noted. This is the main type of monitoring information that is collected and allows the organizers to check what has been sold (Annex 4).

Figure 4. Vendor registering the products for sale.

Figure 5. Helping the farmers to use the vouchers

Figure 6. Music and dancing at the end of the fair

Once the vendors have set up their products, beneficiaries are then allowed into the enclosure with their vouchers. DDA staff are on hand to answer questions and advise the beneficiaries on how best to spend their vouchers according to their needs (Fig 5), and to ensure that the prices of the products sold is according to the agreed prices. Some of the staff said that it was difficult to control what goes on in the fair and that there are a number of bad practices taking place, as detailed in sections 2.6 and 2.7. In general, however, each fair has a festive atmosphere: it is a sociable and lively event, with participants meeting old friends and making new acquaintances; local traders selling soft drinks and snacks; and often a theatre company to provide entertainment and awareness about HIV/AIDS (Fig 6).

At the end of the day, the vendors redeem their vouchers for cash from the DDA staff (Fig 7), who must check the serial number of each voucher. DDA staff interviewed in the course of this study agreed that the task of checking the serial number and making the payments was a laborious and difficult procedure, not least because they are expected to make up any financial shortfalls from their own pockets. Security has not been a problem to date at any of the ITFs in Mozambique, though policemen are on hand in case of any disturbances. The money for the ITF is transported by the DDA staff from the local bank to the fair location on the day of the fair. There were no reports of any known corruption from those interviewed, who agreed that the limited amount of time for the exchange of vouchers prevents their misuse. Although there were no known cases of vouchers being exchanged for cash, it is theoretically possible that beneficiaries might use their vouchers to purchase tools which can then be later sold for cash.

Figure 7. Redeeming vouchers at the end of the fair

2.4 Vouchers, cash and the types of inputs sold through trade fairs

This value of each voucher booklet (190,000 Mts. or about US $ 8) was originally determined according to the value of the previous seed kits. However, this was subsequently found to be too high in some areas, and led to a ‘lottery syndrome’ in which farmers’ normal seed selection mechanisms and purchasing judgments were abandoned by the need to spend a large sum of money in a short amount of time (Dominguez et al 2004). In 2003, this problem was solved by

the introduction of a beneficiary contribution of 20,000 Mts in order to receive the voucher booklet. Although the value of the voucher booklet has remained at 190,000 Mts, the amount that is actually transferred to beneficiaries is now 170,000 Mts (about US $ 7).

Each booklet is made up of 18 vouchers worth 10,000 Mts, and ten vouchers worth 1,000 Mts, though DDA staff and vendors all agree that the 1,000 Mts voucher is unnecessary and merely makes the payment process more laborious. Each booklet has a serial number and the same serial number is printed on each voucher and its counterfoil within the booklet (Fig 8). In theory, these serial numbers allow for the purchases made by selected beneficiaries to be traced, but such data are not recorded in practice. We recommend that a study should be undertaken to understand how farmers actually make use of the inputs acquired from ITFs, and what impacts the ITF/voucher approach has on agricultural production, markets, food security and vulnerability.

Figure 8. Vouchers of different denominations and the voucher booklet used in 2004

Although the initial fairs provided only seed, it was quickly realized that various different types of agricultural inputs could also be sold through the fair, hence the name 'input trade fairs' (ITF). Vouchers are exchanged for various different types of seed (see section 2.6), vegetative planting materials, tools, fertilizer, pesticides, and even water pumps and livestock in some cases. Table 2 provides information about the quantities of seed and tool inputs sold in relation to the quantities brought by the traders. The quantities sold depend on the number of farmers and their purchasing power in relation to the number of traders, the appropriateness and quantity of the inputs. The data in Table 2 suggest that there is no guarantee that a trader will be able to sell the inputs that they bring to the fair.

One of the advantages of the ITFs is that they allow farmers to purchase inputs that they might not normally use. Since most agricultural inputs are highly seasonal, those inputs that have least demand tend not to be stocked by traders on a regular basis, e.g. actellic (a powder used to treat seed and grain to prevent insect damage in storage). Without vouchers, farmers generally couldn't afford to purchase actellic and consequently traders tended not to stock it. With ITFs and vouchers, however, farmers have the means to purchase it and traders are now stocking it specifically for the fairs. Another advantage of the fairs that is often cited in the literature is that the funds transferred for the sale of inputs remain in the local community. This is discussed further in section 3.3.

The fairs also attract an array of traders selling items other than agricultural inputs, and often a parallel market is formed around the outside of the fair enclosure, where products such as food grains, sugar, oil, snacks and soft drinks can be purchased in exchange for cash (Fig 9). Any trader who is refused entry to the fair enclosure (generally because their 'seed' is considered by the Organizing Committee to be sub-standard) is allowed to sell on a cash basis outside the enclosure. As such, the fairs promote trading activities in rural areas. Even within the fair enclosure, vendors are allowed to sell for cash as well as vouchers. In some fairs, the value of cash sales is slightly more than voucher sales, as shown by Table 3.

Table 2. Amount of inputs brought and amount sold at selected ITFs in Chokwe District

		Amount brought (kg or pieces)	Amount sold (kg or pieces)
Hokwe ITF	Seed (kg)	4413.88	2540.81 (58%)
(500 Beneficiaries)	Tools (pieces)	1171	281 (24%)
Chiguidela ITF	Seed (kg.)	10,936.43	2284.85 (21%)
(400 beneficiaries)	Tools (pieces)	1357	300 (22%)

Source: DDADR-Chokwe

Table 3. Cash sales at selected ITFs in Chokwe District

	Voucher sales (US $)	Cash sales	Total
Hokwe ITF	4,059.23	4,275.18	8,334.41
(500 Beneficiaries)	(49%)	(51%)	(100%)
Chiguidela ITF	3,229.92	3,270.17	6,500.09
(400 beneficiaries)	(50%)	(50%)	(100%)

Source: DDADR-Chokwe

Figure 9. Other products and goods for sale outside the seed fair enclosure

2.5 Numbers and types of vendors taking part in input trade fairs

Although the number of beneficiaries attending each fair is fairly constant – between 400 and 600 beneficiaries – the number of vendors varies according to how well the ITF has been publicized, the location, and the attitudes of the traders who are invited to participate. DDA staff reported that it was initially difficult to attract traders to come to the ITFs, but after they realized that the vouchers would potentially increase their sales, they came with a range of different products. The number of vendors differs for different parts of the country: as shown by Table 4, the number of vendors participating in ITFs in central zone remains small because markets in this part of the country are generally less well-developed than in the south. In terms of the gender of the vendors, there tend to be more female vendors in the southern zone (Devji 2004).

Table 4. Number of vendors taking part in ITFs

		Total vendors			Vendors by gender	
		Min	Max	Average	Average female	Average male
Central Zone						
	Tete	3	8	6	0	6
	Manica	4	8	6	0	6
	Sofala	3	5	4	0	4
Southern Zone						
	Inhambane	5	9	7	2	5
	Gaza	10	11	10	6	4
	Maputo	4	6	5	4	1
TOTAL		3	11	6	2	4

Source: Devji 2004

Figure 10. Seed fair vendors

Data collected by Devji (2004) distinguish three types of vendors (Fig 10): (i) local traders are those traders or farmers who live in the area of the fairs; (ii) non-local traders are traders who are resident in districts or provinces other than that of the fair; and (iii) seed company agents who are licensed to sell formal sector seed (see Annex 3 for further information about seed company agents). The majority of vendors coming to the fairs tends to be non-local traders (Table 5), although the general consensus among the DDA staff interviewed was that local traders have a better knowledge of the types of inputs that farmers require and the types of seeds and varieties that are most appropriate to the local area. For this reason, farmers generally prefer to buy from traders who they already know. Non-local traders often travel long distances to participate in the fairs; traders from Xai-Xai market in Gaza, for example, participate in fairs in Inhambane, Gaza and Maputo. The problem with traders coming from outside the local area is that the seed types that they bring may not necessarily be well-adapted to the local area. This is further explored in section 3.2. There is only a small number of registered seed company agents in each province, and some agents refused to participate in some of the fairs in Gaza and Maputo due to arguments over price (see section 2.7). In the fairs funded through Provincial funds in Manica and Maputo Provinces, only formal seed company traders were allowed to participate due to complaints (by the company agents) about the quality of seed being sold by unlicensed traders (*Dumba-Nengue*), especially those coming from Xai-Xai (Luciano 2005).

Table 5. Types of vendors participating in ITFs

		Local traders	Non-local traders	Company agents	Total
Central Zone		12 (34%)	14 (40%)	9 (26%)	35
	Tete	1 (10%)	5 (50%)	4 (40%)	10
	Manica	7 (41%)	7 (41%)	3 (18%)	17
	Sofala	4 (51%)	2 (25%)	2 (25%)	8
Southern Zone		18 (29%)	32 (52%)	12 (19%)	62
	Inhambane	1 (5%)	12 (60%)	7 (35%)	20
	Gaza	6 (22%)	17 (63%)	4 (15%)	27
	Maputo	11 (73%)	3 (20%)	1 (7%)	15
TOTAL		30 (30%)	46 (47%)	21 (22%)	97

Source: Devji 2004.

2.6 Seed types and seed quality

The types of crops sold in the fairs varies according to the season: in the first or the main cropping season (August-January), maize, beans and groundnuts are commonly grown, so these crops predominate in the first season fairs; and in second season (February-June) vegetables are more important. In terms of the types of seed, we distinguish between formal sector seed (also known as certified seed[10]) and informal sector seed (also known as local seed[11]). Types of informal sector seed can also be further classified according to whether the seed is sourced from grain markets or from farmers' own production. Formal sector seed is subject to the quality controls imposed by existing seed legislation and is more expensive that informal sector seed. Annex 3 describes the formal and informal seed sectors in more detail.

[10] However, much of the seed that is sold as formal sector seed at fairs lacks the lot numbers, which are one of the defining characteristics of certified seed (see footnote 14).

[11] However, much of the informal sector seed brought to fairs by traders originates from outside the local area.

The types of crops produced by the formal and informal seed sectors varies. Due to the difficulty of producing vegetable seed through the informal sector, most of the vegetable seed planted by farmers in Mozambique (and sold at ITFs) is formal sector seed that has been imported by the seed companies from overseas. Maize, beans, groundnut, and rice, on the other hand, can be either from the formal or informal seed sector. Other crops such as millet, bambaranut, pigeonpea, and sesame are not produced by the formal seed sector in Mozambique. Other types of planting material, such as tree seedlings, banana suckers, sweet potato vines and cassava cuttings, all come from the informal seed sector, though are rarely seen at ITFs in Mozambique. Similarly, in Western Uganda, bananas, sweet potatoes and cassava were completely absent from seed fairs because these crops tend to be sold *in situ* rather than in markets (van der Steeg et al 2004).

Figure 11. Informal and formal sector seed being sold at seed fair

Different types of traders tend to sell different types of seed – local and non-local traders tend to sell informal sector seed, and company agents tend to sell formal sector seed (Fig 11) – but, as illustrated by Table 6, these distinctions are by no means exclusive. Some traders also sell formal sector seed, and some agents also sell informal sector seed. Data collected from ITFs in Tete, for example, revealed that the formal seed sector was unable to supply sufficient quantities of bean seed to meet the level of demand, so seed company agents were instead selling informal sector bean seed that had been purchased from farmers in Angonia and packed in bags specifically for the ITFs. The fact that this informal sector seed had been packaged and was selling for the same price as formal sector seed led farmers to believe that it was formal sector seed, when in fact it

had been sourced from the informal sector (Devji 2004). Similar cases have been reported at ITFs held in Marracuene, where bean seed sold by Panaar and SEMOC was found to be mixed and have low germination rates (Luciano 2004). Such practices are further discussed in section 3.2.

The fairs also attract an array of traders selling items other than agricultural inputs, and often a parallel market is formed around the outside of the fair enclosure, where products such as food grains, sugar, oil, snacks and soft drinks can be purchased in exchange for cash (Fig 9). Any trader who is refused entry to the fair enclosure (generally because their 'seed' is considered by the Organizing Committee to be sub-standard) is allowed to sell on a cash basis outside the enclosure. As such, the fairs promote trading activities in rural areas. Even within the fair enclosure, vendors are allowed to sell for cash as well as vouchers. In some fairs, the value of cash sales is slightly more than voucher sales, as shown by Table 3.

Table 6. Types of seed sold by vendors

Type of Vendor	Type of seed sold	Frequency
Local traders (n=30)	Informal sector seed only	26 (87%)
	Formal sector seed only	2 (7%)
	Informal and formal sector seed	2 (7%)
Non-local traders (n=46)	Informal sector seed only	35 (76%)
	Formal sector seed only	1 (2%)
	Informal and formal sector seed	10 (22%)
Company agents (n=21)	Formal sector seed only	13 (62%)
	Informal and formal sector seed	8 (39%)

Note: Based on the assumption that the same seed vendors are selling seed at different seed fairs, seed samples were collected from one fair only. For this reason, it is not possible to draw comparisons between different seed fairs

It is the role of the National Seed Service (SNS) to ensure that formal sector seed is produced and sold according to the quality standards set by national seed laws. Since 2004, SNS staff have been collecting ITF seed samples to be tested for purity and germination, but we were unable to acquire any of these test results from the SNS staff interviewed. Table 7 shows the seed quality results for the quality tests commissioned by ICRISAT as part of the study conducted by Devji (2004). The table attempts to distinguish formal and informal sector seed[12]. Although the small sample sizes for some of the crops make it impossible to draw any firm conclusions from these data, a number of inferences can be made.

All seed types have low germination percentages except *Mocuba* maize, *Bonus* beans, local millet, and local bambaranut. Although the germination of formal sector seed tends to be slightly higher than informal sector seed, many of the formal sector samples fail to meet the quality standards set by law[13]. Out of all the formal sector seed samples collected, only two had a lot number[14], suggesting some degree of doubt about the types of seed that seed companies are selling. The lowest germination rates were for PAN67 maize, local groundnut, beans and maize. Test results for local groundnut, beans and maize, however, vary greatly, with a minimum

[12] The table in fact uses the varietal names recorded to distinguish improved varieties from 'local' varieties. However, unless the actual source of the seed is recorded it is very difficult to distinguish formal and informal sector seed. The assumed distinctions between formal and informal sector seed presented in Table 7 should therefore be regarded with caution.

[13] Minimum germination rates are as follows: maize-90%; groundnut-80%; beans-85%; cowpea-80%; chickpea-80%.

[14] The lot number is like an identity tag for seed. It is a number that is given by SNS to identify the seed and its precise origin.

germination rate as low as 9% and maximum as high as 92%. It is unfortunate that the tests performed on informal sector seed did not distinguish seed sourced from grain markets and seed from local farmers' production. It is widely thought that seed from grain markets is of much lower quality than seed from local farmers (which can sometimes be of much higher quality than formal sector seed), but there is no data available to confirm this observation. Low germination rates stem from late harvest and poor storage; although this is not a problem for grain that is intended for consumption, farmers take particular care in ensuring a timely harvest and good storage for seed that is intended for planting. We recommend that – as well as distinguishing formal and informal sector seed - testing should distinguish informal sector seed which comes from grain markets from that which comes from local farmers' fields, and that test results should be made available to those concerned.

Other data collected by SNS and published by ABIODES are presented in Table 8 and show similar results as those in Table 7, though the germination rates for formal sector bean seed are extremely low (4-5%). In terms of physical composition, test results were very good (98-100% purity), regardless of the type of vendor or product, suggesting that physical selection is undertaken for all seed types.

One of the problems with testing seed at the time of the fairs is that the test results are not known until after the fair. This is an ineffective way of controlling the quality of seed brought to the fairs. To rectify this situation, SNS is now moving towards testing seed prior to the fairs. The problem with this, however, is in ensuring that the seed lots tested are the same as those brought to the fairs.

Table 7. Germination rates of seed sold at ITFs

Seed type		Germination rate (%)		
		Minimum	Maximum	Average
Formal sector seed	Maize - Matuba (n=11)	53	90	83
	Maize - Sussuma (n=3)	74	91	84
	Maize - Mocuba (n=1)	75	75	75
	Maize - Pan67 (n=5)	11	77	43
	Groundnut - Natal common (n=3)	54	82	65
	Common beans - Bonus (n=2)	77	93	85
	Common beans - Pan 159 (n=1)	47	47	47
	Sunflower - Pan7351 (n=1)	90	90	90
	Sorghum - Macia (n=1)	88	88	88
Informal sector seed	Maize -local (n=22)	14	91	62
	Groundnut - local (n=19)	9	88	49
	Common beans - local (n=30)	9	92	64
	Cowpea - local (n=9)	59	89	76
	Cowpea -B.mix (n=4)	57	78	64
	Bambaranut - local (n=1)	80	80	80
	Sorghum - local (n=2)	71	87	79
	Sunflower - B. record (n=1)	71	71	71
	Sunflower - local (n=1)	74	74	74

Data from only 97 vendors out of the 105 interviewed: the remaining 8 vendors were selling only tools, not seed
Source: Devji 2004

Table 8. Seed quality results for ITFs in Maputo province (2003)

Seed Vendor	Crop	Variety	Purity (%)	Germination
Company	Common beans	Bonus	100.0	5
Company	Common beans	Bonus	99.3	4
Company	Sorghum		99.9	86
Local vendor	Maize	SC513	100.0	77
Local vendor	Common beans	Bonus	99.3	80
Local vendor	Groundnut	Mixtures	98.6	54
	Groundnut	Local	97.9	70
Local vendor	Groundnut	Local	99.1	78
Local vendor	Groundnut	Local	99.5	87
Local vendor	Maize	Local	98.7	81
Local vendor	Maize	Local	99.9	76
	Maize	Local	99.8	79
	maize	Local	100.0	84
Local vendor	Maize	Local	99.2	84
Local vendor	Common beans		100	74
Local vendor	Common beans		99.3	86
Local vendor	Green bean		97.3	93
Local vendor	Cowpea	Local	97.5	73

Source: Alberto & Massinga, 2004: 13 (from SNS test results, 2003). The data have been re-arranged according to the vendor and variety type of seed indicated

2.7 Seed prices

In most developing countries in Africa, the price of formal sector seed is normally between two and five times higher than informal sector seed. In Mozambique, the price of formal sector seed is about five times the cost of informal sector grain. For example, the price of maize grain sold in Xai-Xai or Maputo grain markets is approximately 4,000 to 5,000 Mts per kilo, whereas the price of formal sector maize seed purchased through retail shops is normally 25,000 Mts[15].

At recent ITFs the price difference between formal and informal sector seed is not nearly so great due to pressure put on local and non-local traders by seed company agents to increase the price of informal sector seed. The price data collected at the ITFs shows that the price difference ranged from 2.5 times down to zero (Table 9). Although difficult to substantiate, we heard many reports of artificial price distortions taking place at the ITFs. All of those interviewed who had been involved in implementation reported incidents of cheating by the seed companies and traders. DDA staff are aware of various types of bad practice, but they say that it is difficult to control what goes on in a fair. The way in which seed companies were said to prefer not to have the prices and promotional information announced in public, as mentioned in section 2.3, is one example. In another case, it was reported that the seed company representatives threatened the traders by saying that if they did not increase their prices (to be closer to the price of the certified seed) they would have them sent to prison. This was confirmed by traders interviewed in Xai-Xai market, who admitted that this price increase was bad for the farmers, but said they were forced to raise their prices if they wanted to take part in the fairs. In Marracuene District, it was reported that the price of seed sold by the seed company agents increased once they knew that

[15] SEMOC has two price systems: seed sold in small quantities at retail shops is slightly more expensive than the cost of seed purchased in bulk by farmer associations, NGOs and other development projects. Seed destined for ITFs is purchased by the retailers at the lower price but marked up at the ITF to account for transport costs.

beneficiaries had to use the vouchers in the same day and there was no competition (Luciano 2005). There are also unsubstantiated reports of seed company agents increasing their prices as soon as the traders' seed has all been purchased. Various different suggestions have been put forward for controlling this situation, as described in section 3.2.

Table 9. Price of seed at ITFs

	Central Zone			Southern Zone		
Seed type	Tete	Manica	Sofala	Inhambane	Gaza	Maputo
Maize - local	40000	35000	35000	15000	10000	15000
Maize - Matuba	40000	40000	35000	25000	25000	25000
Common bean - local	40000	35000	35000	35000	35000	27500
Common bean - Bónus	40000	-	-	35000	35000	40000
Cowpea -local	40000	35000	35000	30000	35000	25000
Cowpea -B. mix	40000	-	-	30000	-	-
Groundnut - local	40000	35000	40000	30000	35000	30000
Groundnut - Natal Common	40000	40000	-	40000	-	35000

Source: Devji 2004

Table 9 presents the prices of various different seed types for the ITFs in different provinces and reveals considerable price variation between provinces. In general, prices in the southern zone are lower than those in the central zone. This relates to the fact that there are more vendors participating in the ITFs in the southern zone (as reported in section 2.5) and thus greater levels of competition. The price variation between different crops also varies according to the quantity available. In the Tete fairs all seed has almost the same price, probably because both the number of vendors and quantities of seed were low. The price difference between formal and informal sector seed is discussed further below. This price difference is a major factor determining the quantities of seed bought by beneficiaries, hence there is considerable pressure by seed company agents to increase the price of informal sector seed. The data recorded for Gaza, for example, show a very low local maize seed price because the NGO implementing the fairs had fixed the price for maize to avoid competition because it was considered to be very low quality.

2.8 Monitoring and evaluation

At every fair, monitoring is undertaken by DDA staff who record the details of each vendor, the quantities of each item that they bring to the fair, the prices at which they are sold, and the quantities that are left unsold at the end of the fair (as shown in Annex 4). These data have been entered into an Excel database and form the basis of FAO's reports to donors. By measuring the quantity of items left unsold at the end of the fair, and knowing the total value of the vouchers, the amount of goods sold for vouchers and cash respectively can be determined. To date, there has been no formal follow up with beneficiaries to determine what happens to the inputs acquired at the fairs, though in some cases farmers will informally mention to DDA staff how they have used the inputs, or invite DDA staff to visit their farms. No formal cost analysis has yet been undertaken.

In 2001, an evaluation was undertaken that sought to determine whether farmer seed vendors became seed producers as a result of their participation in the fairs (Cuna, personal communication). However, since most of the more recent fairs tend to attract the same traders, this type of evaluation is no longer appropriate because it merely produces the same results for each fair. No subsequent evaluation focusing specifically on ITFs and vouchers has since been carried out, though brief mention is made of the approach in the DFID-funded evaluation

commissioned by MADER and SETSAN of the broader drought mitigation activities implemented in 2004 (Austral Consultoria e Projectos, Lda 2005). This report recommends that there should be increased monitoring of the end use of inputs purchased at ITFs.

2.9 Implementing agencies and capacity building

Over the four years that the ITF/voucher approach has been implemented in Mozambique, a very impressive level of human capacity has been developed among all of those involved: NGOs, Ministry of Agriculture, traders, seed companies and agents, and farmers. Those coordinating and implementing the fairs have developed the expertise necessary not only to respond efficiently to emergency situations but also the capacity to transform the ITF/voucher approach to fill various other, more developmental functions that will be explored in section 3.

Table 1 lists some 20 NGOs that have been involved in the implementation of ITFs and vouchers, not including the various local NGOs who work in association with Kulima. Since 2004, the DDAs of some 7 districts in 52 provinces throughout the country have also implemented ITFs. The capacity to implement ITF/voucher interventions was initially developed through formal training courses facilitated from 2001 to 2003 by UCEA and ICRISAT (Fig 12). More recently, DDA staff have gained capacity more informally, often through on the job experience. In some cases, DDA staff have been taken to visit ITFs implemented in neighbouring districts to allow for learning opportunities. Guidance notes drafted by ICRISAT (based on the CRS approach) and used as a training tool for those implementing ITFs and vouchers in 2001 were subsequently revised in the light of the lessons learned from the early pilot activities and published in Portuguese by ICRISAT and DINA in 2002 (Fig 13), and also made available electronically in English. A first edition of 500 copies was printed, and in 2003 a second edition of another 500 copies was printed and distributed among those implementing the fairs. Although still considered to be relevant, ICRISAT is considering updating the guidelines to reflect recent changes.

After scaling up the implementation of ITFs and vouchers, the 2004 shift in implementing agencies from NGO to DDA was made possible by the decentralization process through which additional capacity was provided to the DDAs. Prior to 2004, the DDAs had been involved in supervising the fairs implemented by NGOs, and some limited implementation in areas where NGOs lacked sufficient capacity. Through supervising the ITFs, the DDA staff realized that they could implement for themselves, and it is considerably cheaper to implement ITFs and vouchers through the DDA than through NGOs. Another advantage of implementing through the DDAs is that they cover all parts of the country, whereas NGOs are not necessarily present in all areas. NGOs, on the other hand, have a more integrated approach and – unlike the DDAs - do not focus exclusively on agriculture. The more agricultural focus of the DDAs may limit the potential for developing the ITF/voucher approach beyond strictly agricultural activities unless other actors become involved.

Figure 12. Training session by ICRISAT staff

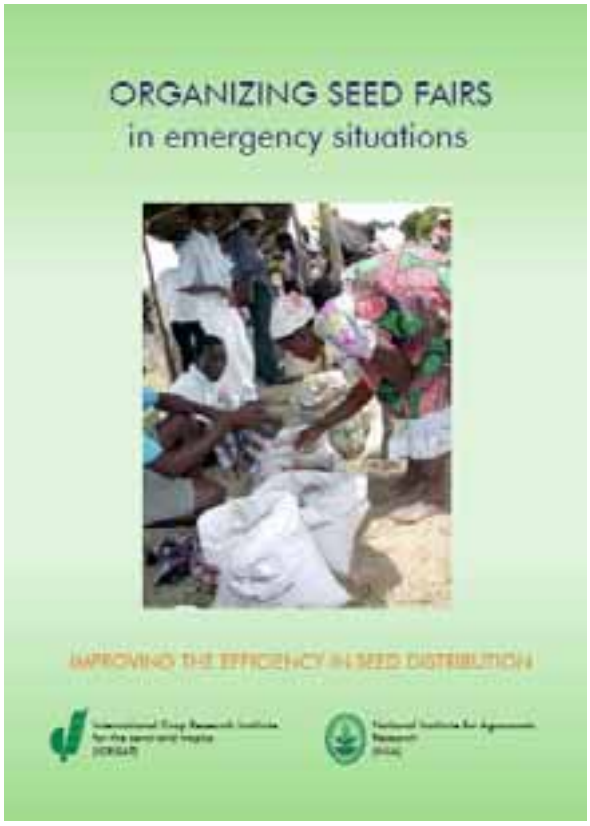


Figure 13: ICRISAT-INIA guidelines for seed fairs

Mozambique's experience with ITFs and vouchers has allowed for capacity to be developed in neighbouring countries and other sectors. Ministry and NGO staff from Zimbabwe were invited to observe the ITFs taking place in Mozambique. In the case of ActionAid, one of the staff involved in the ITF/voucher approach in Mozambique conducted training courses for ActionAid staff in Malawi and Zimbabwe. More generally, presentations based on the Mozambique experience have been made by ICRISAT staff in relevant workshops and international conferences held Angola, Entebbe and Rome. Within Mozambique, the ITF/voucher approach has been adapted to the education sector; SC-UK have held educational fairs to allow the children of families affected by HIV/AIDS to access school text books and stationery (Lori Bell, personal communication).

3. Key issues arising from the Mozambique experience and options for the future

In Mozambique, it is some of the very advantages of the ITF/voucher approach claimed by the broader literature that have proved to be the most controversial over time. These advantages – that it provides a nexus between relief and development; that it offers a level playing field for competition between the commercial and the farmer seed sectors; and that the proceeds from seed sales stay in the communities (Remington et al., 2002) – are discussed in detail in the sections below. We also highlight what appears to be a missed opportunity to use the fairs as a forum for the dissemination of agricultural extension messages, and we explore the potential for the ITF/voucher approach to provide a social protection mechanism to vulnerable farmers. Finally, we consider a range of options for the future development of ITFs and vouchers and summarize our recommendations.

3.1 Relief or development?

The seed fair and voucher approach was originally presented by CRS as an approach that allowed agencies to get off the 'seeds-and-tools treadmill', i.e. to move away from the repeated use of seeds and tools interventions, season after season (Remington et al. 2002). It is also said to lie at the 'nexus between relief and development' (Remington et al. 2002: 326) in that it is a flexible programming approach that can potentially be adapted to suit a range of different situations on the so-called relief-development continuum. To what extent have these advantages been realized in practice?

The shift from seed kits to ITFs and vouchers has certainly allowed for a significant change in the way that emergency seed interventions are implemented in Mozambique. But after four years of ITFs in Mozambique, there appears to be a sense of frustration that ITF/voucher approach itself has become 'normalized' in that ITFs are being implemented on a bi-annual basis, even when some might consider that the so-called 'emergency' is not so severe that farmers couldn't cope for themselves. Have ITFs and vouchers merely replaced the former seeds-and-tools treadmill? The apparent normalization of ITFs allows for more developmental objectives to be realized through innovations in the way in which ITFs and vouchers are programmed, but there appears to be a lack of consensus as to precisely what the objective of ITFs and vouchers ought to be. At the time the interviews for this study were being undertaken, the issue of ITFs and vouchers was a topic of considerable debate within DINA-MINAG. Some informants felt that ITFs and vouchers should promote enhanced market systems (based on periodic, ambulatory markets), particularly in the north of the country where local markets are not well-developed.

Others felt that they should be used to support the development of the seed sector, and especially the production of high quality seed by small scale seed producers. Both are possible, but achieving the chosen objective will require an appropriate and well-defined programming approach (see Table 12).

Although exactly what the ultimate purpose of ITFs and vouchers should be remains uncertain at present, what is clear is that there is a desire to move away from emergency objectives towards more developmental objectives. This is symbolic of a widely shared sense of frustration within MINAG of the failure of repeated emergency interventions to alleviate the problems faced by poor farmers. Most of those working in the Ministry have developmental backgrounds and find it frustrating when their long-term programs are constantly derailed by short-term emergency interventions. There is a desire to achieve a greater level of sustainability in the interventions being promoted. In the case of ITFs and vouchers, one senior DINA official expressed the wish to see future fairs without any inputs from government or NGO intermediaries and in which vouchers will no longer be necessary. Such a move towards developmental objectives is certainly possible, but it will still be necessary to ensure that genuine emergency needs will be met in the event of a serious crisis. Here it is pertinent to remember that emergency needs are multiple, not just agricultural.

Strong leadership will be required to overcome the current lack of consensus surrounding the way forward for ITFs and vouchers and to ensure that the approach evolves to meet a clearly articulated objective. Without this, there is the risk that 'nexus' position of ITFs and vouchers merely becomes a persistent confusion of purpose.

3.2 Formal vs. informal seed sectors: Unfair competition at ITFs?

According to the literature, seed fairs are said to offer a level playing field on which the commercial seed sector and the farmer seed sector can compete. However, it is also noted that the field can easily be tilted in favor of one or other of these players by influencing the way in which beneficiaries spend their vouchers (Remington et al. 2002). In Mozambique, there has been a lot of pressure from the seed companies and agents to tilt the field through various different mechanisms in favor of the formal seed sector. Such mechanisms include the prevention of publicly announcing seed prices prior to a fair, attempts to increase the price of seed being sold at the ITFs by local and non-local traders, attempts to restrict the participation of non-local traders at the ITFs, and – most recently – new requirements for the registration of vendors (see below and Annex 5). The need to ensure good seed quality provides the main justification for these actions, but various other issues relating to the formal and informal seed sectors are also involved, and these are explored below.

First, it is necessary to summarize very briefly the perspectives of the different seed sector players: (Additional background information about the formal and informal seed sectors is provided in Annex 3.)

(i) From the perspective of the formal seed companies, retailers, and the SNS: non-local traders are bringing grain from outside the local area and selling it at ITFs as seed. This 'grain-seed' is not considered to be seed by the formal seed sector; it is sold at a low price (with which seed companies cannot compete) and is believed to be of inferior quality.

(ii) From the perspective of the traders and the Ministry's local staff involved in organizing the fairs (the DDAs): the formal seed sector plays an important role in providing new 'improved' varieties to farmers, but it is incapable of supplying either the types or the quantities of seed necessary for ITFs, and farmers often prefer to buy informal sector seed, particularly if they can buy it from local traders who they know and trust.

(iii) Although we were unable to ask the perspectives of farmers specifically for this study, based on a detailed knowledge of both the formal and the informal seed sectors in Mozambique (see Annex 3), one might assume that farmers' views would be somewhat more balanced: ITFs provide an opportunity to acquire formal sector seed of vegetable, beans and (for some farmers) hybrid maize relatively easily. An ITF might also provide an opportunity to acquire and test new varieties of seed, whether from formal or informal sectors. For poorer farmers, an ITF allows the opportunity to acquire informal sector seed that might otherwise be sought through *kuthekela*[16] or (as a last resort) from the grain market. These poorer farmers would probably prefer to purchase cheaper informal sector seed at an ITF: they might plant some and then eat that which they don't need for planting.

It is generally agreed that the problem between formal and informal seed sectors at ITFs is not the informal sector seed brought by local farmers and local traders, but the 'grain-seed' brought by non-local traders from distant grain markets. Unfortunately there is no seed quality data available to substantiate this[17]. Yet the situation has led to a very heated debate, described by one interviewee as a 'war' between SNS and the seed companies on the one hand against the non-local traders on the other hand. While much of the debate has focused almost exclusively on seed quality (measured in terms of germination[18]), the issue of the appropriateness of the varieties provided has been entirely overlooked. The main reason that farmers prefer to purchase seed from local producers is because they know that the varieties are well-adapted to the local ecology and farmers' preferences. Seed of unfamiliar varieties from outside the local area – whether these are from the formal or the informal seed sector – may not necessarily be adapted to local conditions, and it is only after farmers have tested them over two or three seasons that they will be able to determine their local appropriateness. Until the formal seed sector is better able to provide a range of varieties that are well-adapted to locally specific conditions, farmers are likely to be disappointed by formal sector seed, which tends to take a 'one-size-fits-all' approach to providing improved varieties to different ecologies. Similarly, non-local traders must recognize that, for example, seed of a local maize variety purchased in Manica District may not necessarily be suitable for cultivation in Massingir District. It is necessary that much grater attention is given to the local adaptability of seed provided through ITFs.

[16] *Kuthekela* is a local social protection mechanism that farmers draw on to acquire seed (and other forms of assistance) from other farmers (either within community or in distant communities) (Traedal 2002). *Kuthekela* arrangements depend on the needs and capacities of the provider and the nature/closeness of the social relation between the provider and the receiver, as well as the type and quantity of seed being provided. Arrangements can vary from what might appear to be a free gift (though in reality it is not free but a social investment whereby the provider can seek assistance from the receiver in the future), or seed can be exchanged for work or other goods or services.

[17] Very little SNS data is available and it does not distinguish seed of local traders/farmers from the seed of non-local traders.

[18] Based on existing germination data for formal sector seed (Tables 7 and 8), SNS should perhaps focus its energies on ensuring that the quality of formal sector seed meets minimum germination levels.

Despite attempts to restrict the entry of non-local traders to some of the ITFs, it is generally agreed that all different types of vendors should be represented at the fairs. Some informants expressed concerns that without the informal traders and small-scale seed producers to provide competition at the fairs, seed companies and retailers would increase their prices to take advantage of the greater purchasing power promoted by the vouchers. However, the issue is not so much the types of vendors but the types of seed that are available at the fairs. Despite the efforts of the formal seed sector to promote good quality seed, the experiences that farmers may have had with formal sector seed in the past (e.g. through seed kits) and in the present (with some types of purchased seeds currently on the market) may have led them not to trust such seed, either because the variety itself is not locally adapted or because the germination rates have been far below expected standards. We recommend that much greater effort should be placed on ensuring the quality standards of formal sector seed.

One suggestion for solving the problem of competition between formal and informal traders is to organize the ITFs in terms of seed vendor's market share, for example by using different coloured vouchers: red vouchers for formal and white for informal seed vendors (Austral Consultoria e Projectos, Lda 2005). This, however, would restrict the degree of choice available to beneficiaries by obliging them to purchase both types of seed if they are to spend the vouchers of both colours. An alternative suggestion might be to encourage the different types of trader to sell different types of seed – in particular, for informal sector traders to sell formal sector seed. This already happens to some extent (see Table 6). Ultimately, however, a long-term solution may require some major changes in the way in which formal sector seed is currently produced and certified to allow for varying levels of certification standards (e.g. guaranteed seed) that is more affordable to small-scale farmers, as well as the development of varieties that are better adapted to low-resource conditions across a range of ecologies.

What has actually been put in place is a system that will require traders (both formal and informal) to register with the Ministry of Commerce and the Ministry of Agriculture if they want to take part in the ITFs. Annex 5 provides a translation of the letter sent out by the Seed Department explaining the new procedures, which include the testing of seed prior to the ITFs. These procedures may limit the participation of informal sector traders, particularly the farmers and local traders who tend to supply very small quantities of high-quality, locally appropriate seed. Although DDA staff interviewed were confident that they would be able to assist such farmers and traders to become registered, these procedures are effectively forcing the 'formalization' of the informal seed sector. If there are fewer local vendors at the fairs, it will also mean that less of the money generated by an ITF actually remains in the local communities.

3.3 Market development

The question as to whether the money from ITFs actually remains in the communities depends largely on whether or not the majority of the vendors come from the local area. It has been reported that 70% of vendors at CRS seed fairs held in Eastern Kenya are from the local communities, thus ensuring that a large proportion of the funds remain in the beneficiary communities (Makokha et al. 2004: 59). In Mozambique, however, only about 30% of the vendors come from the local communities (Table 5), implying that only a small proportion of the funds remain in the beneficiary communities. Yet, viewed from a broader market perspective, the ITF/voucher approach is a considerable improvement on the former seed kit approach, when all of the seed was purchased from neighboring countries. Under the present ITF/voucher system,

much of the proceeds from the input sales remains in Mozambique.[19] As such, ITFs and vouchers are benefiting markets in Mozambique.

Although the majority of the proceeds from ITFs do not necessarily remain in the local communities, in general, it was widely felt that the fairs encouraged commercial activity and the potential for market development at a local level. The fairs themselves attract a number of traders selling an assortment of items such as sugar, rice, oil, soft drinks, etc. In some places, the fairs are also seen as an opportunity for farmers to sell not only agricultural inputs but also their outputs, particularly livestock (chickens, goats, etc). In some districts (eg Manhiça District, Maputo Province), beneficiaries are advised to bring their own money to the fair (in addition to the 20,000 Mts required for the voucher contribution), and non-beneficiaries are also invited to participate and bring their own money. Thus, the level of cash sales at a fair is often as great as the level of voucher sales (Table 3). In some districts, the experience of the fairs has prompted farmers and traders to request assistance from the DDA in organizing market days where they can sell their produce.

Such requests suggest that there is potential for market development in the areas where the fairs are held. In particular, the increased knowledge and the networking opportunities that are afforded by the fairs has in some cases allowed vendors to realize new opportunities. In some places, for example, links between seed companies and traders established through the fairs have allowed for traders to sell seed company products. One of the seed retailers interviewed reported that the experience of the fairs in Maputo Province allowed him to identify pockets of unmet demand and he subsequently opened two additional shops to meet this demand. In cases where the vendors have been able to increase their sales through participating in the fairs, some of the profits are invested into improving their business enterprise. The traders from Xai-Xai market who had participated in the ITFs, for example, reported that the fairs provided a good opportunity to sell their products and allowed them to sell considerably more in one day than they would normally. One female vendor said that she was typically able to sell 5 million Mts. in one day in Xai-Xai market, and 6 million in one day at a seed fair. Data recorded by CRS in Burundi for sales by traders in the 2003 B season show higher sales as a result of fairs: for the three main crops traded (beans, sorghum, groundnuts) an average of 35% of total sales were through CRS seed fairs[20].

Despite the observation that the ITFs have the potential to promote market development, those interviewed also reported that the most successful fairs (in terms of levels of participation and overall turn-over) are those that take place in areas where markets are already well-developed. Fairs that are held near a main road, for example, tend to attract more traders (both official vendors and non-official traders who sell their products outside of the fair enclosure) and buyers (particularly non-beneficiaries who come with cash). Because transport is easier and there is a broader range of traders, a much greater diversity of inputs can be found at fairs held near a main road. In more remote locations where transport is problematic or more expensive, traders are unwilling to take the risk of transporting their goods to fairs in case they don't sell their goods and then have to transport them back again. Thus, the location of a fair is an important factor. However, if the aim of ITFs is to promote market development, then it is necessary to hold fairs in the more remote locations where market development is needed.

[19] Although some of the inputs are imported (e.g. vegetable seed, actellic, and some of the tools), Mozambican companies and traders benefit from the sales.

[20] By crop, the proportion of sales through seed fairs was as follows: beans: 36% (out of a total of 503 MT); sorghum 7% (out of a total of 7.4 MT); and groundnuts 19% (out of a total of 3.724 MT) (Walsh et al 2004: 23).

3.4 Awareness-raising and the dissemination of agricultural technologies

In general, agricultural fairs are seen to provide a good opportunity to promote awareness about key social issues. In Mozambique, theatre groups are regularly invited to the fairs to perform educational shows containing messages relating to HIV/AIDS. Similarly, in Western Uganda, fairs provide a captive audience for puppet shows that are used to sensitize communities about corruption, human rights and domestic violence (van der Steeg et al. 2004). Considering the agricultural focus of the fairs, however, it is surprising that no formal effort is currently made to promote agricultural extension messages at the fairs. At an informal level, much agricultural information is being exchanged: farmers learn about seed and inputs they previously may not have had access to; they discuss seed issues among themselves, with traders, and with company agents, and some might better realize the value of seed. Similarly, informal traders gain knowledge from farmers and from company agents about local preferences and the range of inputs available through the formal sector. Through direct contact with farmers and informal traders, company agents also learn about local preferences and markets. At an informal level, there is thus an abundance of information being shared among the fair participants. But not all of this information is necessarily accurate; in some cases it is mere propaganda on the part of the vendors wanting to promote and sell their products. Although DDA staff are aware that some of the propaganda information is inaccurate, at present there is no formal effort to provide accurate agricultural extension messages beyond the advice provided by individual DDA staff to individual farmers. As such ITFs are presently a missed opportunity for promoting accurate information about 'improved' agricultural technologies. We recommend that greater attention should be given to using ITFs as an opportunity to promote agricultural extension messages.

3.5 Social protection

Social protection mechanisms allow people to cope with adverse circumstances and enhance opportunities for poverty reduction, equity and growth. The primary purpose of social protection is threefold (Shepherd et al 2004):

- to prevent, mitigate and enhance the ability to cope with and recover from, the major hazards faced particularly by all poor people
- to contribute to chronically poor people's ability to emerge from poverty, deprivation and insecurity and to challenge the oppressive socio-economic relationships which may keep them poor through increasing their livelihood security and linking such increases to promoting enhanced livelihoods
- to enable the less active poor to live a dignified life with an adequate standard of living, such that poverty is not passed from one generation to the next.

There exists a vast array of different mechanisms through which social protection can be provided, including agricultural programs. In Mozambique, however, social protection is not yet on the agenda of MINAG, and agricultural staff are, in general, not familiar with the rationale or the approaches to social protection that are currently being promoted in other sectors or in other countries.

In Mozambique, there is increasing interest in social protection mechanisms to support those affected by HIV/AIDS and other vulnerable groups. At present, social protection is provided

through the National Institute for Social Action (INAS)[21] within the Ministry of Women and Children. Another form of social protection is provided to those who have a Poverty Certificate (for which there is a complex registration and annual renewal process); these individuals receive a cash transfer of 80,000 Mts per month and are exempt from school fees, health fees, and other such payments. Thus, social protection systems already exist in Mozambique, and it would be possible to explore the potential for linking such systems to ITF/voucher interventions. Alternatively, ITFs and vouchers could perhaps be modified and developed as a social protection mechanism in itself, as outlined below. Lessons from the Starter Pack Programme in Malawi (Levy et al 2004) would provide a useful starting point in exploring the potential for transforming ITFs and vouchers into a social protection mechanism. Further data regarding the use of actual use of inputs provided through ITFs and their impacts on vulnerability and agricultural production would also be necessary.

3.6 Options for the future development of ITFs and vouchers in Mozambique

The analysis of strengths, opportunities, weaknesses and threats (SWOT) of ITFs and vouchers undertaken as part of the broader evaluation of the drought response program offers a useful summary of some of the points presented in this report, and provides a good starting point in considering the potential for developing the ITF/voucher approach in various different ways. There are certainly various opportunities for building on the existing strengths and addressing the current weaknesses, but it is also necessary to look beyond the current ITF/voucher approach and consider the objective which it should be expected to fulfill. It is only once this objective is agreed, that it becomes possible to prioritize which strengths and weaknesses highlighted in Table 10 should be addressed. Various different potential objectives are outlined below.

Table 10. Strengths, opportunities, weaknesses and threats of ITFs and vouchers.

Strengths	Weaknesses
• Seed fairs have had ample coverage in areas where they have been done • Quantity of seeds available at ITFs is usually sufficient to meet farmers requirements • Seed multiplication plots are now being developed and managed by private individuals and associations • Diverse seed varieties available in the fairs • Quality drought tolerant seeds of new varieties are being distributed • Beneficiaries are able to choose from the seeds available • Dissemination of information related to HIV/AIDS in some seed fairs	• Seed companies complain of unfair competition due to logistics considerations • Some low quality seeds appearing at the fairs • End use of seeds not easily verifiable – some beneficiaries are eating their seeds • High seed prices • Delays in the execution of fairs and in seed distribution • Undue focus on seeds at the cost of other farming inputs • High cost to seed companies leads to attrition in company participation • Poor information regarding the needs and wants of local farmers weakens companies' response to the needs of farmers • Difficulty of testing and assuring seed quality at the time of the fairs

[21] INAS works in the poorest parts of the country (Sofala, Inhambane, Zambézia and Tete) and targets those unable to work (mostly the elderly, but increasingly those with HIV/AIDS). Assistance is provided in the form of monthly food subsidies, construction materials, medicines and health education. They provide basic social services, construct infrastructure, provide credit to small businesses, and promote local initiatives in farming, fishing and charcoal production.

Opportunities	Threats
• Creation of rural based markets for local and improved seed varieties • Untapped potential for increasing knowledge of improved cultivation techniques among rural population via small training sessions around the ITFs • Distribution of a variety of farming inputs aside from seeds • Increase information regarding rural populations needs to seed suppliers	• Lack of monitoring to verify end use of the seeds purchased • High costs of formal sector seeds • Seed companies reduce participation due to high costs • Transportation costs to and from seed fairs in terms of time and money • The supply of poorly adapted varieties through ITFs are a disincentive to the adoption of improved varieties by farmers • Lack of information regarding appropriate seeds for the area increases transaction costs of seed suppliers

Source: Adapted slightly from Austral Lda (2004: 78)

In this section we highlight five different objectives that the ITF/voucher approach could potentially achieve. Each is briefly described, and a summary overview is provided by Table 11.

(i) ***Emergency response to address lack of access to inputs***

This is the objective that Mozambique ITFs and vouchers were originally designed to meet, based on an approach that was adapted by ICRISAT from the CRS model. While there appears to be a move towards addressing alternative, more developmental objectives such as those below, it is also necessary to recognize and respond to a real emergency as and when this might occur. As an emergency response, ITF/voucher approaches should aim to allow beneficiaries to access a broad range of inputs that may not necessarily be only agricultural. Provided that markets are functioning, cash might be considered as an alternative to vouchers to allow for greater choice on the part of beneficiaries.

(ii) ***Social protection mechanism for vulnerable farmers***

Though the concept of social protection is not yet familiar to those working in the agricultural sector, there is a need to recognize that some farmers are chronically vulnerable and may require long-term assistance to enable them to emerge from chronic poverty and food insecurity. If ITFs and vouchers are to provide a social protection mechanism, then there is a need for careful targeting and plenty of choice in the types of inputs made available (i.e. not only agricultural).

(iii) ***Promotion of rural trade and agricultural marketing***

Another option is for the current ITFs to evolve into 'development fairs' to promote rural trade in general and the marketing of agricultural products in particular. This implies that the fairs should not only provide an opportunity for farmers to purchase inputs, but also to sell their outputs, such as livestock and grain surpluses. This is already taking place to some extent, outside the perimeter of the fair itself, and the level of cash sales suggests that the scope exists for promoting rural markets. Under this objective, there should be as few restrictions as possible as to who can participate, either as vendors or buyers, but seed quality must be ensured.

(iv) ***Promotion of the formal seed sector***

If the objective of the ITF/voucher approach is to promote the seed sector (whether formal or informal), it is essential that this is based on an accurate understanding of farmers' seed preferences and requirements. The evidence available to date suggests that ITFs offer limited opportunities for substantial increases in the sale of formal sector seed.[22] At the same time, the formal seed sector appears to be incapable of supplying enough beans and groundnuts to meet

[22] For example, just 5% of Panaar's seed sales are channeled through the fairs, and although approximately 20% of seed agents' sales are realized through fairs, the ITFs are considered by the agents to be very risky.

the demand from farmers, and the germination rates of formal sector seed is often well below acceptable standards. This would suggest that the performance of the formal seed sector itself should first be improved before being promoted. ITFs and vouchers might be expected to promote commercial seed sales only after the formal seed sector is able to provide seed of appropriate varieties (i.e. adapted to local ecologies and farmer preferences), at an acceptable quality, and at a price that is affordable to farmers. Meeting such conditions will require long-term structural changes to the seed system. Current attempts to promote the development of the informal seed sector (through enhanced production practices and marketing), on the other hand, merely risks formalizing the informal sector and may prove to be counter-productive in the long term.

(v) ***Promotion of crop and varietal diversity***

There is considerable experience with seed fairs that aim to promote crop and varietal diversity, particularly in Latin America. Within Africa, such fairs have been implemented successfully, though the approach that has been documented does not allow for farmers to access seed at the fairs, only to observe a range of varieties available from other farmers (Nathaniels and Mwijage 2000). In this respect, the ITF/voucher approach offers the potential to adapt the approach of the varietal fairs that have been undertaken to date. Promoting agricultural diversity has the potential to strengthen local seed systems and increase resilience to drought and other disasters.

Table 11. Future options for vouchers and agricultural fairs according to various objectives

	Emergency response to address lack of access to agricultural inputs	Social protection mechanism for vulnerable farmers	Promotion of rural trade and agricultural marketing	Promotion of commercial seed sector	Promotion of crop and varietal diversity
Types of vendors	No restrictions on vendors or registration requirements	No restrictions on vendors or registration requirements	All types of local and non-local traders	Registered agricultural input traders	Local farmers and registered agricultural input traders
Types of inputs/products	Wide range of products and inputs (not only agricultural) to meet basic needs, e.g. foodstuffs, water containers, clothes, etc	Wide range of products and inputs (not only agricultural) to meet basic needs, e.g. foodstuffs, water containers, clothes, etc	Wide range of products and inputs (not only agricultural) to meet basic needs, e.g. foodstuffs, water containers, clothes, etc	Certified and registered classes of seed.	Locally adapted crops & varieties, both from informal and formal seed sectors.
Targeting of beneficiaries	Target those affected by crisis.	Target most vulnerable farmers	All farmers	All farmers, especially commercial farmers	All farmers
Contribution to cost of voucher or product	No contribution	Small contribution	Larger contribution, leading to the phase-out of vouchers altogether	Larger contribution, leading to the phase-out of vouchers altogether. Or seed companies to provide small subsidy	Larger contribution, leading to the phase-out of vouchers altogether. Or Government and seed companies to provide small subsidy
Level of information provision at fair	Little need for information since products are familiar to people	Little need for information since products are familiar to people	Information provided for inputs or products that might be unfamiliar to farmers	Detailed information about varietal characteristics and appropriate advice about cultivation requirements	Detailed information about varietal characteristics and appropriate advice about cultivation requirements
Source of seed	Local farmers, traders, grain markets, and formal sector	Local farmers, traders, grain markets, and formal sector	Local farmers, traders, grain markets, and formal sector	Formal sector	Local farmers fields and formal seed sector, including agricultural research institutes.
Seed quality control	No need for formal control measures beyond the Fair Organizing Committee and farmers' own assessment	No need for formal control measures beyond the Fair Organizing Committee and farmers' own assessment	Formal control measures appropriate for both informal and formal sector seed	Formal control measures to guarantee seed quality	Formal control measures to guarantee seed quality

3.7 Recommendations

Although there is a widely shared view among those who we interviewed in the course of this study that ITFs and vouchers have a positive role to play in terms of rural development and meeting the needs of poor farmers, there is a need to make some high-level strategic decisions within DINA as to the specific objectives that vouchers and ITFs should aim to achieve. A number of options have been put forward, together with our own observations and suggestions as to the different ways in which the ITF/voucher approach could be implemented to meet each of these different objectives. The following recommendations have also been put forward by this report:

(i) Strong leadership will be required to overcome the current lack of consensus surrounding the way forward for ITFs and vouchers and to ensure that the approach evolves to meet a clearly articulated objective. This report puts forward a number of options regarding possible objectives. Any decisions regarding the future direction of ITFs and vouchers in Mozambique must necessarily be based on credible and well-documented evidence.

(ii) Regardless of which option is chosen, there is a need to undertake more consistent monitoring, evaluation and analysis to ensure that lessons are learned and shared across different parts of the country and that the approach is achieving the desired impact.

(iii) In addition to regular monitoring, we recommend that a study should be undertaken to understand how farmers actually make use of the inputs acquired from ITFs, and what impacts the ITF/voucher approach has on agricultural production, markets, food security and vulnerability.

(iv) Greater attention could be given to integrating the ITF/voucher approach within existing needs assessment, early warning, and decision-making structures such as the ICRISAT seed needs assessment methodology, DAP, GAPSAN and SETSAN. In the case of the ICRISAT methodology, some clarification may be necessary regarding the practical use of the local agricultural system profiles for needs assessment.

(v) In organizing the ITFs, we recommend that as much information as possible is given to farmers concerning the inputs available, the prices, and how to use them (for those inputs which are unfamiliar). This will ensure greater transparency and choice to farmers.

(vi) ITFs should be seen as an opportunity for promoting accurate information about 'improved' agricultural technologies. We recommend that greater attention should be given to using ITFs to promote agricultural extension messages.

(vii) In addition to seed quality, it is necessary that much greater attention is given to the local adaptability of seed provided through ITFs.

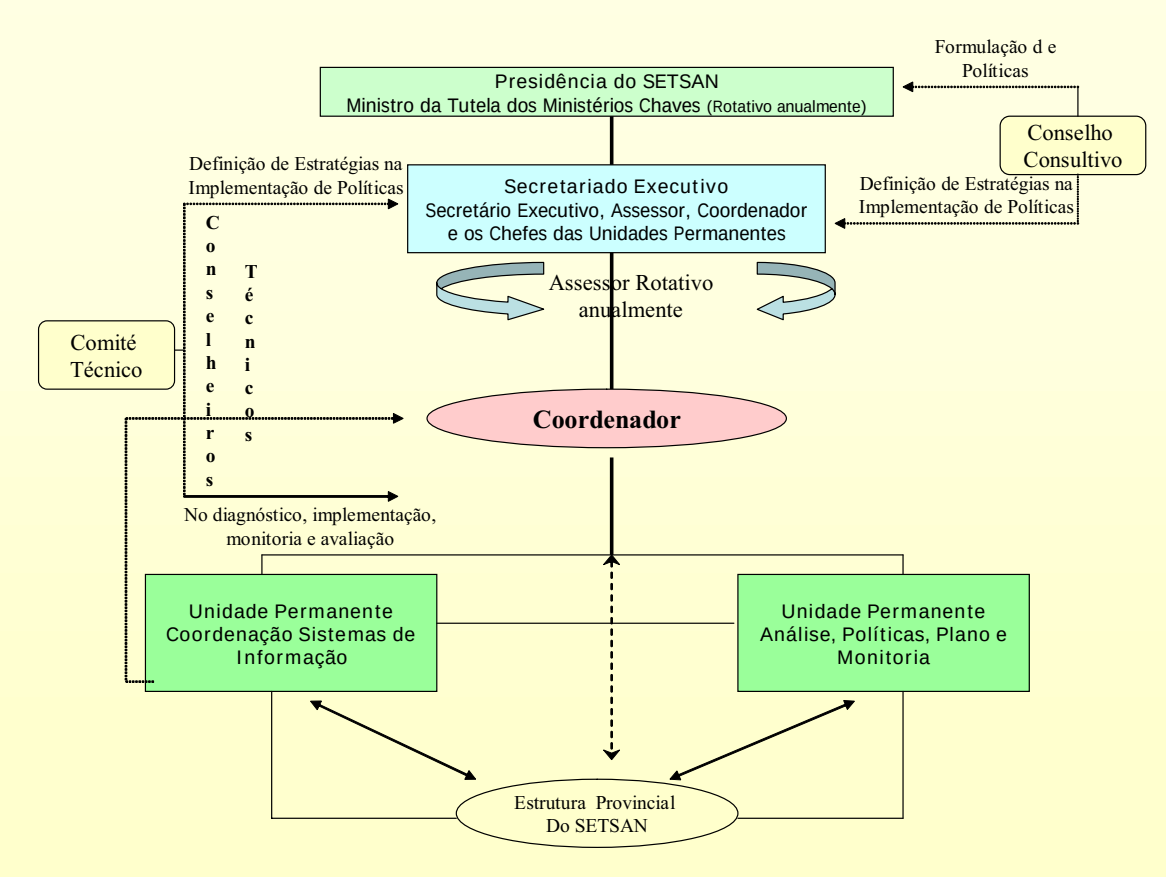
(viii) In terms of seed quality testing, we recommend that – as well as distinguishing formal and informal sector seed - testing should distinguish informal sector seed which comes from grain markets from that which comes from local farmers' fields, and that test results should be made available to those concerned.

(ix) More generally, we recommend that much greater effort should be placed on ensuring the quality standards of formal sector seed – for seed which is provided through ITFs and other formal sector seed channels.

Annex 1. List of People Interviewed

Sergio Gouveia, DINA
Joaquim Cuna, UCEA
Paciencia Banze, SNS
Domenico Liuzzi, Kulima
Eduardo Costa, Action Aid (Maputo)
Francisco Chilenge, Panaar Seed Company
Nicolao Dunhe, Hortimoc (SEMOC retailer, Maputo)
Emigdio Oliveira, DFID
Sam Bickersteth, DFID
Laurence Hendrickx, FAO
Michelle Mac Nabb, FEWSNET
José da Graça, SPA-Maputo
Teresa Helena Boaventura, SPA-Matola –Maputo province
Pinto Luciano (Seed Focal Point), SPA-Maputo Province
Diogo Cavele, SPA–Marracuene (Maputo Province)
Virgina Cumba, SPA–Marracuene (Maputo Province)
Custodio João, SPA–Marracuene (Maputo Province)
Ancha, Xai-Xai Market trader
Pedro Dzucule, SPA-Inhambane
Arlindo Maluzane, SPA-Inhambane
Antonio Quimbine, SPA-Inhambane
Fernando Chilengue, Adviser to SPA-Inhambane
Rafael Baule, DDA-Inharrime (Inhambane Province)
Rogue Antonio, DDA-Zavala (Inhambane Province)
Louis Alicate, DDA-Zavala (Inhambane Province)
Bedes Armando Simango, DDA-Zavala (Inhambane Province)
Pablo Manembué, SPA-Xai-Xai (Gaza Province)
Theresa, Xai-Xai Market trader
Lydia, Xai-Xai Market trader
Aderito Mavie, DDA-Chokwe (Gaza Province)
Stefano Ubisse, DDA-Chokwe (Gaza Province)
Felisberto Chambal, SEMOC Retailer, Chokwe
Eduardo Langane, SNS laboratory, Chokwe
Gilda Francisco Rizar, SNS laboratory, Chokwe
Teresa Machai, Action Aid (3 de Fevereiro; Manhiça)
Gabriel Chambo, SPA-Manhiça (Maputo Province)
Lori Bell, FAO-SETSAN
Helder Gemo. Director of DNER (Direção Nacional de Extensao Rural) (telephone interview)
Britt Granqvist, former SEMOC Marketing Manager, (email correspondence)

Annex 2. The Technical Secretariat for Food Security and Nutrition (SETSAN)



Source: SETSAN 2004

SETSAN aims to create the decentralized institutional structures necessary for the timely diagnosis and subsequent decision-making to alleviate food and nutritional insecurity. In the past four or five years the organization of SETSAN has been subject to considerable change, and has ultimately emerged as a strong, well-coordinated structure that brings together a wide range of governmental, non-governmental and international organizations working to promote food security in Mozambique. As illustrated by the organogram, SETSAN is composed of two core units: information systems and policy analysis. Within the information unit, there are a number of technical working groups. Though the efforts of SETSAN's policy unit are less well-developed than those of the information unit, improvements are expected in the future.

The Technical Working Groups of SETSAN have also changed in the past year. Formerly, those relating to agriculture included the Agricultural Early Warning Group (GAPA), and the Evaluation Group for Agricultural Emergencies. The Early Warning Working Group for Food Security and Nutrition (GAPSAN) was formed at the end of 2004/beginning of 2005. Currently, the two phases of early warning coordinated by SETSAN include work by GAPSAN that monitors the progress of the rainy season and crop production and highlights any potential risks or threats in different parts of the country. The Vulnerability Assessment Committee (GAV) then follows up on the information provided by GAPSAN to identify particular areas of vulnerability. There is considerable overlap in the composition of the working groups, allowing for continuity in the specific tasks undertaken by each.

Annex 3. Seed Systems in Mozambique

The informal seed sector[23]

Most of the seed presently used by Mozambican farmers today is sourced through informal channels, often referred to as the local seed system. This system encompasses all activities from production through to utilization including seed exchange that is not controlled by formal institutions either public or private. Its main characteristic is that production; selection and storage are carried out by local farmers primarily for their own use but also for exchange amongst neighbors through well-defined local dynamics. Another important characteristic is that with few exceptions, seed production is an integral part of crop production whether for food or other uses. This is one of the reasons for the higher adaptability of local varieties to specific growing conditions compared to introduced varieties and the resilience of the system.

As women have the primary responsibility for ensuring the household's food security, it is natural that they should have the main responsibility for selecting and saving seeds from the crop harvest. Men provide containers or construct storage facilities for both grain and seed, and are known to sometimes bring seed of new varieties from elsewhere for testing in the farms.

Very low levels of improved inputs are used for crop production in Mozambique. Seeds are the most important input – and often the only input used. Women and men farmers are conscious that seed is an essential input for food security and use a wide range of local varieties or landraces that have specific names in each region. The extent of genetic diversity between these local landraces in different regions is not fully understood. According to Ferguson, varieties with the same name have often widely different morphological and genetic characteristics and little homogeneity, suggesting that they might actually be different (ICRISAT 2002a).

Women and men farmers commonly exchange seed with their neighbors or with farmers from nearby villages. Seed may be provided as a gift, as a loan to be repaid at harvest, or exchanged for labor or other products. In many villages, some women and men farmers are recognized as "seed providers". Seed donations are more common among relatives but seed exchange is always practiced if seed is available.

The grain market is an important source of seed. Women and men farmers buy grain for use as seed, but are careful in selecting the right variety. Even though traders bring grain from distant areas, farmers are aware that not all varieties are suitable to the local conditions and recognize the adapted ones.

Small-scale farmers rarely use commercial seed, except for vegetable crops. There are several reasons for this, mainly the limited number of retail outlets in villages and the high cost of seed compared to grain. Instead, farmers use a combination of seed sources to obtain planting seed. Under normal conditions, the main source is their own seed (72%) supplemented with grain purchased from the markets and/or gifts or loans from relatives and friends (16%). Few farmers (12%) rely solely on purchasing seed. Surprisingly, it is the poorest farmers who most rely on purchased seed – possibly a day-to-day survival strategy for families with very low incomes.

[23] Taken from: Dominguez and Jones 2003

Table 12. Distinctions between informal and formal seed sectors

Informal seed sector	Formal seed sector
• Seed production integral to crop production • Farmer seed selection • Regulation through "good neighborliness" • Quality of seed/variety is maintained through good management • Range of seed acquisition methods • New varieties through social networks, local selection, and formal seed system • Very resilient and continues to function in disasters	• Seed multiplication separate from crop production • Quality control regulated externally (seed legislation) • Recommended that seed is replaced every 3 years • Seed acquired for cash through commercial channels • Dependent on existence of a commercial agricultural system • New varieties through research and development • Vulnerable to collapse without sufficient funding

The formal seed sector

The formal seed sector includes the public and private institutions involved in the research, production, multiplication and dissemination of seed. Table 11 summarizes the main differences between with informal and formal seed sectors. In Mozambique, the national seed program was initiated in 1978 and this led to the establishment of the commercial (state-owned) seed company, SEMOC (Sementes de Mocambique) in 1990. This was the only seed company until 1999 and produced seed on its own farms and by contract. Up to 1986, SEMOC produced various seed types (maize, rice groundnut, bean, cowpea, soybean, sorghum vegetables) for state owned farms while subsistence farmers generally used their use their own seed (from the informal sector) or seed re-circulated by the marketing parastatal enterprise AGRICOM. From 1987 to1995 the seed market was dominated by relief supply, whereby donor funds were used to purchase seed from SEMOC that was then distributed among farmers affected by conflict and/or drought. In the late 1990s, efforts were made to promote local seed production and expand the national seed industry to increase the availability of quality seed and improved varieties.

The National Seed Service (SNS) is responsible for increasing national seed productivity through the promotion and protection of seed quality and the supervision of control of quality (both domestic and imported). This includes all activities relating to inspections of fields or seed production and laboratory analysis to certify seed quality. Seed legislation includes sanctions on those who are found to be selling low quality seed. However, in practice there have been no known cases in which seed sellers have actually been penalized for selling poor quality seed. This is not because they are not selling poor quality seed, but because SNS has not yet applied the legal sanctions that exist.

The private seed sector is composed of two main seed companies, SEMOC and Pannar, and also a number of seed retailers. Most of the seed retailers used to be shopkeepers employed in SEMOC shops that used to exist throughout the country. Initially they were compelled to source seed from SEMOC, but recently it has become possible for them to source seed from any seed company. Each seed company (SEMOC, Pannar) is associated with about 25-50 small retailers, some of which are now registered seed trading companies[24]. Both the seed companies and the trading companies are registered by SNS and are subject to the legislation regarding quality control.

[24] Seed trading companies include: SEMOC, TECAP, PANNAR, HORTIMOC, Munguambe & Filhos, Matuel Comercial, Bila Emprendimentos, Maurício Dengo Comercial, Alberto Chambal, Bonifácio Marihemo, Hygrotech, Qualita, and IAP.

Annex 4. Monitoring Data Collected by Vendors' Record Form

Number
Location of fair
Date of fair
Type of vendor: Local or Company
Name of vendor or company
Gender: Male or Female

Crop or tool	Varieties or types	Quantity of inputs brought to fair (kg or unit)	Quantity of inputs sold at fair (kg or units)	Price at fair (Mt/kg or Mt/unit)	Total value of sales (Mt)
TOTAL					

Annex 5. Recent Regulations Concerning Registration of Vendors at Fairs

Translation of the letter from the Seed Department to SPAs, SEMOC and PANNAR

Subject: Seed Fair Interventions
Date: 25 April 2005

In recent years we have verified that there is an abnormal movement of informal traders within seed fairs, selling grain as if it were seed, side by side with seed companies.

This situation is a big concern, because it compromises the objective of the seed fairs, and it is impossible to apply any mechanisms of control to this type of activity and it goes against some of the norms established in place for in the seed sector.

The way to improve this situation for the future and the quality of the service give for these interventions to the productive sector, we recommend as follows:

a) Any vendor that wants to sell seed must be registered as a seed producer-distributor.
b) This registration is done in the Ministry of Commerce. According with the 'certification of the negative' coming from the commercial registry office to have the 'alvara' (tax reference) according to the type of business they operate (seed or any other input).
c) Having this 'alvara', they have to go to the Ministry of Agriculture and register as a seed vendor.
d) For the vendors wanting to participate as producers (either on their own or by sub-contract) or distributors, it will be necessary for them to have facility es to clean, treat, weigh and pack the seeds and weight the seed and pack.
e) Seed should be of known origin, form local producers or private sector that have assistance from seed technicians through the DDAs. Commercialization should be oriented to producers that have been previously identified through the DDA, and assisted during the production season, same as they have the preference to acquire the product in one specific zone.
f) Local producers that are an integral part of the local seed production system. The entrance in the seed fair should be credited by the DDA and registered in the database of the seed department to be able to be controlled during the seed fairs.
g) All participants should be selected in advance through the testing of the seed that will be sold in the fair.
h) The quality control for the producer is extensively to the formal seed companies that acquire 'seed' coming from the small producers and specifically for crops such as gnut and beans.

Kindest regards
Head of the Seed Department

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