CRS SEED VOUCHERS & FAIRS

Using Markets in Disaster Response

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Preface

Over the past twenty years, Seeds & Tools (now called Direct Seed Distribution) has become the standard approach to agricultural recovery from disaster. However, rather than leading to sustainable recovery and greater resilience, Seeds & Tools became expensive annual or at least biennial events. Increasingly, both donors and seed aid practitioners began questioning the effectiveness of this approach. But 'what to do?' If not Seeds & Tools, then what? Building on key seed aid evaluations in Zimbabwe, Rwanda and Kenya, a more nuanced understanding of seed security and seed systems emerged. CRS accepted a suggestion made by Louise Sperling of CIAT that if the seed security problem was one of access to seed and not availability of seed or seed quality, then perhaps vouchers would be more effective than direct seed distribution. This lead to the Seed Vouchers & Fair approach which was first used by CRS in Uganda in 2002.

Since the development of the Seed Vouchers & Fair approach in 2000, CRS Country Programs throughout Africa and beyond quickly committed to changing from the conventional approach of direct distribution of seed to a radically different approach that put farmers at the center of the recovery process. In changing from 'doing what we had always done' ('and getting what we had always gotten') to a different, more complex and nuanced approach, CRS staff accepted challenge and significant risk.

These proceedings are the output of a symposium on CRS's experience with the Seed Vouchers & Fair approach to agricultural recovery from disaster, which was convened and coordinated by the CRS East Africa Regional Office. The papers contained in the Proceedings are a testimony to their courage and their commitment to the people that we serve.

Dedication

In remembrance of Christine Kuwaza, CRS-Zimbabwe Country Program Agriculturist. Christine was a dedicated and enthusiastic pioneer of the use of Seed Vouchers and Fairs in Zimbabwe. She will long be remembered at CRS and in Zimbabwe for her determination to take risks and innovate under the adverse conditions. Her persistence to find solution to each of the implementation challenges and her contagious humor made working with her a joy. Christine will be greatly missed.

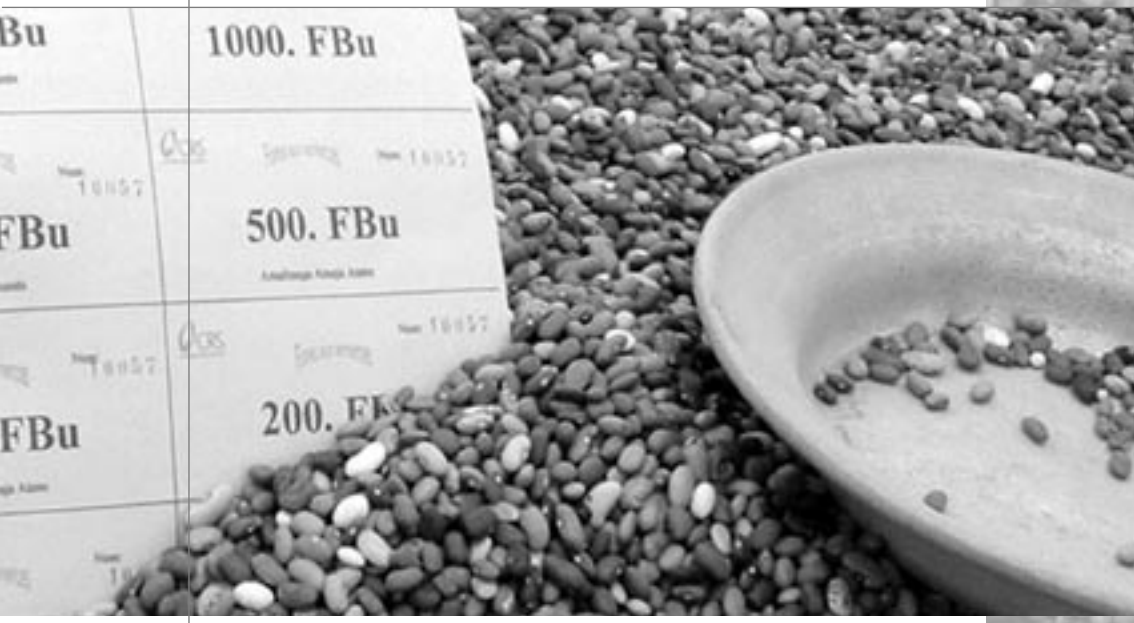
Acknowledgements

The editors are grateful to the CRS Country Representatives for their unwavering support to transform how CRS responds to disaster and to our incredibly important partners who embraced the challenge of change. We also wish to acknowledge the support of Jean Marie Adrian, the CRS East Africa Regional Director, who immediately saw something good and provided support and encouragement throughout the exciting transition. On behalf of CRS, we are also grateful for the financial and moral support of our major donor in disaster recovery, the United States Agency for International Development, Office of Foreign Disaster Assistance.

List of Acronyms

CIAT	International Center for Tropical Agriculture
CRS	Catholic Relief Services
CRS/EARO	Catholic Relief Services / East Africa Regional Office
CRS/ET	Catholic Relief Services/Ethiopia
CRS/WARO	Catholic Relief Services/West Africa Regional Office
CTDT	Community Technology Development Trust
DFID	Department for International Development
DMER	Design, Monitoring, Evaluation, Reporting
DRC	Democratic Republic of Congo
DSD	Direct Seed Distribution
FAO	Food and Agriculture Organization of the United Nations
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDP	Internally displaced persons
IP	Implementing Partners
IRIN	Integrated Regional Information Networks
MDS	Minimum Data Set
NGO	Non Governmental Organization
OCHA	Office for the Coordination of Humanitarian Affairs
OFDA	Office for Foreign Disaster Assistance
PRA	Participatory Rural Appraisal
SPP	Strategic Planning Process
SSSA	Seed System & Security Assessment
SV&F	Seed Vouchers & Fairs
UNEUE	UN-Emergency Unit for Ethiopia
USAID	United States Agency for International Development
WFP	World Food Programme

INTRODUCTION



Understanding Seed Systems

Seed Vouchers & Fairs Minimum Data Set

Understanding Seed Systems

Tom Remington,CRS/EARO

Development is not judged by whether farmers grow traditional varieties or ones that are the products of formal plant breeding, but rather by the range of productive choices that are at their disposal. Development is not assessed by whether or not farmers save seed, but rather by their security of access to seed, from their own farms or through the market (Tripp 2001).

There has been a great deal written on both farmer and formal seed systems in Africa. This information is drawn on to articulate the strengths and weaknesses of both systems and the opportunities that each present for the other in the context of seed-based agriculture recovery from disaster. In contrast, the evolution of the informal seed system has gone largely unrecognized, unappreciated and undocumented. This article will briefly discuss the formal and farmer seed systems and describe the emergence of the informal seed system, drawing on examples from Burundi, Kenya and Senegal. It will close with a discussion on how relief seed approaches are influenced by the underlying formal, farmer and informal seed systems.

1. Seed Systems

In East, Central and Southern Africa, formal and farmer seed systems coexist. There are different opinions on the strengths and weaknesses of both systems. Proponents of farmer seed systems often view the formal seed system as a threat to farmer seed and crop system resilience and agro-biodiversity. Proponents of the formal seed system believe that formal seed production is a prerequisite for sustained increases in crop productivity – through the use of high quality seed of new

varieties[1]. However, there is a growing appreciation of the strengths of both systems and increased efforts to integrate the two, with the formal system focusing on development of new varieties and the production of small quantities of quality seed to be introduced into the appropriate farmer seed systems for farmer evaluation and eventually seed multiplication and varietal maintenance.

Farmer seed systems

Farmer seed systems are systems in which selection, seed production and seed exchange are integrated into crop production and the socio-economic processes of farming communities (Almekinders and Louwaars 1999).

It is widely recognized that own-saved seed and exchange with family, friends and neighbors remain important sources of seed for small farmers in Africa.

Formal seed systems

Formal seed systems are systems in which seed is supplied through an organized chain of events by specialized breeders, seed producers, marketing agents. This system includes seed quality assurance through a process of certification (Almekinders and Louwaars 1999).

Formal seed systems are more complex, linear and less integrated than farmer seed systems where most activities take place at one farm location. Steps in formal seed production in Africa include (Tripp 2001):

1. Plant breeding by public or, increasingly, private institutions
2. Multiplication of "source seed" to increase breeder seed
3. Seed multiplication
4. Seed conditioning and storage
5. Seed marketing
6. Seed quality control or certification.

Market opportunities for the formal seed system can be assessed by answering the following four questions:

[1] New is used to denote a variety developed by breeders in the formal seed system. It is used instead of 'modern' or 'improved.'

1. Are there new varieties with potential high demand by farmers?
[Is the variety attractive to potential customers?]

2. Does the formal seed system have a comparative advantage in maintaining varietal quality?
[Does the farmer lack the knowledge, labor or capital to invest in maintaining varietal quality?]

3. Does the formal seed system have a comparative advantage in maintaining seed quality?
[Are farmers able to produce and maintain disease free and viable seed?]

4. Is this a commercial crop, resulting in volume demand?
[Is this a high volume cash crop for farmers?]

Not surprisingly it is hybrid maize which has been the engine of financially sustainable commercial seed systems in Africa. This is quite simply because maize lends itself to commercial seed production:

- Maize outperforms other cereals (pearl millet, sorghum, upland rice) in the high potential agro-ecoregions. The area planted to maize is large and the demand for seed substantial.
- Commercial maize varieties significantly outperform local (traditional) varieties across the range of environments.
- Genetic quality of commercial maize varieties (especially hybrids) erodes under farmer seed management (when seed production is integrated with crop production).
- Hybrid maize seed production is technically complex, exceeding the management capacity of smallholder farmers.

Hybrid maize is clearly the most promising commerical product: new varieties come on line from breeding regularly, farmer-saved seed suffers loss of genetic quality and crop performance, the seed is prone to insect damage under traditional on-farm storage, and many small farmers cultivate maize as a commercial crop with the concomitant encouragement to invest in quality commercial seed to complement investment in fertilizer.

Throughout Africa, governments and donors have supported the maize sector through breeding, extension, production subsidies and support to commercial seed enterprises. And throughout Africa, large seed enterprises exist only where maize is an important commercial crop.

Informal seed systems

The informal seed system is opportunistic with attributes of both the formal and the farmer seed systems. It has co-evolved with the transition from production for subsistence to the emergence of local grain markets and production for sale. Along with dependence on markets for sale and purchase of grain, farmers began to depend on the same markets for the purchase of seed.

Farmer – formal – Informal seed system linkage

The farmer, formal and informal seed systems are poorly integrated at present. The current strategy of the formal seed system is to manage the entire process from varietal development through multiplication and certification to marketing through commercial outlets to farmer-consumers. One might say that the strategy of the formal seed system is to avoid integration.

Perhaps because the informal seed sector is largely unrecognized or assumed to be an undesirable symptom of problems in either or both the formal or farmer seed systems, it receives no support from governments – who support the formal seed system or Non Governmental Organizations (NGOs) – who tend to support the farmer seed system via community-based seed activities. Consequently, and in spite of its significance, the informal seed sector does not have access to new varieties, to basic seed as an input, or to seed quality control services.

Formal seed system actors often discourage farmers from producing and saving seed of varieties whose seed was initially acquired commercially. The motive in doing so is to maximize commercial seed sales and company profitability. From the formal seed system perspective, the significant costs associated with commercial seed production must result in attractive pricing and in sustained volume

sales. To achieve this, it is important that farmer seed purchases are recurrent and not one-off or, at best, infrequent. When small quantities of seed produced by the formal seed system enter the farmer seed system and are then multiplied and recycled or shared within social networks, farmers reduce their costs and maximize their return on seed investments but formal seed system revenue and profits are low.

Rather than competing, thought should be given to supporting the informal or "integrated" seed system by facilitating farmer access to seed of new varieties, and by supporting the maintenance of varietal and seed quality. The key challenge will be engaging commercial seed enterprises by demonstrating that integration can be profitable.

2. Relief Seed Approaches

Relief seed aid is an approach to quickly ensure that farmers have seed to plant the season after a disaster. This need for relief seed is based on the implicit determination that farm communities are seed insecure – that both the formal and farmer seed systems have failed and farmers are therefore unable to obtain seed. This might be because seed is not available, or because it cannot be accessed, or because it is of unacceptable quality.

Until recently, relief seed approaches were called "Seeds & Tools". Confronting the perceived failure of both the formal and farmer seed systems and influenced by an ongoing emergency food operation, "Seeds & Tools" were top down and interventionist (termed by some "command and control"). "Seeds & Tools" is now referred to as "Direct Seed Distribution" (DSD). Recently, an alternative to DSD, a combination of Seed Vouchers & Fairs (SV&F) (CRS, 2002) has gained widespread acceptance.

Relief seed approaches have evolved differently in different countries in Africa. Currently there are two basic types of DSD relief seed systems:

- Commercial sector-based
- Farmer system-based

Disaster first triggers a food aid response. This is closely followed by consideration of supporting agriculture recovery by ensuring that farm families have access to adequate quantities of seed of acceptable quality of the right varieties in time for planting with the onset of the next rains. Donors and relief agencies understandably looked to the commercial seed sector for seed – first to national enterprises, next to regional and then perhaps to international sources. However, there have been numerous problems with commercial seed sourcing – problems of inappropriate varieties, poor seed quality and late delivery. Commercial seed companies have been ill prepared to meet the spike in demand for commercial seed from donor-financed activities. Problems increase as seed is sourced regionally and internationally. In response to these problems, donors and practitioners are increasingly looking to the farmer seed system as a source of seed, especially where there are no local commercial seed sources.

Commercial sector-based relief seed approach

Kenya, Zimbabwe and Malawi have a commercial sector-based relief seed approach. This is because of the importance of maize as a commercial crop and the dominance of commercial maize seed in the seed market.

When disaster caused crop failure in these countries it became evident that the seed systems (whether farmer or commercial) had failed. Government, donors and NGOs sought to develop a strategy to assist in recovery, focusing on facilitating farmer access to commercial seed for the following reasons:

- Commercial seed was available (the problem was inability of farmers to purchase not a failure in production).
- The impact of the disaster on crop production also affected farmer seed production as seed is produced on the same fields. Therefore there was a problem of availability of farmer seed.
- Sourcing seed from the commercial seed sector would serve to financially support the formal sector – perceived as a public good.
- Being certified, commercial seed was deemed to be of better quality than farmer seed.

- Purchasing from commercial seed companies allowed large lot tendering and satisfied donor and implementing agency procurement requirements.

Recent evolution of commercial-based relief approaches

Recently, there has been concern that maize-based seed aid – though efficient – was not effective in increasing seed system resilience. In fact, seed aid was becoming an annual event (Sperling 2002).

Increasingly, seed aid practitioners – regular customers of commercial seed – are questioning the wisdom of relying on seed of commercially available maize and beans under certain conditions. The distribution of maize and beans to farmers experiencing crop failure due primarily to drought when these farmers traditionally cultivate dryland crops such as millet, sorghum and cowpeas was inappropriate. Responding to NGO customer demand, several seed companies (for example Western Seed Company in Kenya) have begun producing sorghum, millet and cowpea seed – exclusively for the relief seed market.

Farmer system-based relief seed approaches

In countries without a significant commercial seed system (Burundi) or one that focuses on a small niche market (maize in Ethiopia), seed aid practitioners have always relied on the farmer seed system as the source for DSD.

This raises an interesting question:

If, after persistent and repeated disaster due to conflict (Burundi) and drought (Ethiopia), adequate seed is available in the farmer seed system to meet the needs of the relief seed market, might this indicate that there is also adequate seed availability in the farmer seed systems of the non-commercial crops in those countries that use commercial-based seed (Kenya, Uganda, Zimbabwe, Malawi)?

Recent evolution in farmer-based relief seed approaches

An efficient and effective relief seed approach has developed in Ethiopia, entirely dependent on the farmer seed system. With a declared disaster

and reception of primarily donor funding support, localized seed is purchased through district level seed committee tendering to local traders.

In Burundi, the Food and Agriculture Organization of the United Nations (FAO) has promoted a similar though more centralized system through the issuance of large tenders for the purchase of bean seed from the farmer seed system.

3. Conclusions and Recommendations

An analysis of the development of formal seed systems – influenced by the emergence of maize as an important food and cash crop in Africa – assists in understanding how and why relief seed approaches evolved as they did in different countries.

It is now clear that the conventional wisdom that disaster results in farmer seed system supply failure is incorrect. Concurrent with repeated *de facto* determinations of supply-side failures in Kenya, Zimbabwe and elsewhere, the Government in Ethiopia and FAO in Burundi have been relying exclusively on the farmer seed system supply for seed to distribute to seed insecure communities.

It is clear that the formal seed system has the competitive advantage in maize seed and that relief seed approaches will continue to rely on commercial maize seed. However, care needs to be exercised to ensure that maize seed is not distributed to farmers farming in inappropriate maize agro-ecologies.

The starting point in seed recovery programming in all other crops should be the farmer and the informal seed systems. At the same time, commercial seed companies should be encouraged to target the relief market with seed of other crops, especially crops in which breeders have developed promising new varieties of potential interest to farmers. More effort should be devoted to effectively supporting the informal seed system and linking the formal and farmer seed systems so farmers can access seed of promising new varieties and to subsequently maintain varietal and seed quality within their own system.

Seed Vouchers & Fairs Minimum Data Set:

Analysis of CRS Experiences

Paula Bramel, CRS/EARO

Since its development in Uganda in 2000, CRS Seed Vouchers & Fairs (SV&F) have become the preferred approach to seed-based agriculture recovery across the CRS world. Today, SV&F have been held in 16 countries under emergency conditions such as conflict, drought and floods. This paper summarizes the results of a survey of 16 country[1] programs that implemented SV&F.

1. Introduction and Overview of the Survey

Seed fairs are markets organized to distribute seed to seed needy households through a voucher system. Seed fairs are organized on a specific day and location. Vulnerable households are provided with vouchers worth a specific cash value to exchange for seed from registered sellers in the community. The seed sellers redeem the vouchers for cash from CRS and its partner at the end of the fair. The seed fair approach addresses the problem of lack of access to seed in a household following a disaster or displacement, and in doing so, challenges the assumption that seed is unavailable in a community during an emergency. Some of the advantages of the seed voucher and fair methodology are that:

- Seed fairs present a means by which beneficiaries access agriculture inputs that are locally available, of their preference, and meet their immediate needs.
- Seed quality is left to the judgment of farmers.

[1] The countries in the survey were: Burundi, DRC, Eritrea, Ethiopia, Gambia, India, Kenya, Lesotho, Malawi, Madagascar, Senegal, Sudan, Sierra Leone, Tanzania, Uganda and Zimbabwe.

- They are an open and transparent process.
- Local crop production is supported.
- They provide a more equitable distribution of resources.
- They can be planned and implemented in a short period of time.
- Communities are actively involved in the planning and implementation.
- They serve the needs of large numbers of farm families experiencing difficulty accessing seed.
- They can be adapted to the level of seed insecurity.

The purpose of this survey was to develop a minimum data set of CRS SV&F activities worldwide. Outputs from this survey include:

- The status of the implementation of the SV&F approach.
- The development of a simple minimum data set to be continuously updated for CRS SV&F.
- A network of CRS SV&F practitioners.

Sixteen country programs that had implemented SV&F since 2000 completed the survey.

CRS has experience in the implementation of SV&F projects since 2000. In 2000/02, 4 countries piloted the approach (Kenya, Uganda, Sudan, and Tanzania). This initial test led to a training workshop in 2002 and the development of a manual in the same year (CRS 2002). In 2002/03, 6 countries implemented SV&F. For the period 2003/04 – up till now 11 countries have begun or continued their use of SV&F. These countries are Lesotho, Ethiopia, Eritrea, Madagascar, Uganda, Gambia, West India, Senegal, Zimbabwe, Zambia, and Sudan.

The application of SV&F has been done under conflict (5 countries), drought (13 countries), and floods (2 countries). In 3 of these countries, more than one cause was identified as the source of disaster. Most of the country programs have used the SV&F approach for drought recovery. When the total number of beneficiaries addressed and the amount spent on seed are compared (Table 1), the SV&F interventions that were targeted for drought responses were generally 2-3 times larger than responses to other disasters. The only exception was Sierra Leone.

Table 1. The number of countries, average number of beneficiaries, and average $[2] spent on seed vouchers for the 3 types of disasters.

Type of disaster	Number of countries	Average number of beneficiaries	Average $ spent on seed vouchers
Conflict	5	5 981	51 776
Drought	13	19 344	196 570
Floods	2	5 537	37 219

Most of the countries based their agricultural response on food security assessments. In 12 countries the primary justification was a food needs assessment. Most of these countries (8/11) also indicated that a seed needs assessment was done and used to justify the intervention. The actual nature of this assessment was not given but in most cases, the food assessments triggered a donor request which resulted in a preliminary assessment of seed needs. In Kenya, the Government diagnosed seed needs and requested the seed intervention.

In 11 of the 16 countries, the Office for Foreign Disaster Assistance of the United States Agency for International Development (OFDA/ USAID) was the primary donor for the SV&F intervention. In 8 of the 11 countries, OFDA was the only donor involved in the SV&F program. OFDA has been the largest donor for the application of this approach since 2002, with 4 countries receiving support in 2002/03 and 7 countries receiving support in 2003/04. FAO supported the program in 4 countries. In Sudan and Kenya, FAO was the sole source of funds but in Zimbabwe and Ethiopia, FAO contributed additional funds to an ongoing SV&F intervention. In Zimbabwe, the Department for International Development (DFID) also contributed funds to the ongoing OFDA funded intervention. DFID favors a livelihood approach to address acute and chronic disasters. The SV&F approach ties in with this requirement by contributing to the recovery of assets not just seed. Therefore, DFID has continued to support the agricultural recovery program in Zimbabwe in 2003/2004.

[2] $ refers to USD in this report.

2. Seed Vouchers & Fairs: Scale and Scope

In the minimum data set, the 16 countries reported on 537 seed fair events with an average of 734 beneficiaries per seed fair. The SV&F programs addressed the seed needs of 271,856 beneficiaries for a total of $2,743,580 spent on seed that was locally procured from 14,874 sellers. The number of SV&F beneficiaries per country varied from a low of 146 to more than 50,000 (Table 2). On average, 45% of the beneficiaries were female in the 11 countries which disaggregated the gender of beneficiaries. In 5 countries the proportion of female voucher holders were only 12-31% while in 5 other countries the number of female voucher holders ranged from 51-60%. The DRC had a seed fair with 100% female voucher holders. Many countries reported a problem with the under-reporting of females since they often register in their husband's name.

Table 2. The distribution of the countries among the total number of beneficiaries addressed, the number of seed fairs held, and the number of beneficiaries per seed fair.

Number of beneficiaries	Number of seed fairs	Number of beneficiaries per seed fair			
		146-300	301-500	501-800	1015-2438
146-7816	1-5	Lesotho	Sudan	India	
	17-38	-	Uganda	-	-
10 000-23 000	17-38	Eritrea	Tanzania	Gambia Senegal	Zimbabwe
	67-133	Sierra Leone	-	-	-
30 000-50 000	17-38	-	-	-	Burundi Malawi
	67-133	-	Ethiopia	Kenya	-

The number of seed fairs events varied from 1 to 133. The number of beneficiaries per seed fair varied from 146 to 2,438. Table 2 shows the distribution of the countries among these 3 parameters. Lesotho, Sudan, India, Madagascar, and DRC all held a small number of seed fairs for a moderate number of beneficiaries. These all represented targeted interventions for limited scale disasters. In most cases the programs were still engaged in a learning process. In the SV&F manual, it is recommended to hold fairs with no more that 500 beneficiaries. Fairs with more than 500 participants pose significant organizational challenges and risk. Despite this recommendation to manage seed fair events of 500 or fewer participants, 9 of the 16 countries held larger fairs. Madagascar, DRC, Zimbabwe, Burundi, and Malawi held fairs with more than 1000 beneficiaries per fair. There was no relationship between the total number of beneficiaries, the number of seed fair events, and the number of beneficiaries per fair. Demonstrating the flexibility of the SV&F approach, different combinations were used by the 16 countries. For example, Sierra Leone held a large number of small seed fairs for a moderate number of beneficiaries. Conversely, Zimbabwe held a moderate number of large seed fairs for a moderate number of beneficiaries.

3. Seed Vouchers & Fairs: Voucher Program and Value

Across the 16 countries, the average value of a voucher was $11.00 and the average total cost of the seed vouchers was $171,471 for 16,991 beneficiaries. There was a wide range of voucher values across the 16 countries – from $2.55 in West India to $34.00 in Lesotho and Eritrea. The total cost of the vouchers also varied greatly, $7,540 in West India to $447,777 in Ethiopia. As expected, the number of beneficiaries addressed and the total cost of the vouchers were not independent, however individual beneficiary voucher values were independent of the total size and cost of the program. The value set for the vouchers should depend upon the seed needs and the estimated cost of seed for the locality and the results of the survey would indicate this criterion was used to meet local needs. This again indicates the diversity of experiences gained in the approach.

Table 3. The distribution of the countries on the basis of the total number of beneficiaries addressed, the value of the voucher per beneficiary, and the total cost of seed vouchers.

Total number of beneficiaries	Value of voucher $	Total cost of seed voucher $		
		7540-62 000	100 000-250 000	250 000-450 000
146-7816	2.55-6.00	India Sudan DRC Madagascar	-	-
	6.00-15.00	Uganda	-	-
	29.00-34.00	Lesotho	-	-
10 000-23 000	2.55-6.00	-	Zimbabwe	-
	6.00-15.00	-	Tanzania Sierra Leone	Gambia, Senegal
	29.00-34.00	-	-	Eritrea
30 000-50 000	2.55-6.00	-	Burundi	-
	6.00-15.00	-	-	Kenya Malawi Ethiopia

The total value of the program allocated to the 16 countries was $4,183,102 with an average value of $321,777 per country. In general 57% of program value was used to cover the cost of the seed vouchers. The cost effectiveness of the SV&F program is measured by the proportion of the total cost which went to the vouchers and served as a

cash infusion to the local economy. It is desirable to keep this ratio high by reducing administrative cost. This can be effectively done by fully utilizing the local officials and committees. The range for this measure of efficiency was from about 20% in Zimbabwe and DRC to more than 80% in Eritrea and Tanzania (Figure 1). In some cases, the total cost of the program given in the survey by individual countries included activities in areas other than SV&F such as water/sanitation and health. Thus not all countries report cost in similar manners contributing to these differences. Generally, 8 countries reported values greater than 60% which is an acceptable ratio.

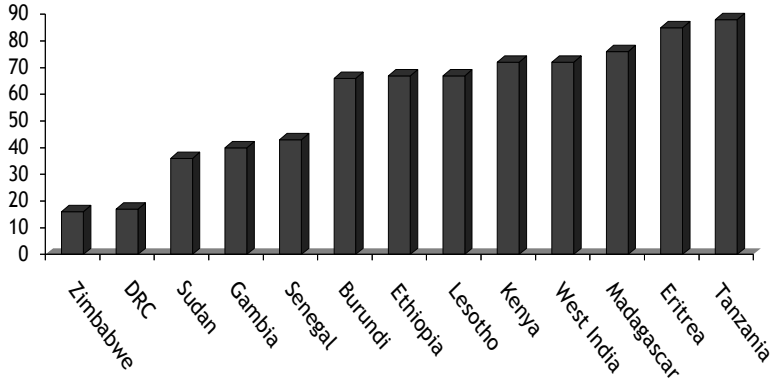


Figure 1. The proportion of the total cost of the SV&F program that was used for seed vouchers.

4. Seed sellers

Across the 15 countries who reported, there was a total of 14,874 sellers of which 71% were local traders (Table 4.). There was a range of seed sellers from 6 in Madagascar to 3,319 in Eritrea. Eritrea, Ethiopia, and Kenya accounted for nearly 60% of all the seed sellers, with the majority of these being local traders. Burundi, Gambia, Senegal, and Uganda reported having only local traders. Conversely, Zimbabwe, Sudan, Tanzania, DRC, and Lesotho had farmer seed sellers but no local

traders. These results may indicate differences in local grain and seed market systems in the various countries. The absence of local traders may be due to a very informal market system for local production and thus seeds. The formal system was represented by seed companies and stockist in 7 countries. In Madagascar, the majority of the very small number of seed sellers were from seed companies.

Table 4. The number of local traders, large traders, seed companies, stockists, farmers and other seed sellers in each country separately and the ratio of beneficiaries to sellers.

	Local trader	Farmer	Large trader	Stockist	Seed company	Other	Total	Ratio Beneficiaries/ sellers
Eritrea	2 912	404	3	0	0	0	3 319	3.05
Ethiopia	2 674	119	0	38	0	0	2 831	17.69
Kenya	1 450	830	124	25	4	21	2 454	15.61
Zimbabwe	0	1 347	0	32	2	1	1 382	16.28
Burundi	1 152	0	0	0	0	0	1 152	28.93
Gambia	886	0	0	0	0	0	886	18.70
Senegal	803	0	0	0	0	0	803	29.69
Uganda	622	0	0	0	0	0	622	12.56
Sudan	0	494	0	0	0	0	494	3.45
Tanzania	0	403	0	6	0	0	409	33.28
DRC	0	259	0	0	0	0	259	9.41
Sierra Leone	73	46	0	0	0	0	119	123.43
West India	23	93	0	2	0	0	118	25.82
Lesotho	0	19	0	0	1	0	20	7.30
Madagascar	1	1	0	0	4	0	6	542.83
Total	10 596	4 015	127	103	11	22	14 874	59.15

The proportion of local traders and farmers who were women is given in Figure 2 for 13 countries who reported the gender and type of seed seller. Madagascar had no women sellers and West India only had 3 women sellers. Malawi reported that 60% of the total number of sellers were female. Overall, the proportion of local seed sellers which were female was 33% but the proportion of farmers who were women was much higher, 45%. In the countries where both local traders and farmers were seed sellers, the proportion of women was nearly the same for both types of sellers. The proportion did vary from 56-60% in Kenya and Eritrea to less than 20% in Ethiopia. In the countries which had only local traders, the proportion of those which were women was very low, 22-35%. Conversely, in the countries where farmers were the majority of the seed sellers, DRC, Zimbabwe, and Lesotho had more than 50% women sellers.

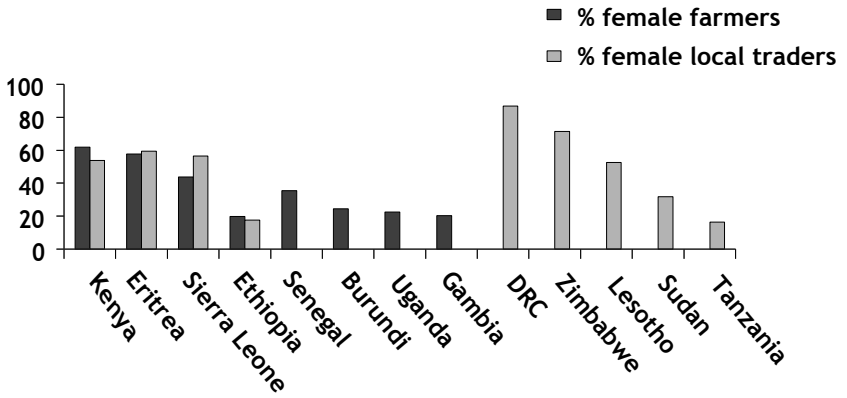


Figure 2. The proportion of local traders and farmer seed sellers that were female.

The ratio of beneficiaries to seed sellers indicates the effectiveness of the SV&F program to mobilize seed sellers (Table 4). This ratio was less than 10 in Eritrea, Sudan, Lesotho, and DRC which represented 1 medium and 3 small size programs (Table 2). The ratio was moderate (10-20) in Uganda, Kenya, Zimbabwe, Ethiopia, and Gambia (1 small, 2 medium, and two larger scale programs). The ratio was high (20-35) in West India, Burundi, Senegal, and Tanzania (1 small and 3 medium scale programs). It was very high (>100) in Sierra Leone (a medium scale

program) and Madagascar (a small scale program). Thus there was no relation of this ratio to the size of SV&F interventions or type of seed seller. One other factor which may also impact this ratio is the voucher values which may influence the market opportunity for individual seed sellers. No relation was seen in the 4 countries with ratios of less than 10 where 2 had the highest and 2 had the lowest voucher values (Table 3 and 4). For countries with ratios greater than 20, 3 had very low voucher values and 3 had intermediate values. Madagascar, which had the highest ratio, had a low voucher value while Eritrea and Lesotho, with the smallest ratios, had the largest voucher values. Thus no relationship was found between the ratio and voucher value. This would indicate that differences in the ratio were due to implementation approaches.

5. Seed Supply

The 16 countries were asked to list the top-5 crops for which seed was sold in the SV&F programs and the quantities of seed brought and sold by the seed sellers. The main crops for which seed was sold at SV&F events included 8 cereal crops and 7 grain legume crops. Maize was among the top-5 crops sold in 12 of the 16 countries; it was the top crop sold in Kenya, Malawi, Zimbabwe, and Lesotho. Groundnut was in the top-5 crops sold in 10 countries; it was the top crop sold in Sudan, DRC, Gambia, Senegal, and West India. Beans were in the top-5 crops sold in 9 countries and the top crop sold in Uganda and Burundi. Other crops listed in the top-5 were sorghum (8 countries), rice (4 countries), pearl millet (3 countries), and finger millet (3 countries). All other crops were listed in only one or two countries.

One of the challenges in the SV&F approach is to mobilize adequate quantities and varieties of the crops needed to meet the demand of the beneficiaries. When the quantity is adequate, nearly all of it is sold. Thus an assessment was done on the proportion of each crop brought by sellers and subsequently sold in each country. The results of this analysis are given in Figure 3. In only 2 countries, Madagascar and Lesotho, did the sellers sell 100% of seed brought to the fairs. In

Madagascar, 100% of crops brought were sold (maize, beans, rice and vegetable seed). In Lesotho, 100% of the sorghum and potato planting material was sold. A sale of 100% could be interpreted as a perfect match of supply and demand or it could indicate a high voucher value which allowed beneficiaries to purchase all the seed which was available. However, the sale of all seeds brought by sellers is more likely an indication of a shortage of seeds to meet the demand. A more realistic goal is to find 75-99% of the seed sold which was the case for 34% of the crops sold across all countries. In Lesotho and Sierra Leone more than 75% of the seed was sold for all the top crops available. In Tanzania, Zimbabwe, and Gambia, more than 50% of the seed brought was sold for the top-5 crops. In all these countries, the supply and demand were fairly well matched to give farmers options in terms of crop, variety, and seed quality. Pearl millet and rice were the only 2 crops where sellers sold more than 75% of the amount brought for all countries. In Eritrea, less than 50% of the seed brought was sold for all 5 top crops. This situation indicates an oversupply of seed that might be due to a high seed price in relation to the voucher value, a need for large quantities of one or more crops, such as barley or wheat, or a very large surplus of grain in the local market available for sale. This large supply could also be predicted by the very high number of sellers at the fairs. Thus mobilization was very successful but pricing may need to be considered to better match the supply with the demand.

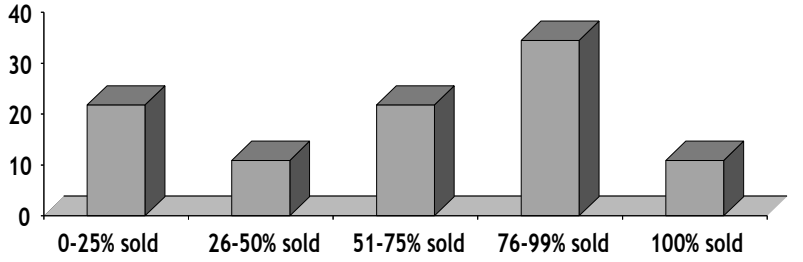


Figure 3. Proportion of seeds brought by sellers that was sold at SV&F. events.

One other option that can be used to facilitate the mobilization of seed sellers and encourage a better match of supply and demand is better seed pricing practice. In 11 countries, the price was set by negotiations or based on market analysis while in 3 countries (DRC, Lesotho, and Ethiopia) the price was set by seed sellers during the normal market operation. Two countries (Kenya and Gambia) used both methods for different fairs. The difference in the grain price and the seed price at the fair was compared for all crops. In two cases, groundnuts in Uganda and sunflowers in Burundi, the price of the seed was lower than the price of the grain yet in both cases less than 25% of the seed brought was sold. There were 4 cases where the seed price was more than 150% of the price of grain. This included sorghum in Ethiopia, Tanzania, and Uganda and maize in Uganda. In all these cases, the proportion of the seed brought that was sold was more than 75%. The majority of the cases had a premium of 0-25%. These results would indicate a high demand for crops which were sold at prices above 150% but also might have limited supply of the desired variety or seed quality. From the evaluation of the beneficiaries and sellers, in 14 countries both beneficiaries and seed sellers were satisfied with the price, in 2 countries beneficiaries said the price was too high, and in 2 countries the sellers said the price was too low.

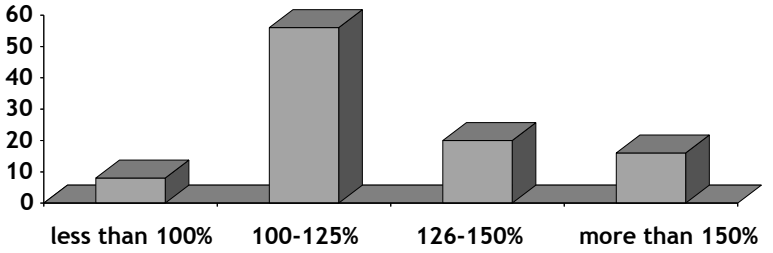


Figure 4. Average price for seed at SV&F as a proportion of the average grain price for top 5 crops sold in each country separately.

6. Seed Vouchers & Fairs: Evaluation

An evaluation of outcomes was done using a real time evaluation of the beneficiaries and sellers on the day of the fair and post fair monitoring. Sixteen countries did a beneficiary evaluation on the seed fair day as suggested by the guidance. Eleven countries did or will do an evaluation during the cropping season while 7 countries did or will do a harvest evaluation. In 15 countries, seed sellers were evaluated on the seed fair day while 4 are planning post fair evaluations. The Minimum Data Set (MDS) survey also requested evaluation information on SV&F implementation processes.

Evaluations show that beneficiaries in all 16 countries found seed quality good. In 11 countries, seed quality was evaluated at the time of seller registration, 8 countries did germination testing, 1 country used pre-fair testing and 7 countries used post-fair testing. Of those 8 countries which used germination testing, 3 countries used internal testing while 5 countries used government testing.

In the evaluation of beneficiaries, a question was asked about the use of the vouchers and crop/variety selection at the SV&F. In all 16 countries, the selection of crops and varieties was adequate but some countries indicated that not all the varieties were available. In a small number of countries (2/16) beneficiaries reported that voucher use was not satisfactory, perhaps due to problems in voucher design and values.

Finally the countries were requested to list any follow-up activities to SV&F. For beneficiaries, 12 countries planned post fair monitoring, Zimbabwe planned a demonstration plots and field day program, 3 countries planned to do seed system assessments, and 3 countries planned activities with research programs to facilitate access to crops or new varieties and encourage technology transfer. For sellers, 11 countries have none planned, 3 countries have post fair evaluation, 1 will involve the sellers in an agro-enterprise workshop, and 1 plans to organize seed grower groups.

7. Conclusions

The minimum data set has set a standard for reporting on CRS experience with SV&F. The consolidation of these minimum parameters to report on the implementation and outcomes of the SV&F will allow CRS internally and externally to learn from its individual country experiences. The analysis does indicate the breadth of the applications of the approach, the diversity of outcomes, and the possible relationship between implementation and the degree of success. The local nature of this intervention is evident in the diversity of options used to implement the approach and the local differences in the types of crops for which seeds are sold and types of sellers. Hopefully this minimum data set will continue to be compiled and used by CRS for its future reporting.

COUNTRY PAPERS

Afghanistan

Burundi

DRC

Eritrea

Ethiopia

Gambia

Kenya

Madagascar

Malawi

Senegal

Sierra Leone

Sudan

Uganda

West India

Zimbabwe

CRS/Afghanistan:

Livelihood Inputs

A Lesson from Afghanistan[1]

Donal Reilly, CRS/Afghanistan

During the past two decades over 4 million Afghans fled war and drought, most of them to neighboring countries. A further 1.5 million were internally displaced. With the fall of the Taliban regime this migration pattern began to reverse. According to the Ministry of Refugees and Repatriation, almost 2 million refugees have returned since the beginning of 2002, along with 900,000 internally displaced persons. Large numbers are also expected to return with the commencement of spring 2003 and onwards.

1. Introduction

The severity of four to five years of drought, particularly in the south and west of Afghanistan, has had grave consequences on the livelihoods of both previously settled farming communities and the nomadic and semi-nomadic populations. With little or no access to water, livestock levels have been decimated (82-93% herd loss, CRS 4/02) and crop planting was found to be less than 10% of normal levels among 81% of farmers interviewed at the beginning of the season (CRS 4/02, field verified 7/02). As a result farm families have been forced into debt and have sold their household and productive assets (Tufts/USAID 5/02). Labor opportunities are limited almost exclusively to provincial cities and cross border manual labor. Coping mechanisms are nearing

[1] CRS Afghanistan would like to thank the CRS India evaluation team for their contribution to this paper.

exhaustion forcing many families to sell land, livestock and household assets; thereby increasing their overall household debt.

It is acknowledged that 23 years of turmoil have resulted in Afghans developing dynamic and complex coping strategies and that the composition of rural livelihoods cannot be taken for granted. In recognition of these complex coping mechanisms and in light of accurate information regarding existing coping strategies, CRS designed a project that relied on the beneficiaries choosing livelihood inputs best suited to their individual needs. Over the past year, August 2002 to 2003, CRS/Afghanistan has implemented an integrated livelihoods program that provided short-term access to cash and livelihood inputs to meet the immediate needs of resettling populations and vulnerable families in communities of return in southern and western Afghanistan. The program was valued at $1.8 million and was jointly funded by the Bureau of Population, Refugees and Migration (BPRM) and CRS and target vulnerable communities in the southern province of Kandahar and the western province of Herat.

The program was designed to promote local economic growth through improved community infrastructure and increased household productivity. A twin intervention approach, cash-for-work and livelihood inputs, was employed for the following reasons:

- *Cash-for-work* will be used to aid vulnerable families to acquire cash that can be used to purchase food and non-food items to aid in their immediate survival. Simultaneously cash-for-work activities gave the communities the opportunity to create and improve rural assets such as irrigation channels, karezes[2] wells and farm-to-market roads.
- *Livelihood inputs* allow vulnerable families to obtain materials, tools, seeds, livestock or other livelihood inputs that will offer them an opportunity to improve their future economic situation.

This paper primarily deals with the implementation of the livelihood inputs section of projects.

[2] Kareze is an ancient system for water extraction in Afghanistan. A Karez is essentially a horizontal well in which the discharge of an aquifer is brought to the surface by a tunneled conduit.

2. Implementation of Livelihood Vouchers

Goods that can be redeemed through the livelihood inputs included seeds for wheat, vegetables and other crops, farm tools, fertilizer, rental of traction animals or tractors, livestock, wool and tools for carpet weaving, and tools/inputs for trades such as masonry, carpentry, blacksmithing and tailoring. This list was not exclusive since beneficiaries were allowed to purchase items that improve their overall livelihood. While the specific implementation of the livelihood inputs was designed in consultation with implementing partners and community shuras (councils), different implementation strategies were used in Southern and Western Afghanistan.

Generally, Participatory Rural Appraisal (PRA) activities were conducted by CRS/partner field teams to select communities for participation in the proposed project. Eligible beneficiaries were generally identified by the community *shura* and confirmed by CRS and its implementing partners (IP). Discussions with beneficiaries took place in order to get an idea of the livelihood options they would like to purchase. CRS and IPs carried out surveys in the local and district markets to identify cost and availability of items and to provide information on quality. The survey was also used to determine the interest of merchants in taking part in the project and their ability to meeting the project demand for certain products.

Field teams conducted further meetings in target communities to describe the project to the beneficiaries and community-based organizations and share the information from the market survey. Each beneficiary received goods or services towards improved household livelihood. Beneficiaries themselves determined what types of goods were most appropriate for their needs. In case of demand for improved seeds, arrangements were made to procure seeds from local seed producers associations and/or FAO. Plowing arrangements were made with local suppliers or government, as appropriate, in conjunction with community organizations and livestock was purchased from local markets. The participating merchants were paid directly by CRS thus enhancing the local economy. Finally, post distribution monitoring will

be conducted to assess whether the inputs are being used to increase livelihood opportunity, or whether they are sold to meet basic needs.

At this point, September 2003, it is too early to measure the economic impact of the $70 (voucher value) livelihood input on participating families, however, an evaluation team from CRS/India carried out an assessment of the project in August 2003. They reported achievements to date for the livelihood voucher program. This included that 196 villages in Herat province and 9 villages (which include about 100 sub villages/mosques) in Kandahar province have been covered under the program. A good rapport has been established with the community in both provinces paving the way for future development initiatives in these areas. 3000 families received sustainable livelihood/agricultural inputs of $70 to pursue several farm based and non-farm based livelihoods. Of these, 809 were women. Informal interviews with the participants reveals that these inputs have helped participants to repay loans from the income generated from the use of the inputs, invest in household items such as carpets, crockery, etc., improve their dietary habits to move from a meal comprising bread and tea to a meal comprising bread, vegetables and sometimes meat. The evaluation team stated that "the achievement of the program vis-à-vis the stated objectives and indicators within the span of one year is impressive". A more detailed measure of impact on beneficiaries' livelihood strategy will be obtained towards the end of the year.

The evaluation team reported that the flexibility built into the project led to the two offices (Herat and Kandahar) implementing the program in very distinctive ways. While Herat introduced innovations such as the community livelihood program, Kandahar was innovative in the kind of inputs selected – this is especially so in the case of agricultural inputs, e.g. provision of fuel to the gardeners to enable them to irrigate their garden as per the required norms to ensure increased yield. The inputs provided were based on the already existing skills of the participants. This is both the strength of the program and its shortcoming. While building on existing skills is a safe way to program resources, diversification or introduction of new livelihood options has its merits too. For example, milk processing was cited as one of

the livelihood options that could be introduced to communities whose livelihood is largely dependent on livestock.

Inputs were provided as per the participants' request. Feasibility and sustainability of the requested inputs were not researched sufficiently. This is due to time constraints and the commitment to provide as per the participants' request. Accompanying skills training was limited and this emerged as a felt need from the participants, especially those who received the livelihood options. Counseling on the most effective use of the inputs and the final profits did not accompany the provision of inputs. This is again due to lack of staff, time and expertise.

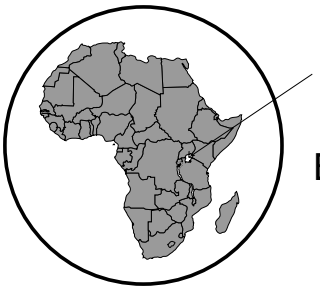
Selection of participants was done with care, based on the assessments done at the beginning of the program. However, in Herat, due to the large spread of the program not all eligible participants could receive inputs. There was a prioritization and about 11.44% of the community was covered. In Kandahar, selection of participants and inputs were based on what their existing skills were. This led to the exclusion of those seemingly with no skills or land. However, the assessment did not include the skills of the women in the family. This is largely due to problems faced in obtaining details about the women in the families. Thus, livelihood options given to women were limited to widows.

While Herat included a combination of inputs per voucher, in Kandahar the inputs per voucher were limited to one kind. For example, in Herat a family received seed, carpet weaving materials, etc. against one voucher. After an assessment of the different kinds of inputs, the different prices of the different inputs were presented to the participants who then chose the quantity and type of inputs they wanted up to a total value of $70. In Kandahar, this was restricted. If a participant decided to opt for seed, he/she was given seed worth $ 70.

3. Challenges and Lessons Learned

While the evaluation team received positive feedback on the impact of the $70 livelihood input, it is too early to assess the overall impact of the program on the livelihoods of the beneficiaries. In follow-up to the existing program CRS has received $1.2 million from BPRM for a one-year continuation of the livelihood cash-for-work project in Kandahar and Herat. CRS has also received $2.5 million from OFDA for the implementation of a similar project in the western province of Ghor and southern province of Kandahar.

In implementing these two grants CRS will take into account lessons learned from the past year and recommendations from the evaluation team. Major points to consider were the need to streamline the beneficiaries' selection process and to improve coordination between the two project areas. There is a need to explore ways to better involve local markets, such as fair days with a greater use of local vendors. CRS/Afganistan and its local partners need to consider offering more and better advise to beneficiaries in selecting inputs, to share experiences of others and highlight opportunities from various inputs. Thus they should link inputs with skill training.



CRS/Burundi:

Experience with Seed Vouchers & Fairs in Kirundo Province

Stephen Walsh, Bonaventure Ngendahayo, and Christophe Droeven, CRS/Burundi

In Burundi, the combined effects of drought and political crisis have devastated agricultural production and food security. Kirundo province, where small farm cultivation accounts for over 90% of the population's livelihoods, experienced a severe rain shortfall in 2000 and 2001. CRS/Burundi used the SV&F approach to respond to seed needs of nearly 33,000 farming families in Kirundo province.

1. Introduction

Kirundo province is in the extreme northwest of Burundi, bordering Rwanda and covering an area of 1,700 km². Kirundo province has a population density of 230 hab/km² and an average farming area of 0.8 ha/family. Small farm cultivation accounts for over 90% of the population's livelihoods. The region is traditionally a bean and sorghum producer, but bananas, coffee, cassava and sweet potatoes are also cultivated.

The Burundian farmer seed system is characterized by broad crop and varietal diversity, and the continuous search for new seed and new varieties[1]. Seed production is usually a part of crop production

[1] Farmers use several kinds of seed from different sources. They are mainly varieties taken from their previous harvests, adapted to local conditions and managed over many generations, or seeds from other regions obtained through small local markets or by exchange. Farmers also use varieties developed by research in national or multinational centers and purchased annually through formal supply networks. Source : Ministry of Agriculture of Burundi : Plan national semencier 1989-1994

and there is often significant seed acquisition off farm. Poor farmers access seed differently from wealthier farmers with a far greater chance of seed need being met through the market for poorer farmers and wealthier farmers more likely to access seed from their own stocks (Sperling 1994). The farmer seed system is also marked by a limited ability to access new materials.

It is common for bean farmers to access their bean seed from a number of different channels within a single season. These channels include own stocks, market, social networks, and limited amounts of new material for experimentation from extension agents or research. Strategies for seed acquisition vary by wealth with a pronounced increase in use of the market as a seed source among poorer households (David and Sperling 1999).

Agricultural production and food security at the household level have been devastated by the combined effects of drought and political crisis. Kirundo has experienced a severe rain shortfall with declines of 70% of the norm for 2000 and 2001. In October 2001, CRS/Burundi piloted the SV&F approach to respond to seed needs for 517 farming households in Kirundo Province. In the subsequent 16 months and over the course of three agricultural seasons, CRS employed this same approach in Kirundo to respond to the seed needs of nearly 33,000 farming families. Approximately $180,000 were injected into the Kirundo economy as a result of these fairs. The average gross per seed seller was $160.

2. Seed Security Assessment

CRS assesses seed systems by distinguishing between access and availability. Derived in part from the so called "entitlement approach" of Amartya Sen, this diagnostic framework highlights that total output and availability are but only one of several factors that determine entitlements, the bundle of commodities over which a farming family establishes command in order to meet their seed needs. Even though this fact is elementary enough, it is remarkable that food analysis and seed analysis is often conducted just in terms of production and total availability rather than taking note of the processes through which people establish their entitlements to food and seed (Dreze and Sen 1989).

In Burundi, as elsewhere in Africa, diagnosis of emergency seed needs has been based on household food security assessments, without distinguishing between access and availability issues. Assessments have been produced and based on seasonal calculations, without strong regard for potentially more chronic seed system problems. Such assessments are liable to misdiagnose chronic problems as "acute". This misdiagnosis may manifest in repetitive or regular characterizations of the seed problem in a given region, territory, or country as being "acute" without adequate analysis and appreciation of more systematic and chronic factors.

3. Comparing Conventional Seed Aid and Seed Vouchers & Fairs

Conventional seed aid does not place the farming family at the center of the process, rather the farming family is typically a passive recipient of relief. Under the best of circumstances, the recipient farming family or their local representative is queried as to their seed needs and the resulting relief package is determined in consultation between local authorities and the implementing agency. At the point of receipt of conventional seed relief, there is rarely any distinction between what one farming family receives from another. Uniformity and standardization are the watchwords for conventional seed relief.

The SV&F approach places the farming family at the center of the process by which their seed needs are met. Under the worst of circumstances, the recipient farming family decides what crop and variety best meets their needs and the resulting relief package is determined in consultation between the voucher holder and seed sellers. The package is dependent on the quantity, variety, and quality of seed brought to the seed fair by farmers and traders in the area of intervention. At any seed fair, there are a multitude of seed packages chosen by farming families. Choice and individual empowerment are the watchwords for seed vouchers and fairs.

The role of the implementing agency is to act in consultation with local authorities and in coordination with other seed aid implementers to

target the area of intervention and to determine the beneficiary list in consultation with local authorities and beneficiary representatives. The dates and locations of seed fairs are determined through the same consultative process. Farmers and traders are sensitized to the expected value of the seed fairs in their area, the dates, and locations. The intent of such sensitization is to ensure that adequate quantity, variety, and quality seed is present on the day of the fairs. This sensitization is through multiple channels, Church, community associations, governing authorities, and local/international NGO's operating in the region of intervention. Seed sellers are registered prior to fair commencement and seed is inspected. Participants are sensitized in advance with a focus on educating voucher holders that the vouchers are akin to cash and only redeemable through the seed fair.

4. Kirundo Seed Fairs: What seed was exchanged?

In the Kirundo seed fairs, the cost of seed per beneficiary farming family was approximately $6. The average seed package received by voucher holding farm families over the three agricultural seasons was 20 kg beans, 1 kg sorghum, ½ kg maize, 1/3 kg groundnut. Prices for seed exchanged during these seed fairs were also competitive with local market prices. Seed fair prices were on average 12-20% above local market prices, the increase due to the temporal nature of the vouchers.

Figure 1 synthesizes what was on offer and what sold over the course of 31 seed fairs held over three agricultural seasons in Kirundo. Seed availability was not a problem as there was nearly 1/3 more seed supplied than demanded. The preponderance of bean in the Kirundo seed system is evidenced by the rich diversity on offer at the Kirundo seed fairs. There were a total of twelve different bean varieties at the fairs.

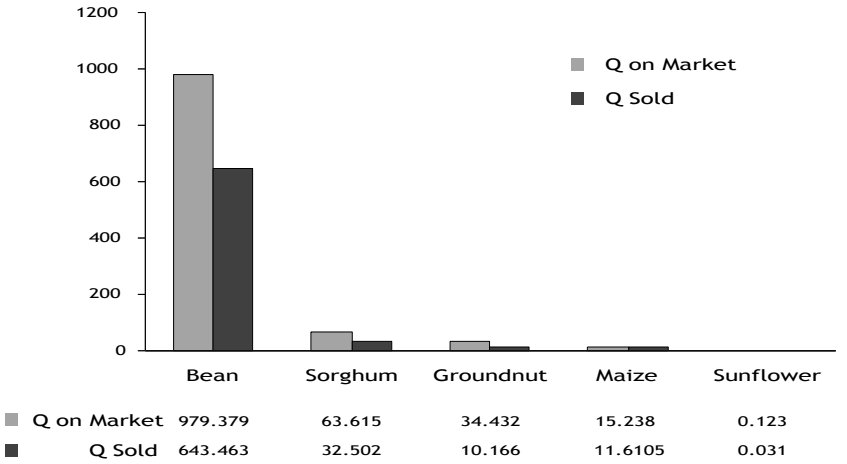


Figure 1. Kirundo Seed Fairs: seed traded (Metric Tons) (Q= Quantity).

4. Kirundo Seed Fairs: Assessing the Economic Impact

Beyond responding to seed relief needs in a timely and efficient manner, the seed vouchers and fairs stimulate local markets through injecting cash into the economy by way of independent entrepreneurs (seed sellers, large and small).

Table 1. Kirundo Seed Fairs: Value of seed sold over three agricultural seasons.

Seed fair dates	Total value ($)	Total sellers	Female sellers (%)	Average sales/seller* ($)	Max sales/ seller* ($)
Jan 02	51 557	346	17.9	149	1 634
Sep 02	54 400	298	22.8	183	1 054
Jan-Feb 03	76 036	491	30.7	155	1 642
Total	181 993	1 135	24.7	160	1 654

*Numbers are based on payout lists at seed fair conclusion not exit interviews.

Over the 31 different fairs held during these three agricultural seasons, there was an average of 37 seed sellers per fair, with a maximum of 72 and a minimum of 12. Of the sellers, 48% brought between 200 and 1000 kg of seed to the fairs while another 37% of all sellers brought less than 200 kg. The sellers at these fairs were an assorted group of young and old, male and female. There were young men in their late 20's, grandmothers paired with children in their late teens, traders on bicycles, others with rented vehicles, and a very few traders with their own vehicle. The one common denominator was that they were all independent entrepreneurs.

Table 2. Kirundo Seed Fairs: Voucher holders over three agricultural seasons.

Seed fair dates	Total voucher holders	Total female	Total male	Female %
Jan 02	9 331	4 677	4 654	50
Sep 02	9 795	5 370	4 425	55
Jan-Feb 03	13 684	4 321	9 365	32
Total	32 810	14 368	18 444	44

5. Kirundo Seed Fairs: Lessons Learned

The evidence from Kirundo supports the assertion that even in emergencies, local systems are relatively durable and resilient, and that the common farmer problem is more aptly characterized as being driven by losses of entitlement (access) and less so by total production or total output (availability). Entitlement here defined as endowments from land holding, labor, cash, trade, kinship and social ties. CRS/ Burundi's experience in Kirundo also points to how the SV&F approach can strengthen the farmer seed system. The evidence suggests that this occurs in three ways: by letting farmers strategize which crops and varieties they should use in stress times, by letting farmers continue to

access seed through sellers they know (and whose quality they know), and by supporting local seed sellers who will continue to serve farmers, with or without seed fairs.

The Kirundo seed fairs also show the considerable knock on effect of a SV&F approach to local farming economies. With a total of nearly $160,000 injected into the Kirundo economy over three successive agricultural seasons, the preliminary results indicate that this money will be turned over several times within the local economy and used for critical needs such as investment in agriculture and health care. The major insight that should be drawn from the CRS experience with seed fairs is the need for greater focus and attention to be paid to local seed systems. The fact that the farmer seed system, as opposed to the formal system, remains the dominant channel through which seed needs are met, particularly by more vulnerable households and even during times of profound seed system stress, points to the need for an increase of resources and effort to be channeled to the farmer seed system.

CRS/DRC:

Experience with Seed Vouchers & Fairs

Mbuyi Lusambo, CRS/DRC

When war broke out in 1998, the town of Kabinda became the front line and was under rebel siege for three years. From early 1998 to early 2001 the villages surrounding the town of Kabinda were no man's land in which farmers did not have safe access to their land. Instead of being a center of agricultural production, Kabinda became known for malnutrition. CRS provided a first round of seed and tool assistance to some accessible war-affected farmers in 2001. In 2002 CRS/Congo carried out a SV&F program, when the front line began to recede and became porous more war-affected and displaced families returned. The improved access to Kabinda also attracted producing farmers from rebel-held territory further out.

1. Introduction

Kabinda is an agricultural district in Central DRC with a population of over 50,000 inhabitants, which traditionally supplies food to the large urban market of Mbuji Mayi, (population 1.5 million). Kabinda district is spread out over 58,625 km^2, on a plateau intersected by gullies and mountains. The district has alternating wet and dry seasons, with 9 months of rain from mid August to mid May, intercepted with a short dry season, end January to mid February. Temperatures range from 16°C to 25°C. About 90% of Kabinda's traditional economy consists of agricultural production such as maize, manioc, beans, peanuts, and rice. No formal seed sector has existed for many years. Each farmer

normally selects and keeps a few kilos of produce during harvest as seeds for the next planting season.

CRS/Congo carried out the first SV&F in Congo (to our knowledge) in the district of Kabinda in September 2002. The fair was used to procure and distribute peanut, cowpea, pistachio and soy seeds and was part of an emergency agriculture rehabilitation program that also included the direct distribution of maize seed and tools to 2,423 people, in a 20 km radius. The decision not to include maize seed in the fair was due to a total failure of the previous maize crop in the region (due to drought and pests).

2. Seed Vouchers & Fairs: Implementation

The seed fair beneficiaries were the 2,423 people who had returned to their villages in the period between mid-2001 (CRS' first seed distribution) and September 2002. These families also received maize seeds directly. In early September 2002, CRS and CRS's partner Caritas Kabinda met with officials from Kabinda to explain the seed fair methodology, objectives and advantages and obtained the support of the authorities of the district of Kabinda. The CRS program manager held a training in Kabinda, 10 days before the start of the SV&F. The training targeted enumerators and partner supervisors involved in the project and centered on building skills and tools to be used before, during and after the seed fairs.

Caritas recruited 30 animators and 6 supervisors, to supervise groups of 5 animators. These groups were in turn sent out to about 30 villages for 3 days where they identified the beneficiaries (those families not present during the first seed distribution). Sellers were recruited through a radio program. For five nights, Caritas Kabinda and a CRS program manager spoke on the radio to tell people about the seed fair, what it was, how, where and when it would be conducted, and who could participate. The show was transmitted in French and Kisongwe (the local language).

CRS was the donor for this seed fair. The total cost for seeds for the fair was $12,190. The value of each voucher ranged from 100 FC (Congolese

Franc) (about $0.3) to 500 FC (about $1.5) with each beneficiary receiving vouchers totaling 1,600 FC (about $5) allowing him/her to buy at least 5 kg of legumes. Vouchers had the name of the beneficiary, name of the village, marital status (if married, name of husband), number of children and information on the seeds and quantity each beneficiary was to receive. CRS wrote down the name of each beneficiary on a master list along with the answer to a secret question, asked to the beneficiaries the day of the fair in order to establish identity (such as the name of a child).

Enumerators were in charge of establishing a list of all the sellers (a total of 259, with 34 men and 225 women). A token was given to each registered seller with the seller's name, village, variety of seeds they were selling and quantities (approximate due to the sellers' individual methods of measuring seeds), along with the name of the seed fair, date and place. Each seller signed the enumerator's list to prove he/she had received a token. Sellers registered up until the day of the fair, particularly those coming from rebel-controlled territories.

The seed fair took place in a school compound with a single entrance and a single exit. At the entrance, inside the compound, a table with 3 enumerators checked the seller tokens and the list of beneficiaries and called out groups of 5 beneficiaries at a time. Twelve policemen were on duty at the entrance and exit. The fair started at 7:15 a.m. but after 30 minutes, the policemen could no longer control the crowd, particularly the beneficiaries, who thought they would miss the seeds and be left with a worthless voucher. The door eventually broke down and everyone came in, including some people who did not hold vouchers. In order to restore order, the sellers were installed at one end of the courtyard and the beneficiaries at the other and the system of the seed fair was explained once more, over a megaphone. Sellers started off by conferring with each other and setting seed prices but eventually, each seller bargained with each individual beneficiary. The fair continued until 4 p.m. The cash register was open from 4:15 p.m. to 7 p.m. and reopened the next day from 7:30 a.m. to 1:40 p.m, to exchange the sellers' vouchers for cash.

A cashier's office was set up in a room of the offices of *Caritas Développement Kabinda*. There were 3 cashiers: the first verified seller

tokens with names on the seller list; the second checked the vouchers and added up the amount to be paid, and the third paid out the cash. Of 259 registered sellers, only 214 showed up and sold seeds. The seller who earned the most made 104,200 FC ($315.60) and the one who earned the least made 1,300 FC ($3.40).

During the fair, enumerators circulated and asked the beneficiaries and sellers questions using pre-established questionnaires. However, these forms were not always filled out completely, so a post-seed fair evaluation was carried out, with 200 beneficiaries from 11 villages.

3. Seed Vouchers & Fairs: Evaluation

The results show that peanuts were the most bought and sold seed (44.5%), followed by beans (33.5%), maize (23%), pistachios (7%) and soybean (4%). Peanuts are a cash crop while beans are used as a condiment, eaten with *biashi* (a ball made of manioc flour and maize) in most households of Kabinda. For maize, the beneficiaries or the animators may have misunderstood the survey question, because maize seeds were distributed to all the beneficiaries and were not for sale at the seed fair. 71.5% of the households rated the seed quality as good while 11% found it mixed and/or moldy.

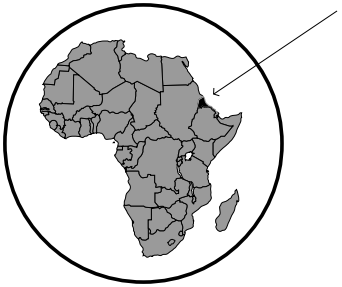
79% of households were satisfied with the seed fair and 20% were not. Some of the main reasons of participants' dissatisfaction with the fair were that some beneficiaries felt that 5 kg was insufficient because some had large fields to sow and needed 10-15 kg of seeds. Some beneficiaries felt that there should have been manioc cuttings at the fair because manioc is one of the main ingredients used in making *biashi*. However, transportation and logistics were problematic, as the cuttings would have come from the National Center of Agricultural Research (INERA) located in Gandajika; there is no direct road from Gandajika to Kabinda. Finally, some beneficiaries would have preferred receiving money as opposed to seeds.

The biggest problem encountered was the lack of time to plan the fair. Two main activities were combined: a) distribution of maize seeds and agricultural tools to more than 5,000 households; and b)

organization of the Seed Voucher and Fairs for other seeds for 2,438 households. This all had to be done in 2 weeks, before September 15, when seeds are traditionally sown. Sellers could not say with precision the quantity of seeds they would be bringing, mainly due to the use of non-conventional measures by some sellers. Some participants felt the length of the seed fair was too short. However, it was kept short to cut down on possible fraudulent behavior. High seed prices compared to the market prices were reported and there was mixed consensus on the quality of the seeds.

4. Next Steps

A seed voucher and fair for an emergency project for displaced peoples of Lomami in the district of Sankuru, province of Kasaï Oriental had been planned, but due to time constraints and to the unavailability of personnel implicated in the project, the fair did not take place. We are also awaiting grant approval from USAID for an agricultural project in which we would like to use the SV&F approach.



CRS/Eritrea:

Experiences with Seed Vouchers & Fairs

Yibabie Sebhatleab and Jack Norman, CRS/Eritrea

During the 2002 growing season, the spring rains failed to materialize and the summer rains started 4 to 6 weeks late and ended early. Eighty percent of the people of Eritrea are mixed crop and livestock farmers, dependent on the azmera (spring) and kremti (summer) rains. In a report released by FAO/WFP, the number of people affected by this drought is estimated at 1.4 million, approximately 42% of the total population. In the Consolidated Appeal (CAP) issued in November 2002, another 1 million people are deemed at risk, including expellees, IDPs, returnees, and those living in chronic drought areas. The annual cereal production outputs are now confirmed at approximately 54,000 MT or 10% of the annual cereal needs of the country. Border closure with neighboring Ethiopia and Sudan hinder the possibility of any cross border trade. Patterns like those that preceded the 1984/85 famine began to appear, cereals prices doubled compared to three months ago while animal prices are at half the rate they were over the period prior to the onset of the drought. Farmers, needing to purchase cereals and knowing that they cannot provide adequate fodder & water for their animals, are selling the goats, sheep and cattle. In 2003, the rainfall started late, even though at this time the rains are good, this may affect the long season crops like sorghum, maize and finger millet.

1. Introduction

The targeted area Zoba Debub (Southern Administrative Region) is located on the central highlands zone. The landforms are plateau, with hills, valleys and small escarpments. The altitude ranges from 1500-2600 meters above sea level. Dominant soils are cambisols, luvisols, lithosols, regosols. The average farm size is 1 ha. The main crops are wheat, barley, sorghum, finger millet, maize and tef. The key minor crops include peas, beans, chickpeas and linseed. There is dependence on animal power for plowing and threshing (oxen); small ruminants are reared by most families for meat and milk and as a source of cash; donkey and mules are important for transport. Communal grazing areas and seasonal migration of herds to the lowlands are common. Problems include acute shortage of fuel wood and declining soil fertility and productivity – due to population pressure on land.

The demographic profile of the targeted population of Zone Debub is a heavily populated area, totaling 778,040 people, approximately 20% of the country's total population. According to the recent FAO/ WFP report, it is also one of the areas most severely affected by the drought, with a 44% decrease in rainfall and a subsequent reduction in agricultural production. Overall, the 2002 crop yield was very low; the crop season was short, and the return on these activities was often inadequate to cover household subsistence needs. The majority of the people in the region live on approximately $50 per day. This level of income will hamper farmer families' ability to purchase seed for the coming planting season. Many of the targeted families were women-headed households and approximately 75% of all households are headed by women, elderly or disabled persons.

2. Rapid Seed Security Assessment

A field assessment of the seed system and the impact of the drought on seed needs in the upcoming season was undertaken between 20-21 January, 2003. The team included CRS/Eritrea staff, staff from CRS/ EARO and the Ministry of Agriculture. The team visited two sub-zones in Debub, which are potential target areas for the program intervention.

The team interviewed affected farmers in villages in two sub-zones and grain traders in the local market in one sub-zone. Prior to the field visits, a stakeholder meeting was held with the Ministry of Agriculture staff from the headquarter and from other zones. This meeting was used to assess the need for seed security intervention in response to the current drought 2003 in assisting agricultural recovery. Assessment was completed at the sub-zone level based upon crop production monitoring. A monitoring trip confirmed that crop production had been severely affected by the drought.

3. Implementation of Seed Vouchers & Fairs

CRS submitted a proposal to OFDA/USAID for funds to assist families who are in shortage to access seed of their choice through a seed voucher program. The main partners in this intervention were Ministry of Agriculture, Ministry of Local Government and NGOs (CARE, Concern and Refugee Trust) working in seed distribution in zone Debub. All these partners participated in the Seed Fair workshop. Even though the approach was new to Eritrean farmers, meeting with extension workers, with local leaders, local administration officers and relief committees of each village enabled CRS/Eritrea to explain the methodology of the SV&F system.

The donors for the intervention were OFDA/CRS funds and the total amount spent was $353,808 and the total cost of seed for the intervention was $299,222. In this intervention 37 seed fair events were held and 10,136 food insecure families received vouchers of which 51% were women households. The targeting of beneficiaries at the seed fair was done on the choice of local government and Zonal Ministry of Agriculture based on the drought assessment.

Table 1. Number of beneficiaries, % female beneficiaries, seed sellers and % female sellers.

Sub zone	Number of beneficiaries	% Female beneficiaries	Number of seed sellers	% Female seed sellers
Segeneiti	997	62	677	80
Decemhare	1 915	57	694	76
Adikaieh	600	56	34	53
Dbarwa	2 801	45	934	39
Mendefera	1 778	35	475	51
Areza	1 044	41	208	47
Serejeka	1 001	69	297	44
Total	10 136	51	3 319	58

Heads of families were given a set of 28 small denomination vouchers to be exchanged for seed at special seed fairs.

4. Results

The cost per beneficiary household was $29.52. There was no formal screening committee for crop quality control but during the fair it was checked by beneficiaries with close follow-up of extension workers, CRS staff and the field consultant. Very few of the displayed seed were rejected due to poor quality. The beneficiary farm families obtained seed of 24 varieties of 13 crops (Table 2). Barley, wheat, and mixed barley/wheat accounted for 64% of the seed sales.

Table 2. Total amount of seeds purchased in metric tons (MT) through SV&F program.

Type of crop	Amount purchased	% purchased	Number of varieties
Barley	2 229.4	39.6	5
Mixed (wheat/ barley)	779.6	13.9	1
Wheat	604.8	10.7	3
Tef	534.4	9.5	2
Finger millet	369.8	6.6	2
Sorghum	351.4	6.2	3
Maize	88.7	1.6	2
Faba bean	469.6	8.3	1
Chickpea	75.7	1.3	1
Vetch	46.5	0.8	1
Lentil	39.0	0.8	1
Field pea	37.5	0.7	1
Cowpea	1.3	0.02	1
Total	5 627.7	100.00	24

The seed sellers were mostly local traders and farmers with very few big grain traders (Table 3). The 3 large traders did sell on average 19 MT versus the local traders who sold only 2 MT on average. The local administrators with extension workers announced the date of the fair and interested sellers participated in the fair. The sale price was determined by seed sellers in the fair. Prices in general increased due to shortage of supply, however, seed fair prices were comparable and in some cases lower than market rates.

Table 3. Seed sales for sellers by category and gender.

	Number of women	Gross sold (MT)	Number of men	Gross sold (MT)
Local trader	1 680	3 055.85	1 232	2 493.95
Large trader	2	33.50	1	24.20
Farmer	240	12.00	164	8.20
Total	1 922	3 101.35	1 397	2 526.35

5. Seed Vouchers & Fairs: Evaluation

The first evaluation was conducted at exit interviews with participants and seed sellers as they departed the fairs with purchased seeds. The exit interviews helped in gathering information on variety, quality and quantity of seed exchanged at the fair. Post fair discussions were held with implementing partners, committee and community members about the completed process of the fair and the lessons learned at the fair were properly documented for the future seed fair planning and implementation purposes.

The seed fair survey beneficiaries evaluation questionnaire showed that 99% of voucher recipients expressed satisfaction with the seed

fair and voucher system. Seed germination was randomly tested in the Ministry of Agriculture laboratory with 95% viability. The post fair evaluation with beneficiaries was done in field by post planting crop stand evaluation in randomly selected villages. No other evaluation was done.

There were no major constraints encountered during the seed fair; however, vendors were skeptical of the voucher system. The voucher system in the beginning created confusion and uncertainty among the vendors. CRS addressed this by explaining the voucher system on-site with the local vendors and administration and by setting up an immediate redemption of vouchers.

6. Conclusions

The lessons learned included that "buy-in" at all levels, and all relevant ministries, was essential for effective implementation. Strong linkage with research was seen as key to the sustainability and effectiveness of the program. Beneficiaries were most impressed with their ability to be able to purchase such localized seed. It is imperative to gain greater understanding of local coping strategies and market forces (e.g. role of the church in conserving seed). There is a need to ensure communities are well sensitized in advance and sellers should be actively sought. There is a need to establish systems to reduce or discourage collusion between sellers and buyers. There is a need to understand local traditions and systems and establish systems to work with/through them (e.g. women beneficiaries registered under husbands' names). Follow-up activities include working with seed sellers to look at local seed market development and working with the National Research Program to enhance the availability of improved legume seeds for future improvements in productivity.

CRS/Ethiopia:

Experience with Seed Vouchers & Fairs

Dennis Latimer, CRS/Ethiopia

In September 2003, an assessment made by the Government of Ethiopia and WFP/FAO indicated that 14 million people were seriously affected by food insecurity. Among the main causes listed were shortage of seeds; lost wage labor opportunities; decreased income from cash crop production; and absence of alternative sources of income. Prior to this announcement humanitarian agencies had already reported that the shortage of seed could lead to a second catastrophe unless farmers were able to plant seeds within the onset of the next rains which were only a few weeks away.

1. Introduction

Ethiopia has a total landmass of 113 million hectares with a projected population of 67 million. While as much as 80% of the land is potentially cultivable, only 13% of the potential land is presently used for crop production. The highland (>1500 m.a.s.l.) and lowland (<1500 m.a.s.l.) constitute about 45% and 55% of the total area, inhabited by 75% and 25% of the total population of the country respectively. Over the years, Ethiopia has not been able to meet its own food and nutritional requirements. While 85% of Ethiopians derive their livelihoods directly from agriculture, an estimated 40% of rural households do not produce enough food or income to meet their basic nutritional needs.

The agriculture sector's growth is estimated 2.3% annually (Ethiopian Economic Association 1999/2000), where as population growth is

at 2.9% per annum. Thus, the sector cannot feed the fast growing population. To augment the problem, Ethiopia's land tenure system in the country accelerates the fragmentation of the already small plot sizes. The poor performance of the agricultural sector has reflected on the national annual food deficit, which ranges from 0.5 - 1.0 million MT.

The rainfall is bi-modal with the *belg* rains occurring in February-May and the *meher* rains lasting from June to September. Rainfall in Ethiopia is erratic. Recurrent drought and rainfall failure, especially in the *belg* season, has become common.

In September 2002, an assessment made by the Government of Ethiopia (GoE) and WFP in collaboration with FAO indicated that 14 million persons were seriously affected by food insecurity (DPPC 2003). Among the main causes listed were shortage of seeds (often due to replanting when initial plantings failed); lost wage labor opportunities; decreased income from cash crop production; and absence of alternative sources of income. There was no seed assessment done per se; seed needs were based on food needs and requests from the GoE, WFP and donors. Catholic Relief Services/Ethiopia (CRS/ET) had received information from the UN-Emergency Unit for Ethiopia (UNEUE) that many woredas (district) were in need of seed. In their May 9th *FOCUS on Ethiopia* UNEUE reported, "there is a general and acute lack of seeds in many woredas… Generally, only half of the listed beneficiary households that should be supplied with seeds are actually receiving seeds." On June 4th, Integrated Regional Information Networks (IRIN) news stated, "The country requires some 23,000 MT of cereal seeds and 7,000 MT of pulses." Their reports quoted a humanitarian source saying that unless farmers were able to plant seeds within the next few weeks, there could be a disaster next year.

In January 2003, CRS/ET obtained a grant from USAID/OFDA for a total of $1.55 million dollars to address emergency needs from the 2002 crop season. By mid-June 2003, and after reviewing the additional needs and assessments made by the GoE and WFP, two cost-extensions were secured bringing the total project amount to $2.9 million. In addition, a $30,000 grant via the Ministry of Agriculture was obtained from FAO/Ethiopia to conduct two additional pilot seed fair projects in Kalu and Kellela woredas of South Wollo.

2. Seed Vouchers & Fairs: Implementation

Partners were originally selected from CRS/ET's current development projects to cover areas in East Tigray and East Hararghe. Additional partners were recruited from the ongoing emergency food partners who are responsible for the general food distribution in targeted woredas throughout Ethiopia. A new partner was added to cover one woreda in Southern Nations, Nationalities and People Region.

Three levels of training workshops were conducted before any seed fairs were implemented. A stakeholders' workshop was first held in Addis Ababa in January 2003. Participants included all implementing partners, GoE ministry officials, woreda agriculture bureaus, implementing partners, donors and UN agencies. During this workshop the concept of seed security, seed systems, seed quality standards and SV&F methodology were thoroughly discussed. The last day was exclusively used to plan activities and action plans with implementing partners.

A second level of training was held for all implementing partners two months later. During this workshop, partners reported on progress towards their action plans, results from their market and farmer seed surveys (to determine supply and demand) and detailed implementing issues were discussed and consensus reached as to the standardization of voucher design, beneficiary targeting and registration/payment formats.

Each implementing partner, with each targeted community, conducted a final level of training. The focus was on sensitizing participants. The expectations of all beneficiaries, the extent of coverage, SV&F methodology, description of the operations, registration and correct usage of vouchers was clearly discussed. Woreda officials had an integral part on the community sensitization process as well as in the identification and pre-registration of seed sellers and traders and the formation of Seed Fair Committees.

Several tools were centrally designed and printed to aid in this sensitization process. These included posters, which clearly identified the color and value of each voucher and brochures in three of the mayor Ethiopian languages (Amharic, Oromo, and Tigrinya). In addition,

each Seed Fair Committee member received a brightly colored T-shirt identifying him or her. Partners also conducted personal visits to seed traders and local sellers to explain the process, pre-register them and ensure that a minimum of seed and sufficient varieties would be available during each seed fair. Finally, implementing partners conducted follow-up sessions with woreda officials and extension staff to ensure their participation and cooperation.

Seed Fair Committees were organized by implementing partners to ensure community participation, transparency, equity and fairness. Members included the implementing partners, Woreda (district) officials, and Peasant Association leaders. The roles and responsibilities of the Seed Fair Committees were to develop criteria for identifying beneficiaries, confirm and register beneficiaries, identify suitable sites and dates for seed fairs, advertise the seed fairs to sellers/vendors, assess and weigh the amount, type and varieties of seed brought to the market by seed suppliers, establish payment procedures on a site-specific basis and be communicated to seed suppliers in advance, develop a criteria and process to examine the quality of seed, reject or accept seed based on these standards, collect sample seeds for germination tests, and keep the seed fair running smoothly and avoid/resolve any conflicts.

To date CRS/ET has conducted 135 seed fairs in 19 woredas with 9 partners in 5 of the 9 regions of Ethiopia. Over 1,658 MT of seed have been traded at a total cost of $447,777. Seed sellers were originally identified during market seed surveys conducted by each implementing partner early in the year. Additional seed traders were identified and invited to participate by seed committees, special invitation notices were issued detailing the exact date and location of fairs. Each seed seller and trader was also sensitized as to the correct usage of vouchers and the "rules of the game" that they must adhere to in order to continue participating in subsequent fairs.

Challenges were encountered in the process of selecting seed sellers and traders. Some wanted guarantees on volume and price of seed sold. In essence they wanted to revert back to the tendering process of a traditional seed distribution. Because the seed fair concept was new, many sellers were skeptical and refused to travel to distant villages. In a few exceptional cases, farmers that had surplus seed and had been

invited to participate in seed fairs as sellers colluded with relatives from the same villages.

Vouchers were printed centrally by CRS/ET in 10, 5, 1 and 0.25 Birr denominations ($1 = 8.6 Birr). Each voucher was color coded to loosely resemble the Ethiopian currency; they were printed with the CRS logo and had several security measures to warrant against counterfeiting (serial numbers, water mark and a blank space in the reverse side for a validation stamp and date). The Seed Fair Committee and implementing partners determined seed fair sites and size. When beneficiary numbers were small, they were combined in one seed fair. Ninety-six households participated in the smallest seed fair and the largest included 1,027 households. Prices were not fixed, but allowed to fluctuate at the time of each seed fair according to supply and demand. Seed Fair Committees monitored price fluctuations to ensure that these did not go above a 25% price margin as compared to local market prices.

An emergency seed standard was negotiated with the National Agriculture Input Authority (NAIA). Three lines of seed quality checks were also put in place. A Seed Fair Committee at each seed fair registered seed vendors and conducted a physical inspection of seed for quality; farmers themselves were allowed to inspect seed for quality and decide at the time of the fair whom to purchase from depending on their preferences; and finally post-fair germination tests were conducted from seed lots of 50% of the sellers. These germination test were carried out by the Ethiopian Agricultural Research Organization regional centers and the results have showed at least 75% seed viability.

Each implementing partner hired temporary enumerators. Enumerators supervised, with the aid of the village leaders, the registration and voucher distribution process, the transaction of vouchers for seed and ensured that collusion did not occur. In addition, enumerators surveyed participating households and seed sellers at each fair.

3. Seed Voucher and Fair: Evaluation

During each seed fair enumerators would conduct brief interviews with beneficiaries and sellers using a standardized questionnaire.

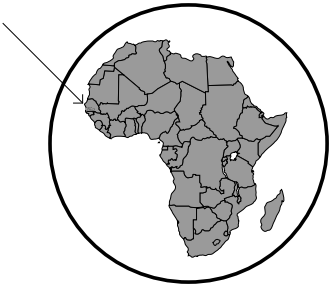
Table 1. Preliminary seed fair evaluation results.

Crops	Amount sold (kg)	Average market price ($/kg)	Average seed fair price ($/kg)
Wheat	394 990	0.29	0.32
Haricot Bean	335 570	0.35	0.37
Tef	253 300	0.29	0.34
Barley	264 660	0.22	0.29
Sorghum	124 310	0.19	0.33

In 78 of 135 seed fair evaluations done, 832 beneficiaries and 349 sellers were interviewed. The average earnings per seller was $503. Out of the 494 fully completed beneficiary surveys, 388 (86%) rated the quality of seed as good or higher, 275 (61%) thought distance to fair sites was not a problem, 405 (90%) had fields ready for planting, 339 (76%) reported that they were adequately sensitized, and 45% did not know that they could use their vouchers to purchase seed from multiple vendors. Identified constraints were that some enumerators did not speak English, some implementing partners did not conduct evaluations after each and every single seed fair, some implementing partners developed their own seed fair evaluation questionnaires, some implementing partners did not hire enumerators, some woreda officials wanted to "control" the Seed Fair Committee and seed fairs, and some implementing partners have been slow in providing documentation.

CRS/ET is in the process of submitting a post-emergency transitional recovery proposal to USAID/OFDA. The seed vouchers and fairs methodology will be linked to the new proposal in that activities will incorporate training this year. Support will be provided to the nascent

commercial seed sector in the multiplication of seed of promising varieties and the training of selected seed growers in seed processing, storage and marketing In addition, capacity building of farmer seed producers will be undertaken with enhanced links to commercial seed enterprises. The role of local grain traders in local seed system will be supported to strengthen their reliability.



CRS/Gambia:

Experiences with Seed Vouchers & Fairs

Amadou Gaye and Njagga Jawo, CRS/Gambia

Gambia experienced an exceptionally low rainfall in 2002 with a dry spell of several weeks nationwide. Crop planting failed and the season was delayed leading to a massive crop failure. There was between 25 and 50% reduction in all crop production causing a high livestock mortality resulting in severe food shortages, an extended hungry season, and a seed stock shortage. Thus, this was a slow onset, one-off disaster with 30,000 households affected in all divisions.

1. Introduction

The Gambia has a limited agriculture base with no important mineral or natural resources. The agricultural system has low productivity, 33% of the Gross Domestic Product (GDP) with 75% of the population involved in farming. The climate is Sahelian with a single rainy season from July to October and an average rainfall of 600-900mm. The land area is 54% arable, of which 32% is used. The major cash crop is groundnut which is grown on 45% of cultivable land. The main cereals are millet, sorghum, maize, and rice. The major farming system is groundnut/cereal based but typically traditional. The cropping systems is a groundnut/millet system in the uplands and continuous rice production in the lowlands.

2. Seed Vouchers & Fairs: Planning and Implementation

CRS/Gambia responded to the drought conditions affecting crop production in Gambia with the development of an OFDA proposal in April 2003 based on secondary information. The planting was to begin in June 2003 and thus the project was constrained by a limited time to respond. The districts identified by CRS/Gambia were based on Department of Planning (DOP) estimates of hard hit areas (Western Division (WD), Lower River Division (LRD), North Bank Division (NBD), Central River Division-North (CRD-N), Central River Division-South (CRD-S), Upper River Division (URD)) from December 2002. A total of 362,660 persons or 30,000 households were targeted in 4 districts in the WD, 4 districts in LRD, 3 districts in NBD, 5 districts in CRD, and 2 districts in URD. The strategic objective was for seed insecure farm families in target districts to have access to seed of acceptable quality of preferred crops and varieties in time for planting. The target was for 20,000 farm families to participate in seed fairs.

CRS/Gambia conducted a rapid, exploratory seed security assessment done by a multi-disciplinary team which consisted of representatives from the National Agricultural Research Institute (NARI), Departments of Planning, Agricultural Services, and Community Development; Concern Universal; National Women Farmers Association; and Catholic Relief Services. A one-day tool development workshop was held with a one-day tool pre-test and a three-day field assessment with a quantitative and qualitative questionnaire, a rapid, spot market survey, and key informant interviews. The rapid assessment was done with three teams of 6 persons in the six affected divisions (WD, LRD, NBD, CRD-N, CRD-S, URD) in 12 districts, 24 villages, and 50 farm households.

The assessment concluded that the drought had significant impact on farm households who depend on agriculture for their livelihoods. There was acute seed insecurity, especially for groundnuts, rice, and maize with an inadequate seed supply although some farmers could meet part of their needs from kept seed. The result was a reduction in farm income, high grain price, and average to visibly poor quality of market grain. Groundnut production was only 15% compared to

a normal year. Farmers could only use 22% of their seed from their own stock for the next year (compared to 100% in normal year). Some farmers reduced area planted to groundnut by substituting alternative crops with generally average to good seed security, such as millet and sorghum. Groundnut seed/grain prices increased continually, between $0.34 and $0.86 per kg. There were a considerable number of local traders with large amounts of grain/seed. Local traders and stockists sourced seed from smaller traders and other farmers. The assessment confirmed a clear need for seed where apparently access and not availability was the problem.

A series of planning meetings were held with local partner staff and relevant government departments where the roles of various participants were reviewed. A 3-day training on SV&F was then organized which covered seed systems, seed security framework, the outline of the OFDA proposal, and SV&F planning, implementation and evaluation. A practicum seed fair with 538 beneficiaries targeted was done. SV&F sensitization included community radio announcements and panels, National radio announcements, national television broadcast with live coverage, and notices in local newspapers.

Seed quality examination was done during registration by staff from NARI, Department of Agriculture, and farmer beneficiaries. Quality was checked by farmers during purchase; in some instances, farmers opted to postpone the seed fair to a later date, if not satisfied with quality of available seed. Seed samples were collected during seed fairs and later analyzed for germination by NARI (results for groundnut and maize indicated good germination capacity of over 75%.) The release of vouchers was controlled to a specific number of beneficiaries depending on the supply of seed. This greatly regulated seed prices.

3. Results

The benefits of the SV&F in Gambia was that 17,000 farmers were able to access seed within 3 weeks. The transaction costs were clearly lower than in direct seed intervention. The majority of sellers were from the fair area, and will invest money in their community. Given the sellers' mobility, the seed fair made it possible for seed to be moved from areas with abundant supply to seed deficit areas. Beneficiaries were allowed

a choice in type and quantities available. Women farmers were able to access new and improved rice varieties disseminated through research stations. Many farmers benefited from the choice of substituting groundnut for other crops. Vegetable seeds which are normally only obtained from large urban commercial centers were readily available at the seed fairs. There was participatory self-targeting in the Gambia, thus empowering the community in the process.

4. Challenges, Lessons Learned and Next Steps

Seed availability made SV&F events quite risky in The Gambia. Prices were significantly increased in some fairs as a result of reduced seed supply. The large sums of money carried by the teams led to some perceived security risks. Due to improper targeting, some beneficiaries were tempted to collude with buyers and obtain cash.

Among the lessons learned was that participatory targeting was largely successful. During the confirmation of beneficiaries, there were no serious complaints or interference from any interested parties or groups. Beneficiaries were active in identifying potential seed sellers in the community and convincing them to bring seed to the fairs when seed was short in the market. Seed quality was better assured where farmers opted to only buy seed from other farmers from the same community. Control on the number of vouchers issued kept the price of seed low. There is need for use of larger denomination vouchers in order to ease counting. The practicum seed fair was an excellent training opportunity for the team members, thus contributing to smooth implementation. There is need to have a team that registers the amount of seed sold before payment to sellers. The use of all types of media products and outlets greatly contributed to effective sensitization and success of the fairs. The Gambia used special teams to sensitize sellers and beneficiaries simultaneously.

The next step will be to conduct a post-seed fair monitoring and evaluation exercise, both during cropping season and after crop harvest to assess beneficiaries' use of seeds and the overall impact of project. Follow-up activities are funded to strengthen the role of grain/seed traders and local markets, link farmers to research and improved varieties, and strengthen the informal seed system.

CRS/Kenya:

Experiences with Seed Vouchers & Fairs

Paul Omanga, CRS/Kenya

In Kenya, over 75% of the total area and about 20% of population is affected by drought. Drought is common in arid and semi-arid lands (ASALs) in the eastern, northeastern parts of rift valley and the coastal provinces. Drought occurs as a result of low (300mm), erratic and poorly distributed rainfall. In ASALs drought generally occurs in 3 out of 5 seasons but it can also occur in 4 or 5 successive seasons resulting in low crop production or complete crop failure.

1. Introduction

The common type of disaster requiring agricultural intervention in Kenya is drought. After at least 3 seasons of complete crop failure, the Government through the Ministry of Agriculture (MoA) Extension staff and Provincial administration conducts food needs assessments in the affected areas. The MoA staff also conducts seed need assessments to identify the number of households requiring seed in each district. The number of households needing seed are compiled at the district level and passed to MoA headquarters. An appeal is then made to various governmental and non governmental organizations for assistance. The estimated number of households requiring seed in affected districts according to government assessments, was 912,000 in 1992; in 1995 there were 667,000; in 1997 there were 445,000; and in 2000 there were 178,025.

2. Summary of Results

CRS/Kenya responded in 2000 and 2001 with programs of seed vouchers and fairs. The sources of funds and amounts ($) for each year are given in Table 1.

Table 1. Source of funds and proportion used for SV&F in 2000 and 2001.

Source	Total $	Amount used for SV&F $	% used for SV&F
SIDA[1] (2000)	65 000	48 000	73.8
DFID (2001)	284 000	238 500	83.9
Total	349 000	286 500	82.3

[1] Swedish International Development Agency

A stakeholders workshop was held along with training of partners and MoA staff. Sensitization meetings were held and a rapid seed availability assessment to assist in the identification of beneficiaries and identification of locations for fairs. In preparation for the seed fairs, seed was inspected, prices were set and the exchange of vouchers for seed was done. Over the course of the two years, 65 seed fairs were held which reached 38,275 households. The average number of households per seed fair event was 600 with a total of 2,444 seed vendors. The amount of grain brought to the seed fairs totaled 2,597 MT of which 937 MT was sold as seed. The households took home an average of 30 kg of seed. Additional information on the seed fairs is given in Table 2.

Table 2. Number of seed fair events held, ratio of beneficiary to vendor and amount of seed exchanged per district.

District	Number of seed fairs	Ratio beneficiary/ vendor	Amount of seed (MT)
Tharaka	15	8.9	173.7
Mbeere	17	17.5	147.3
Muranga	3	306.7	78.0
Machakos	6	12.7	150.0
Makueni	8	11.5	146.0
Kitui	9	13.0	98.0
Mwingi	8	49.6	86.0

The types of seed vendors at the fairs included farmers, grain traders in markets, local shopkeepers and traders, seed stockists, seed companies, research institutions, and church organizations. Farmers preferred to purchase local grains over certified seed mainly due to price differences, trust in local grains, trust in crops they saw growing, bad past experiences with seed distribution, and a mistaken belief that Western Seed Co. seed is for western Kenya. Table 3 gives a comparison of prices at the seed fair for local versus certified seed for various crops.

Table 3. Comparison of grain prices in seed fairs, local markets and certified seed prices.

Crop	**Mean price at seed fairs** KES/kg	**Mean price of local market grain** KES/kg	**Price of certified seed from stockists** KES/kg
Maize	30	20	140
Sorghum	30	15	100
Millets	30	15	100
Beans	50	35	100
Cowpea	50	25	120
Mungbean	75	50	150
Pigeonpea	50	35	150

Different locally adapted crops/varieties, some of which are not available through the formal seed sector, but are important to food security in the region were brought for sale. For example beans (8 varieties), cowpea (7 varieties), sorghum (6 varieties), maize (5 varieties), pigeonpea (4 varieties), dolichos or lablab bean (4 varieties), mung bean (3 varieties), pearl millet (3 varieties), chickpea (2 varieties), and one variety of proso millet. Large amounts of grains at seed fairs is an indication of the potential of local markets as a major source of seed. In 2000, 98.6 MT of seed was brought to the fairs and 64.6 MT was sold (66%) while in 2001, 2500 MT of seed was brought but only 870 MT was sold (35%).

3. Conclusions

Seed vouchers and fairs are simple to implement, can be planned and implemented in a short time period and the administrative and logistic burden of direct seed distributions is reduced. Within 3 weeks before rainfall onset CRS Kenya was able to distribute 552 tons of seeds to over 25,000 households in six districts. Each household accessed 20-30kgs of seed from 700 KES instead of 4-5 kgs from the market or stockists. The next steps will be to strengthen local seed systems through training of farmers on seed production and processing to improve seed quality; to inject improved drought tolerant crop varieties into the system through promotion; to organize regular seed fairs where farmers can buy seed using cash at the beginning of season; finally, to involve Kenyan Plant Health Inspection Service KEPHIS in quality inspection at seed fairs.

CRS/Madagascar:

Experience with Seed Vouchers & Fairs

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On 8 May 2003, the Manou cyclone hit the eastern coasts of Madagascar. For nearly 24 hours, the region was affected by 8 inches of rainfall and winds up to 115 mph. The Manou cyclone ruined the harvest, jeopardizing the populations' overall food security. CRS/Madagascar responded 15 days after the cyclone hit with food and non-food items distribution for disaster victims and then implemented an SV&F project to bolster agricultural activities.

1. Introduction

The process used by CRS/Madagascar (CRS/MG) to implement the SV&F project was initiated with an assessment. A seed needs assessments was done based on planting season and local seed availability. Contact was made with 6 seed sellers, including 2 local vendors. The value of the vouchers was determined at $3.92 per farm family for a total value of seed distributed of $12,777. The seed vouchers were designed and printed.

2. Seed Vouchers & Fairs: Planning

The partners of CRS/MG were trained in the SV&F approach and the community project team was set up with the agriculture technical monitors and local authority representatives. The CRS/MG Diocesan partner was responsible for the management of seed fair funds, joint monitoring of SV&F event-related activities, awareness-building of local authorities about the seed fair concept, approaches and implementation, negotiation with local vendors, printing of vouchers and banners, and voucher control. The local government and Ecumenical group roles included identification and registration of potential beneficiaries, awareness-building at the community level, organization and construction of the stands with the community members, and participation in the daily seed fair related activities such as seed quality control, security, etc.

3. Results

The SV&F project resulted in 3,257 farm families obtaining 19 tons (6 varieties) of rice, 1.2 tons (2 varieties) of beans, 7,500 small packets (20 varieties) of vegetable seed, and 0.9 ton (3 varieties) of maize. There was a high level of satisfaction of both seed sellers and beneficiaries. 98% of beneficiaries said that they were well informed about the SV&F events while 79% of beneficiaries appreciated SV&F organization. 89% of beneficiaries found the seed variety that they needed and 80% of beneficiaries were satisfied with the quality of seeds during SV&F. From the post-seed fair evaluation it was seen that there was a high rate of germination and growth (100%) for vegetables, beans, maize, and improved rice seed but only a 50% rate of germination and growth for local rice. Many of the vegetables produced from the seed obtained at the seed fairs were sold at the local market.

Other accomplishments included the opportunity the SV&F projects gave to the integration of the activities between two units of CRS/ Madagascar (Agriculture and Disaster). CRS/MG and its partners increased its capacities in terms of planning and SV&F implementation. There was a good acceptance of the SV&F approach by beneficiaries.

The SV&F approach increased the effectiveness of CRS/Partner response to address the need of beneficiaries and allowed resumption of agricultural activities. The SV&F project renewed the seed stock at the beneficiary level and sensitized national level seed sellers regarding feasibility of the approach for future emergency needs.

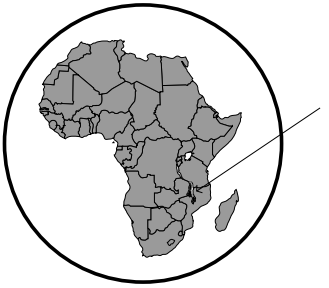
Some of the problems encountered included the poor literacy of some of the beneficiaries and the limited availability of local seeds. 21% of beneficiaries complained about long queues during the fair. This was due to the large number of beneficiaries per seed fair, the limited number of vendors, and the limited number of fair days. The beneficiaries suggested CRS/MG and its partners should organize SV&F at village level, increase the number of sellers or number of stands, and introduce other rice varieties for upland rice cultivation and flooded rice cultivation. Thus because of limited supply, a quota was established for certain seed types. The seed quota per beneficiary was updated on a daily basis depending on seed availability and rather than weighing seed at the beginning and end of the fairs, a controller was assigned to each stand to monitor sales.

The lessons learned from these initial SV&F was that the high number of beneficiaries/day (>1000 beneficiaries/day) made long queues and influenced farmers choice for the variety and the nature of seed. There was a reduced choice on the last day of the fair somewhat due to the reluctance of outside vendors to commit more seeds than could be guaranteed to be sold. Voucher counting is time consuming. SV&F generally respected the market law of supply and demand because vendors were free to fix their price within the ceiling price fixed by SV&F team. Beneficiaries prioritized seed quality over quantity. One seed supplier manipulated the process in order to ensure that he sold all his stock. The next steps include an impact evaluation to reinforce the lessons learned. The next SV&F will likely be implemented as a drought response in southern Madagascar.

CRS/Malawi:

Experiences with Seed Vouchers & Fairs

Owen Chamdimba, CRS/Malawi



Malawi has been described as one of the nations in southern Africa most affected by chronic food insecurity. Forty to sixty percent of rural households in Malawi face recurring food insecurity for two to five months per year (Gough no date). The reasons for this have been the subject of hot debate and have generally tended to stretch from poor government policies to natural causes. Other factors which have contributed to the food insecurity in Malawi include: devaluation of the local currency which made the cost of inputs unaffordable to smallholder farmers, increasing population density, and limited access to affordable credit.

1. Introduction

For the majority of Malawians, the adequacy of a meal is determined by the amount of maize, any other crops are supplementary to maize. Due to climatic changes in recent years, agricultural production patterns, especially for maize, have tended to fluctuate leading to continued food insecurity. The production of other crops such as sorghum and millet is also in decline. In drought prone areas, growing a broad range of crop varieties constitutes a coping mechanism and strategy to spread the risk of crop failure.

Malawi faced one of its worst droughts in the last two decades during the seasons of 1999-2000. The Government imported 250,000 tons of maize at an estimated cost of $75 million to augment available supply and to address the needs of the 40% of the population who would needed assistance. In addition, NGOs in Malawi, complementing governments' efforts, requested assistance from the international community after the President had declared Malawi a food insecure country. A consortium of NGOs was formed to distribute relief food to the majority of Malawians who were food insecure. The direct food distribution was a direct response to the disaster. The drought recovery of the agriculture systems form a short to medium term solution to the problem following the natural calamities explained above. With funding from OFDA CRS/Malawi in partnership with the Catholic Development Commission of Malawi (CADECOM) has been implementing an Agricultural Recovery Project through seed assistance with funding from the United States Government. However, there was no formal seed assessment conducted before the proposal was submitted to the donor.

2. Seed Voucher & Fairs: Planning

CRS/Malawi's SV&F project targeted a total of 37,500 beneficiaries. The target population was mainly focused on drought affected vulnerable households. Community-based criteria were used to identify the most vulnerable people. The project was implemented in all seven Catholic Dioceses across the country. These are: Mzuzu, Lilongwe, Dedza, Mangochi, Zomba, Blantyre and Chikwawa. The CADECOM is the implementing partner in this project.

The onset of seed fair activities started with a training of field staff. The training was conducted from 7-11 of October 2003 in Lilongwe. The participants represented staff from all seven implementing dioceses. These included Directors for each diocesan CADECOM and agriculture field staff and participants from National CADECOM and CRS/Malawi. A total of 21 people attended this training workshop. This workshop was conducted by the Agriculture Regional Technical Adviser for Southern Africa Region (SARO). He was assisted by an

officer from CRS/Kenya who had experience in conducting seed fairs. The workshop ended with a field trip to one of the sites near Lilongwe town where participants attended a sensitization meeting.

Sensitization meetings were first conducted at the district level. This process involved consultations with the district Assembly responsible for all relief and developmental activities in the district. After meeting the relevant authorities at the district level, the next step is to sensitize the relevant front line agriculture staff at the grassroots level. The final step was community sensitization. Sensitization was accomplished through community meetings. The implementing partner, CADECOM, is largely responsible for this process. Other stakeholders like Ministry of Agriculture extension personnel, parish committees, local leaders, and other NGOs were also involved in these meetings.

Project teams were formed at village level where the seed fairs were going to take place. The project teams were composed of all stakeholders who were involved in the seed fairs. These included local authorities, beneficiaries, members of parish committees and agriculture extension personnel. The project team formation was done by the local authorities spearheaded by the local Ministry of Agriculture personnel in that area. The team was responsible for the formation of smaller committees to assist in seed fair implementation. Such committees included the seed quality assessment committee, security committee, and sometimes members of the Catholic Commission for Justice and Peace committees where available were affiliated in this main committee. The selection of beneficiaries was based on criteria developed jointly between the project teams and beneficiary communities. This selection was not based on religious affiliation but on a needs basis and in the fulfillment of the criteria agreed upon.

The role of the seed quality committee was to assess the quality based on indigenous knowledge present in the communities and a blend of professional experience provided by the local Ministry of Agriculture personnel and the CADECOM agriculture field officer. This committee was the one responsible for checking the quality of seed presented at the market. Seeds of poor quality were rejected and not registered. Farmers also do their own quality assessment by relying on the indigenous knowledge accumulated over the years of farming in their locality.

The security committee was responsible for the overall security issues as regards the buying and selling of the seeds. They also assisted beneficiaries to form lines when exchanging seeds with vouchers. This committee was comprised of at least one armed policeman hired specifically for the seed fairs. This was in realization of the fact that large sums of money were carried to the seed fairs to pay for the redeemed vouchers.

The organizers of the seed fairs were responsible for advertising the seed fairs. The seed fairs were advertised locally prior to the actual seed fairs. The local media houses were invited to cover the seed fairs in their newspapers and radio stations. At times the state-owned television station broadcast the events at a seed fair. Posters and special announcements were being made at local gatherings including agriculture extension meetings. Sign post were sometimes used to indicate the direction of SV&F venue. This was done to ensure that seed sellers who were interested would come and sell their seeds at the fairs. In cases where a defined type of seed was needed but was not available in the locality, the organizing committee was responsible to look for alternative sources. After finding the potential sellers, the committees were responsible for inviting these sellers to the fairs. Seed sellers made their own arrangements and met all the logistical cost involved to transport their goods to the fairs.

The seed vouchers were designed to fit on one A4 size paper. The total voucher value was five hundred Malawi Kwacha (MK500), equivalent to $6. The seed voucher was divided into four denominations and each denomination had a different color band to distinguish between the voucher values. There were two logos on each voucher, one for CADECOM and one for CRS. The lines demarcating the vouchers were perforated to allow easy separation.

3. Seed Vouchers & Fairs: Implementation

The actual implementation of the seed fairs involved registration of seed sellers, distribution of vouchers, buying and selling of commodities, counting of vouchers, seed fair evaluation, and exchanging vouchers

with cash. Depending on the number of beneficiaries per seed fair, this process normally took the whole day. The size of the fairs was being decided depending on the number of beneficiaries in the locus and the logistical constraints. The number of beneficiaries per fair ranged from 500 to 1,200. Site selection for the fairs largely depended on the accessibility of the place where the fair was to going to be held. Local primary schools and Ministry of Agriculture complexes were favorite places to hold seed fairs. The conditions on the roads leading to seed fair sites were also an important factor.

Seed pricing was done by the organizing committee to set the price ceiling for the seeds offered during the seed fairs. A mutual agreement was reached between the seed sellers and the committee. Seed seller registration was the first exercise on a seed fair. All seed sellers were required to register their seeds with the committee organizing the fairs. The seed quality committee assessed the quality of seed and, after approval, a seed seller was now able to register his seed. If the seed was rendered of poor quality by the committee it was being rejected.

All beneficiaries and seed sellers were gathered at one place. The codes of conduct of the seed fairs were announced. This involved issues like the encouraging lobbying and bargaining during buying and selling, tips on how to lobby for more customers and negotiate the prices. The next process was issuing of vouchers. This was conducted using different methods depending on the situation. Beneficiaries in a location where the SV&F event covered more than one village were gathered at one place with their village headman. Names of the beneficiaries were then announced and the village headman verified that it was rightful beneficiary. After issuing of vouchers the seed market was declared opened. Farmers were free to access seeds of their choice in quantities they desired. Monitoring of events during the seed fairs was done by a special security committee.

Seed fair evaluation was carried out to get the views of the seed fair participants. Enumerators were recruited to administer a structured questionnaire to the seed sellers and beneficiaries. At least 40 beneficiaries were interviewed after the seed fairs. A sample of at least 10 seed sellers were likewise interviewed.

4. Results

The total number of beneficiaries was close to 30,454 households. Approximately 65% of the beneficiaries and 60% of the sellers were women. Four of the 7 dioceses managed to hold all the seed fairs while 3 dioceses suspended seed fairs due to the onset of the seasonal rains. The 3 dioceses, which managed to conduct all the seed fairs were Chikwawa, Zomba and Lilongwe.

The seed fairs brought to the market a wide diversity of crops seeds for sale (Tables 1. a, b). The major crops sold were open pollinated varieties of maize, groundnuts and beans. In the southern region of the country, especially in Chikwawa Diocese, guar beans – previously a popular cash crop – had lost value in the market. However, the seed fairs brought an alternative crop of groundnuts, which is now replacing the guar beans. The groundnuts fetch better prices on the market than guar beans.

Tables 1 (a and b). Quantities (MT) of seed sold at fairs in the various CADECOM.

CADECOM	Maize	Groundnuts	Beans	Rice	Soybeans
Blantyre	2.1	3.9	2.5	6.8	0
Chikwawa	52.1	19.0	4.5	24.4	0
Dedza	9.7	0.9	4.4	0	3.2
Lilongwe	32.1	55.3	41.1	0	6.7
Mangochi	5.9	1.4	2.0	0	0
Mzuzu	4.2	2.2	2.5	0	0.3
Zomba	11.5	7.6	1.4	0	0
Totals	117.6	90.3	58.3	31.2	10.2

CADECOM	Pigeonpeas	Irish Potato	Cowpeas	Sorghum	Pearl Millet
Blantyre	1.9	0	0.6	0	0
Chikwawa	4.5	0	3.0	3.4	2.4
Dedza	0	3.7	0.1	0.0	0.1
Lilongwe	0.0	1.2	0	0	0
Mangochi	2.9	0	0	0	0
Mzuzu	0	0	0	0	0.4
Zomba	0	0	0	0	0
Totals	9.2	4.8	3.7	3.4	2.9

5. Evaluation

The seed fairs improved access to scarce crops such as the improved millet variety *okashana*. This crop was originally introduced in 1994 to the southern region by the Government's previous input distribution program called "starter pack". Despite the fact that this variety was widely accepted and appreciated by most smallholder farmers, there has been insufficient seed for the crop. The seed fairs have greatly improved the accessibility of this scarce crop. In addition, there are other pulses, which would not have been possible to access and sell to smallholder farmers if a conventional seed distribution system was adopted.

The range of crops offered by seed sellers during the seed fairs was generally good, but the quantities were sometimes not adequate especially for minor crops. For example beans and pigeonpeas in Zomba, Dedza and Lilongwe, cowpeas in Dedza, Mangochi and Lilongwe, millet in Mangochi and Dedza were not readily available. The seed fairs were conducted late in the agricultural year when most seeds had already been sold. The ideal time for the fairs is between July and September.

Prices were generally fair as compared to the market price offered by large commercial sellers. However, the prices could have been even better if there were more sellers per commodity to allow for competitive pricing of the seeds. In some areas where the seed sellers

had to transport the seed for some distance the prices were higher than expected, for example in Chikwawa and Zomba.

The beneficiaries highly appreciated the SV&F system and there was overwhelming acceptance by the community, partners and other stakeholders. The seed fairs presented an opportunity for seed sellers to trade their commodities and earn cash such as smallholder farmers who had seed. There are some initiatives in the country to promote smallholder farmer groups involvement in seed multiplication. The seed fairs provided market to many of such groups and it stimulated the demand for seed. These farmers groups found an outlet for their commodity. This has contributed to increasing rural incomes particularly at a time of serious economic hardship. The beneficiaries on the other hand managed to access a diverse variety of seeds of their choice in order to improve their food security and enhance crop diversification.

The seed fair evaluation also provided some insight on how to improve the service delivery and general organization of seed fairs, including issues of security during the seed fairs and some other irregularities. Some of the regulations set by the committees to foster smooth operation of the seed fairs were delaying the process. For example, having a uniform voucher distribution system turned out to delay the process in some areas. So committees chose a more flexible, situational system. Issues of security concerns included timing of the fair so that sellers were not traveling home after dark with large sums of money. This was solved by changing the starting time of the market.

The other issue was that some unscrupulous sellers were coaxing some farmers to redeem their vouchers for cash directly without buying seed. This was checked by measuring the quantities the seller brought to the markets and comparing with what was sold. All seed sellers who had more vouchers than they had actually brought had the extra vouchers forfeited. There were suggestions from the stakeholders to expand the span of the market to include cash buyers. However, where the program is interested to distinguish between what was offered and actually bought, this arrangement would create difficulty in getting this information. The distinction from what was on offer and accessed gives insight about availability and preference of the farmers in that

ecological zone. However, a few logistical issues can be put in place to make sure that the market aspect is highlighted to bring in a concept of sustainability.

6. Challenges and Lessons Learned

The sensitization for the seed fairs was generally adequate. However, in some areas, farmers encountered problems in the calculations on amounts of seeds to buy from seed sellers. This was an issue especially in some sites in Zomba and in areas where low literacy levels, particularly among women, were common. Some were confused by conversions from voucher values to kilograms. Some were even asking for change. Timing of the seed fairs was a bit off track. In the original project, seed fairs were supposed to have been completed by November but they stretched further.

Some partners do not have adequate technical staff on the ground, i.e., Mangochi Diocese has only the Director who has other extensive activities. The latter affected service delivery in terms of monitoring of activities. Partners needed additional financial orientation before the seed fairs. This led to late liquidation and subsequent funding. CRS/ Malawi procurement of motorcycles was delayed, impacting the close monitoring of activities.

The Country Program has submitted a cost extension proposal to consolidate the achievement made in the current period of implementation. This proposal will focus on building on the lessons learned and aim at increasing the resilience of farmer seed systems. The proposal will be submitted to OFDA very soon.

CRS/Senegal:

Experience with Seed Vouchers & Fairs

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Senegal suffers from chronic, seasonal, and transitory food insecurity. Seasonal food insecurity occurs traditionally during the "hungry season" from June to September, while chronic food insecurity has steadily risen with growing cereal deficits during the last 12 years. This is reflected in the high rates of malnutrition among children (evidenced by 23% stunting and 7% wasting rates). Although the rural economy in Senegal is not as dependent upon agriculture as other Sahelian countries, transitory phenomena such as two successive years of drought, and privatization of segments of the state agriculture sector has had profound effects that increased food and seed insecurity from 2001 to early 2003.

1. Introduction

Due to poor harvests during 2001/02, many farmers were unable to reimburse seed loans and decreased the land surface sown for cash crops (peanuts), while an early dry spell in 2002 resulted in yields which were 70-83% lower than normal, particularly in northern and central Senegal. In addition, as a result of state privatization of agricultural enterprises, many farmers were never paid for what meager production existed in early 2003 by new private sector buyers. As a result of these circumstances, high cereal prices and the fact that

drought had decreased alternative sources of income such as livestock, there was low availability and access (through income) to food. This, in turn, affected seed availability, as areas faced seed shortages for both cereal and cash crops during the 2003 planting season, and farmers lacked adequate income to buy seeds.

Senegal has a *sudano-sahelian* climate with typically one cropping season per year: May-October. The 2002/03 rains were sparse, with pockets of dry spells just after farmers had sown crops. Some of the hardest hit regions received less than 47% of average rainfall for the region. The rapid onset consequences of drought put the donor community in a reactive mode but hesitant to implement major response plans until an official disaster declaration was made.

The Senegal SV&F program was an emergency response to a number of factors. CRS Headquarters representatives met with OFDA in April 2003 during a period in which FAO/WFP foresaw drought related disaster in Senegal, Mauritania, Guinea Bissau and Mali. CRS/Senegal was requested to submit a proposal specifically using the SV&F approach. A review of documents and contacts indicated food insecurity and potential seed insecurity in the peanut basin (Diourbel, Thiès, Fatick,) the South, Ziguinchor and the semi-arid regions of Louga and St. Louis (Table 1). CRS considered interventions by other donors and NGOs in order not to duplicate scare resources. Additionally, an assessment of partnership and capacity to implement the SV&F approach would narrow the optimal zone of intervention down to 4 regions.

Table 1. Crop Losses (Peanut in kg/ha).

Region	1996 – 2000	2001 – 2002	2002 – 2003	% Losses
Peanut Basin Diourbel	476.2	879	193	-59.5
Peanut Basin Fatick	642.0	958	159	-75.0
Peanut Basin Thies	488.8	855	336	-25.0
South (Bignona)	955.4	942	427	-56.0

Source: Direction de l'Agriculture, Division des Statistiques Agricoles.

A team composed of CRS/EARO[1] and CRS/West Africa Regional Office (CRS/WARO)[2] came to provide technical guidance on the content of the SV&F proposal and lead training on SV&F methodology. A four-tiered process began with rapid food and seed security assessment preparations with complete assessments post-harvest (Feb 2003). Second, a stakeholder meeting was held to share results and introduce the concept of SV&F to the Government, the donors, NGOs and associations. Third, more detailed studies of seed availability and sellers in the targeted areas were launched. Fourth, a series of planning meetings were conducted to enable the SV&F to rapidly prepare for the fairs with the short window of time before the rains began.

2. Training for Rapid Seed Security Assessment, Thiès, Senegal 1-6 May 2003

During the week of 1-6 May, 2003, CRS personnel and partner personnel underwent a 6-day training on how to carry out Rapid Assessments of Food and Seed Security, using a draft tool and process developed by the International Center for Tropical Agriculture (CIAT) and CRS under a previous OFDA funded project. Eight CRS staff (including 2 experts from CRS/EARO and 1 from CRS/WARO) and 13 partner personnel (2 Direction Régional du Développement Rural (DRDR), 1 Food For Peace (FFP)/Dakar) attended the training, which focused on how to identify geographical areas and communities most food and seed insecure, in addition to establishing criteria by which to select those households most vulnerable within those areas eligible to receive seed vouchers.

Results from Rapid Assessments highlighted seed insecurity for the main crops, groundnuts, pearl millet and cowpeas. It confirmed a chronic seed deficit, particularly in groundnuts for which there was concern about the quality, the lack of seed saved and recent farmer dependency on provision of seed by the Senegalese Government (GoS). Results from food security assessments confirmed secondary data findings on food security; the areas studied were chronically food insecure. Although it was recommended to supplement seed fair with hungry season food distribution (seed protection), CRS felt that this distribution could not be effectively addressed in the scope

[1] Tom Remmington, CRS/EARO, and Christophe Droeven of CRS/Burundi

[2] Joseph Sedgo, CRS/WARO

of the program. Both secondary data review and rapid seed and food security assessments also confirmed that the impact of the disaster was heterogeneous. Clearly peanut farmers without diversified income strategies were the most vulnerable of those affected by the drought.

3. Stakeholders Meeting: 7 May 2003, Hotel Ndiambour, Dakar

This meeting convened 17 principle stakeholders to SV&F including donors, concerned NGO representatives, and GoS entities from Ministry of Agriculture and Livestock, in addition to representatives from the seed sellers association, 2 Caritas partners and 8 members of CRS also attended this meeting. The objectives were to present the preliminary findings from the Rapid Seed and Food Security Assessment as justification for the CRS intervention and to provide an overview to the concept of SV&F. This was particularly important given the dismal recent history in Senegal with the state-organized market payment system, which also used vouchers. This meeting was a strategic icebreaker and an important step to take, given the novelty of the SV&F approach in Senegal. It raised interest, and brought attention to the CRS response in time for the rainy season.

4. Rapid Food and Seed Security Assessment, Areas of Thiès, Diourbel, Fatick, Kaolack, and Ziguinchor, 8-15 May 2003

In the week following the rapid seed security assessment training, rapid assessments were carried out by CRS and partner staff in the Thiès, Diourbel, Fatick, and Ziguinchor regions in order to determine which specific areas and communities should be targeted for seed fairs. The Ziguinchor assessment was led by consultant Mariam Sow-Soumaré of Cabinet Communauté Economique des Etats de l'Afrique Occidentale (ECOVAS). The assessments provided valuable information about suitable locations for seed fairs, existing sources and suppliers of seed, and helped form the basis of criteria for determining

household eligibility for vouchers. Through subsequent targeted surveys, potential seed suppliers were identified and informed about the upcoming seed fairs, and how they will function to get them interested for participation.

5. Seed Fair Training and Planning Workshop, Thiès, May 19-21

A three-day central workshop was conducted in Thiès by CRS trainers (Mr Bonaventure Ngendahayo and Mr Balthazar Ndabordieye, Project Managers from CRS/Burundi). The trainers expounded on the concept of the SF&V to staff from CRS/Senegal, its three implementing partners, and national and regional government members. On the third day, initial seed fair planning included drafting various terms of reference and procedures by which they would be organized locally.

6. Local Seed Fair Trainings and Organizing Committees Formed, Districts of Thies, Diourbel, Fatick, and Ziguinchor, 23-30 May 2003

Following the central workshop, several two-day training sessions were conducted at the district levels of each region for partner staff and community members forming local seed fair committees. For each regional partner, CRS/EARO trainers carried out the initial training on how to carry out subsequent training. After each two-day training session, a third day was generally used to finalize terms of reference for committees, decide on locations and target populations for the fairs, and begin planning. Seed Fair Committees were then formally established.

7. Planning and Preparation of Seed Fairs, District Level Locations in Thies, Diourbel, Fatick, and Ziguinchor, 26 May – 30 June 2003

Once local training had taken place and Seed Fair Committees formed, the committees established guidelines to target beneficiaries, began sensitizing local communities about the fairs, and determined seed prices based on local markets. The committees then established places and dates for fairs in coordination with partners and CRS, and registered beneficiaries. CRS and its partners advertised the seed fairs through various means (national and regional FM radios, both public and private), while CRS designed and printed vouchers. Different seed sellers, including commercial importers, agricultural centers, farmers, and seed grower associations, were pre-certified for attendance at the fairs according to seed quality criteria established previously at the central workshop in Thiès.

In the meantime, on 3 June 2003, CRS approached the Ministry of Agriculture to present the program's details as US Government support to Senegal for seed provision was already announced through a Conseil de Cabinet. The CRS Country Representative and Head of Programming met the Directeur de Cabinet, the Technical Chief Advisor and the Head of the Seed Unit of the ministry. On CRS request, a press conference was prepared and facilitated by the ministry's Chargé de Communication, and was held on 6 June with national radio stations and newspapers. Radio France International was also present. Following this press conference, the CRS representatives met the Chief Executive Officer of la Société Nationale de Commercialisation des Oléagineux du Sénégal (SONACOS), the National Company in charge of groundnuts seeds.

8. Seed Vouchers & Fairs: Implementation

Four local Caritas programs were chosen as the partners for project implementation corresponding to the geographical areas targeted for the program. The Dioceses covered respectively by Caritas Dakar, Thiès and Kaolack can be juxtaposed to CRS' targeting in the peanut basin: Diourbel, Fatick and Thiès regions. Caritas Ziguinchor covered the targeted Ziguinchor region. Agreements were prepared and signed with each Caritas on the overall objectives of the project. Each Caritas signed specific agreements with local government representatives (Ministry of Agriculture) for their involvement in the program. Caritas responsibilities included: identifying and registering beneficiaries, determining the site, date, and time of the seed fair, advertising the seed fairs and providing human resources needed for of each fair. Local government responsibilities (DRDR) included ensuring good seed quality by inspection at the opening of each fair, collecting samples of seed for germination tests and providing a report to respective Caritas.

Communication and organization took place at the partner/community level and government level. At the partner/community level, seed assessments were detailed at the level to indicate the location and varieties of seed that would be potentially available at the fairs. Local communities were sensitized on fair implementation, selection of beneficiaries and how beneficiaries would access seed at the fairs. Partners advertised the seed fairs through various means, including large posters, radio broadcasts, newspapers, letters and visits to officials. At the Government level a national media campaign took place that exhibited the positive collaboration with the Government of Senegal. CRS was in regular contact with Ministry of Agriculture on the status of the fairs. The CRS Senegal Country Representative and Head of Programming presented SV&F to the Ministry of Agriculture which was televised and widely diffused through local and international radio. Following this press conference, they also met the Chief Executive Officer of SONACOS, the parastatal groundnut oil company, responsible for the dissemination of groundnut at the national level.

The project was funded by USAID/OFDA, for a total value of $837,838. The total value of vouchers issued during the fairs is $358,661. Each

voucher was worth $15.00. Thirty-eight seed fairs were carried out in 36 locations (Table 2) of four regions in Senegal from June 9 to July 10, 2003.

Table 2. Location of seed fairs.

Area	Region	Number of fairs	Number of beneficiaries	Average seed fair size
South	Ziguinchor	11	4 378	398
Peanut basin – West	Thies	10	7 165	716
Peanut basin – South	Fatick	10	7 164	716
Peanut basin – Center	Diourbel	7	5 301	757
Total		38	24 008	632

After the first few fairs, it was decided to tag all sellers before they enter the fair. During the payment time of the first fairs (Touba Toul), we realized that several sellers reported to the cashier under the same number assigned by different registration monitors. With the tagging system, each seller receives from the supervisor a number before meeting the registration monitors. That number appears in all documents referring to that specific seller.

A minimum of 18 people per fair from CRS and partner staff served as supervisors, stock evaluators, vouchers distributors, and interviewers. Seed prices were negotiated between traders and farmers. Because of the acute demand and the open market, the prices were sometimes high (for example peanut seed prices varied between 550 and 825 francs CFA per kilogram). Fairs were open to all types of seeds; it was up to the farmers to buy or not.

Various seed sellers, including commercial importers, agricultural centers, farmers, and seed growers associations, were contacted and invited to participate in the fairs. The main challenges we confronted in dealing with the seed vendors were the fact that there were no commitments to confirm their participation prior to the fairs. In the peanut basin where there is a strong culture of exchange in market venues, this did not pose a problem. The number of vendors at any given fair in this area ranged from 12 to 66. However, in the south

where farmers customarily procure seed through informal networks, the number of vendors varied from 2 to 42.

9. Seed Quality

All lots of seed proposed for sale in the fairs were inspected and weighed before entering the designated fair area. An agent from the Ministry of Agriculture Seed Division inspected all seed, eliminating obviously inappropriate seeds (based on quality or climatic adaptation). A sample of seeds was taken from various vendors, and a germination test was done by competent services after the fair. The quality of seed exchanged varied. As illustrated in Table 3, the seed was, for the most part, satisfactory according to obtained germination rates.

Table 3. Germination test results at the Touba Toul Fair (Thiès).

Name of vendor	Category of vendor	Type of seed tested	Germination rate %
Modou Fall	Seed grower	Peanut 55437	85
Coumba Soumaré	Seed reseller	Peanut Codou Camara	92
Assane Sène	Small trader	Peanut Fouré	84
Aliou Ngom	Small trader	Peanut FL11	45
Maty Sall	Small trader	Peanut Hative/sefa	60
Khady Diouf	Farmer	Niébé rouge	88
Yacine Faye	Farmer	Niébé Melakh	76

Source: Compiled from Government's reports – June 26, 2003

10. Seed Vouchers & Fairs: Evaluation

There were interesting cultural particularities that transpired in the implementation of fairs in Senegal. In the South (Ziguinchor), for example, as a general rule for reasons mentioned in the previous section, the seed fairs were not as popular as in the northern regions.

There was a lack of appropriate venue points and a limited number of sellers (2 vendors for 165 beneficiaries). With limited vendors and a demand for groundnut in some territories (particularly around Sidian and Niaguis), CRS and Caritas were fortunate to have collaborated with SONACOS in the Ziguinchor region, who was implementing a government subsidized groundnut distribution[3]. The insecurity due to the 20 year ongoing rebellion in the southern Casamance region limited movement in that area perhaps limiting participation in fairs. For security purposes, CRS and Caritas/Ziguinchor coordinated all fair plans with local military police.

In the peanut basin (Thiès, Diourbel, Fatick), there was an acute demand for seed, which can be attributed to the lack of seed stock and wide spread culture of market amongst farmers in this area. There was generally good response of seed sellers (up to 66 in one fair of 1,038 vouchers). Some constraints encountered during the fairs included the following. Due to the emergency nature of the program, some staff members lacked sufficient preparation to assume their roles in the fairs. With insecurity prevailing in Ziguinchor, traveling long distances was difficult. In some fairs, vendors showed up very late. Due to the generalized seed vulnerability of the overall population, there was difficulty in identifying the most seed vulnerable villages. Fictitious beneficiaries were included in the program with complicity of the village committee. There were also incidences of duplicated beneficiaries reported early in the process where criteria for selection were not being respected.

11. Conclusions and Next Steps

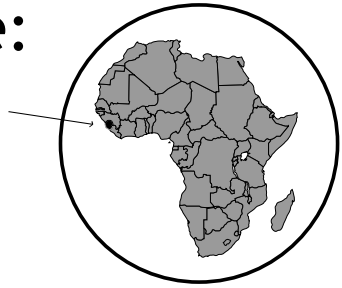
An evaluation meeting was held with all implementers at Mbour from 22 to 24 July 2003 to evaluate activities and plans for next steps. Monitoring of performance of seed procured at fairs is underway in each region to follow the performance of the seed procured at the fairs. Training and implementation of full seed/food security assessments is tentatively set for February 2004. Following food/seed security assessments, CRS and Caritas propose implementing a study on

[3] SONACOS distributed unshelled peanuts for the token price of 75 CFA (13 cents/kg)

the role of markets, assessing market seed flow and integration of commercial and farmer seed systems. Other proposed activities include creating contact lists of known seed vendors and planning training for vendors in warehousing and pest management. CRS/Senegal will liaise with the Agricultural Research Institute of Senegal (ISRA) to acquire better understanding of national research priorities and linkages, and needs for support. The results of the above mentioned assessments and ISRA priorities would suggest amendments to the implementation of activities.

In conclusion, Senegal's first experience with SV&F was met with much interest and enthusiasm. CRS was publicly commended by the GoS and the populations served for having responded to an impending seed crisis on such a wide-scale and in time for the rains. With reports of excellent rainfalls this season, we can be hopeful to have some, albeit small, impact on reversing the trend of seed and food insecurity in the regions of Thiès, Fatick, Kaolack and Ziguinchor.

CRS/Sierra Leone:



Experiences with Seed Vouchers & Fairs

Ibrahim Jallow, CRS/Sierra Leone

Despite its riches and potentials, Sierra Leone remains a socially and economically underdeveloped country, with a long history of mismanagement and a civil war that lasted more than a decade. In 1991, civil war erupted between the Government and the Revolutionary United Front (RUF) rebel forces. The conflict resulted in tens of thousands of deaths and the displacement of more than 2 million people (well over one-third of the population) many of whom were refugees in neighboring countries. The war has now ended and the country is returning to normalcy. The combatants have been disarmed and are gradually being reintegrated into society.

1. Introduction

In Sierra Leone, crop production systems and methods vary within the country. They range from traditional farming practices like shifting cultivation/bush fallowing to crop rotation, sole or mono cropping. Shifting cultivation/bush fallowing is practiced in the uplands throughout the country. It is a traditional farming system whereby the farmer cultivates a piece of land for a period of 1-3 years and then abandons this land. Depending on the population and the demand for land, this period of abandonment may range from 5-15 years. During this time, the land is left fallow and vegetation is allowed to regenerate and the land to regain its natural fertility. However, because

of the increase in population and the increased demand for land for uses other than agriculture, the fallow period has been shortened and other farmers have resorted to other more sustainable methods of crop production.

CRS/Sierra Leone (CRS/SL) implements its own agricultural recovery activities on a two-year plan, primarily using community-based organizations (CBOs) as partners. Over the past six years, CRS has purchased seeds and tools locally in Sierra Leone, and distributed these inputs directly to vulnerable farmers within targeted communities. In 2002 and 2003 CRS extensively utilized SV&F as a vehicle to purchase and distribute seeds to vulnerable farmers. Under this scheme, CRS worked with CBOs in secure areas of the country, to encourage them to market seeds in communities that are still in the initial stages of recovery from the war.

Although agriculture employs approximately 75% of the workforce in Sierra Leone, the country historically suffers from chronic food insecurity. Prior to the war, most rural populations were generally able to produce sufficient quantities of food for their own needs. Urban populations, however, have always been dependent on foreign imports. In particular, the country has not been self-sufficient for rice, its staple food and principal crop, and has been importing an average of 100,000 MT per year since the early seventies. This shortfall in productivity is due to various factors, including the lack of inputs and inadequate dissemination of productivity-enhancing information. Access to and availability of viable seeds have been two major problems farmers had to grapple with throughout the rural farming communities in Sierra Leone even before the advent of the war. Farmers had to rely on existing social networks to secure limited seeds for planting. The situation described above was compounded by the decade-long rebel war. Farming communities in rural and sub-rural communities lost most, if not all of their seed stocks. The social fabrics that bound farmers together were destroyed.

With the renewal of the civil conflict in May 2000, seed distribution activities in the north and east of Sierra Leone (CRS focus areas for SV&F) were disrupted and more than 150,000 people were newly displaced. This movement came during the critical planting period

in May-June. Given the deterioration in harvest levels during the war, increasing agricultural production is a top priority for addressing food insecurity within Sierra Leone. Qualitative data suggest that the average cultivated area in war-affected communities dropped to between one and two acres.

OFDA, the major donor for the CRS/SL program, encouraged the country program to implement SV&F systems in its agriculture recovery strategy. Thus in early 2002, the first experimental seed fair was held in the north and another in the east. By the end of 2002, all indications were that the system was workable and adaptable in the CRS/SL work environment. In 2003 therefore, all OFDA funded agriculture projects were carried out on full-scale SV&F, both for the northern and eastern regions of the country.

2. Seed Vouchers and Fairs: Implementation

The seed vouchers and fairs involved a solid network of partners. Partners included but were not limited to local Catholic Church development entities and community-based organizations. In an emergency/recovery situation it can be difficult to nurture community participation and ownership, but with our partners we were able to do so in several ways. The CRS/SL strategy to ensure that vulnerable groups have a voice in the CBOs is a network of sensitization to develop democratic/collective decision-making frameworks and structures with equal representation across gender, age, and ethnic lines.

First CRS worked with local partners (where they exist) or CBOs to identify vulnerable farm families in need of emergency support in the form of assistance to access seeds and tools. After that CRS and partners organized "cluster meetings" bringing together villages that are in close proximity to each other at a central location. Each community sent representatives to these meetings facilitated by extension agents of CRS and partner organizations. The agents then made follow-up visits to the communities to work with them to assess projected needs.

CRS in conjunction with its wide network of partners and CBOs conducted rapid needs and availability assessment in vulnerable

communities in northern and eastern regions for agricultural recovery support during which it was determined that problems with seeds relate mostly to access/affordability rather than availability.

Being a new agriculture intervention strategy, sensitization and planning meetings are often held with the targeted beneficiaries on the operational principles and procedures of the SV&F system. During these meetings, dates and venues for seed fairs were discussed and agreed upon, while extension agents carried out registration of targeted individuals/groups with the help of the village development committees. During the sensitization meetings with targeted beneficiaries, potential seed suppliers were identified almost automatically. Some were beneficiaries while others were local seed dealers. The sellers were then sensitized on the new seed delivery system.

Because of the high rate of illiteracy among the beneficiaries, the agency (CRS) had to take a lead in this venture. However, prior to the day of the seed fair, farmers were given proper orientation on the colors, face values and use of the vouchers. The following activities took place on the day of the seed vouchers and fairs: registration of sellers and stock recording of their seeds, verification of registered farmers, cross check of seeds bought against the value of voucher issued to registered farmers, observation of the process and random interviewing of farmers and sellers, cross check of the quantity of vouchers presented for payment against the quantity of seeds still available to sellers, record the total stock of seeds sold and those remaining unsold, redeem vouchers for money, and evaluation with a cross section of farmers, sellers, CBO representatives and community leaders.

On the days of the seed fair, farmers and sellers converged at agreed centers. It was here that the exchange of vouchers for seeds took place. Each farmer received vouchers to the market value for a unit of seed at the time. Prices during the seed fairs were entirely determined by the forces of demand and supply. That is, if a lot of seeds were available in the market, then prices would drop. Conversely if there were deficits in supply as in the case of some centers, prices would rise.

3. Results

Altogether, 91 seed fair events have been held in the north and east with a total of 119 sellers presenting seeds for sale to 14,688 beneficiaries for 2002 and 2003. Since the inception of SV&F by CRS/SL in all its operational areas, there has been marked improvement on availability, acceptability, viability, timeliness and appreciation by farmers of CRS/SL agricultural inputs delivery. Returns to local producers (farmers selling surplus outputs), artisans (blacksmiths selling fabricated farm tools) and beneficiaries (spending less resources on their inputs) have contributed to the improvement of local capacities and economies. Preferred inputs such as farm tools and planting materials are being maintained by community members within their environments rather than being exported to other areas.

There has not been any formal training to sellers and buyers since the inception of SV&F in Sierra Leone. However, as seed exchange is not new in traditional farming communities, there is an internal resource within communities, which provides an excellent opportunity for spontaneous learning. Community members know how to do seed exchange as they have been and will continue to be engaged in it. CRS/SL considers the SV&F as adding value to the traditional exchange mechanisms of seeds and the weekly markets (trade fairs) that are widespread in Sierra Leone. Farmers bring their produce to these weekly markets to sell or barter, using similar mechanisms to those of the SV&F. This explains the relative ease it takes for farmers to have faith in the seed vouchers and fairs in Sierra Leone as it appeals to farmers' reality and gives credit and meaning to what they have been doing.

Seed quality has not been an issue during the SV&F. The seeds were familiar to the beneficiaries since they were obtained locally within the beneficiaries' environment. However, beneficiaries carried out a physical examination for purity during the SV&F.

4. Evaluation

Most of the seed fairs are conducted successfully, however, there are cases where the number of farmers per center was so high that the process was very delayed. Another problem was the sensitization of farmers. This took time and required regular meetings with farmers prior to the seed fair days in order for them to understand the process. In some communities most of the farmers are illiterate, and so were not able to read the value of the coupon by number, only by color-coding.

In some cases, the quantities of seeds and tools estimated during the needs and availability assessments were less than actually required for all beneficiaries. This lead to the exclusion of some beneficiaries or additional costs to conduct more sessions. Also, the inclusion of seeds from outside the targeted communities has been minimal. This might have prevented farmers from accessing materials that might be of better quality and hence potentially improve their farming inputs and outputs. CRS/Sierra Leone SV&F has a tradition of giving farm tools with only seed rice and/or groundnut . Vegetable seeds, livestock products and other agricultural inputs have not been included in the scheme that would have given a fuller package of agricultural inputs. Some sellers do not consider the process as an open market, and thus rely on the agency to buy the seed in the event that targeted beneficiaries do not exchange their vouchers for their seed during the seed fairs.

5. Conclusions and Next Steps

Some of the activities planned or implemented after SV&F are a continuation of the initial activities before and during the SV&F. These include the formation of cluster committees, which involve combining three or more villages. These committees assist extension agents in monitoring. They call meetings of all the communities involved to discuss felt needs and other issues. Visits will be made to check on quantities of seeds procured by farmers and farm sites will be checked on seed viability and to ascertain whether seeds were planted. The views of farmers and seed sellers on the conduct of the SV&F will be

asked for. Many agricultural activities have a linkage with SV&F. One main activity is the periodic marketing, which determine prices during the SV&F days. Another activity is the farmer field schools where most aspects of agriculture are discussed with farmers, e.g. local methods of seed testing for viability and other cultural practices. Forming seed banks help determine seed availability at village and cluster levels. Road rehabilitation activities improve access to market centers. For CRS/SL country program, SV&F has now become a challenge in the implementation of Agricultural Recovery Programs. We see a visible link between the process of utilizing community own resources at the recovery stage and transitioning into development. Among other things, CRS/SL will work on networking with like-minded organizations in extending and expanding the seed vouchers and fairs, coordinate with the Ministry of Agriculture in the processes of planning and implementation of the SV&F, and finally share experiences and lessons learned with other CRS country programs implementing the SV&F.

CRS/Sudan:

Experiences with Seed Vouchers & Fairs

Resom Habte, Michael Roberto, Philip Marol, Jim Ashman, and Lawrence Otika, CRS/Sudan

Sudan has been at war for 37 of the last 47 years. Although the north vs. south conflict has been most publicized, there are simultaneous conflicts between various groups in the south.
CRS began implementing emergency response programs in Sudan with a focus on food security in 1989. Since 1994, the program has assisted displaced and drought affected communities near the Uganda border through food distribution and agriculture rehabilitation (seeds, tools, and extension). CRS currently works in areas controlled by the SPLM, the largest rebel group in the south. Here there is no national government in control, boundaries change according to the military successes and defeats of the various parties, and CRS operations must be conducted cross-border from Kenya and Uganda.

1. Introduction

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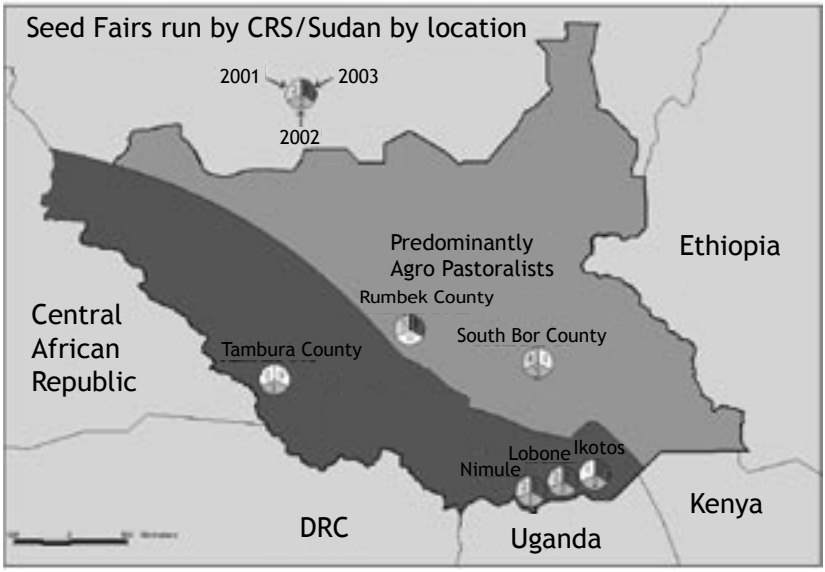
SPLM, the largest rebel group in the south. Here there is no national government in control, boundaries change according to the military successes and defeats of the various parties, and CRS operations must be conducted cross-border from Kenya and Uganda.

2. Results

CRS/Sudan, which had conducted seed fairs in both 2001 and 2002, ran five more seed fairs in 2003. The 2003 interventions attempted to address seed insecurity among communities recently displaced by conflict. A computerized seed security survey was developed and administered prior to each seed fair, providing for the collection of relevant information. At three locations, beneficiary groups were selected on the basis of recent displacement as a proxy for seed insecurity before the seed security survey was performed. At the fourth seed fair, beneficiaries were selected on the basis of the results of the survey. At these four locations, a total of 1,704 beneficiaries were provided access to 16,400 kilograms of seed through the distribution and exchange of $9,054 of vouchers.



As transportation represents a large portion of the costs of providing external inputs to south Sudan, seed fairs greatly reduce the cost of providing seeds. Excluding administrative costs, which are similar in the program's implementation of both seed fairs and seed distributions, CRS/Sudan spent $0.55 per kilogram of seed transferred in their 2003 seed fairs. This represents a significant cost savings over the seeds and tools distributions implemented by CRS/Sudan in 2000 and 2001, where the cost per kilogram of seed distributed was $1.42. The following graph illustrates the cost of seeds by crop type at the 2003 seed fair by location. These are compared with the costs of procuring and transporting relief seeds from Uganda to the same locations in 2000/2001.

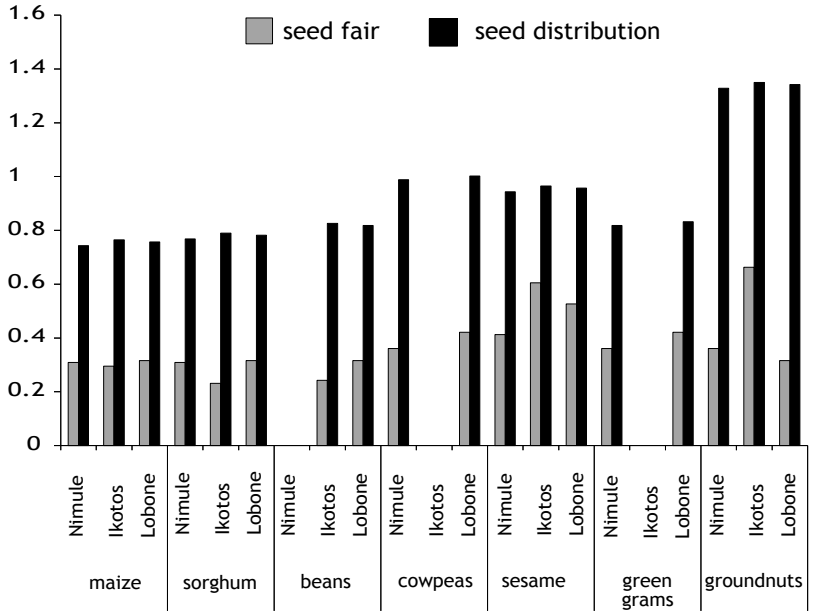


Figure 1. 2003 Seed Fairs vs. 2000/01 Seed Distributions (Cost of Seeds in $ per kg).

3. Conclusions and Recommendations

Through assessment of the actual versus the intended impact of each exercise, and analysis of the procedures followed, a series of recommendations has been proposed. Central to these recommendations is the formulation of a seed fair implementation tool kit, integrating a next generation seed security survey into a prescribed planning process. This process should incorporate explicit guidelines for determining when a seed fair is appropriate, identifying target groups, setting critical parameters such as voucher values, and providing standardized built-in impact evaluation.

A significant feature of seed fairs is that they work through local systems. As such, the specific methodologies employed must be appropriate to the local context. CRS/Sudan works in a conflict environment, where an armed rebel movement constitutes both the de facto Government and the mandatory counterpart relief agency (SRRC). Manipulation of trade, restrictions on certain groups of traders, artificial price controls, and taxation of relief items (including seed at seed fairs) are powerful forces that characterize the market. The seed vouchers and fairs approach and the seed security survey challenge the assumption that seed is unavailable. Increased emphasis should be placed on challenging the assumption that seed is inaccessible to the target population, and examining the effect of the seed fair system on traditional mechanisms of access. Sustainable community-based approaches to assisting those who have lost their seed stocks will need to take into account the existing dynamics of local seed exchange.

CRS/Uganda:

Experiences with Seed Vouchers & Fairs in Gulu and Kitgum

Joseph Oneka and David Lukungu, CRS/Uganda

Due to ongoing civil conflict in the districts of Gulu and Kitgum, only the annual crops continued to be cultivated. The situation worsened in 2002 when the Uganda People's Defense Forces (UPDF) dislodged the LRA from Sudan. The LRA rebel incursion in the region found a security vacuum that allowed them to abduct and kill people, loot, burn and destroy properties, food and seeds. The situation created an enormous emergency need and acute shortage of food and seeds in the districts of Kitgum, Gulu and Pader. Over 765,000 people were displaced in Acholi sub-region out of which 395,000 people were displaced in Gulu district alone (UN/OCHA 2003). The District Disaster Management (DDM) sub-committee on agriculture and relief and UN/OCHA carried out a needs assessment to establish the magnitude of the problem. It concluded that 8,000 households with access to land for cultivation needed seeds. In the CRS Development Activity Program (DAP), only 4,000 households were to be covered per year. CRS submitted a proposal to USAID requesting for more funds to cover 8,000 households.

1. Introduction

CRS Uganda responded to the emergency using a multidirectional intervention which included provision of food and non-food items and helping farmers to acquire seeds using the seed vouchers and

fairs approach to boost production and ensure food security. The seed voucher and fairs intervention was conducted in the districts of Gulu and Kitgum only and food items were distributed in Pader District. The SV&F intervention targeted 13,000 households in Gulu and Kitgum, however, only 12,691 households (Gulu had 8,812 and Kitgum had 3,879) were served with voucher value of $102,170. In 2002, 63.5% of the voucher recipients were women while 83% were women in 2003.

2. Implementation of Seed Voucher & Fairs

To effectively implement the SV&F intervention, CRS Uganda and partners, organized a one-day training on the SV&F approach as an emergency seed aid intervention. The training targeted CRS, partner and district extension staff. Thereafter a joint intensive pre-fair sensitization of voucher recipients and local leaders, seed availability assessment, formation of community project committees, registration of voucher recipients and seed sellers and verification of the registered voucher receipts were carried out before the venues and dates for the actual seed fair were selected, set and advertised in the two districts. The local leaders, implementing partners, CRS and District Agricultural Department staff jointly set targets for each area. Sites were selected based on their accessibility and safety to all the participating parties.

Seed Vouchers of 2,000/= UGX and 5,000/= UGX were printed to allow easy exchange during the seed fair and each beneficiary got vouchers worth 15,000/=UGX ($8.33). Insecurity could not allow easy movement of vehicles; therefore, places which were not easily accessible and did not have enough seed available were either left out or the beneficiaries were forced to move to sites that could easily be accessed by the seed sellers. Seed fair site selection was dependent on seed availability, accessibility and safety of the participants in the seed fairs.

3. Results

In 2002, twelve seed fair sites were selected and 13 seed fairs conducted in 5 days. At Unyama, the seed fair was conducted over two consecutive days due to people who were traveling a long distance to reach the site.

All the seed fair sites in the same area held their seed fairs on the same day for security reasons. In 2003, 9 seed fair sites were selected and 10 seed fairs were conducted in Gulu district while in Kitgum district, 8 seed fair sites were selected and 8 seed fairs were conducted. At Bungatira seed fair site, the targeted beneficiaries were 1,190 people who were served in two days.

In 2002, the seed fairs in the various sites attracted 809 seed vendors out of which 19.3% were women. At Unyama and Katikati seed fair sites there was a seed shortage, hence CRS had to provide seeds to fill the supply gap. CRS sold 65.7% of the total seeds sold at Unyama and 38% of the seeds sold at Katikati fair sites. The overall percentage of seeds sold by CRS during the seed fair exercise was 13.6%.

In 2003, the seed fairs attracted 1,028 seed vendors (Gulu - 474, Kitgum - 554) out of which only 23.2% (238) were women. Selection of sites was mainly dictated by security conditions, thus, men were more likely to travel in insecure areas on bicycles with large quantities of seed to the seed fair sites. Eighty-six DAP farmers participated as seed sellers representing 8.4% of the total seed sellers that participated in the seed fairs. In Acholi sub-region, women perform most of the farming activities but they are less involved in cash transactions and marketing of crops produce.

In 2003, two agro-farm supply enterprises participated in the seed fairs in Gulu providing an opportunity to farmers to select quality seeds of their choice. Farmers in Gulu district bought 86.68 kg of vegetable seeds, which was estimated to plant 1,728 acres. The purchase of the vegetable seeds by the seed voucher recipients confirms that farmers know what they want and they will select only what they will plant. Participation of the formal seed sector in the seed fair is a testimony to the appropriateness of the intervention in the seed emergency response.

Table 1. Seed of Crops (kg) sold in Gulu and Kitgum seed fairing 2002 and 2003.

Crop	Gulu (2002)	Gulu (2003)	Kitgum (2003)
Beans	10 016	39 877	12 725
Groundnuts	109 581	37 675	14 435
Maize	3 399	1 465	6 411
Rice	0	8 756	478
Soya beans	819	363	3 263
Finger millet	12 360	2 309	3 762
Sunflower	0	0	257
Cowpea	40	1 969	265
Sesame	902	2 917	968
Sorghum	0	170	7 053
Pigeonpeas	0	1 944	1 535
Green grain	0	117	131
Cabbages	0	21	0
Onion	0	64	0
Carrots	0	0	0
Melon	0	1	0
Okra	0	0	0
Lettuce	0	0	0
Spinach	0	0	0
Tomato	0	65	0
Grand Total	137 116	97 626	51 286

The farmers bought mostly groundnuts and beans (Figure 1). In Gulu, farmers bought 8,756 kg of rice seed, an important food and cash crop for the district. In Kitgum district, farmers bought more maize (6,411 kg) and sorghum (7,054 kg) than in Gulu. Sorghum is the main food crop in Kitgum district, consumed with cassava.

Many farmers bought different varieties of different crops both in Gulu and Kitgum (Table 1). The main varieties of beans that were bought during the seed fairs conducted in Gulu and Kitgum were yellow beans, local beans ("agwede" or "bam" or "lango beans"), K132 and K131. In Gulu, 50% of the bean seeds bought were local beans and 37% were yellow beans while in Kitgum 62% of the bean seeds bought were yellow beans and only 22 % were local beans. The two varieties are high yielding, early maturing and can evade the highest pest pressure experienced in the first season. To avoid losses due to high pest pressure by fireflies in the first season farmers plant beans mainly in June to July. Yellow beans produced in the first season have a very good market, as there would be limited supply of the beans on the market.

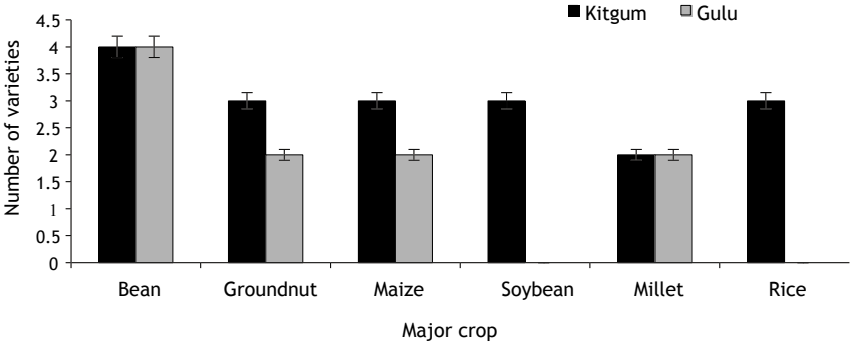


Figure 1. Number of different varieties sold at Gulu and Kitgum seed fair market.

The groundnut varieties that were brought to the seed fairs in Gulu and Kitgum were Red beauty, Igola 1, local ("Amaido" and "Labeja"). Red beauty was the most common variety in both supply and demand at the different seed fairs in Gulu (100%) and Kitgum (84%). It has gained popularity due to its market potential and good yield but it is susceptible to groundnut rosette virus disease.

4. Evaluation and Next Steps

CRS Uganda and partners conducted exit interviews and 495 respondents were interviewed. Of the entire respondents interviewed in Gulu and Kitgum 92% and 85% respectively said they were adequately sensitized about the seed fair intervention approach. This is an indication of the commitment and efforts made by CRS and partner staff even when the security was turbulent and time was short. In addition, the fact that seed fairs were carried out concurrently in March in Bundibugyo, Gulu and Kitgum, there is in house capacity in Gulu to promote and handle SV&F intervention in the country. 99% and 93% of the respondents in Kitgum and Gulu, respectively, acknowledge the timeliness of the seed fair intervention. The seed fairs conducted in Gulu and Kitgum were a success despite the increasing insecurity in the region. We hope that the seeds bought will be planted and have greater impact on production, food security and nutrition and the well-being of the people in the region. We look forward to collecting yield information and other activities when security situation allows.

CRS/West India:

Experience with Seed Vouchers & Fairs

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Hunger, famine, and starvation are conditions which arise out of the widespread lack of access to food that occurs when drought, flood, war, bad weather, or political disruption is forced upon an already undernourished population. This statement refers to approximately half of India's population. Failed or delayed monsoons in 2002 caused 12 out of 29 states in India to experience the most severe drought in 15 years. At least 321 of India's 593 districts spanning 12 states faced the worst drought since 1987 (OCHA 2002). The situation was particularly serious in the northern states of Rajasthan, Madhya Pradesh, Uttar Pradesh, Punjab, Gujarat and Haryana.

1. Introduction

Drought is a recurring phenomenon in Rajasthan. The state faced drought for the fourth consecutive year. In the last 54 years Rajasthan experienced 41 drought periods. CRS, through a new drought response program offered relief, recovery and disaster preparedness services to 10,719 families in 57 villages in the areas hardest hit by the drought in Rajasthan. The six month long project of $506,047 was supported by the Office of Foreign Disaster Assistance (OFDA).

The Udaipur region was selected for pilot testing the seed fair concept. It is predominately a tribal community, located in a remote, hilly portion of Rajasthan. Accessibility to markets and other seed sellers is poor. People use their own seeds on large scale. A study of agriculture and seed systems was the basis for the overall seed procurement plan for the fairs. The relevant information was collected through a cropping pattern study, seed security survey and PRA to understand farmer's preferences. A cropping pattern survey of all the 15 project villages was conducted. Ten small and marginal farmers (less than 2 ha. land holding) from each village were randomly selected for the survey. Survey results showed the type and quantity of seeds traditionally used by farmers. The important crops of the area are maize and black gram. Other crops are sesame, paddy, and pigeonpea.

2. Seed Vouchers & Fairs: Planning and Implementation

A seed security assessment was carried out with the help of a questionnaire, developed by CRS/EARO. This questionnaire was used to collect information from 16 families of three villages 3 weeks before organizing seed fairs. This assessment shed light on seed procurement channels. It was found that people relied on their own resources for the required seeds in a disaster free or "normal" year, whereas in the current year, apart from a few who possessed some maize seeds, all of the farming communities depended on market sources for their total seed requirements. The normal channels of seed procurement have been through tremendous changes in the last five years, due to consecutive droughts. These changes brought about a substantial shift in the economies of the individual villages, as the quantity and quality of seeds that were needed were only available in the market. Most markets are not located in CRS intervention villages. Here the price of the seeds exceeded that of food grains by two to seven rupees. Credit from landlords, (who themselves were often the seed sellers) for the purchase of these seeds was available. The terms forced an exchange of 1.5-2kgs of food grains on harvest for a kilogram of seeds. Using this market as a source for their quota of seeds was not a choice made by the

farmers but rather a last resort due to poor conditions in the preceding years.

The project villages are divided into four clusters based on proximity and number of families. It was estimated that the team could manage a seed fair for 800-900 families. Understanding cropping patterns is also important, as similar cropping patterns reduces the burden of organizing widely different types of crop seeds. Community make-up influences resource availability and risk taking ability. Scheduled castes (SC), scheduled tribes (ST), and other backward classes (OBC) have poor access to resources and minimal capacity to take risks. General category families have good access to land and water. So it was expected that in seed fair I and II, people would choose newer varieties.

A team of CRS and Partner staff members planned and managed the seed fairs. Tasks were divided into two broad categories, community based activities and logistics. Community based activities were those that had to do largely with community mobilization and preparatory surveys. The seed fair planning teams took up different tasks for seed fair execution. The major tasks were confirmation of sellers, logistics arrangements (water, food and security), facilitators and evaluators cell (to help participants in purchasing seeds, conduct interviews of participants and sellers for evaluation), seed samples collection for quality tests and payment to sellers. Selected local youth and partner staff members were trained for conducting seed fair evaluations as well as guiding participants during the fairs.

Each project village had a village committee comprising of men and women. Women's self help groups were also promoted. Before each seed fair, a meeting with members of village committees was organized. CRS and partner agencies talked to the groups about seed fairs and involvement of community in making them successful. Issues related to community participation in planning and management of seed fairs were discussed. Together, partners and community members identified the seed fair sites. All the committees took the responsibility of awareness generation among the participants and voucher distribution. The host village took major responsibility of logistics. Many sub-committees were formed to manage different tasks such

Table 1. Characteristics of seed fair locations.

Seed fair village Location	Number of villages	Proximity of villages to fair location	Community mix (% ST/SC/OBC)	Major crops	Total number of families
Seed Fair-I (Nakoli)	5	Within 3 km radius	97	Maize, black gram, ground nut, guar, sesame	919
Seed Fair-II (Tumder)	5	3 villages close by and 2 villages are 15km away	99	Maize, black gram, pigeonpea, Paddy	743
Seed Fair-III (Chandwas)	4	3 villages close by and 1 village is 20km away	91	Maize, paddy, black gram, moong, pigeonpea, sesame	765
Seed Fair-IV (Pipalbara)	1	Within village	99	Maize, paddy, black gram, moong, pigeonpea, sesame	526
Overall	15				2953

as arrangement of drinking water, site cleaning and setting up tents, security, and food arrangement for sellers.

As prospective sellers approached for the first time, they doubted the organizer's intentions. In an attempt to build confidence in the process, the organizers registered sellers, with the use of printed and stamped materials, making the process more formal and official, and thus developing a relationship of faith and trust. This minimized the possibility of "no shows". This was necessary as some of the sellers identified and approached were not within the periphery of the community, but from farther away. In order to ensure the required variation of qualities and quantities, traders were approached to participate.

3. Seed Vouchers & Fairs: Results

Four seed fairs covering 15 villages were organized between 6-27 June 2003. About 3000 families received vouchers worth $2.55(Rs.120/-) each. Women voucher recipients were 30% of total recipients. Although the total number of women voucher recipients was substantially less than male recipients, it was evident that the seed fair process facilitated a significant opportunity for women as their actual participation in the seed fair was almost equal to the male participation. The first seed fair had the largest participation, with 919 families receiving vouchers and only 3% of the community not participating. The second seed fair had 743 families and 2% non-participation. The third and fourth seed fairs saw 100% participation with 765 and 526 families participating respectively.

Farmers had ample choice to select seeds of their preference and also to bargain with different seed sellers. The range included a mix of cereals (maize, sorghum, pearl millet), Pulses (black gram, pigeonpea, green gram, cowpea, soyabean), oil seeds (groundnut, sesame, castor) tuber crops (turmeric, ginger, sweet potato, arvi) and vegetables seeds. The quantity of seed available in the fair was 75 MT, of which 26 MT was purchased by the participants. The total amount of sale was $ 7,434 (Rs. 349,398). The seed prices were not pre-decided or controlled externally.

Attempts were made to ensure that the market (fair) decided the rates by maintaining appropriate demand/supply ratio.

The overall assessment of the fairs was made with four factors in mind: the analysis of the beneficiaries' input, (awareness and perceptions of beneficiaries), the seller's response, an assessment of the purchasing trends, and post seed fair feedback. Total awareness about the fair had been achieved, as 100% of the participants reported that they were informed of the fair, the timing, the process of seed selection and availability, and the fair's overall working. The timing of the seed fairs was important, as seeds were required for sowing before the monsoon set in. Except participants for the last seed fair, all other seed fair participants felt that the timing was favorable as they had adequate time to buy and sow the seeds of their choice. The variety of seeds available was vast and appreciated. The findings of the fourth fair assessment reflect a deviation in consensus. This has largely to do with the timing of the fair, which was not favorable as the farmers had been forced to sow seeds not of their choice, the monsoons having already begun. During the first fair, there was a shortage of seeds. This was rectified in subsequent fairs. A large majority of 94% felt positively about the fair, whereas only 6% felt that it was fair or poor.

Some drawbacks were also reported by some of the participating farmers. The first fair saw a shortage of seeds, and the majority of the feedback from this fair indicated this shortage. The organization of the last fair was delayed forcing the farmers of this village to use seeds that were not of their preference. Once again, this delay has been indicated in the feedback and refers to the last fair exclusively. Due to poor literacy, some faced difficulty in understanding the coupons. Some felt that the traders benefited more than the farmers. The cost of the seed was also higher than the normal cost. A few of the participants felt cheated as the seed was wet and thus affecting the weight. Finally, a larger space for the fair would have been preferred by some of the participating villagers.

4. Information on Seed Sellers

The sellers were divided into four general categories: the farmer from the village, the local or small trader, the large trader, and the stockist. The two latter categories were from outside the village. Two types of information were collected to analyze sellers responses - interviews with 93 sellers and seed procurement and sale details of all the sellers. The questions included type of sellers, source of seeds, experience of sellers, planned use of income generated from the fair and perception about the fair. Table 2 gives the division of the sales at each of the four fairs.

As is clear in the table, the overall percentage of the farmer sales in the first seed fair is less. The reason for this is the fact that groundnut seeds were in demand and the farmer sellers were not able to fill the required gap between the supply and the demand. This lacuna was filled by stockists, reducing the farmer's sale percentage. The second, third and fourth fairs all saw an increase in the number of farmers as well as local traders. The increase in the number of farmers and local traders affected and reduced the gap in the supply and demand of certain seeds like groundnut.

Of all the crop seeds, maize and black gram were available with local farmer sellers in the largest quantities. Out of the 58 farmers who sold maize, 55 were able to source the seeds on their own and 45 farmers traded exclusively in maize seeds. Black gram was available in slightly lesser quantities, with 41 out of 42 farmers sourcing their own seed and 34 trading specially in black gram. Groundnut was more available with local traders and found less among the farmers. About 50% of the 118 sellers were first time sellers, the majority of whom were farmers. Approximately 19% had one to three years of experience. About 6% of them had three to seven years of experience and remaining 26% with eight years or more experience. Local traders tended to have more experience i.e. more than 3 years.

Table 2. Fair wise participation and division of the total sale.

Seller's category	Seed fair I		Seed fair II		Seed fair III		Seed fair IV		Total	
	Nakoli		Tumder		Chandwas		Pipalbara			
	Number of sellers	Total sales ($)	Number of sellers	Total sales ($)	Number of sellers	Total sales ($)	Number of sellers	Total sales ($)	Number of sellers	Total sales ($)
Local trader	2	370	6	558	7	930	8	537	23	2395
Stockist	1	1057	1	148	0	0	0	0	2	1205
Farmer	19	859	31	1149	19	1022	24	804	93	3834
Total	22	2286	38	1855	26	1952	32	1341	118	7434
Participation and sales by farmers	86%	38%	86%	62%	73%	52%	75%	60%	79%	52%

5. Participant Evaluation and Feedback

Almost all respondents (98%) said that the seed fairs were well timed. When asked about the pricing, 59% claimed flexibility in price negotiations, 14% said the prices were fixed and non-negotiable, while 27% did not have a specific response. The respondents were also asked their opinion on the prices at the fairs compared with normal market prices; 75% felt that the rates were slightly higher than those in the normal market. In addition to the discussions with the farmers regarding their thoughts on the quality of the seeds, 125 samples were randomly tested to check the viability of the seeds available at the fairs. The tetrazolic salt test method was used, and the results showed that all samples fall in the range of 85% to 96% viability. Only 5% reported dusty seed or seed that had been harvested too early. The remaining 95% had no complaints about the seed and reported it to be of good quality. All the farmers reported that the germination of all seed was satisfactory. 70% felt positively about the voucher system. The remaining 30% were not entirely happy with the system for various reasons including problems with literacy and the inflexible nature of the vouchers.

During the second seed fair, an attempt was made to expose farmers to better agriculture practices and seeds. Both innovative farmers and research institutions were brought together to participate in discussions and exhibitions which were organized simultaneously to the fair. Six innovative farmers from different states and ICRISAT India participated in this event. This platform also brought to light innovative seed developments such as seeds yielding vegetables up to seven to eight times their normal weight, standard sized onions, bright red chilies, high yielding pigeonpeas, wal (local beans), chickpeas, etc.

Community mobilization and ensuring seed availability are the two aspects of planning a seed fair that are most integral to its success. It was clear to the organizers that without thorough preparation of these aspects, the success of the fairs was at stake. For example, the first seed fair experienced a shortage of groundnut seed, forcing the participants to purchase seed from one major seller. This caused a crowd concentrated at one point at the same time. The consequence

of this situation was a prolonged fair timing of 9 hours, whereas the subsequent fairs' total duration was only 3 to 4 hours.

An example of rushed planning was the fourth seed fair, where community mobilization was inadequate. The village comprised of more than 500 families but only 150 families from two hamlets participated in cash-for-work program. It was then decided to provide benefits to all the participants of the village. Time given for community mobilization was limited. As a result information did not reach all the families in the village. This was reflected in under half of the community receiving their seed vouchers. The process was stalled for one week, and resumed only when the community mobilization was thorough.

Due to poor literacy in the villages, literate volunteers (community members) are required to facilitate the process by assisting participants in the appropriate use and counting of their vouchers. The team of evaluators conducting interviews with beneficiaries and sellers was trained to guide participants in subsequent fairs.

The team planned to develop a group of experienced farmers for testing the quality of seed based on specific farmer-based parameters. In order to understand these parameters a day-long discussion was organized with selected seed producers/farmers. It was observed that farmers' selection was not based on standard parameters like size of seed, impurities, or color of seed. They did not ascertain the seed quality as good or bad, but rather in terms of their different features and uses under different conditions. This reflected a highly experienced approach to the optimal usage of all resources (land, water, agricultural inputs, etc.).

One lesson that emerged from the four fairs related directly to the voucher design. The two aspects of voucher design that must be researched are the highest denomination and the number of lowest denomination vouchers needed. In general, very thorough thought must be given to the different denominations as required by the participants. Initially, all vouchers were of a standard color, and this not only proved very difficult for the organizers at the time of counting, but also reduced the handling capacity by illiterate participants.

Separating the vouchers by colors as was done in the last fair, made counting easier for the organizers and also helped illiterate participants to differentiate values.

6. Conclusion

To build a strong foundation, one must start with understanding the way of life of the farmers. This includes learning about their agricultural practices, their preferences and their needs. Without this as a base, the attempt to organize a successful seed fair may not actualize as there is bound to be a lack of direction and confidence in its management and implementation. This would make it necessary to plan subsequent seed fairs at well-placed intervals, giving the organizing team the time and the space for implementing learning from previous experiences.[1]

[1] The authors are grateful to the partner organizations Jagran Jan Vikas Samiti, Udaipur, Vanvasi Vikas Sansthan Kolyari (Udaipur), Jan Chetana Sansthan Jhadol (Udaipur), Ankur Sansthan Jhadol (Udaipur) involved in direct implementation of seed fairs. Thanks are also to Mr. Ken MacLean-Director CRS West India, Dr.Kamal Bhattacharya-Technical Advisor (Agriculture) CRS India, Rajeev Tiwari-Head of office CRS Jaipur, Varun Sharma-Program Executive CRS Jaipur, Girdhari Lal Verma-Program Coordinator Agriculture-JJVS Udaipur, Manoj Ghantasala -Program Executive CRS Bhopal, Rajesh Machado-Program Executive-CRS Mumbai, Debarthi Dutta-Program Executive-CRS Jaipur for their painstaking efforts and advise in planning and implementation of the seed fair concept.

CRS/Zimbabwe:

Experience with Seed Vouchers & Fairs

Christine Kuwaza, CRS/Zimbabwe
and Paula Bramel, CRS/EARO

Zimbabwe has faced a complex disaster emanating from the devastating effects of cyclone Eline in the 2000/01 agricultural season, to the subsequent drought in 2001/02 which resulted in complete crop failure in most parts of the country. The HIV/AIDS pandemic, the economic hardships and the Government's policies on land reform and seed price controls aggravated the situation. As a result, many households have been left vulnerable. In response to the situation, CRS/Zimbabwe solicited and obtained funds to assist affected farmers by facilitating access to a wide variety of local crops appropriate to varying ecological conditions. The focus was on restoration and strengthening of agriculture activities with improved farmers' access to seed. CRS used the SV&F approach and implemented the project in partnership with a local NGO, the Community Technology Development Trust (CTDT).

1. Introduction

In August 2002, a proposal was finalized and submitted to OFDA to initiate a new approach assisting farmers to acquire seed for the 2002/ 2003 cropping season. This proposal was funded and the program was implemented. Funding was provided by OFDA and DFID. The program initially targeted 9,000 households in five districts. The targeted districts consisted of communal land where mainly subsistence agriculture is practiced. However by the end of the program a total of 22,500 households were able to access seed of various crops. Seed needs assessments were carried out in September 2002 by a team of three consultants. A training and planning workshop was held on September 23 and 24, 2002 with Jeremiah Maroko and Tom Remington from the CRS East Africa Regional Office and 19 participants. Specific outcomes of the planning workshop were the targeting process, the information package, the sensitization process, and the price setting process. They held a pilot seed fair on October 8, 2002 with 400 beneficiaries in Murewa. After the seed fair, the participants reviewed the constraints and identified a number of problems to be addressed.

2. Seed Vouchers & Fairs: Planning and Implementation

The process started in each district with a visit to the Development Agents (DA), Agricultural Research and Extension (AREX) officer in the district, and the Rural District Councils. The seed vouchers and fair approach was explained. The program was described and the objectives given. The criteria for targeting beneficiaries were given. In each ward, one to two community meetings were organized. Prior to this meeting, the plans for the SV&F program were discussed with the local leadership. The community meetings included the local ward councilor, the traditional leaders, and the men/women of the community. The meetings served to sensitize the community to the SV&F approach and to initiate organization of the event. CTDT/CRS introduced the approach, described the program and the objectives. The fact sheets were made available, example vouchers were presented and the use of the vouchers described. Price estimates were made for

seeds compared with the price locally used for the grain. The farmers who would be seed sellers were mobilized. The seed fair venue and dates were also set. A second visit was made where the seed fair committees (Agricultural Recovery Committees) were established and the beneficiary list made.

The process of seed seller sensitization started at the community meetings where farmers who had seed to sell and local stockist or traders came to the meeting. A follow-up visit was made to the individual traders where fact sheets were given, the voucher system was described, the results of the seed needs assessment given, and an indication was given that there would be no help for transportation. The seed fair date and venue was also given. The pricing was set for maize on the day of the fair. The price included the cost of transportation with an adjustment for the individual voucher values. The price was negotiated with the sellers by a team of CRS, CTDT, and the local committee. The other prices were set based upon the current price of grain with a 25% premium but again taking into account the voucher values that was already set. The price set was to be the maximum price. Farmers and sellers could still negotiate for a lower price or more likely a greater amount of seed for the vouchers because the set price was the upper limit. A workshop was held in Harare with seed companies to mobilize their local stockist and/or to organize to come with seed themselves. The sellers felt that there was not sufficient seed available in the commercial sector to meet the demand and the price was an issue. CRS/CTDT explained it was not possible to change the price but the cost of transport could be factored in to the price on the day of the fair.

The local seed fair committee, called Agricultural Recovery Committee, was established to assist in the organization and implementation of the local SV&F event. This committee was set up after the ward level community meeting. The roles and responsibilities of these committees included organization of farmers for the voucher distribution and to assist in the verification of beneficiary lists. On the day of the fair, the committee would meet with the beneficiaries and CRS/CTDT staff to review the voucher process. Two members of the committee also helped with seed seller registration, one member served on the seed

quality committee (with CRS, CTDT, and AREX) to review the quality of the seed brought for the fair, and all helped to maintain the security and monitor the fair, especially to insure no violations of the set price, and control cheating by sellers.

On the seed fair day, the sellers were registered and the quality of the seed lots reviewed. The seed quality committee was made up of AREX, a farmer representative from the local committee, CRS, and CTDT. They would disqualify seed that did not meet visual standards for seed lot purity and seed appearance. The seed fair team consisted of 12-13 staff from CRS and CTDT. In some of the fairs, local enumerators or helpers were hired. During the seed seller registration, the weight of the seed brought was determined and a badge was given to the seed seller to identify sellers to the beneficiaries. The seed lot was reweighed at the end of the fair. The voucher distribution started with a meeting of the beneficiaries with CTDT, CRS, and the local committee. The objectives of the seed fair were reviewed, the fair operations explained, the use of the actual vouchers described (the need to use and safe keep), the process of seed procurement from sellers with the voucher, and any possible misuse, such as exchange for cash instead of seed with sellers was not acceptable. The sellers were known to cheat the beneficiaries in two ways, one was to take too many vouchers since some of the beneficiaries could not read the voucher values and had to depend upon the seller to help, or the sellers would buy the vouchers for a reduced amount of cash from the beneficiaries. A small percentage of the vouchers for the fair were assigned to beneficiaries who presented their cases on the day of the fair.

3. Seed Vouchers & Fairs: Results

Over all districts, there were a total of 1347 seed sellers, with the highest number of sellers in Chiredzi, Murewa, and Uzumba Maramba Pfungwe (UMP). The lowest number of sellers was found in Tsholotsho. Overall, 71.5% of the sellers were women. Twenty-three crops were sold in Murewa and 25 crops in Makoni, the higher productivity agro-ecological zones (Natural Region II (NR2)). Fifteen crops were sold at Chiredzi, 14 crops in Lupane and 9 crops in Tsholotsho, the drier regions

of Natural Region V (NR5). The highest proportion of sales were made for maize, which ranged from 23% in Murewa to 83% in Tsholotsho. A much lower percentage of sales came from other cereals. In Murewa and Makoni, groundnuts, beans, and potatoes also accounted for 5-18% of the sales. Beans and groundnuts were important in Chiredzi, Tsholotsho, and Lupane. The range of crop varieties on offer was highest for maize with 18 varieties on offer, followed by sorghum (10), groundnuts (9), beans (10), and pearl millet (5). All other crops had less than 2 declared varieties on offer. For many crops, the sellers did not declare a variety name for much of the seed they brought.

4. Seed Seller Information

Who were the seed sellers? The seed sellers were asked to declare their status. The choices were farmers, part-time seed/grain sellers, full-time seed sellers, stockist, agro-dealers, commercial companies, or grain traders. The majority of sellers declared they were farmers. Farmers accounted for 100% of sellers in Lupane, 95% in Murewa, 88% in Chiredzi, 85% in Tsholotsho, and 70% in Makoni. The next category with significant numbers was that of full-time seed sellers, with over 25% of seed sellers in Makoni falling in this category. Attendance by commercial seed companies, agro-dealers and seed stockist was low. The fact that farmers made up the majority of seed sellers achieved one of the aims of the seed fairs: seed exchange within and among communities.

The sellers were also asked to categorize the number of years they had sold seed. The answers to this question are graphed in Figure 1 by type of seller. The highest percentage of the first time sellers at the fair were part-time seed sellers where 44% of the sellers of this type were selling seed for the first time at this fair. Nearly 1/3 of the farmers were selling seed for the first time. Full-time seed sellers were the most experienced sellers where nearly 70% have sold seed for more than 4 years. Nearly 30% of farmers had sold seed for more than 8 years.

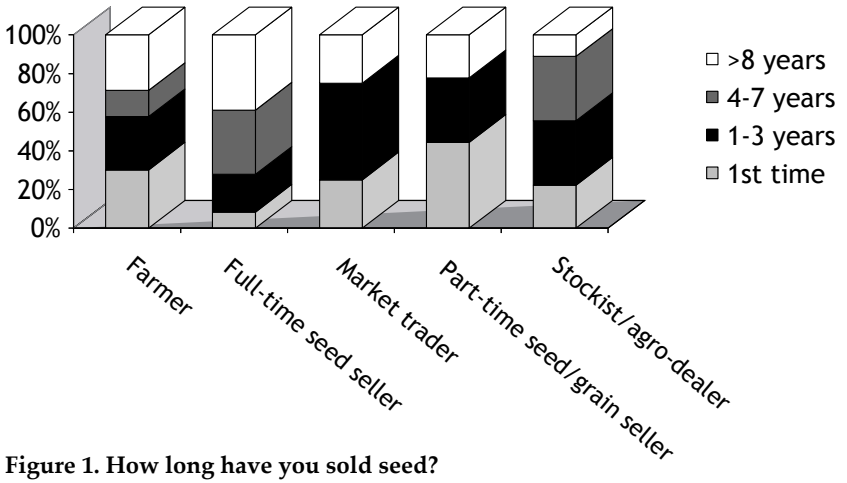

Figure 1. How long have you sold seed?

All the maize was sold by seed companies, stockists, and agro-dealers. The seed sellers for the other crops were not well classified. Table 1 gives the results of the assessment of the type of seed seller for each crop. As expected, the majority of the seed sellers for these minor crops were farmers, except for pumpkins. Pearl millet, wheat, cowpeas, bambara nuts, and okra were sold exclusively by farmers. Full-time seed sellers sold sorghum, finger millet, groundnuts, potatoes, beans, tomatoes, onions, and pumpkins. Part-time seed sellers sold sorghum, finger millet, groundnuts, beans, and tomatoes. Seed companies sold maize, finger millet, and groundnuts. Stockist sold maize, groundnuts, potatoes, and beans. Market traders sold beans and tomatoes.

Table 1. The number and type of seed sellers over all districts for each crop.

	Farmer	Full-time	Part-time	Seed company	Stockist	Market trader	Total
Sorghum	79	4	2	0	0	0	85
Pearl millet	4	0	0	0	0	0	4
Finger millet	103	2	4	3	0	0	112
Wheat	8	0	0	0	0	0	8
Groundnut	245	10	5	3	3	0	266
Cowpeas	11	0	0	0	0	0	11
Bambara	82	0	0	0	0	0	82
Potatoes	11	6	0	0	3	0	20
Beans	205	20	3	0	5	2	235
Tomato	21	4	3	0	0	2	30
Onion	4	4	0	0	0	0	8
Pumpkins	2	4	0	0	0	0	6
Okra	4	0	0	0	0	0	4

The sellers were also asked where they obtained the seed they were selling at the fair. The results of this question are given in Table 2. The majority of farmers sold their own seed for all crops. Part-time seed sellers only sold their own seed. This class of sellers seems to represent the category of farmer who are good seed producers in the community and sell seed if they have excess available, thus they categorize themselves as part-time seed sellers. Full-time seed sellers obtained the majority of seed they sold from sources outside their home (sorghum, beans, bambara, and sweet potatoes), usually from other local farmers. Thus they were more likely full-time seed sellers since they consolidated excess grain or seed in the community and then sold it more regularly. They also sell some of their own production, for example groundnuts. Both the market and the private sector were sources of seed for farmers and full-time seed sellers.

Table 2. Where do you obtain seed?

Crop	Seller type	Own seed %	Local farmers %	Market %	Private sector %
Sorghum	Farmer	46.67	36.67	10.00	6.67
	Full-time seed seller	-	100.00	-	-
	Part time seed seller	100.00	-	-	-
Pearl millet	Farmer	69.39	6.12	24.49	-
	Part-time seed seller	100.00	-	-	-
Rapoko	Farmer	84.91	9.43	5.66	-
Groundnuts	Farmer	74.45	15.33	-	10.22
	Full-time seed seller	100.00	-	-	-
	Part-time seed seller	100.00	-	-	-
Beans	Farmer	66.12	23.97	-	9.92
	Full-time seed seller	25.00	50.00	-	25.00
Cowpeas	Farmer	65.00	20.00	15.00	-
Bambara	Farmer	76.60	23.40	-	-
	Full-time seed seller	-	100.00	-	-
	Part-time seed seller	100.00	-	-	-
Soybeans	Farmer	68.42	-	-	31.58
Sunflower	Farmer	90.32	-	-	9.68
Tomato	Farmer	60.00	-	-	40.00
Potato	Farmer	66.67	-	-	33.33
Sweet potato	Full-time seed seller	-	100.00	-	-
Pumpkin	Farmer	66.67	33.33	-	-
Butternut	Farmer	-	33.33	66.67	-
	Full-time seed seller	-	-	-	100.00

The assessment of the seed sellers, the types of crops sold, the sources of their seed, and the nature of this seed market under normal circumstances does indicate that a local seed market operates in these districts for crops other than maize. The source of seed sold is local but there does seem to be a routine demand and specialized suppliers. The use of the SV&F approach in these six districts did allow seed sellers to operate normally. It also offered opportunities for new sellers given the number of sellers who were selling seed for the first time. It is clear that the SV&F program utilized an already existing market structure to meet the need of the beneficiaries for a wide range of crops and varieties.

5. Beneficiary Use of Vouchers

In three questionnaires, the beneficiaries were asked about the crops and varieties they acquired with the vouchers. Overall in NR2, beneficiaries used the vouchers to procure seeds of 22 crops. The most frequently acquired crops were maize, beans, potatoes, cucumbers, and groundnuts. A large number of vegetable seeds were available and the most frequently procured vegetables were cucumbers, rape, butternut squash, cabbage and tomato. Only butternut was procured more often by men. In all cases, except with cucumbers and butternut, women procured these crops more often than men. For maize, sorghum, rapoko, wheat, beans, potatoes, pumpkin, rape, carrot, tomato and onion, men procured greater quantities than women. In NR5, which is a much drier agro-ecological zone, the number of crops procured was much less (12) with only one vegetable seed: pumpkin. The most frequently procured crops were maize, sorghum, pearl millet, groundnuts, beans, and bambara. Women and men procured nearly equal quantities of all the crops except groundnut and sunflowers were purchased more often by men, and rapoko, cowpeas, and soybeans were purchased more often by women. A comparison was also made between various household types and wealth classes for the crops and quantities of seed acquired from the SV&F. This was compared with the seeds that households also saved. Generally a higher proportion of beneficiaries acquired crops from which they used own seed in lower

proportions. This is not unexpected since a household that is secure for own saved seed may not be interested in using the SV&F to acquire that crop except to experiment with new seed or to supplement a low supply of the seed.

6. Impact of Seed Vouchers & Fairs

One impact of the SV&F was the increased number of households who were able to plant specific crops in 2002/03 versus 2001/02 from seed obtained from the SV&F. This seed produced on average more or the same as most of the other seed sources a household used. A comparison was made of the number of households who obtained 100% of their production from SV&F seed in region NR2 and NR5 for each crop. As might be expected, 38% in NR2 and 50% in NR5 of the households obtained 100% of their maize production from SV&F seed. Conversely, in both regions, 80-100% of beneficiary households who obtained groundnut, cowpeas, or bean seed from SV&F obtain 100% of their household production from this source. Only with pearl millet, did less than 40% of households utilize the SV&F seed to obtain 100% of their production. Thus, seed obtained from the SV&F program was of great benefit to a high proportion of the households who acquired the seed, especially for the legume seed. The opportunity SV&F offers to households to choose the seeds it needs was obviously used in these crops to assist individual households fill gaps in supply of own saved seed or other sources of seed. The increased access to sources of seed from outside the household was critical for recovery of household food production but the choice was up to the individual household.

Thus the SV&F intervention did meet its goal to assist households to enhance their food security within the limitations of the cropping season. Much of this was due to the opportunities households had to access the crop and variety it needed to maintain diverse cropping patterns as a source of resilience in these marginal environments. Households were able to utilize the interventions to fill household seed gaps, increase cropping area with a greater supply of seed, or experiment with new seed sources for future use. The longer term impact of this will not be measured by crop production in the season of the intervention but in

the longer term recovery of these households and communities. This will need to be measured in future cropping seasons.

7. Conclusions and Next Steps

CRS/Zimbabwe has funds to conduct SV&F for the 2003/04 cropping season due to the continued need for emergency assistance. Some modifications will be made in the implementation of the approach. Seed Security Assessment will be done instead of seed needs assessment. Smaller seed fairs with 600-800 beneficiaries will be conducted. CRS and the local partner will take a facilitator role and devolve more responsibilities to the Agricultural Recovery Committees/community as a cost reduction measure. More effort will be made to mobilize more local seed and seed sellers. Seed sampling for germination and other tests will be done routinely by working closely with ICRISAT and Government staff. The fair will use more efficiently designed vouchers. Appropriate follow-up programs for beneficiaries and seed sellers will be conducted.

Seed vouchers & fairs will be used as an emergency intervention in some of the same areas as in 2002/03 but mainly in new areas and with new partners. CRS/Zimbabwe and CTDT have also assisted a number of other NGOs in the training and implementation of this approach in Zimbabwe. Follow-up development activities have also been funded, these include a community seed production program with a local seed market analysis, the promotion of soil and water management techniques through Farmer Field Schools, small livestock support program through livestock fairs, promotion of drip irrigation for household, community, school and hospital gardens, and post harvest storage and processing activities.

THEMATIC PAPERS

Working with Partners

Local Seed Supply Channels

Working with Agricultural Research

Evaluation of Seed Vouchers & Fairs

CRS/Ethiopia: Working with Partners

Dennis Latimer, CRS/Ethiopia

1. Introduction

In response to drought disaster, CRS/ET's priority was to select partners. Partners were originally selected from CRS/ET's current development projects to cover areas in East Tigray and East Hararghe. Additional partners were recruited from the current Joint Relief Partners (JRP) which is responsible for the general food distribution in targeted woredas (districts) throughout Ethiopia. As a last resort, CRS/ET identified new partners in those areas affected by the drought where there were no CRS development projects or food distribution. Thus a new partner was added to cover one woreda in Southern Nations, Nationalities and Peoples Region. The decision to include this new partner was made as a result of an emergency appeal by the Sodo Hosanna Catholic Church for the development of water schemes.

Table 1. Partners in the SV&F project in 2002/03.

Development partners	**Joint relief partners**	**Private funded projects partners**	**New partner**
ECC-SDCO Harar	Lutheran World Federation/ EECMY	Water Action	ECC-SDCO of Sodo Hosanna
ECC-SDCO Adigrat	Ethiopian Orthodox Church	Team Today and Tomorrow	
ECC-SDCO Meki			

2. Scaling Up in a Crunch

Three levels of training workshops were conducted before any seed fairs were implemented. A stakeholders' workshop was first held in Addis Ababa in January 2003. Participants included all implementing partners, Government of Ethiopia ministry officials, woreda agriculture bureaus, cooperating sponsors, donors and UN agencies. During this workshop the concept of seed security, seed systems, seed quality standards and the SV&F approach were thoroughly discussed. The last day was exclusively used to plan activities and action plans with implementing partners.

A second level of training was held for all implementing partners two months later. During this workshop, partners reported on progress in their action plans, and results from their market and farmer seed surveys (to determine supply and demand). Detailed implementation issues were discussed and consensus reached as to the standardization of voucher design, beneficiary targeting and registration/payment formats. As part of this training, two seed fairs were conducted. All implementing partners participated and experienced hands-on training on the actual implementation procedures.

Each implementing partner with each targeted community conducted a final level of training. The focus was on sensitizing participants. The expectations of all beneficiaries, the extent of coverage, SV&F, description of the operations, registration, and correct usage of vouchers was clearly discussed. Woreda officials had an integral part in the community sensitization process as well as in the identification and pre-registration of seed sellers and traders and the formation of Seed Fair Committees. Staff became highly trained and versed in the SV&F approach and thus were able to replicate workshops in other regions as the need arose.

All training materials, forms, surveys, and power point presentations, were standardized. Each implementing partner, according to their specific locality developed a simple to follow Action Plan and Next Steps. These were monitored by CRS/ET staff and reported on by all partners. Partner specific budgets were devised to include hiring of

temporary staff, offices, vehicle, travel and monitoring and evaluation (M&E) expenses.

As part of standard project proposal agreement procedures, it is customary for implementing partners in Ethiopia to review all projects with the concerned woreda officials. Letters of support and approval must be secured from the woreda office prior to project authorization from the Regional Bureaus. This process can be cumbersome and lengthy. In response to the drought emergency, the Government of Ethiopia was lobbied and CRS/ET obtained permission to expedite project agreements and amendments via the Woreda Council rather than at the Regional level. This reduced the authorization time frame from several months down to a few weeks. Thus, implementation of seed fairs was able to coincide with the belg-planting season.

By mid June, a total of 8 partners in five of the nine regions in Ethiopia were conducting seed fairs. So how did CRS/ET do it? Specific project officers were assigned to liaise and provide support per implementing partner. Buy-in and involvement from the agricultural woreda office was secured from the start. Periodic site visits were made by the CRS/ET project officers, especially at the implementation of a partner's first seed fair. Separate project agreements and budgets with each partner were developed. Separate documentation/file/financial management per partner was maintained. Central coordination was done by the project team leader.

Specific roles and responsibilities were developed for each member of the CRS/ET agriculture team. The CRS project officer was to liaise (point person) with a specific implementing partner, facilitate the communication flow, monitor the progress of seed fair implementation, ensure reporting systems were kept, and oversee the liquidation process. The CRS team leader used a standardized Design, Monitoring, Evaluation & Reporting (DMER) approach, maintained fiscal management and integrity, liaised with donors, and made policy decisions.

3. Learning Curve

It must be acknowledged that in the implementation of SV&F, the programmatic staff experiences a learning curve. SV&F must first be accepted as the best alternative to seed distribution; staff must increase their knowledge and capacity as far as the approach and implementation of SV&F; a process of learning by doing must be included to build enough confidence and advocacy to expand and convince others. In general there are three phases:

Phase 1: Training and Capacity Building both for CRS staff and implementing partners with external help, consultants, workshops, and seed fair visits cost roughly $35,000.

Phase 2: Experience gained by accompanying partners in the implementation of seed fairs.

Phase 3: Systems and procedures in place to increase the number of beneficiaries, increase the number of Peasant Associations (PA) and expand coverage quickly.

Each phase must be allotted sufficient time and budgets for implementation to be successful and implementing partner staff must be included so as to increase their knowledge and acceptance of the SV&F methodology.

4. Strengthening Partners' Capacity

It was clear from the beginning of the project that current partner staffing levels would not sustain a massive seed intervention. CRS/ET surveyed each partner and suggested the allocation of technical staff and temporary contract of support staff, including monitors and enumerators. Staffing patterns had to reflect the area coverage, number of beneficiary households targeted, and duration of intervention to ensure a successful implementation

Special budget allocations were made to ensure that support for partner staff was in place. This included enough travel, per diem and office expense budgets. In addition, care was taken to include

training budgets for all implementing partners, woreda and PA staff. As a result, partners were able to modify the SV&F approach to fit their own and beneficiary needs and regional idiosyncrasies. Innovative programming was carried out when difficult situations arose such as lack of seed vendors, distance to seed fairs, and increased demand from last minute increases in beneficiary households. In addition, where the drought had completely eroded household assets, partners decided to closely monitor seed usage and programmed several seed fairs with the same households according to the agriculture-planting season. For example, some partners conducted belg, meher and chickpea seed fairs for each household to minimize consumption of seed as grain.

Throughout the entire process, partners felt a high level of ownership due to their involvement from the planning to implementation stages. SV&F allowed enough flexibility so that each partner could develop their own procedures and responses within the standard agreed upon guidelines. Partners were allowed to come up with creative solutions to particular problems and constraints encountered along the way and were able to quickly react to the changing situation. This sense of ownership was underscored when an international NGO published a front-page article in most of Addis' major newspapers claiming responsibility for being the innovators of the seed voucher approach to seed distribution. Partners immediately responded with calls to CRS/ET, rebuttals and articles of their own.

All partners were held accountable for the implementation of the accorded number of seed fairs, area of coverage, and number of targeted beneficiaries. A sense of responsibility was instilled by constant feedback, monitoring and field visits not only by CRS/ET staff but also from high-level USAID officials, CRS/Headquarters staff and an insurmountable number of foreign journalists. Despite the above, lessons were learned on the need for further support and training in financial management, liquidation procedures, and timely submission of quarterly, financial and evaluation reports.

Linking seed fair interventions to agribusiness and development activities will be the challenge ahead for the next planting season. Most of CRS/ET's traditional partners are involved in agribusiness group formation and market led agricultural production. These activities are

incorporated under our current five-year DA/DAPII project and can easily expand activities to include the strengthening of farmer seed growers and the role of market traders in local seed systems.

5. Preparing for the Next Disaster

A final evaluation and workshop is scheduled for February 2003. This evaluation will allow us to continue to learn about the nuances of farmer seed systems and develop future programming to strengthen our seed fair interventions. CRS/ET will continue to be selective where implementing partners are concerned and will use the lessons learned from the final evaluation to strengthen partnerships with those that responded well, and not be afraid to drop those that did not. CRS/ET is currently involved in a strategic alliance with FAO and CARE/Ethiopia to conduct a Seed Security System Assessment and develop a standardized seed assessment tool that would allow all stakeholders to better determine the needs of farmers and the supply of seed available in the country.

CRS/ET and its partners are embarking on a livelihoods approach to programming. We plan to increase our capacity and conduct two livelihood surveys in the coming fiscal year. This will allow a more comprehensive people-centered picture providing development agents and communities a means to define their overall livelihood strategies given their specific resources. The framework can serve as a guide to micro-policies concerned with poverty reduction in rural areas. Finally, CRS/ET and its partners will continue to advocate with donors to increase their knowledge of the emerging situations in rural Ethiopia. With drought cycles becoming shorter and shorter we should expect a drought-induced emergency once again to hit Ethiopia by 2006. With an increasing population, an agriculture sector unable to meet food demands, a stagnant economy and repressive government policies, the next emergency will prove to be even worse than the crisis of 2002/03. It will arrive without a sufficient period for recuperation and if we fail to assist affected populations recover from the depletion of their assets that occurred in the previous crises, the numbers of affected households could easily double.

6. Plenary Discussion: Partners

There were many issues raised during this session regarding current partnerships, current partnership challenges and successes, and potential partners. In both Zambia and Lesotho, CRS is finding it difficult to have partners other than the Church and Caritas (respectively). In Zambia, they face conflicts between the Church and other partners, and in Lesotho, Caritas does not want CRS working with any other group. Zimbabwe echoed some of the concerns stated by others, that one partner can really make it difficult to engage other partners.

In Afghanistan where CRS is very new, finding viable partners at all has been quite difficult. They are facing a situation where there is no Catholic Church and a sudden influx of money has created an environment of opportunistic "NGOs". The representatives from Sudan also pointed out that when you are operating in an emergency situation, partners can complicate any exit strategies you may have for projects. Zambia says that they would like to partner with groups who have a parallel structure to CRS so that they will be more prepared to take over a project.

Ethiopia, a well-established program, has operated for many years with partnerships and so enjoys the benefits of strong and longstanding relationships. They have invested in partner capacity as part of their Strategic Plan. The qualification is that they only invest in the partners they feel will work out in the long-term. They admit though, that they have the flexibility at this point in time to pick and choose partners. They also advise emergency programs to network with potential partners in calm periods.

West India considers the background of a partner as very important to whether or not to engage them. They also believe in building human capital and capacity of the partners. The Burundi program has some reservations about capacity building for partners in certain areas. They wonder if this would not be overstepping their mandate. One commenter agreed that if the partner does not have the focus that CRS needs, to give them capacity in what is needed may change the entire focus of the organization. That should not be an aim. The representative

from Senegal said that their Caritas partners have been strengthened by CRS consultants. This can be a positive way to augment their capacity.

The Gambia program takes an inventory of current and potential partners considering location and capacity in order to choose the best match for a project. They have found in some cases that the Church is not a top choice for partnering. And the representative from Ethiopia says that the best way to find good partners is to be open and stay flexible. Representatives from the Gambia said that many of their partners engage partners and collaborators of their own. There can be problems, however, in scaling up with multiple teams simultaneously.

The representative from Malawi agrees that coordinating many partners at once can be a problem. This is why they prefer to work with diocesan partners with existing capacity. The representative from Kenya says that they encourage Dioceses to employ their own seed fair staff.

CRS/Burundi:

An analysis of local seed supply channels with a focus on how Seed Vouchers & Fairs support local seed sellers

Christophe Droeven and Steve Walsh, CRS/Burundi

1. Introduction

The following paper is based on research carried out within a Burundi case study that is being conducted by CRS/CIAT. The study is situated in Kirundo province, in the extreme north-west of the country, bordering Rwanda and covering an area of 1,700 Km^2. Kirundo province enjoys a fertile soil, which can, under optimal conditions, produce a large variety of food and cash crops. The Bugesera zone covers 65% of the province's total surface (average altitude 1,350 m.a.s.l.), the economy is based on agriculture and livestock rearing. This region is traditionally a bean and sorghum producer, but bananas, coffee, cassava and sweet potatoes are also cultivated.

Agricultural production and food security at the household level have been devastated by the combined effects of drought and political crisis. For the last six years, all of Kirundo province, but particularly Bugesera zone, have experienced a severe rain shortfall (declines of 70% of the norm for 2000 and 2001). CRS/Burundi has used a SV&F approach to respond to seed needs in Kirundo province. Over the last three agricultural seasons, approximately 30,000 farming households have had their seed needs met through seed vouchers and fairs.

The Burundi OFDA-funded study will focus on the seed sellers (traders). The overall aim of this case study is to understand how seed fairs address seed needs of those deemed "seed needy" and to understand the role of seed fairs in supporting, stimulating and strengthening the local seed system. The study should encourage seed aid practitioners

in Burundi to take a more long term and holistic approach towards assessing and addressing seed needs. The study is also expected to help practitioners design and implement seed fairs to meet local needs.

The study was conducted in collaboration with local governing authorities in Kirundo province and the DPAE (Provincial Department for Agriculture and Breeding). Both CRS and CIAT are aiding the fieldwork. A questionnaire was developed to target seed sellers that had participated in the Kirundo seed sellers. The questionnaire was pre-tested over a two-day period in early July 2003 and field interviews were completed in early August 2003. The interviewers were CRS staff members familiar with seed fairs and involved in the implementation of seed fairs in the region. Interviews were semi-structured.

To date, preliminary interviews with local traders and farmers suggest that there has been no seed availability problem in recent years (since 1999). In normal times, most sellers source their seed directly from producers/farmers and only in crisis do they buy from traders. Small vendors greatly appreciate seed fairs since they yield a 4-fold income in a single day, without having to extend credit. Sellers suggested the introduction of new varieties in a SV&F venue. New varieties should be promoted at lower prices than local (as a promotion). Sellers/traders request that their purchase for potential resale from CRS/development projects also be subsidized.

2. Preliminary Results of Questionnaires

Forty-one vendors responded to the questionnaires, 39% were females. Of the vendors questioned, 63% were both seed traders and farmers. For 71% of the vendors, this seed trade represents about 50% of their livelihood. In 2003, 80% of the vendors estimated that the seed market had increased in volume. The majority of the vendors were selling beans. Fifty-six percent of the vendors differentiated between grains and seed. Under periods of stress, seed was still available according to 71% of the vendors. Seed could be obtained nearly equally from other regions of the country such as Car (37%), other communities in the region (30%) and other countries such as Rwanda and Tanzania (33%).

The vendors were asked about the source of the seed they sold; 46% obtained seed directly from farmers; and 6% sold their own seed. Two other sources of seed were stockists and rural collectors. Vendors who obtained seed from other sources mainly bought the seed for cash (71%); 23% used credit. Traders sold beans to other traders (41%), at the local market (23%) and SV&F (36%). The vendors obtained about 35% of their gross revenue from the seed fairs. They expected to use their gross revenue for credit reimburse (27%), family needs (17%), reinvest into trade (43%), and reinvest into agricultural operations (13%).

The negative aspect of the fair for traders was that prices were not fixed and the market was open to all traders. The positive aspect of the fair was the high volume of trade in a single day, direct cash payment, and better prices than the local market. Thus, the traders felt the way to increase revenue was to fix prices, guarantee a minimum volume, make credit available, and provide transport. Beneficiaries were asked why they chose seed from a particular seller and not another. The answers related to the quality of seed, honesty and precision of the balance, getting a good price, and trust in the local seller. The major findings are that seed is available even during a stress period. Seed fairs are a more important source of revenue than initially anticipated for the sellers, and the highest percent of revenue is reinvested in income generating activities. The next step is to move towards market self regulation with improved participation of small sellers, improved sensitization and communication, and improved links between the formal seed sector and the seed fair program.

3. Plenary Discussion: Trader Survey

Transport for small traders emerged as the largest issue of discussion. The comment which sparked the discussion was that the lower profit margin due to low volume sales is one risk small traders take, and has led them to ask for credit or transport to participate in seed fairs. Most participants were firmly opposed to providing any subsidy to seed sellers even if they were small traders. However, many suggestions came out of the plenary. One suggestion was to connect small traders

together so that they could access transport as a group lowering the cost. Another was to help traders with access to credit. The general feeling was to facilitate small traders participation, but not to offer direct subsidies. It was felt that SV&F should strengthen markets, not create dependence.

Arguments for subsidized transport were also heard. The representative from Zambia said that since they are the only NGO in a remote area, costs can be very high for sellers to reach them. Therefore, they may be forced to cover some transport costs. In Lesotho, sellers must go to the city to redeem vouchers in a bank. The Lesotho country program has given support to sellers for this extra cost. The large traders in Burundi would like to have agreements that make entry difficult for small traders. This could lead to some sort of subsidy by the country program to ensure their participation. Finally the representative from Afghanistan said that to subsidize or not should not be the question. Rather to encourage markets, any subsidy should be based on calculated incentives.

Another issue raised was that of government policy regarding seed quality. If government policy does not allow the sale of uncertified seed, how can the SV&F approach engage small-scale local sellers? The representatives from southern Sudan were sure that in an emergency situation government policy could relax. However, the representative from Zambia reminded the group that strict government policies were maintained through the recent food crisis in Zambia. The representative from Burundi said that they bypass the policies by saying they deal with vouchers only, not seed.

CRS/Eritrea:

Working with Agricultural Research

Yibabie Sebhatleab, CRS/Eritrea

1. Introduction

This is part of the CRS/Eritrea OFDA project aimed at facilitating farmer access to new crop varieties through testing of newly introduced varieties and local landraces with potential. The objectives were to assist in establishing legume nurseries and to ascertain the status of crop improvement in the above legumes. Traditionally there are many legume crops grown by farmers in Eritrea. The common grain legumes are chickpea, faba bean, field pea, grass pea, haricot bean and cowpea.

In order to make available improved varieties of legumes for testing at various levels from research to farmers, CRS will facilitate the evaluation and selection of both introduced and promising local landraces/ varieties that will start with on-station and later on-farm evaluations. Through this initiative, The Eritrea National Agricultural Research has increased its links to International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), International Center for Agriculture Research in Dryland Agriculture (ICARDA) and International Institute for Tropical Agriculture (IITA) for provision of improved varieties of chickpea, groundnuts (ICRISAT), lentil and faba bean (ICARDA) and cowpea (IITA). To start, CRS/Eritrea has assisted the Legume Research program by funding an expert from Kenya ICRISAT to discuss the current situation of legume research and plan increased co-operation between the National Program in Eritrea and ICRISAT.

CRS/Eritrea is also giving financial support to operating costs for legume research ($ 8,888). Although the plan was to initially support six legume crops in this initiative, these have been scaled down to five. The materials will be tested on-station for the first two years and thereafter,

identified adaptable varieties with desirable agronomic traits will go into on-farm trials in subsequent seasons. Due to the current staff shortage in the Agricultural Research Organization, temporary staff will have to be engaged to assist in the management of the trials at the various testing sites. The trials focused on chickpea, lentil, cowpea and faba bean. Depending on the result of 2003 trails, on-farm testing of chickpea and cowpea may start in 2004 and for lentil and faba bean in 2005.

2. Overview of Current Crop Production and Improvement Status

Chickpea is produced mainly in the highlands and midlands, especially in Zoba Debub, Maekel and parts of Gash Barka. The crop is planted solely on residual moisture between mid August and early September and harvested in December/January. All varieties grown are desi types. The main constraints to production are terminal drought, low yield potential of local varieties, diseases, poor seeding rate and planting date. Chickpea experiments for variety improvement have been going on since 2002 at Halhale on both landraces and introduced chickpea materials. Last year there were three trials namely chickpea landraces observation nursery, chickpea yield trial (materials from ICRISAT) and chickpea drought tolerance nursery (introduced from ICARDA). However the rainfall in 2002 was very poor and these trials did not yield.

Lentil is produced in Debub, Maekel and Gash Barka. Varieties are grown usually as pure stand of local landraces. Planting is done in mid-late July depending on soil type. The country imports most of the lentil consumed due to low production/productivity of local landraces, diseases, and drought. Screening/evaluation of local landraces will be done to identify desirable traits for farmers use and breeding and introductions will be evaluated for adaptation and drought tolerance.

Faba bean is grown in Zobas Debub, Maekel, parts of Anseba and Gash Barka. The crop is planted at onset of rains in June and is occasionally inter-cropped with field pea. All varieties planted are local types.

Constraints to production are diseases and the low yield potential of local varieties. There are currently two on-going disease-screening nurseries from ICARDA but no other faba bean trials are being done.

Cowpea is grown mostly in the western lowlands (Gash Barka) and Zoba Debub. The crop is inter-cropped with sorghum especially in the western lowlands. The main constraints to production are drought and insects (pod borers). There is no crop improvement program so far.

Groundnut is produced in Zobas Anseba, Debub and Gash Barka. Local landraces are normally planted at the onset of rains in June and harvested in September/October. The constraints to production are the low yields in local varieties, otherwise no tangible information on insect pests and diseases have been collated. Some initial testing of introduction was done in 1994 and 2000 at Shambuko and Hagaz, respectively.

3. Plenary Discussion: Research

This discussion centered around what the various country programs are doing with research institutions, what they would like to get out of these relationships and their current investments in research. CRS Eritrea is looking for a strategic relationship with the Government of Eritrea. To this end they would be willing to provide an advisor and some funds to support agricultural research in Eritrea. In the Gambia where there is better established research in the Ministry, the country program does yearly contracts and the local NARI contributes staff. They are monitoring trials, training farmers, supporting Farmer Field Schools and even getting close to promoting certain varieties. The Ministry covers lab tests and other facilities, and CRS provides some funding. They are not sure how to make it sustainable. The Senegal country program also collaborates with the local NARI on sesame and conducting research for a varietal map. Burundi has invited their NARI to do on farm demonstrations of new varieties.

The DRC country program is collaborating with the local NARI. They have picked some researchers to help partners with seed multiplication in mosaic resistant cassava. The Malawi country program currently

uses researchers mainly as a source of information. In Madagascar the country program is working with the Madagascar National Center for Applied Research on Rural Development (FOFIFA) on rice issues. And Ethiopia holds contracts with many research centers. They help to provide planting materials for market led agricultural production. All of their contracts are with regional researchers.

Other country programs work with the Consultative Group on International Agricultural Research (CGIAR) centers. The Tanzania country program is working on a commodity chain approach to chickpeas with researchers at ICRISAT, and they are looking to expand the program. The West India country program also works on chickpeas with ICRISAT. Sudan collaborates with ICRISAT and farmers to develop new varieties. The Kenya program is working with Kenya Agriculture Research Institute (KARI), ICRISAT, International Maize and Wheat Improvement Centre (CIMMYT), and CIAT doing participatory on-farm trials for selection of well performing varieties.

The representative from the West Africa Regional Office (WARO) cautioned the participants to be skeptical as research does not offer a panacea solution to problems in agriculture. Others raised concerns about the deficiency of the technology transfer models in use. They focus too much on the scientist. CRS should be focused on the farmer. CRS should consider avoiding the use of the "Mother & Baby" approach. We should question and push the researchers for better methods and more farmer friendly outputs.

Evaluation of Seed Vouchers & Fairs

Paula Bramel, CRS/EARO

The evaluation of the SV&F implemented by CRS/Zimbabwe and its partner, CTDT was a user-focused evaluation (Patton 1997). This approach allowed the use of evaluation for review and planning of a new intervention, to market SV&F to donors, local partners, and other NGO's, and to allow learning before the report is complete. The evaluation had two components: impact and process.

A monitoring and evaluation workshop was held in the CTDT office with CTDT staff, the district staff, CRS, and the seed fair team to develop the monitoring plan and survey tools. All this was available in a monitoring plan which consisted of a series of three household surveys and one questionnaire for AREX officials, local leadership, and other relevant stakeholders. The evaluation plan included objectives of each survey, design of tool, time schedule and responsibilities of CRS and CTDT. The survey was designed to address indicators in the proposal. The household questionnaires were to be administered after planting, half-way through the season, and after crop harvest. All of these were administered as planned. The initial sample size was to be 10% of the beneficiaries but this was reduced for the second questionnaire. The three objectives of the impact evaluation were:

- To ensure access to the type of seed and quality of seed desired by beneficiaries through the SV&F program (fair day evaluation of seed sellers and beneficiaries).
- To establish a baseline database for beneficiaries, determine level of satisfaction, and use of seed obtained from SV&F program (first and second post-fair questionnaires).
- To establish overall harvest and contribution of food harvested from SV&F programs to household food security (third post-fair questionnaire).

The evaluation of the seed fair process consisted of a review meeting with CRS and CTDT staff after the first seed fair that was held in

Murewa. This resulted in a list of challenges and possible solutions. A SWOT (Strength-Weakness-Opportunities-Threats) analysis was done at a review workshop held in Kariba from 18 to 22 November after the implementation of seed fairs in all six districts and a summary sheet on lessons learned developed. A questionnaire was administered to a sample of the district/ward/local AREX and leadership and the local committee members in June. The objective of this questionnaire was to evaluate the process used to implement the fair and solicit suggestions for changes. The results of this questionnaire were presented at the workshop and, along with the SWOT analysis, were reviewed and the lessons learned incorporated in the plans for the 2003/04 SV&F program. This workshop was attended by CRS and CTDT. Finally, the results of the evaluation were presented to a stakeholder workshop on the application of SV&F in Zimbabwe, which included the donors, other NGO's working in Zimbabwe, FAO, and other UN Agencies held in July, 2003.

Some of the issues that were critical in the evaluation of the SV&F were the need to keep up with data entry and allocate time to check data quality to make the results and observations of the beneficiaries, sellers, local committee, and local officials available and applicable during the intervention. Consideration must be given to the relevance of information to be gathered in surveys. It is important to pre-test surveys and consider structuring of questions. Balance the depth of questioning with sample size, for example a longer, more in depth survey will require more time per interview but result in a smaller sample size while a shorter more focused questionnaire may increase the sample size but neglect the how and why needed to interpret the survey. There is a need for a better procedure to identify beneficiary household versus the voucher holder versus the interviewee. Ask questions when most appropriate for the farmers. Ask questions about seed price, quantities obtained, or seed fair operations on the day of the fair when the experience is fresh to the beneficiaries or sellers but ask questions about seed or varietal quality after the farmers have time to use the seed.

A few key recommendations were made on the impact evaluation.

- Do the evaluation process with better information gathering at seed fairs and one harvest time evaluation. Beneficiary evaluation and seed seller evaluation at seed fair using better focused forms (Annex 1 and 2) and question 10-20% of beneficiaries at random.
- Do one post fair evaluation of 10-20% of the beneficiaries after harvest where information on household characteristics and asset base, quality of seed received, quantity of seed received, price, and evaluation of SV&F are added to questions on harvest, seed source, area planted, production. Do not worry about estimates of consumption since they are not very reliable and difficult to obtain.
- Use a stratified random sampling for the post fair evaluation to better assess the impact with such a small proportion of the beneficiaries. This will avoid some of the biases in sampling by enumerators or local staff. The sampling is independent of the fair day evaluation. Conduct a post fair evaluation of the local seed sellers. This will allow better follow-ups with the sellers for more sustained market development. This survey will need to ask more about seed sources, pricing, credit arrangements, and local market issues.

WORKING GROUPS

Setting Voucher Values

Designing the Vouchers

Determining the Price of Seed

Analyzing and Ensuring Seed Quality

Identifying Seed Sellers

Recommending a Seed Vouchers & Fair Minimum Data Set

User-Focused Evaluations

Effective Information, Communication & Education

Engaging the Donors

Seed Vouchers & Fairs and Agro-Biodiversity

Seed Vouchers & Fairs Approach in Acute Conflict

Setting Voucher Values

Three key components determine the value of the vouchers:

1. Farmer baseline information: average area planted per household, farmer seed rates, total household seed need per crop.
2. Current seed price data collected through a market and/ or farmer survey.
3. A measure of the seed security in the area obtained through a survey on the availability by crop, the access to the target population by source and availability and accessibility of complimentary inputs.

Voucher value is then V= x + y + z + …

Where x = total requirement x % to be provided for crop A

y = total requirement x % to be provided for crop B

z = total requirement x % to be provided for crop C

High voucher values will ensure sufficient seed access to farmers providing there is enough seed supply at the fair, although it may encourage unnecessary seed purchases, seed price inflation (low supply), dependency among beneficiaries, interest from non-intended beneficiaries, and a heavy management load.

Low voucher values may lead to insufficiency of access to seed; however, low values may encourage farmers to be selective and bargain for low prices.

Designing the Vouchers

A design that is "friendly" to buyers and sellers is important for success of the fair.

"Good" vouchers need an appealing design with minimum wording in a large font and must include the following:

- the CRS logo and partner logo
- the name of the event
- the value of the voucher

Paper choice must be durable for use (and possible re-use) in demanding conditions.

Voucher denominations are also key to voucher design. There should be 2-4 different denominations. They could follow the national currency, but this isn't necessary. In fact in some countries it could be a problem to link vouchers closely with currency. Most importantly they need to be rounded up, but still in small enough denominations for beneficiaries to buy seed from many sources if they wish.

To enable monitoring, for easy recognition in case of illiteracy and to avoid abuse and counterfeit, vouchers should oncorporate:

- Different designs and color coding for different events
- Color coding for different denominations of the vouchers
- Sequential numbers
- Validation stamp

The question of recycling vouchers calls for more conscientious design of vouchers, such that they are durable and difficult to counterfeit. Furthermore, the program must be flexible to do this, and the stability of national currency must be considered.

Determining the Price of Seed

Seed prices can be very contentious issue for all participants in a seed fair. With both vendors and beneficiaries hoping to benefit from the fair, pricing is one of the most important issues to work out. The group came up with 4 different pricing scenarios:

a. SV&F committee determines the price before the fair (based on market price plus some benefit).
b. Vendor and beneficiary representatives set the price in common agreement beforehand.
c. The seed price is determined entirely by the vendor but a maximum is set by SV&F organizers before the start of the fair.
d. Open market pricing.

Regardless of pricing scenario, a maximum must be set for seeds of all different crops made available at the fair. The severity of the crisis leading to the SV&F has an important impact on the price. In general, grain sold as seed could be priced 20-30% higher than the actual grain price.

Manipulation of supply and demand can also be used to control seed prices. The SV&F organizers should try to ensure a large number of vendors with substantial seed volume and also control the number of beneficiaries for each fair depending on the expected supply. Alternatively the value of the vouchers given to the beneficiaries can be increased or decreased depending on the prices.

Local authorities may intervene to set or influence seed prices in a seed fair. If this happens on the day of a fair, the group recommends delaying or suspending activities until an agreement can be reached. If there is no consensus, then the fair should be re-planned. However, local fair committees can help to reduce this possibility by helping to plan the fair and the pricing system.

Cash sales at a seed fair could be welcomed after assessing the amount of seed available. The sales may be welcomed at the end of the day if there is unsold seed. However, cash sales could create problems if the presence of cash buyers increases prices, or if cash holders collude with voucher holders.

Analyzing and Ensuring Seed Quality

There are several components of seed quality; physical, physiological and varietal. Physical quality depends on color and size as well as the appearance of damage, pest infestation, or other impurities. Physiological quality depends on a seed's viability or germination. And finally the varietal quality, the most difficult to determine depends on its genetic makeup. To ensure quality for SV&F purposes each level of quality should be addressed. However, in some cases it may be more difficult to carry out the required tests to make the determination. Physical quality of seed can be determined at many levels of the fair, by the seller, the voucher holder, through sampling and by post fair evaluation. Physiological quality can really only be ensured through sampling or post fair evaluation, and the same holds for varietal quality. The government and the formal sector could have the responsibility of carrying out physical inspections and sampling for further testing though it is unclear what role the seller and the voucher holders might play in varietal quality assurance.

Quality is very important to CRS in SV&F for a host of reasons. Institutionalizing quality testing in the SV&F approach is very important to its success. If sellers are asked to register in advance of a fair, there will be ample opportunity to perform tests on their seed. While farmers can and do assess seed quality for themselves, they should not be the only source of quality verification. Some tests such at the Tetrazolium test have both budgetary and logistical implications. To validate indigenous knowledge we should do sample testing. This will also help us to maintain good relations with donors.

Identifying Seed Sellers

CRS has used several strategies in the SV&F approach to engage seed sellers. There have been national and local media campaigns, opening ceremonies, recruitment drives, seed seller surveys, and word of mouth. The process of engaging seed sellers can be improved by involving the sellers more and earlier in the planning process, making seed seller surveys part of each fair and through publicity and sensitization. Engaging commercial seed sources specifically might be done during a Seed System & Security Assessment (SSSA) when these sellers are interviewed on their seed supply and through publicity/sensitization.

To enable equal access for all seed sellers, CRS could exert control through pre-registration and tagging of sellers, as well as ensuring an enclosed area for the fair. Care should be taken to have a good mix of small and large traders, and there could be an inflow regulation favoring small sellers. There should be adequate networking with sellers and training for local seed producers. If market analysis has been performed well, the information gathered will also help CRS to preserve a "level playing field" for the sellers. Sensitization work with the local seed fair committees on gender balance and other goals of the fair are important.

Subsidizing seed sellers is not a good policy. Instead facilitation through linking seed sellers to credit, transport, storage and packing sources was recommended. This way the sellers will have networks with short and long-term services for other purposes, as well as with one another.

Recommending a Seed Vouchers & Fair Minimum Data Set

A Minimum Data Set (MDS) is desirable on several levels. The MDS can be used for each fair and each project. A revised version of the MDS used for the SV&F symposium is given in Annex 3.

The main reasons for a MDS are for project tracking and global strategy, standardization of data collection, transparency, and indication of SV&F quality. The MDS will also be a tool for reporting and marketing.

MDS are to be maintained by CRS, with input at all levels from partners, Monitoring and Evaluation (M&E) teams, Project Managers and Program Managers. Partial and final reports should have participation and sign off by all parties.

To ensure that the MDS is usable across country programs and regions, the tool should be standardized. A clear set of criteria should be identified for use with the tool such that results will be robust across seed fairs. In the dataset, it should not be possible to alter the form of the information required from the MDS so that the aggregation of information from MDS's of various fairs and country programs will be possible.

User-Focused Evaluations

Four types of evaluation to be completed in connection with a seed fair are:

1. Process evaluation, including a log sheet recording indicators of planning activities through the actual seed fair day.
2. Immediate impact evaluation with the number of beneficiaries/sellers, the amount and type of seeds sold and their value, and the satisfaction of the beneficiaries/sellers with SV&F.
3. Post planting evaluation to evaluate seed use, area planted, and to assess targeting criteria.
4. Post harvest evaluation to estimate farmer production and to get a realistic indication of the amount of production to be used as seed.

Evaluations could be led by an external consultant, a member of the Country Program, a representative of local stakeholders, or a member of another Country Program who has had experience in the area. The Country Program should budget for monitoring internally for SV&F activities. Once evaluation activities are completed and the lessons learned incorporated into upcoming activities, the problems should be shared with donors. External problems, such as those associated with seed certification should be shared immediately.

Effective Information, Communication & Education

Good management of the information from seed fairs is important. Classification of data into categories is advised depending on what is being collected and for whom, as well as in the design of templates. Use of templates will ensure consistency of layout for data/information recording and for later data interpretation. Timely reporting and good record keeping is also an essential aspect of effective information management.

To enhance the collective knowledge of CRS on SV&F it is important to establish and maintain networking linkages across Francophone and Anglophone countries. The Country Programs should be documenting indigenous knowledge and scientific knowledge in their areas. Organizing periodic workshops and exchange visits will facilitate network formation and information sharing at the country, regional and inter-regional levels.

Using the CRS intranet and setting up a site with access to the SV&F database, as well as to pages with guidelines, tools, templates, reporting procedures, and voucher designs will greatly enhance the communication. There could also be a FAQ page providing basic information to individuals and Country Programs not familiar with the SV&F approach.

One of the most important goals of a CRS communication strategy on SV&F is to brand it as CRS. There should be one consistent message being presented. To that end, we should develop a shared vision and strategy on SV&F. In general our communications need to be simple, consistent and systematic.

Engaging the Donors

Our current donors include OFDA, DFID, FAO, and CRS. SV&F is an unique approach which could attract more donors than we currently have. Potential donors that we would like to engage are SCIAF, Ireland Aid, SIDA, French Cooperation, CI, EURONAID/ECHO, BPRM, USAID/WARP and their contractors, Danish Embassy, UN, World Bank, and UNCAP.

Improving current donor relations is key for our drive to engage new donors. We must share results and reports more frequently, and engage donors in regular informal meetings. We should establish coordination mechanisms and initiate site visits for them. We can emphasize the role and outreach of the Church, sell the CRS network and engage them with evaluations, workshops, trainings and TDY. Most of all we should be confident.

Attracting new donors and improving our relationships with current donors may also depend on rethinking our approaches. For instance, we should never call SV&F programming "pilot", and we should use private money for small projects. To be more forward thinking with current and potential donors we could dedicate a staff member to fundraising, use local news outlets for publicity, and prepare professional marketing media. We must ensure the quality of reporting and use the donors logo liberally. Finally we can share information of donors to our collective CRS benefit through the Intranet, email updates, and possibly the ERT bulletin.

Seed Vouchers & Fairs and Agro-Biodiversity

Preserving biodiversity is usually not seen as a priority under circumstances of drought or conflict. However, strategies that encourage and force reliance on "own" seed resources and on traditional coping mechanisms to maintain seed supply, ultimately are also favorable for maintenance of biodiversity. The isolation caused by conflict in different geographical areas may help the survival of varieties well suited for local conditions. On the other hand, drought and market pressures often contribute to a decrease in biodiversity. Drought can cause complete crop failure leading to a large loss of seed supply. Market pressures would decrease biodiversity because of increased specialization of commodities and their adoption at farm level.

In order to know what the impact of SV&F on agro-biodiversity, there is a need for more information. Currently the capacity to assess the varieties with certainty at the seed fairs is lacking; however, there is value in knowing CRS SV&F impact on local biodiversity. To get an idea of this, SV&F should be conducted in different countries, ecological zones, crop/farming systems with collaboration with National Agricultural Research Systems (NARS) in measurement. There could be a baseline followed by the institutionalization of Seed Fairs as seed markets where the NARS could promote different varieties.

SV&F could be promoting agro-biodiversity through strengthening the local seed system and exchange of local varieties. Furthermore, traders with more varieties across and within ecological zones, community seed producers, and companies presenting new varieties would also encourage agro-biodiversity. To increase the positive impact of SV&F, CRS should actively motivate traditional community seed producers to participate, build capacity of organizers about indigenous technical knowledge of indigenous seed systems, and M&E skills. There should also be promotion of open pollinated varieties (OPV)s as well as hybrids at SV&F. Finally qualitative and quantitative data collection at the SV&F would enable CRS to monitor impact.

If CRS decides to use SV&F in ongoing development programs staff must be committed to transferring this from an emergency to a

development tool. CRS partners would need capacity building to run seed fairs on a continuing and non-emergency basis. There should also be networking among community seed producers and other seed stakeholders, and formal links with NARS within and between countries. In achieving this our potential partners would be NARS, extension workers, universities, international agencies (e.g. ICRISAT, CIMMYT), seed traders, seed companies, community groups, and grower associations.

Seed Vouchers & Fairs Approach in Acute Conflict

The SV&F approach is still appropriate in conflict zones if a minimum security requirement is met. The requirement should consider staff, beneficiaries, partners, and traders. Experienced staff and a high level of flexibility are important. The economic, social and food/seed security benefits of a fair can make the extra preparations needed to carry out a seed fair in such an area worth while. Some preparations that may be needed are compromising on some operating principles like transportation, and also there may be a necessity of initiating dialogue with warring factions.

Ensuring seed availability is more difficult in conflict areas. Assessing seed availability from the 'desk top' can be done, but would depend on the quality of secondary data. Data can be accessed from partners, farmers, traders and others coming to the office. Previous experience and knowledge of the area and environment would also be especially helpful. Any data that can be used from other organizations, government or NGO's would also aid in the assessment process. There could be difficulty in convincing donors to invest due to a lack of first hand data.

Minimizing risk is a major goal when undertaking these projects. We like to call these "hit and run" seed fairs. To accomplish this there should be very little public advertisement, up-to-date security information, the development of a SV&F insecurity procedure, a well thought out location, reduced movement of money, and the development of a high level of trust in the area.

Do's & Don'ts

CRS Seed Vouchers & Fairs : What to do?

What not to do!

Do’s and Don’ts

What to do?

- Build on past learning, experience and evaluation
- Carry out a Seed System & Security Assessment (SSSA)
- Continue to be flexible and nimble
- “Go to scale”, with increased number fairs serving the needs of increased numbers of seed insecure households, if warranted by level of seed insecurity
- Consider reducing to a “safety net” voucher, consisting of the distribution of vouchers to only the chronically seed insecure - if warranted by SSSA
- Consider broadening to a “livelihood” voucher
- Invest in understanding and appreciating the role of market traders in the local seed system
- Support small traders who rely on social capital and traders identified as specializing in seed
- Use an agro-enterprise approach- with a focus on market opportunities for poor farm families — to analyze options

- Strengthen social capital by supporting farmer organization, trader organization and farmer/trader linkages
- Strengthen the linkage with agricultural research to enable farmers to access seed of promising varieties
- Hold research partners accountable
- Be proactive in strengthening seed quality assurance procedures
- Move to open market determined pricing
- Improve overall planning, implementation, monitoring, evaluation and reporting/communication
- Budget for learning
- Continue to improve beneficiary targeting
- Encourage fairs without CRS facilitation
- Consider engaging in cash fairs.

What not to do!

- Repeat what you did before — stay off the “treadmill”
- Subsidize transportation
- Guarantee seed prices or volume sales for sellers
- Restrict sale of seed to certain crops or sources
- Restrict participation of seed sellers
- Support community seed multiplication, seed banks, or seed credit (buy back schemes) that are not based on agro-enterprise analysis
- Accept “seed certification” as the only method of ensuring seed quality
- Allow participation of women as sellers or voucher holders, to decrease.

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Annex 1. Seed Fair Evaluation Form – Seed Seller

Seed Fair Site _____ Date _____

1. Seller is: ❑ Male ❑ Female

2. Home location _____ Store Location _____

3. Would you consider yourself a:

❑ Farmer ❑ Local Store owner

❑ part-time seed/grain trader ❑ Stockist

❑ full-time seed/grain trader ❑ Seed Company Representative

4. How long have you sold seed? _____ years ❑ First time

5.What crops and varieties do you most often sell to farmers at planting time?

Crop	Variety (local or improved)

6. Estimated quantities of seed sold at seed fair

Crop	Variety (local or improved)	Quantity sold	Range of prices paid

7. What was the source of the seed supplied to the fair?

❑ Own production ❑ Local farmers ❑ Farmers in other locations ❑ Local Traders

❑ Seed Companies ❑ Stockist ❑ Markets in larger town ❑ Other_____

8. Was the seed you brought cleaned prior to the fair?

❑ As received from farmers ❑ Screened ❑ Hand picked ❑ Machine cleaned

❑ Other _____

9. Describe where and how seed was stored prior to the fair.

10. How were the prices you received at the fair?

❑ Very good ❑ Adequate and fair ❑ Poor

11. How far did you have to travel to get to the fair site? _____ ❑Km ❑Hrs

12. How did you transport your seed?

❑ Carried on foot ❑ Carried on scotch cart ❑ With own vehicle

❑ With hired vehicle ❑ Other _____

13. Did you understand that each farmer could:

- Divide their vouchers to buy multiple crops/varieties ❑ Yes ❑ No
- Divide their vouchers to buy from multiple sellers ❑ Yes ❑ No
- Bargain and negotiate prices ❑ Yes ❑ No

14. How easy was the process of redeeming vouchers? ❑ Easy ❑ Difficult

If it was difficult, why? _____

15. Rating of Seed Voucher and Fair

❑ very satisfied ❑ satisfied ❑ unsatisfied ❑ very unsatisfied

16. Comments or suggestions on seed voucher and fairs.

17. Would you probably participate in a seed fair again in the future? If no, why not?

Annex 2. Seed Fair Evaluation Form – Beneficiary

Seed Fair Site _____ Date _____

1. Beneficiary is: ❑ Male ❑ Female

2. Are you the household head? ❑ Yes ❑ No

3. Household Head Status: ❑Married ❑Female defacto ❑Widow
❑Widower ❑Divorcee ❑Single

4. Age of household head. ❑ 18 years or less ❑ 19 to 59 ❑ 60 and older

5. What seed did you purchase with your vouchers?

Crop	Variety	Quantity	Price	Opinion of Quality

Quality: Very good, good, average, poor, very poor

6. Were you satisfied with the range of crops available? ❑Yes ❑No

7. Were there adequate quantities of seed available of the crops/varieties you wanted?
❑Yes ❑No

8 Were there any crops or varieties that you wanted but were not available?
❑Yes ❑No

Crop	Variety

9. The prices at the fair were ❑ negotiable ❑ fixed. If fixed, the prices were
❑Fair ❑ High

10. How far did you have to travel to get to the fair site? _____ ❑Km ❑Hrs

Was the distance: ❑ Too far ❑ Not a problem

11. How ready for planting are the fields in your village right now?

❑ Fields ready ❑ Few fields ready ❑ Some fields already planted

12. Did you understand:

- The value of each voucher ❑ Yes ❑ No
- Vouchers could be used for more than one seed type ❑ Yes ❑ No
- Vouchers could be used with more than one vendor ❑ Yes ❑ No
- You could bargain with the vendors ❑ Yes ❑ No

13. Rating of Seed Voucher and Fair

❑ very satisfied ❑ satisfied ❑ unsatisfied ❑ very unsatisfied

14. Comments and suggestions for the seed voucher and fair program:

Annex 3. Minimum Data Set Survey

	SURVEY TO BE COMPLETED FOR EACH SV&F PROJECT IMPLEMENTED				
1	Country Program				
2	Name of Country Representative				
3	Email of Country Representative				
4	Name of CRS SV&F Project Manager				
5	Email of CRS SV&F Project Manager				
6	Implementing Partner Agency Name, contact point, and email				
6	Date of SV&F project - months/year - Project Defined as entire process and many include several or more discrete SV&F events)				
7	Type of Disaster (more than one can be checked)				
	Conflict				
	Drought				
	Floods				
	Other (specify)				
8	Justification for SV&F (please check):				
	Explicit seed needs or security assessment (primary diagnosis)				
	Food security assessment (secondary diagnosis)				
	Donor request				
	Partner request				
	Other (specify)				
9	Project Donor(s)				
10	SV&F Geographic Territories (Locations)				
11	Number of SV&F "events" within the project (Events defined as discrete, usually one day seed fairs)				

12	Average number of voucher participants per event				
13	Total number of voucher participants served in the project (Male / Female)	Male	Female		
14	Value ($) of vouchers received by individual participants (Provide average if voucher value varies)				
15	Total value of vouchers issued in the project (USD)				
16	Total project value (USD)				
17	Seed sellers by category and sex	Women - No.	Gross Sold	Men - No.	Gross Sold
	Local trader				
	Large trader				
	Commercial seed company				
	Stockist				
	Farmer				
	Other (specify)				
18	Information on grain & seed price, supply, sale:				
	Crop (5 main crops)	Amount Sold	Average Price	% of total	
19	Setting sale price				

	Set by consensus prior to fair as % of prevailing market grain price				
	Determined by independently by seed sellers				
	Determined by authorities				
20	Feedback on seed pricing (check only one)				
	Participants & Sellers satisfied with pricing				
	Voucher holders complain that price unfair (too high)				
	Seed sellers complain that price unfair (too low)				
21	Seed Quality Verification (more than one can be checked)				
	Seed Fair Committee physical verification at seller registration				
	Individual voucher holder physical verification at time of purchase				
	Pre-sale sample germination testing				
	Post-sale sample germination testing				
22	If germination was tested:				
	Carried out internally (Specify method used and by whom)				
	Carried out by a government seed inspection service				
23	General participant (voucher holder satisfaction with quality)				
	Seed Quality was OK				
	Selection of crops and varieties was OK				
	Voucher use was ok (Y/N)				
24	Monitoring and/or evaluation was done (check those which are relevant)				
	Beneficiaries survey on the day of fair				

	Sellers survey on the day of the fair				
	Beneficiaries survey during crop season				
	Beneficiaries survey at harvest				
	Sellers survey after the fair				
	Discussions with local government/leadership officials				
	Discussions with extension officials				
	Discussion with local seed fair committee				
	Others				
25	Was there any follow-up activity with beneficiary farmers? Briefly Describe				
26	Was there any follow-up activity with seed sellers? Briefly describe				
27	Project documents available electronically (please check):				
	Seed needs or security assessment				
	Project proposal				
	Project progress report				
	Seed Fair exit interviews				
	Project evaluations				
28	Person to obtain documentation				
29	Email Contact:				