
THE MARAGWA SEED SHOW
HELD AT
MARAGWA CHIEF'S CAMP IN THARAKA DISTRICT
ON MARCH 6TH 1999



Hosted by

LOCATIONAL DEVELOPMENT COMMITTEE OF MARAGWA

Supported By ITDG-Kenya

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ACRONYMS

ABC	Agricultural Biodiversity Conservation
ASK	Agricultural Society of Kenya
ASAL	Arid and Semi Arid Lands
IT	Intermediate Technology
ITDG	Intermediate Technology Development Group
KARI	Kenya Agricultural Research Institute
LDC	Locational Development committee
PTD	Participatory Technology Development

1 BACKGROUND

The Intermediate Technology Kenya (IT Kenya) has supported the Locational Development committee (LDC)¹ of Maragwa location to host four consecutive annual seed shows since 1996. The 1999 Maragwa Seed Show marks the fourth annual one-day event, held after a season's harvest and which brings farmers of the remote Maragwa location in Tharaka District, east of Mount Kenya together at the Maragwa chief's camp to display seed varieties of their crops.

The Maragwa seed show is part and parcel of the farmer to farmer extension activities, within the broad context of Participatory Technology Development (PTD) approach of the on-going Marginal Farmers' Project of IT Kenya. The purpose of the Marginal Farmers' Project is to increase food production in Tharaka and Kathekani activity areas and contribute to long-term goal of improved food and livelihood security of marginal farming communities in Arid and Semi Arid Lands (ASAL).

IT Kenya is already contributing to crop biodiversity debates and research through the Agricultural Biodiversity Conservation (ABC)² Project attached to Marginal Farmers Project. IT Kenya works with the Maragwa LDC to strengthen the existing systems for farmers to save, acquire and exchange seeds. A seed and cultural show in which farmers display their seeds, indigenous foods and farming implements as well as traditional songs and dances promoting seed security and crop diversity has proved effective in promoting crop biodiversity through seed security.

As in most ASAL areas of eastern Kenya, the farmers of Maragwa location regularly experience seed shortage following extended droughts when seed stocks are used for food when crops fail, leaving farmers without seed to plant when rains start. Available seed from commercial sources have been developed for high rainfall farming areas with few drought tolerant crop varieties available for ASAL areas. Furthermore, high prices of seeds from commercial sources limit the majority of ASAL farmers from accessing the few drought tolerant crops. As such, over 80% of farmers in ASAL areas, except those who are able to source from their relatives and friends, lack access to seeds of suitable crop varieties, particularly after a drought or difficult year (*European Commission Journal, August 1999*).

Lack of roads and inaccessibility to extension services in Maragwa location further hinders local farmers' access not only to, suitable crop varieties, but also information on such varieties, which they need to improve their food situation. The result is a cycle of crop failures, food shortages, famine, dependence on relief and increasing poverty. Against this background, the LDC of Maragwa location and IT – Kenya were inspired to

¹ LDC is the lowest ranked structure of the Kenyan government charged with the responsibility of co-ordinating development at the ward level based on the strategy for rural development.

² See the Report of the National Workshop on Biodiversity Conservation held in January 1999.

build on the traditional practices of seed exchange and acquisition through relatives and friends, by holding an event – seed show, which allows farmers to display their seeds, learn and source seeds they need.

Crop diversity is increasingly recognised as crucial to improving food production and food security among marginal farming communities in semi-arid lands. Management and preservation of seed based on farmer skills and community participation could help achieve crop diversity conservation and improve food security among farming communities in drought prone areas. Although farmers tend to conserve crop varieties that give them better yields, activities that reinforce appreciation of their existing crop diversity need to be supported by all stakeholders in food security. One such activity is a community seed show.

2 INTRODUCTION

An analysis of the 1999 Maragwa seed show is discussed in this report focusing on the events and crop diversity. The project staff of IT – Kenya found interviews and discussions with farmers at the 1998 seed show to be very useful, especially in determining the importance of the Maragwa seed to the farmers. During the 1999 seed show therefore, IT project staff Marginal Farmers' Project carried out interviews and discussions with exhibitors and other farmers at the seed show.

This report presents:

- A summary of interviews and discussions that the project staff had with farmers;
- Activity highlights at the 1999 seed show;
- Analysis of crop diversity displayed in the 1999 seed show;
- Ideas for organising a successful seed show and cost estimates; and
- Conclusion

3 OBJECTIVES

The main objective of the seed show is to *“help farmers appreciate their large crop diversity by encouraging them to exhibit planting material.”*

The Maragwa seed show was initiated to enable farmers to;

- Access seeds of crop varieties that they need; and
- Exchange and share information and their experiences on farming under their local conditions.

The seed show provides a suitable forum for farmers to share information and exchange seeds within and beyond Maragwa location thus giving them access to a wider choice of seed varieties and maintaining a high level of crop diversity. For others the seed show provides an opportunity to learn about the wide indigenous crop diversity from experienced community seed specialists.

4 FARMERS' INTERVIEWS AND DISCUSSIONS

4.1 Accessing crop varieties

Maragwa is an isolated location with a population of about 17,000, located about 90 kilometres from the official tarmac Embu - Meru road. No formal roads lead to Maragwa and access from the Embu - Meru road is by rough track through semi arid and hilly terrain. Although Maragwa location is vast, about 680 square kilometres, it has no roads and the main mode of transport is foot (walking), occasionally bicycles.

The LDC of Maragwa chose Maragwa chief's camp - the grounds of the seed show because it is centrally situated and farmers from most sites of the location can walk to the place. Most farmers who participate in this annual event – the seed show walk long distances, with the furthest covering 40 kilometres return trip on average.

When interviewed on her arrival at the seed show at 1.00 p.m., Mrs. Margaret Mariku from Kabuigi, a remote village east of Maragwa chief's camp said, she began her journey to the seed show from her house at 6.00 a.m. "I came to display my seeds and see whether I can get seeds of crop varieties that I desire to have on my farm," said Mrs. Mariku, who like other exhibitors had many crop varieties to display. Her stand had the following crop varieties:

- more than 12 varieties of sorghum,
- 18 varieties of pearl millet,
- 16 varieties of cow peas,
- 3 varieties of green grams,
- 3 varieties of maize,
- 4 varieties of pigeon peas,
- fox tail millet,
- 4 varieties of melons,
- assorted varieties of guards and pumpkins,
- 2 varieties of castor oil,
- sugarcane,
- cotton, and
- fruits from the wild.

"Although I have maintained a large diversity of crops on my farm even before I began to participate in the Maragwa seed show two years ago, I have acquired new varieties of crops such as sorghum and cowpeas through the seed show. During the 1998 seed show, I bought KARI³ Mtama 1 - a variety of sorghum from the stand of Mrs. Elizabeth Muthengi, a farmer from Kathuri village. At the same time, I acquired K80 and M66,

³ KARI – Kenya Agricultural Research Institution is the research institution mandated by the Kenyan government to administer agricultural research.

both varieties of cowpeas,” said Mrs. Mariku. “My newly acquired varieties did extremely well during the last farming season (November 1998 – January 1999). KARI Mtama 1 matured early and I harvested 270 kilograms from same plot area where I harvested less than one bag (90 kilograms) of Kaguru, a traditional variety of sorghum during the November 1997 – January 1998 farming season.”

Like Mrs. Mariku, there are tens of farmers who access seeds of crop varieties they desire. Interviews with 35 farmers who had exhibited their seeds revealed that most of them had received, exchanged or sold seed. However, it is difficult to monitor the level of exchange or selling of seed among farmers during the seed show. Manduru seed bulking group sold most of its seeds.

Mrs. Jane Kirambia, the winner of this year’s grand-prize is a farmer and the wife to a local primary school teacher. She comes from Manduru village, 5 kilometres south of the seed show grounds - Maragwa chief’s camp. She said, “I have always searched for good varieties of sorghum and cowpeas, which are better yielding and I could not find them until I came to last year’s seed show. I bought from Mrs. Elizabeth a few seeds of KARI mtama 1 and K80 varieties, of sorghum and cowpeas respectively Muthengi. The two varieties did so well that I have had surplus food to sell. I brought seeds of the two varieties to display so that I can sell to those who might be interested in them.”



Mrs. Loice Tula, a farmer in Kendu-Bay admires a crop of sorghum, a variety she acquired at the Maragwa seed show in 1998

Farmers’ access to seeds of crop varieties that tolerate or escape drought due to their physiological or structural characteristics is an important factor to ensuring food availability in ASAL areas. Varieties of crops with these characteristics exist. However, they are with few farmers in ASAL communities or in research institutions, and effective extension approaches are needed to expose as many farmers as possible to such varieties of crops. Village or ward level seed shows, such as the Maragwa seed show, held within the boundaries of a community defined by similar weather conditions,

culture, vegetation and soil type provide farmers with better opportunities to acquire useful crop varieties.

IT Kenya's Marginal Farmers' Project plans to maintain a register of exhibitors for monitoring new crops being introduced on their farms from the seed shows. Monitoring results will be used to determine the role of Maragwa seed show in farmers' access to new varieties of crops.

4.2 Opportunities

The Maragwa seed show provides local farmers with the opportunity to share their farming experiences. The 38-year-old, Dickson Kanyaara, the treasurer of Maudumu seed banking group and a farmer from Maudumu village acknowledged that he found the seed show a very useful forum. Some other farmers from other villages, found this year's seed show a very beneficial event, not only for accessing seed but also, for learning from other farmers new ideas on crops and sharing out my experiences. "

"The first three annual seed shows were pilot events to most of us farmers here," said Mr. Kanyaara. "We had had practically no experience in seed shows, so in many ways we have been learning how best we can make the most out of such a seed show."

"Nevertheless," he said, "those who have participated in the seed show yearly have not only acquired new and better crop varieties but have become committed to the process of community–capacity building that the seed show event seems automatically to entail. As such they have come together to form seed show committee within the LDC. Others like Gakia self-help group have started seed bulking activities, and we have begun to see many groups such as Manduru and Maudumu self-help groups in Maragwa location initiate seed banking activities."

"The seed show is not seen as an end itself – but as simply a way to access seeds of crop varieties that we need and to share our farming experiences, as important as this might be," said Mr. Kanyaara. "It is an important, although small, building block in the development of our community. It can help us, people of Maragwa location learn to consult together better and generally increase our capacity for collective action, so that in the future larger, more complex development activities can be undertaken based on the experience gained from the way we manage our affairs during such seed shows."

Mrs. Elizabeth Mathengi, a farmer in Kathuri village and a member of both Maragwa LDC and the seed show committee agrees with Mr. Kanyara's views. "Indeed our Maragwa seed show has brought a lot of changes in our location, the seed show committees have begun to value our traditional crop varieties than ever before. This is because we have seen that other people are interested in the crops that we display in the seed shows." Asked whether they valued their crops before Maragwa seed shows, "yes," she says and continues, "but we are beginning to realise that outside people are also interested in the crops that we have, this does us proud". Elizabeth has been

exhibiting her seeds since 1996. Aged 46, Elizabeth has 7 children (3 sons and 4 daughters) aged between 17 and 3 years. When asked about her education, Elizabeth retiringly says, "I dropped out of school in class seven". "I would have wanted to continue with my education, but my parents were very poor and could not afford to pay for my high school studies." She quickly adds.

Elizabeth cultivates four out of 15 acres of her family's landholding and grows a diversity of crops, more than 18 varieties of sorghum, 15 of millet, 6 of maize, 20 of cow peas, 5 of pigeon peas, 3 of grams and 10 of cucurbits. "My land was severely subjected to erosion before we settled on it, as such it is poor. However, growing many crops has always assured food for my family because there are those that do well and others that don't," she says. "Since I began to participate in the seed show, I have learnt from other farmers in our location that it is possible to improve the quality of my land – through, first, applying boma manure and secondly, laying of terraces and trash-lines to control soil erosion.

Three years ago, I undertook to do these things on my farm and I am realising increasing crop yields. Most important is that the new varieties – KARI mtama 1 and M66 of sorghum and cowpeas respectively, which I purchased in the 1996 seed show have done very well, outstripping yields of my traditional varieties by 2 to 3 times." Asked whether she will abandon her old varieties now that she has wonder varieties of sorghum and cowpeas, she says, "never, because most of my old varieties have certain desirable qualities such as good storage and taste, which are lacking in the new varieties. I will continue to grow both new and traditional varieties to enjoy their comparative advantages."

"There are those varieties that my grandmother gave me during my wedding. I will never abandon such varieties, because it will be a curse to me if ever I did", she says. My grandmother, who died 15 years ago, was an excellent farmer, she ensured food for us all throughout the year – from one harvesting season to another and she taught me her skills of farming. In her memory, I will never abandon the seeds and skills that she passed on to me. I would love to pass them on to my grandchildren also, and to other farmers. I think that other farmers trust seeds that they source from this seed show than from local markets such as Gatunga."

When asked whether she has participated in other shows elsewhere, Elizabeth says, "Maragwa seed show was the first for me and I think for most of us in the location." I have displayed my seeds every year, in this seed show since 1996. I find my participation in this seed show every year worth my effort, because first, I have won prizes since the first seed show and second, and perhaps most important is that I have sold, exchanged and bought seeds from other farmers and KARI. In addition, I have shared and exchanged farming experiences with other farmers during each seed show. For example, the idea that the quality of my farm would be improved through application of boma manure and control of soil erosion came from this seed show in

1997. This is an event – the seed show, which I would like to happen next year and long thereafter.”



Farmers in Manduru village of Maragwa location consult and learn from one another about seeds (Photo by E. Kisiangani)

4.3 Activity highlights at the 1999 seed show

Starting time: All stands were expected to be set up by 10.00 am, however some exhibitors were still arriving as late as 1.00 p.m. to set up their stands. This is understandable because most farmers walk more than 15 kilometres to the seed show.

Judging: Judging of the stands began at 12.00 noon, after over 60% of the 47 exhibitors had set up their stands. Each stand was judged and scores awarded for; general quality and diversity of seeds (stands with highest diversity between and within crops scoring highest), diversity in cereals and diversity in pulses. In addition, each stand was judged for general presentation and arrangements of seeds. While judging proceeded, cultural groups and school choirs entertained guests and farmers. The stands were open for public viewing after the judges had gone round all the stands. The judges comprised of 4 agricultural officers, 3 farmers from outside Maragwa community and 3 project staff of ITDG – Kenya's Marginal Farmers' Project.

Public Viewing: The stands were open for public viewing at about 2 p.m. Most farmers exchanged or bought seed during the viewing period. This session lasted for about two hours after which everybody assembled at one point under a make shift shade for prize giving and speeches.

Prize giving and speeches: This was the moment of anxiousness for exhibitors as they awaited their names to be read out for winning a prize. Prizes included; 1 ox-plough, 4 wheelbarrows, 6 English machetes, 6 spades and household items such as blankets and 2 Kerosene lanterns. Mrs. Jane Kirambia, a farmer from Manduru village won the grant prize – ox-plough. This was the most interesting session as choirs and folk groups entertained guests before presentation of prizes.

Finally, various guests gave their speeches and remarks about the seed show. The chief guest was the late Maina Keengwe, Country Director of ITDG – Kenya. Other notable guests at the seed show were Mr. Mwamsadi – acting District Officer Tharaka North, Dr. Asenath Omega – Programme Manager of ITDG – Kenya and Mr. Njuguna – Tharaka District Agricultural Officer of the Kenyan government.

In his remarks, the District Agricultural Officer said, “I never knew there was such a diversity of crops in Tharaka district, until I visited this seed show today”. “I have attended most of the big “mega” national shows, which are organised by the Agricultural Society of Kenya (ASK) at regional level and they have never impressed me like this small – community seed show of yours. I think farmers get to learn more from one another and from extension and research through such seed shows than from the ASK shows. I say this because, I think that farmers relate better with one another and the extension services in small, community level seed shows such as this one than in the ASK shows. Here in this seed show you are likely to get good advice from your fellow farmers because they know the land and crops here. This seed show idea should be promoted in other locations of Tharaka District and throughout Kenya if possible.”

5 ANALYSIS OF CROP DIVERSITY DISPLAYED IN THE 1999 SEED SHOW

The number of stands at the seed show dropped to 47 from 56 in 1998. Comparatively, however, there was more diversity between and within crops displayed in this year’s seed show than there was in 1998. Most of the farmers who were interviewed attributed reduction in the number of stands to inadequate rains during the November – January growing season. In Maragwa location, over 40% of the 1400 households, especially

those who planted late realised complete crop failure due to poorly distributed rainfall that ended early in the season. As a result, most farmers lacked seeds to display.

It is worth noting that although the November – January season is generally referred to as short rainfall season, it is the most dependable rainfall in most parts of the eastern region of Kenya. Therefore, it is disaster for the majority of farmers in Maragwa location and other parts of eastern province when the November – January rainfall fails or is poorly distributed. The major crops displayed during the Maragwa seed show are indicated in Table 1.

Table 1: Major crops displayed by over 50% exhibitors

Crop	Number of Varieties displayed	Number of varieties on over 75% stands	Varieties displayed in all stands
Sorghum (<i>Sorghum bicolor</i>)	41	15	Mugeta, Kaguru
Pearl millet (<i>Pennisetum glaucum</i>)	15	6	Kiraka, Kiguaja, Ciakaungi
Maize (<i>Zea mays</i>)	10	5	Katumani, Makueni composites
Cow peas (<i>Vulgaris spp</i>)	25	13	Itune (red), Gikamba
Pigeon peas (<i>Cajanas cajan</i>)	10	2	Kimeru
Grams	6	3	Local green grams
Cucurbits	17	8	Local itanka (melon), mumoko

The records of seeds displayed demonstrate a wide diversity of crops existing within Maragwa location. For example, some stands had more than 36 different crops and several varieties within each crop. However, it is difficult to tell whether such varieties are really different from one other. Two local agricultural technicians with the ministry of agriculture of the Kenyan government and four local farmers scrutinised the records of varieties of each crop for duplication of names. However, there could still be some duplication i.e. different names given to same variety in the list, which would reduce the number of varieties in Tables 2, 3 and 4.

The local farmers in Maragwa have very diverse cropping patterns that accommodate the large diversity of crops. The major ones are:

- inter-cropping,
- planting along trash-lines, especially of (melons, pumpkins and gourds), and
- planting different crops on one hill. Most farmers mix their seeds during storage.

Encouraging farmers to maintain crop diversity on their farms and local knowledge through popular events such as seed shows can contribute to more sustainable crop production and ensure food security.

Table 2: Crop Types Displayed

Type of crop	Crop	Number of Varieties	Number of exhibitors
Cereals	1. Pearl millet	15	47
	2. Sorghum	41	47
	3. Finger millet	2	26
	4. Proso millet	1	13
	5. Maize	10	44
Pulses (Legumes)	1. Beans-(soya, tepary, velvet)	12	11
	2. Grams-(green, yellow, black)	6	47
	3. Cowpeas	25	47
	4. Pigeon peas	10	36
	5. Dolichos lablab	1	14
Oil crops	1. Groundnuts	1	11
	2. Cashew nuts	1	2
	3. Castor	3	23
	4. Sunflower	1	11
Root/Tuber crops	1. Arrow roots	1	9
	2. Cassava	1	18
	3. Irish potatoes	1	2
	4. Sweet potatoes	1	14
Fruit crops	1. Bananas		13
	2. Custard apple	1	10
	3. Soursop	1	9
	4. Mango	1	6
	5. Pawpaw	2	13
	6. Guava	1	5
	7. Lemon	1	2
Fibre crops	1. Cotton	1	23
	2. Sisal	1	1
Vegetable crops	1. Tomatoes	1	15
	2. Kale	1	3
	3. Onions	1	7
	4. Egg plans	1	3
	5. Pepper-(chilli, capsicum)	1	12
Cucurbits	1. Guards	7	32
	2. Melons	8	37
	3. Pumpkins	2	39
Others	1. Tobacco	1	13
	2. Sugar cane	3	17

Communities in Kenya are rapidly losing their traditional food crops, mainly due to their replacement by hybrid seeds or a narrower choice of improved crop varieties and crop types. Loss or narrowing of crop diversity drastically increases chances of crop failure in the event of extended droughts, making farmers in ASAL and remote locations with poor infrastructure more dependent on relief.

In Maragwa location, many varieties of the major food crops such as sorghum and pearl millet safeguards against complete crop failures. Tables 3 and 4 shows varieties of sorghum and pearl millet displayed during the Maragwa seed show.



*Seed show prizes for winners serve as incentives for conservation
(Photo E. Kisiangani).*

Table 3: Varieties of sorghum (Sorghum bicolor)

No.	Variety ("Farmers' varieties")	Number of Exhibitors		Total Exhibitors
		Men	Women	
1	Mugeta (Muchaarama)	30	17	47
2	Kaguru	32	15	47
3	Seredo	29	16	45
4	Mukumbu	28	14	42
5	Kagiri	19	20	39
6	Maincha	19	27	46
7	Karuge	16	20	46
8	Serena	19	20	39
9	Muchuri	13	30	43
10	Mugana	3	4	7
11	Mweru	3	1	4
12	KARI-Mtama 1	30	12	42
13	Ndugo (Imure)	1	1	2
14	Mutene	16	22	38
15	Mutumaru	12	28	40
16	Kaguundu	16	27	43
17	Gatamani	3	2	5
18	Gatiga qa tura	3	6	9
19	Mubobi	15	17	32
20	Mututwa	17	23	40
21	Muteqa	12	19	31
22	Ciaqatumu	24	18	42
23	Kirunge	12	3	15
24	Makueni	1	2	3
25	Muritu	0	1	1
26	Kimeru	2	4	6
27	Muturumbi	12	16	28
28	Muranya	1	1	2
29	Munyerenye	13	1	14
30	Mwentia	17	10	27
31	Kathimbwa	15	10	25
32	Gitune	3	4	7
33	Ncungi	12	4	16
34	Ndunyo	2	5	7
35	Muthukubu	2	1	3
36	Gachumbo	13	8	21
37	Tanzania	2	9	11
38	Kitharaka	21	15	46
39	Ciaqatiga	2	1	3
40	Gatumu	2	3	5
41	Ngirigacha	1	2	3

17 varieties were exhibited on more than 40 stands. Mugeta and Kaguru varieties appeared on all the stands. The two varieties – Mugeta and Kaguru are reputed for their marketability, taste, storage and brewing qualities. Although kitharaka variety is small in size and it is low yielding, it appeared on 46 stands, this is because of its ability to tolerate drought.

Table 4: Varieties of pearl millet (*Pennisetum glaucum*)

No.	Variety (“Farmers’ varieties”)	Number of Exhibitors		Total Exhibitors
		Men	Women	
1	Kiraka	31	16	47
2	Kiguaja	15	21	46
3	Mututwa	3	22	25
4	Ciakaungi	21	20	41
5	Kitharaka	21	22	43
6	Mugoi	3	4	7
7	Mucuuku	26	13	39
8	Mbui	22	2	23
9	Mukuna giti	33	5	38
10	ICRISAT	30	14	44
11	KARI	11	11	22
12	Mukumo	12	6	18
13	Mueta	2	4	6
14	Kithara	3	4	7
15	Mukieri	18	23	41
16	Kinene	1	2	3

More than 6 varieties of pearl millet were exhibited on more than 41 stands. All exhibitors at the seed show displayed Kiraka variety of millet. Kiraka variety of pearl millet is popular for its marketability, taste and brewing.

6 IMPACT OF MARAGWA SEED SHOW

The seed show has a positive impact on the farming communities within the Maragwa area as indicated by the following observations:

Increased Productivity

- The farmers are able to acquire new varieties of seed, which have increased yields and mature early. This is the case explained by Mrs. Mariku. The yield from KARI Mtama 1 which she acquired from the show was 270 kg (November 1998-January 1999 season), compared to 90 kg (November 1997-January 1998 season), obtained

from Kaguru, a traditional variety. This is a 200% increase in the yield from the same farm.

Accessing seeds

- Ability to select the seed varieties desired by the farmers. The 35 farmers who were able to exchange or sell seed with each other and with KARI. The farmers are therefore able to diversify their seed varieties through accessing them during the seed show.

Capacity for collective action

- Farmer to farmer extension is enhanced on issues which affect their livelihood, and not only on aspects related to seeds and farming. For instance, the farmers have agreed that through the seed they are able to consult together better and generally increase their capacity for collective action, which can lead to future development activities.

Knowledge on traditional varieties

- The communities have been able to appreciate the importance of the traditional seeds and crops, especially the younger generations who may have had no knowledge of these seeds and crops. Their knowledge of the traditional seeds and crops has therefore been significantly enriched.

Improved Food Security

- There is improved food security in the region because the farmers have been able to access a variety of seeds as well as information. This generally has led to a reduction in the crop failure due to the diversification and a corresponding increase in yield, which improves the food situation.

7 STRATEGY FOR FUTURE SHOWS

7.1 Ideas for Organising a Successful Seed Show

- Announce the date of the seed show long before time to allow farmers time to prepare.
- Invite agricultural research institutions and other development organisations to participate, informing them way before the seed show date.
- Work with a popularly selected local development committee to plan, raise awareness and co-ordinate all activities prior to the seed show
- Involve local farmers in selecting the kind of prizes, especially the grand prize to be awarded. This boosts their motivation to put a good effort into saving their best seed varieties.
- Together with the co-ordination committee and selected farmers, determine the criteria for judging exhibitors' stands and make it known to farmers through village meetings.

- Allow farmers to determine their most appropriate site for the seed show grounds
- Encourage farmers to prepare their selected seed show grounds and set up their stands
- If possible arrange for a seed show rehearsal a day before the seed show event
- Involve farmers and the local development committee in identifying judges, it helps to include competent and respected local notables/elders on the technical team of judges, to avoid disapproval of the results.
- Categorise seed varieties into cereals, pulses, vegetables, fruits etc. and award the prizes to farmers with the widest range of recognisable varieties in each category, with the grand prize for the stand with the widest diversity of all categories of seed varieties.
- Begin judging early, as soon as 60% of the stands have been set up. It helps to keep the public entertained elsewhere away from the stands during judging to avoid messing up the exhibitors' arrangement of seeds.
- Open the seed show for public viewing as soon as judging is over, and invite exhibitors and other participants to visit the winners' tables just before prizes are given out. This gives the winner an opportunity to summarise the benefits of maintaining such a broad range of crops.
- Allow a few people, especially the chief guest to talk about the importance of the seed show and benefits of maintaining a wide diversity of crops.

7.2 Cost estimates for hosting a community seed

In Maragwa location, the involvement of IT – Kenya in organising the Maragwa seed show has been decreasing each year. At the moment, the LDC of Maragwa location through the seed show committee use seed show entry charges to meet limited costs of seed show preparations such as clearing of the grounds, feeding the steering committee during their preparatory meetings, local awareness raising and feeding of their visitors/guests. Although in future, the LDC envisages using funds raised through seed show entry charges for purchase of prizes, this is not visible for the next couple of years, and they still need support from IT – Kenya's Marginal Farmers' Project.

At the time of writing this report, the LDC of Gikingo location, the second location of ITDG – Kenya's Marginal Farmers' Project work had requested the project to support them to initiate seed show activities similar to those in Maragwa. Therefore, the Marginal Farmers' Project envisages investing more funds in supporting the LDC of Gikingo location to initiate an annual seed show event as we wean off our support for the Maragwa seed show and leave the local community and the LDC to carry on.

IT – Kenya plans to raise national wide awareness on seed shows and the importance of encouraging local communities in Kenya particularly, farming communities in the ASAL areas to grow and conserve traditional crop varieties. To achieve this, there is need to develop T-shirts carrying a message from the seed shows of Maragwa and Gikingo on the importance of maintaining crop diversity and to conserving traditional

varieties. The envisaged cost of supporting activities of the two seed shows in Gikingo and Maragwa locations during the year 2000 is as follows:

Budget

	Sterling pound (UK)
➤ Seed show awareness raising leaflets	600
➤ Seed show prizes	500
➤ Staff travel & subsistence	800
➤ Project staff time	1,200
➤ Vehicle maintenance	850
➤ T-shirts for nation wide awareness raising	<u>6,000</u>
Total	<u>9,950</u>

8 CONCLUSION

Access to crop varieties that suit local farmers' needs and production conditions, is an important factor in any crop production system, especially in remote locations of ASAL regions such as Maragwa. Traditionally, farming communities in Maragwa have exchanged or shared out their seed varieties they considered more appropriate to their friends, neighbours and relatives or passed them on to young couples in the form of gifts.

Such ancestral ways of accessing seeds have served strongly bonded communal settings with a lot of success, ensuring collective food sufficiency. However, the aforementioned ways of accessing seeds are rapidly being weakened by two factors; 1) the shift to individual patterns of settlements from communal settings; and 2) the demands of the modern cash economy on households.

Individual households are abandoning their communal obligations (i.e. supporting other members of their communities through fair distribution of resources including seeds) to seek for ways of meeting economic needs of their households as they settle on their private holdings.

In Maragwa location, the transition to a settled modern cash economy from semi nomadic communal setting has affected local farmers, specifically the poorest households, which are mostly women headed. The shift has weakened communal support systems including traditional ways of accessing seed, a factor that has rendered poorer households to be more vulnerable to impact of droughts.

Interventions that address the issue of farmers' access to seed varieties that they consider more appropriate need to strengthen traditional mechanisms of exchange and sharing such seed varieties. Also, the interventions need to be popular, to allow

participation of all sections of a community. Since 1996 the Maragwa seed show has been an annual event, popular with both local farmers and visitors from other farming communities and from both research and development institutions.

Participants have been increasing steadily each year as the show gives farmers the opportunity to exchange their seed varieties for those they consider more appropriate, to purchase new seed varieties and learn from one another and research institutions.

For four consecutive years, local farmers in Maragwa location have been displaying their seeds at the Maragwa chief's camp. During the first seed show in 1996, very few exhibitors (less than 2% of the 106 exhibitors) displayed KARI mtama 1 and ICRISAT – varieties of sorghum and pearl millet respectively. In this year's seed show – four years down the line, more than 95% of the stands had KARI mtama 1 and ICRISAT. When asked about their source of KARI mtama 1 and ICRISAT varieties, 85% of the respondents said, they exchanged their traditional seed varieties for the two varieties during one of the past three seed shows. A clear demonstration that the annual Maragwa seed show has been conduit of crop varieties to farmers.

The Maragwa seed show has become part of a much larger process of enabling communities in marginal ASAL areas to control their seed supplies, grow a wide diversity of crop varieties they consider appropriate for improving their levels of food security. Since the first seed show in 1996, three self-help groups (Gakia, Manduru and Mpingiro self-help groups) in Maragwa location have begun seed bulking activities. Communities or other development institutions, which have visited the Maragwa seed show have initiated similar events back in their locations. Among such initiatives are Gikingo seed show in Tharaka, Umande seed show in Nanyuki (being supported by Department of Agriculture the Kenyan Government) and the GTZ supported seed show in Mwingi District.

9 FURTHER INFORMATION

IT – Kenya's Marginal Farmers' Project welcomes requests for technical support from communities and their support institutions seeking to initiate seed show activities with a view to addressing issues of farmers' access to seed varieties they consider appropriate for improving their food security situation. For more details, please contact the author,

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