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Sorghum Breeding Programme

Medson Chisi

Zambia Agricultural Research Institute, Medsonchisi@hotmail.com

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Sorghum Breeding Programme



Researching Soils, Crops and
Water in Zambia



Medson Chisi

Zambia Agricultural Research Institute

Medsonchisi@hotmail.com





ZSV-15-4

Sorghum Research - Zambia

❖ Food Security

❖ Crop Diversification

❖ Marketing & Processing

❖ Value Chain Management

Sorghum Commercialisation Project

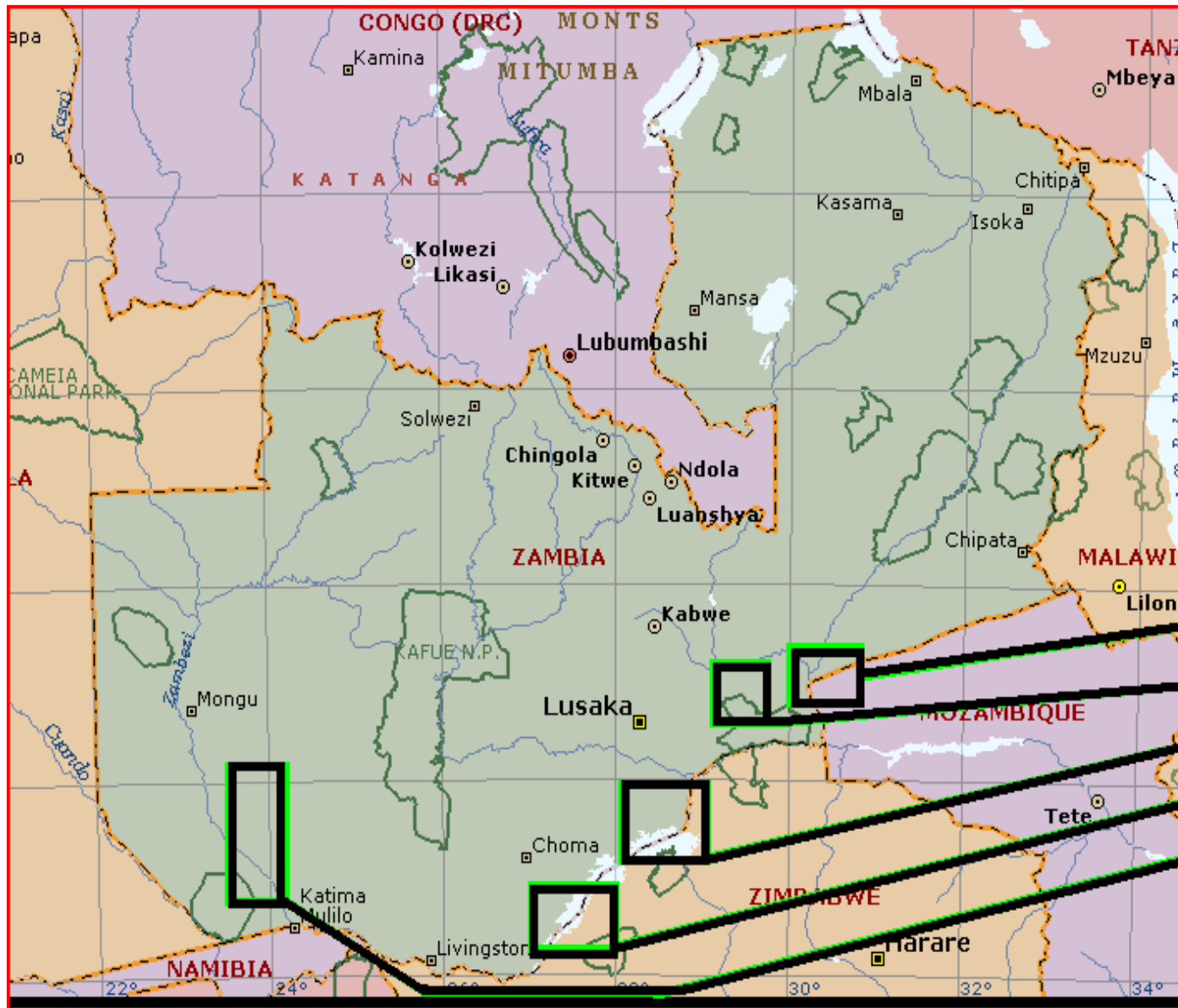
Issues raised by farmers

- ❖ lack of improved seed**
- ❖ lack of information**
- ❖ marketing and utilisation**
- ❖ perception that sorghum for the resource poor farmers**

Objectives:

- ❖ **Increase and distribute improved seed**
- ❖ **Promote sorghum production**
- ❖ **Increase income and profitability of farmers**
- ❖ **Establish cooperatives for sustainability**
- ❖ **Establish markets**
- ❖ **Maintain house-hold food security**

Project Areas:



Luangwa [2008-2009]

Rufunsa [2008-2009]

Siavonga [2009-2010]

Sinazongwe [2009-2010]

Sesheke [2009-2010]

Activities

- ❖ Seed multiplication and distribution of sorghum**
- ❖ Assist in the establishment of cottage seed enterprises**
- ❖ Link farmers to markets – field days**

Expected Output

- ❖ Improved food security**
- ❖ Seed availability of improved varieties assured**
- ❖ Seed cottages established**
- ❖ Sustainable sorghum production established**
- ❖ Market channels established**

Areas that have benefited by district:

2008-2009

- ❖ **Rufunsa District:** Rufunsa, Kawesha, Shikabete, Mapasha and Lubalashi.
- ❖ **Luangwa District:** Luangwa, Chiyendeyende, and Kavalamanja.

2009-2010

- ❖ **Sinazongwe District:** Siameja, Muuka, Siampondo, Kanchindu, Maamba and Sulwegonde.
- ❖ **Sesheke District:** Lusinia, Mwandi and Ngweze.
- ❖ **Siavonga District:** Kapululila, Siangwemu, Kabanana, Kayuni, Lusitu Bridge, Sikongo, Sub Centre, Lakeshore.

2008-2009 Beneficiaries

District	Number of farmers	Kgs of seed recieved
1. Chongwe and Rufunsa		
Lusemfwa	58	145
Shikabeta	62	155
Lubalashi	66	165
Kamwesha	42	105
Chitengele	60	150
2. Luangwa		
Kavalamanja	100	250
Chitope	50	125
Chisobe	50	125
Total	488 [122Ha]	1220

SUSTAINABILITY:

This community was predominantly hunters and gatherers in Sioma Ngweze National Park they are now practising crop production/sorghum



Ngweze



**Best farmer in Rufunsa
Received a wheel barrow**

Socio Economic Benefit

	Year 1	Year 2
Kazungula	256	288
Sikaunzwe	377	650
Zimba		207
Musokotwane		121
Total	633	1,266

Socio Economic Benefit

	Year 1	Year 2
# of hectares	316	633
Estimated production	247 tons	380 tons
Contract CHC	200 tons	180 tons
Increase farmers' income \$60/person	\$37,980/season	\$75,960/season
Employment 231/462 for 6 mnths \$0.70/day	\$24,255/season	\$ 48,510/season
Additional income to cooperative + seeds(15%)	\$5,697/season	\$11,394/season
Total Benefits	\$67,932/season	\$135,864/season









Seed Production

2006 - 2009

❖ 480 tons [Sima, Kuyuma, ZSV-15]

❖ 60,000 hectares

❖ 240,000 farmers



IRRIG THRESHER

RURAL INDUSTRIES PROMOTIONS
COMPANY (BOTSWANA)

10/2008 R&D-282

RURAL INDUSTRIES
PROMOTION CENTRE

PRIVATE BAG 11 PHONE 54
FAX LINE 5460642 KANYE BO



careSM

Processing Plant

**Kazungula Agricultural Co-operative
Society Limited**





SORGHUM PROCESSING PLANT

Kazungula Agricultural Co-operative
Society Limited





Sorghum Meal Export Quality
Product of Zambia

Milled from the finest sorghum grains of small scale farmers in Kasungu District, Southern Province of Zambia by
Kasungu Agricultural Co-operative (Pvt) Limited and ...
A sustainable enterprise development initiative of CARE Zambia to create livelihood and food security in the country.

Sorghum Meal Export Quality
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SORGHUM

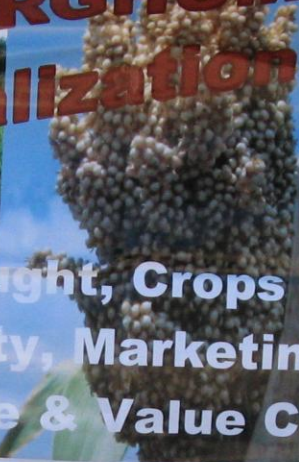
Processing Plant

**Sikaunzwe Multi-purpose Co-operative
Society Limited**





SORGHUM Commercialization Project



Fighting Drought, Crops Diversification,
Food Security, Marketing, Processing,
Increase Income & Value Chain Management



DFID Department for
International
Development

In cooperation with: MACO, GART, CHC Commodities, Land O' Lakes Inc.,
SEEDCO, ZAMSEED and Zambian Breweries Plc.



CONCLUSION:

- ❖ Overall the project has been a success - the challenge is to supply sufficient seed.**
- ❖ A sustainable seed distribution system is needed for farmers living in remote areas.**
- ❖ The Sorghum Programme requires continued support from all stake holders - collaboration.**
- ❖ There is need to link farmers to potential markets.**

❖ Most farmers have expressed the need for assistance in terms extension service and inputs.

❖ Sorghum is an important crop as it is a direct substitute for maize.

❖ Stock feed companies have also expressed willingness to purchase sorghum if more farmers are able to grow sufficient quantities .