

# **Activity Progress Consolidated Report**

## Sustainable Intensification of Market based Agriculture (SIMBA)

**ZWE 1077** 

**Gokwe South District** 

Month [&Year]: January 2016

Ward(s) : Chisina 1, 2, 3&4, Nemangwe 3, 4&5, Njelele 1, 2&3, Ngomeni, Sayi, Jiri

1&2

Consolidated by : Lewis Ncube

#### 1 BACKGROUND

Food security situation is bad for most parts of the operational area. Food shortages re hitting hard in most households as they are failing to meet their daily food requirements or have already started dipping on the food reserves that were meant for the later part of the season. In some areas grain was withdrawn from the granaries earlier than anticipated. Some households have started reducing meal frequencies as a coping strategy. It is seen to be too early as compared to last year. Due to the situation in the fields, farmers have shifted their effort to gardens. Those with chilli crop are concentrating on it for better yields so that they will have income to meet food security needs. Others are now concentrating on the butternut and watermelon crop in community gardens. Maize is also continually planted in gardens with water. Goats which used to sell at \$30.00 are now selling for \$15.00 to \$17.00 and at most \$20.00. A goat is exchanged for 20kg of mealie-meal. Chickens are going for \$1.50 to \$2.00. Cattle are losing value every day averaging \$200.00 to \$250.00 for a good sizeable beast. A tin of maize grain is currently selling at \$6 to \$8.

Water sources like dams and shallow wells used by both humans and animals are drying up and veld is also deteriorating affecting negatively all livestock. Though crops under ground cover are striving for growth, crops uniformity was affected and crops in clay soils are better to sandy soils as they have a higher water holding capacity.

Temperatures soared to an average of lower 40s°C. This has caused some crops to wilt permanently. However, there were just a handful of farmers whose crops have thrived in these prevailing conditions. This has been due to good mulching and good field water retention. Some farmers never attempted even to plant due to sporadic and ineffective rains. During this month, parts of Nemangwes received rains of between 12 to 28mm while Njeleles tracked their rains from the 12<sup>th</sup> of December 2015 to the 27<sup>th</sup> of January 2016. This is 26 days into the farming season and only accumulated 298-379mm. The introduction of more tolerant crops such as sesame, sorghum, cowpeas and mung beans is expected to help farmers to have a wider choice range that will help them to have cushion and better adaptation in drought times.



As a social contribution, the CA farmers that had banked grain last season selected vvulnerable households in the community whom benefited each a tin of maize grain. On the other hand the GoZ through the Ministry of Social welfare has started distributing two tins of maize to vulnerable households. Furthermore, the provincial ZimVAC representatives visited the district to conduct a food security monitoring exercise which WHH also took part in. Grain withdrawals and monitoring provided the bulk of the monthly targets.

#### **ACTIVITIES OF THE MONTH**

ACTIVITIES	TARGET	ACHIEVEMENT	OUTSTANDING
CA Monitoring	1348	561	787
Fowl run construction by LF & FLHH	271	140	131
Broiler production monitoring	26FTs	26Fts	Nil
Granaries Withdrawal Monitoring	91	87	4
Flower Production	36	36	On-going

## 2 ACTIVITIES DONE

#### 2.1 CA Monitoring

This was the main activity of the month and it was carried out with the help from the lead farmers as well as the field technicians. 561 farmers were monitored out of a possible 1348 farmers. There were competing activities i.e. the delivery of and collection of granary bricks that made the target impossible. Generally, there is crop stand variation across the wards and clusters. In Ngomeni ward, Jabula was less affected than the other clusters. In Jiri 1, Matura and Ndoza are better than the other two clusters while in Jiri 2 Gwetsanga and Murwira were the most affected. In Sai 1 Manyoni and Manyepa are better than the other two clusters. In Chisina 2 germination was poor and the current crop condition is also poor and most of the seen crops are replants. In the Nemangwe areas, the first mulch was almost used up but the poor veld condition could not allow farmers to repeat mulch with stover while their livestock had nothing to eat. There is no grass anywhere to supplement the mulch. Areas along mountainous Chamatendera have a better crop compared to all other areas. However crop condition is pathetic in most area of the operational area. The stages currently are ranging



from vegetative to tasselling stage due to differences in rainfall pattern as well as poor germination process. The crops were greatly stressed by poor rainfall pattern, heat wave and prolonged dry spell. Moisture stress on crops were more pronounced in conventional plots and non-mulched plots. This year most farmers managed to use herbicides successfully as a way of controlling weeds hence weed pressure wasn't a great challenge.

The farmer field schools scattered across the wards are doing averagely well, an indication that farmers have seen the importance of having a central learning site.



Godfrey Makwana's CF plot in Jiri 1, the field is doing well.



Mr. Njini's CF plot in Jiri 2, the crop is doing well.



Mr. Maedza's CF plot in Jiri 1, the crop has been affected by heat wave and long dry spell.







Thriving CA maize crop For Mr Mhangura Mahlatini in Ngani (left) and Mr Obert Mangena in Chamatendera (right)



Elda Jaya's CA field treated with pre-emergency herbicide

### 2.2 Fowl –run Construction

Each ward constructed ten (10) fowl runs at Lead farmers' homesteads and at CHC or ROSCA facilitators' or farmers in the event of the lead farmer failing to get the \$60 that was required as a farmer's commitment. The objective was to establish whether the selected beneficiaries were preparing to receive their chicks and whether the lead farmers who will care for the chicks are ready for the task. Under the review month 140 fowl runs were completed and 141 are at varying stages. The project assisted with building materials, transportation and payment of the builders. However, the female —led households were not part of the mainstream project support and produced varying designs for their fowl runs.

## Some varying designs for FLHH fowl runs











Fowl run for Faro Hondo LF of Mazauzau Nemangwe 5

Incomplete fowl run for LF in Nem 4 Kaguta



A typical and completed LF/facilitator Boschveld fowl run constructed in the wards.



#### 2.3 **Broiler Production Monitoring**

Monitoring on management and growth of broilers was done for 26 Field Technicians who were keeping the chickens for research purposes. 50% would be finished on straight feeds while the other 50% on mixed straight feed and Quality Protein Maize. Mortality rate was low for other technicians except Chiviti who lost 11 chicks at 2 weeks of age. Munemo and Ennie had zero mortality. High temperatures resulted in Muzenge losing four at 4 weeks. When he quickly realized it was the heat killing them, he immersed them in water and they recovered. Some used wet sand to cool the birds while others would sprinkle water in the fowl run. Growers mash was exhausted at 3.5 weeks when chickens were introduced to finisher mash. It was observed that, instead of splitting chickens at this stage for different feed, some FTs did not split either on time or not at all. Different reasons were given why they did not separate them, one being shortage of crushed QPM. They said the grinders were refusing to crush the maize for them, which was not true. They later split them but it compromised results. Only two Technicians (Ennie Sena and Medaldo Munemo) followed the procedure to the end. At 5 weeks the chickens were ready for marketing. Marketing delayed to 5.5 weeks when they were weighed to establish if there was any difference in size. Average weight was as follows;

Ward	Name of FT	AV weight Straight feed (kg)	AV weight QPM & Straight Mix	Range (Straight- kg)	Range (mixture- kg)	Remarks
Nemangwe 3	T Muzengi		2.15	1.8-2.5		Separated for four days and mixed them again.
	J shava	2.9	2.56	2.2-3.6	2.0-3.0	Separated 4 days after they were all on Straight finisher
Nemangwe 4	E Sena	2.6	1.5	2.0-3.2	1.8-2.2	Followed procedure
	M Maminimini	2.2	1.2	2.0-3.6	1.0-2.5	
Nemangwe 5	M Munemo	2.5	2.1	2.4-2.6	2.0-2.3	Followed procedure
Nemangwe 5	T Shoko	2.5	2.08	2.3-2.7	1.7-2.4	Separated after 5 days on finisher

The tables below show observations made in Ngomeni, Sai 1, Jiri 1 and 2:



FT	Ward	No. of chicks received	No. died	Weight from QPM at 6 weeks	Weight at 6 weeks from Broiler finisher
Godfrey Makwana	Jiri 1	100	15	2.46kg	2.71kg
Rudorwashe Maedza		100	0	2.43kg	2.62kg
John Marandure	Jiri 2	100	18	2.48kg	2.64kg
Isaac Mareka		100	62	2.4kg	2.51kg
Elphas Msindo	Ngomeni	100	15	2.45kg	2.65kg
Sivirios Chingura		100	15	2.46kg	2.62kg
Robens Mutanga	Sai 1	100	7	2.42kg	2.66kg
Rafael Mduzi		100	9	2.47kg	2.68kg

## Observations from the different feed types are tabled below:

QPM fed broilers	Broiler finisher fed broilers
Average fat	Too fat
<ul> <li>Look stronger and more active</li> <li>Average weight like road runner</li> <li>Good taste like mature chicken</li> </ul>	Behave like normal broilers and less active
	Weigh more
Taken last by the market	<ul><li>Usual broiler taste</li><li>Taken first by the market</li></ul>

In the Njelele area there were no problems observed from feeding broilers with QPM. The growth rate was almost similar to the birds fed on straight feed. Broiler marketing started at 5 weeks with the average weight of 2, 2 to 2,5kg straight fed and 2.1 to 2.4kg QPM fed live mass. The gross margin budget for 100 birds was as follows;

Gross income	• 100birds *\$6.00/bird	• 100birds *\$6.00/bird				
(GI)		<u>=\$600.00</u>				
Variable costs(	Quantity given per 100 birds	cost				
Pre starter	10kg	\$10				
starter	50kg	\$30				
Grower	100kg	\$58				
Finisher	150kg	\$89.25				
QPM	50kg	\$18.00				
Vitamin stress pack	1 packet	\$3.00				
Lassota	1 pack	\$6.00				



Total variable costs(TVC)		\$214.25
Gross margin = GI-TVC		\$385.75
Return per \$ invested =GI/TVC	\$600/\$214.25	1: 2,8

A return of \$2.80 per every dollar invested is obtained. Therefore this indicates that this broiler project is viable when all things are held constant. All the field technicians across the three wards have promised to continue with this project as they are happy with the returns.



Weighing of the birds at 5weeks

#### 2.4 Granaries Withdrawal Monitoring

Due to the low volumes of maize in the homesteads this year bankers were forced to start withdrawing maize from the granaries on the 31st of December as some had nothing to eat at all. 87 out of 91 granaries were observed during this month. In Njelele area, non grain bankers were observed with scotch carts at each and every withdrawal site. This was in anticipation of buying or borrowing from bankers. In Nemangwe area a total of 144,4t was banked during the season. After withdrawals, grain for social gatherings and vulnerable HH was left in the granary. Farmers withdrew all their maize grain. The following table shows what was withdrawn in Ngomeni, Sai 1, Jiri 1 and 2;

Ward	Granary name	Number of tins banked	Bankers	No of tin withdrawn	Balance for social gathering	Tins donated	Balance to be withdrawn
	Bopoma	943	46	841	38	0	102
	Nenge	698	39	659	39	0	0
	Manyewu	1024	75	949	34	0	41
	Ruza	1046	54	992	41	0	13



	Samanyonga	718	49	674	33	0	11
Ngomeni	Mpindi	1014	80	316	34	8	656
	Chinegoto	367	17	351	17	0	0
	Ngomeni	670	46	524	38	0	6
	Mateta 2	1409	64	1298	64	0	47
	Chitambira	1153	46	816	20	0	317
	Rukara	616	42	611	5	0	0
	Maedza	420	34	358	20	0	0
Jiri 1	Ngwere	112	17	108	4	0	0
	Mahwana	544	59	520	24	0	0
	Rwatipedza	446	21	442	4	0	0
	Shoko	534	37	517	17	0	0
	Wutete	107	9	107	0	0	0
Jiri 2	Chekaniso	85	6	79	6	0	0
	Mukuvazvivi	189	25	183	6	0	0
	Matadi	171	10	169	2	0	0
	Mufudza	160		158	2	0	0
	Katema	45	3	45	0	0	0

Some granaries like Nyamazana and Chitungwa from Njelele 2 did not finish all the maize during distribution but reserved some to be collected in the second phase of lean period which is the month of February. The general observation was that the maize in the granaries was of good quality without weevils these are the outcomes emanating from proper grain treatment before storage. Weevil's infestation was only noted at Nhliziyana granary in Njelele 2 west cluster in one of the compartments. The contributors were urged to clean up their maize thoroughly before bringing it for banking to avoid these problems while the grading team was also encouraged to perfect their job during the banking process to restore contributor's confidence on the quality of grain next time during distribution.



Different criteria are used to identify beneficiaries from each granary site. However, the following provides the general framework for vulnerability assessments within different wards;

- be elderly household 70+ years
- be primarily food insecure without any external assistance from family members and only the physical status could not enable him or her to do field requirements that would have brought food to the house hold
- child headed families, chronically ill or widow(ers)

The tonnage distributed to the vulnerable groups in Njelele area is shown by the table below;

ward	Total tonnage	Number of vulnerable	Quantity distributed
Njelele 1	38315t	0	
Njelele 2	46353t	38	816kg
Njelele 3	2500t	0	

## Grain withdrawals in pictures;



Maximum participation from grain bankers



Record keeping by secretaries











Farmers offloading their grain at Shoko granary in Jiri 2 and at Chitambira granary in Ngomeni.

## 2.5 Flower production

A total of 36 farmers have been given flower seeds for production contracted by DK Alexandra from Kadoma. Most of the farmers managed to plant with the first effective rains and the germination percentage was not pleasing. Later in this month the rains that were received induced the germination and emergency of these flowers. This indicated that the seed was in a dormant state waiting for the favorable conditions to start germinating. Currently, farmers are happy with the flowers and they were encouraged to keep the fields weed free to avoid losing the soil nutrients to the weeds which may reduce the yields.





Cosmos flower at Grace Mujumi's field

#### 3 PROBLEMS AND SOLUTIONS

#### 3.1 Problems

- Some areas in the operational area such as Dzire are losing cattle to drought. The
  pastures are dry resulting in competition between cattle and crop for stover which was
  meant for mulch.
- Green trade officers did not supply seed closer to the farmers in Jiri 1. Seed was left more than20km away and asked the lead farmers to collect the seed and distribute it to the farmers. This deprived the lead farmers their valuable time to do other things.
   The farmers were not communicating this to me.
- There was too high temperatures that withered the crops and caused the death of chickens.
- Lead farmers' bicycles are grounded. They cannot move around in the villages. Since
  they are field officers' compliments, I strongly feel the project should help in some way
  to repair their bicycles at least once for each bicycle. Farmers do not have the means
  to source money to buy for the spares.

## 3.2 Solutions undertaken

Discussions were carried out with the Green Trade officers and the lead farmers over the issue and advised to make their negotiations not using WHH.



- Field technicians were advised to cover the roof of their fowl runs with thatch to reduce the effect of heat in the fowl runs
- Lead farmers are to use the trained bicycle mechanics within their areas.

## 4 ACTIVITIES FOR THE FOLLOWING MONTH

PLANNED ACTIVITIES
Granary construction monitoring
CF monitoring
Cluster field days
Boschveld chicks distribution
Boschveld chicks brooding monitoring
Boschveld production training