

## **INTERIM PROGRESS REPORT TO THE MAIZE TRUST**

### **LIMPAST MAIZE DEVELOPMENT PROJECT**

**SEPTEMBER 2006 to MARCH 2007**

*By CPR Cronjé*

#### **Identification of the Project and the Project Leader**

The LIMPAST maize production enhancement project has been in operation for four and a half years. The aim of the project is to enhance the ability of food security and subsistence level emergent farmers to attain levels of sustained production and eventually small-scale commercialization. The project is a collaborative effort between the Limpopo Department of Agriculture, The ARC-Grain Crops Institute, NTK and LIMPAST. The CEO of LIMPAST takes overall responsibility for the project and is tasked to ensure progress, diligent management and sound financial control. The contact details for the LIMPAST CEO are as follows: PO Box 11778, Erasmuskloof 0048 : Tel & Fax 012-9988846 : Cell : 0828086103 and e-mail : erommel@iafrica.com.

#### **Actions that have been taken regarding the project**

The reporting period includes the pre-seasonal planning, planting and current crop. The crop failed due to lack of rain over virtually the whole of the Limpopo and Mpumalanga. Very little training of study groups could take place since all of the demonstration material has died. We had a difficult season in other aspects as well. Mr. Phonie du Toit, our main collaborator from the ARC-GCRI experienced medical problems during the reporting period, and one other ARC person involved with the LIMPAST project has resigned. We have employed a new Program Manager as reported previously. Jean Simpungwe brings a new level of development expertise to the program and has several ideas that we are currently assessing in plotting the way forward for the LIMPAST program.

### **Progress that have been made with the Project**

Very unsatisfactory progress has been made during the past season, mainly due to the lack of rainfall. The trials that were planted did illustrate some shortcomings with the project and should not be seen as merely a crop failure. We attempted several new innovations, of which the main thrust was to use a ripper planter instead of manual planting in some areas. Very few of the local farmers even attempted to plant, and in retrospect that was probably the correct choice. We did have the minimum 40mm of rain required as benchmark to commence planting, but in all the areas no follow-up rain fell.

### **Results that have been achieved**

Obatampa, a high protein variety that showed early promise and created significant interest among some of the study groups was intended for seed multiplication this season. The improved Obatampa seed obtained from the ARC-GCRI was planted near Sophia in the Lowveld, since this area has good soils and normally a higher rainfall. The plot has since dried out before pollination could take place. We have been advising the study groups that the variety did not have good drought tolerance, but the protein content convinced the farmers to attempt cultivation. Table 1 gives a brief detail report on the condition of the crop as on 05 March 2007.

**Table 1: LIMPAST/MAIZE TRUST MAIZE TRIALS STATUS REPORT 05 MARCH 2007**

TRIAL	PLANTING DATE	NOTES
Ga-Maria	15 January 2007	Germinated well. Since January no further rain fell and it was extremely hot. Plants died and no results are expected.
Marapyane	29 December 2006	Germination was poor and wild birds caused a lot of damage. Received 18mm rain on 12/01/2007. Replanted on 15/01/2007. No rain received since replanting. Plants died of drought and extreme heat.
Nokaneng	24 November – CA trial (Ripper planter) 06 Dec - Cultivars trial	Germination fair but only 5mm of rain received after planting. All crops fatally damaged by drought and extreme heat. Conservation Agriculture (Ripper planter) crops did not perform better at all. Main reason is the severe drought but the germination was also not up to standard. During planting action soil is not filled back onto the seed causing germination problems.
Troya		Could not plant at all due to lack of rain
Tafelkop	14 Dec 2006	Germination very good. Some damage caused by cattle again. Fences are now erected. About 7mm rain on January 10. Since then no further rain. Plants are now suffering severe drought stress. Not much of a harvest is expected.
Mapela	11 January 2007	Germination very good. Trial is flood irrigated with water from the mine. Experienced water supply problem from mid January until 26 February. Plants suffered from drought and heat stress, but we still hoping to get reasonable results.
Molepo	14 December 2007	Germination very good. Good rain up and until January 3. Crop badly damaged by drought and severe heat. Doubt whether any harvest will result.
Sophia	21 December 2007	Severe bird attack on germinating seedlings. The crop germinated well. Nonetheless, there is a lot variation across varieties. Obatampa exhibits a poor stand with different heights of the crop. However, should the current moisture stress continue, there will be crop failure.
Zava	12 December 2006	The crop stand is very good since it is irrigated using furrow irrigation. The crop has almost reached maturity and a Field day is being planned.
Zebediela	21 November 2006	The crop is very bad due to moisture stress. Should it not rain in the next two weeks, the crop will not survive. The crop has cobs appearing. The other trial planted on 5 <sup>th</sup> January in Magatle Village has completed failed.
Mashashane	25 November	Crop germinated well, but died due to extreme temperatures
Lekgolaneng	19 December 2006	Achieved a germination percentage of 98 %. Experienced no stalk borer however, the crop is not growing due to heat. The Trial is very bad due to moisture stress. Should it not rain in the next two weeks, the crop may not survive.

### Problems encountered with the project

Dry-land grain production in the Limpopo is a risky business. Historically, 4 out of 10 years will result in crop failures. Recent climatic changes, although only evaluated over a very short period, seem to indicate permanent seasonal changes. The implication is that it would become increasingly difficult to grow crops effectively under dry land conditions. Elsewhere in Africa, for instance Kenya, crop production often takes place under such

circumstances, and we intend to test some of the techniques used there. It remains a concern that farmers (study group members) are generally reluctant to plant if conditions are not near to perfect. We are making an additional effort to educate farmers along the lines of very low yields can be tolerated provided that input costs are recovered. It is for this reason that most of the current research in the LIMPAST project is aimed at minimizing production cost. The continued degradation of the ability of the ARC to render services due to personnel shortages is becoming a very real problem for which solutions need to be found.

### **Milestones that have not yet been achieved and reasons**

The program is on track. The current season has shown that we need to start thinking innovatively about the way forward for small-scale farmers in arid environments.

### **Assessment of adequacy of funding to complete the execution of the project**

Funding is adequate to cover all intended expenses for the current season. We expect a saving on the current budget since several of the planned actions could not take place. At this early stage we would like to make the suggestion that the final 20% payment might not be needed, provided of course that progress in the project allows us to qualify for the full funding for the current season. It is expected that the ARC account usually due in April will also be lower, which saving could then be passed on to the Trust.

**Table 3: Expense items explanation**

ITEM NO	EXPENSE ITEM	EXPLANATION
1	Petty Cash	Petty cash is kept for minor recurrent expenses, including some farmer's days where cash transactions are required. Consolidated monthly
2	Office rental	We share-rent an office with Ninham Shand. The rental includes the use of their receptionist/bookkeeper
3	Bank Charges	
4	Operational Cost	This includes traveling, telephones, S&T and other operational expenses. The recent dramatic increase in fuel prices is causing a small but constant budget overrun on this item.
5	Service Providers	This includes the ARC and others. The major expenses shown here are the annual payments to the ARC and Skills for All
6	NTK	This is the second full season where NTK (previously NLADEV) is included.
7	Directors	This is the cost of travel, meetings and sometimes accommodation for LIMPAST directors. We have reduced the number of meetings to control costs.
8	Training	This is the costs for venues, accommodation, meals and sometimes transport for extension officers and program managers. We have scheduled some courses earlier this year, and are therefore slightly overspent during the first six months.
9	Salary CEO	CEO recurrent expenses now included in salary + 7% increase
10	Salary Program Manager	The program manager is co-funded by SASOL, Progress Milling, Pannar and LIMPAST

Limpopo Province Agricultural Strategic Team



Item	Monthly Budget	September Actual 2006	Actual 2005	October Actual 2006	Actual 2005	November Actual 2006	Actual 2005		
Petty Cash (1)	R 2,000.00	1,000.00	1,000.00	1,000.00	1,000.00	0	1,000.00		
Office Rental (2)	R 2,500.00	2,151.00	2,185.50	2,228.00	2,266.00	2,392.00	2,213.06		
Bank Charges (3)	R 250.00	369.00	234.00	203.90	289.00	126.54	149.00		
Operational Cost (4)	R 8,000.00	11,267.00	10,350.00	11,750.00	37,759.00	18,144.30	10,132.00		
Service Providers (5)	R 15,000.00	30,000.00	10,000.00	0	3,500.00	0	0		
NTK (6)	R 3,000.00	0	4,820.00	10,370.00	2,342.00	4,827.50	2,679.00		
Directors (7)	R 4,400.00	0	7,578.00	9510.00	0	0	0		
Training (8)	R 5,000.00	18,000.00	8,550.00	10,000.00	9,730.00	5250.00	10,000.00		
Salary CEO (9)	R 30,000.00	30,958.00	26,179.90	31,000.00	28,282.00	32,272.00	27,943.27		
Salary PM (10)	R 2,500.00	0	2,253.00	0	2,433.65	0	2,149.89		
<b>TOTALS</b>	<b>R 72,650.00</b>	<b>93,745.00</b>	<b>73,150.40</b>	<b>76,061.90</b>	<b>87,601.65</b>	<b>63,012.34</b>	<b>56,266.22</b>		
Item	December Actual 2006	Actual 2005	January Actual 2007	Actual 2006	Feb Actual 2007	Actual 2006	Budget 6 Mo	2006/2007 6 Mo	2005/2006 6Mo
Petty Cash (1)	4,000.00	5,000.00	790.00	0	1,000.00	1,000.00	6,000.00	7,790.00	9,000.00
Office Rental (2)	2,750.00	2,062.00	2,060.00	2,055.00	1,955.00	2,220.00	15,000.00	13,536.00	13,001.56
Bank Charges (3)	206.52	234.00	255.93	199.00	149.39	234.00	1,500.00	1,311.28	1,399.00
Operational Cost (4)	9,644.02	7,660.00	12,445.00	9,120.00	13,592.50	9,120.00	48,000.00	76,842.82	84,141.00
Service Providers (5)	12,000.00	0	0	0	0	0	90,000.00	42,000.00	13,500.00
NTK (6)	5,515.00	3,625.00	3,602.50	1,600.00	4,032.50	2,567.50	18,000.00	28,347.50	17,633.50
Directors (7)	9,573.00	0	0	0	267.90	5,392.00	26,400.00	19,350.90	12,970.00
Training (8)	0	0	0	0	0	9,750.00	30,000.00	33,250.00	38,030.00
Salary CEO (9)	30,035.00	27,943.27	30,000.00	27,943.27	30,000.00	29,097.67	180,000.00	184,265.00	167,389.38
Salary PM (10)	0	3,340.23	0	2,841.45	3,962.50	3,083.19	15,000.00	3,962.50	16,101.41
<b>TOTALS</b>	<b>73,723.54</b>	<b>49,864.50</b>	<b>49,153.43</b>	<b>43,758.72</b>	<b>54,959.79</b>	<b>62,464.36</b>	<b>429,900.00</b>	<b>410,656.00</b>	<b>373,165.85</b>