

# **BUSINESS PLAN**

**FOR** 

# MAKONDE LUNGANE CITRUS AND MANGO PRIMARY COOPERATIVE LTD

IN

VHEMBE DISTRICT
THULAMELA LOCAL MUNICIPALITY

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# SUMMARY OF MAKONDE LUNGANE CITRUS DESCRIPTION

Farm name : Makonde Lungane Citrus

and Mango Project

Current owner : The Co-operative

Contact person : Mankhili Ntamiseni Tompson

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District Municipality : Vhembe

Local Municipality : Thulamela

Area : Makonde

Extent of the property: 70ha

Latitude : S 28<sup>0</sup> 43`45.85``

Longitude : E 31<sup>0</sup>44`31. 88``

Bioresource group : BRG-19. Moist

Bioresource units : BRU – TUa3- Makonde

Mean annual Rainfall : 717mm per annum

Block burning zones : Mixed veld

Burning dates : Permission Required

Distance from nearest : 30km from Thohoyandou

Estimate Budget : R 940 855.00

#### 1. INTRODUCTION

Makonde farm is trading as a Lungane citrus and Mango primary cooperative with 7 beneficiaries and is a citrus and mango farm located in Limpopo province under the jurisdiction of Thulamela Local Municipality at Makonde village. The farm is 70ha in size and the 7 members each holds 10ha P.T.O. from the tribal authority. The farm is former ARDC projects which was initiated in 1995. The main crops which are on the farm is Citrus which accounts for 56ha in production and Mango production which accounts 14 ha with different cultivars. The initial capital to start up the business was obtained from ARDC where individual farmers secured loans to purchase production inputs and irrigation system (micro-jets) in 1996 and 1997

The project was running smooth until 1997 when the ARDC collapsed .Then by 2001 staff were retrenched and farmers were left without financial support from ARDC. The farmers loan were cut-off without proper explanation and thus resulted in farmers failing to secure financial help from other institutions.

Lungane citrus Co-operative planted 56ha of oranges with Rusternburg navels, Delta Valencia, Midnight Valencia and Satsuna naartjies cultivars, 14 ha of mangoes with Tommy Atkins, Kent and Sensation cultivars. Currently the co-operative sells its produce to a processing plant in Polokwane and to Shayandima Big Six Atchar. The intention is to keep on exploring other markets as it aims to expand its farming operations. Due to the nature of the anticipated expansion of the business, there is a need for capital and resources required to make the expansion plans possible.

The aim of this business plan is therefore to serve as a tool to source such resources and capital and more so to serve as a blueprint for Lungane Citrus Co-operative. The expansion is anticipated to result in more revenue for the business, more job opportunities for the local people, poverty reduction, Economic transformation of the Thulamela Local Municipality and the Province at large.

#### 2. LOCALITY

Makonde citrus project falls under Vhembe District municipality at Thulamela Local Municipality. It is situated in the Makonde Valley, 30km north east of Thohoyandou; it can be reached by travelling along the R34 tar road to Tshilamba/Makuya. The area is situated on the following co-ordinates:

S 2843 '45.85``

E 31<sup>0</sup>34` 31.88"

The project property in question fall within the Registration Division GU and are more fully described as follows:

Farm Name	Project Size (in Hectares)
Makonde Lungane Citrus and Mango Project	70
TOTAL	70

# 3. PURPOSE OF THIS PLAN

The purpose of the plan is to outline the critical requirements necessary to make project more viable, sustainable and improve the living conditions of the owner, employees and the nearby community. The plan is a product of project resource assessment, stakeholder engagement and documentary analysis. The main enterprise at Makonde farm is Citrus and Mango.

Citrus is a capital intensive enterprise and need careful management to ensure good yields and return on the investment. It cost between R50 000-R60 000/ha to maintain a good Citrus crop, especially with export market demands. The project owner is struggling to keep-up with the financial resources required for this, as a result the orchard was not maintained according to its standard and as a result production dropped. On average a good Citrus crop should yield between 1000-1200 cartons per ha and Makonde figures for last season was around 600-650 cantons/ha.

Makonde citrus project has thus applied for financial assistance from the Department of Agriculture for CASP funding to inject the much required inputs for the citrus crop. This business plan therefore it covers the requirements for these inputs and proposes a long-term sustainable finance model for this farm.

This report is also compiled to **provide an implementation plan** for the proposed business and **acquire required funding** from relevant funders and partners.

# 4. NATURAL RESOURCE ASSESSMENT

# 4.1 CLIMATIC RESOURCE ASSESSMENT

The resource section of the Limpopo Department of Agriculture has divided the province into Agro-ecological units or Bioresource Units (BRU's). A Bio resource unit is a demarcated area of land, throughout which there are recurring patterns of topography, soils, vegetation and climate. Climatic factors, primarily rainfall and temperature, are the main criteria used in the delineation of the BRU's. Climate data which is gathered from weather stations with records of ten years and older are used although extrapolation was used where data is deficient.

The area described here falls within BRU TUa3- Makonde. The climatic data related to these BRU's are shown in Table below.

TUa3-Makonde

	Annual	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
RAINFALL													
Median		91	76	67	37	17	11	9	14	33	65	78- 100	100- 450
Mean	717	103	94	79	48	26	16	14	23	58	78	81	97
TEMPERATURE													
Mean	20.8	24.5	23.7	21.5	18.9	16.3	16.3	17.9	19.7	20.8	20.0	22.0	23.8
Max	26.6	29.5	28.9	27.2	25.3	25.3	23.4	23.4	24.4	25.5	26.2	27.1	30.0
Min	15.0	19.5	19.5	18.5	15.8	12.5	9.2	9.2	11.4	13.9	15.4	17.0	18.6

#### Rainfall

The above table indicates that the project is situated in an area within the main annual rainfall of 717mm. Citrus requires 850 to1,500 mm of rainfall over the season. Under irrigation, the total water, including rainfall used by the crop, is 1,550 mm in the area. The projects around this area rely on irrigation for crop production. The

Makonde project has an irrigation system that pumps water from Mutale River, which is a perennial river.

# **Temperature**

The mean annual temperature of the project is 20.8 °C. The maximum temperature usually experienced during hotter months is 35 °C. These temperatures are quite moderate, and pose no limitations to the production of citrus. However, it needs to be noted that citrus is a warm season annual crop and need slightly higher temperature for most part of the growing season. Low temperatures tend to retard growth and delay maturity and cutting cycle.

Optimum growth requires a mean daily temperature of 22-30°C with high solar radiation. For ripening, temperatures of 10-20°C are necessary to reduce vegetative growth and increase the sugar content. The daily mean minimum temperature for June/July should be at least 5°C and the mean annual temperature 18°C and above. The temperature regime indicates that the project temperatures reasonable meet the requirements for a good crop.

#### 4.2. SOIL RESOURCE ASSESSMENT

The soils of the subject property are derived primarily from Dwyka parent material, and to a lesser extent from Dolerite parent material. The soils are well-drained to moderately drain. Chemical fertility of the soil was not determined. It is a standard practice that each citrus project do a soil test every three years to ensure that the level; fertilizer application on the citrus is within optimum level.

#### 4.3. LAND PRODUCTION POTENTIAL

The Bio Resource programme or Model designed by the Natural Resource Section at Madzivhandila Agricultural college utilize climate, soil and management resources to determine the potential yields of the different field crops, planted pasture and timber. The potential yields for citrus under 70% Management unit are shown in the table below.

TABLE 4: Potential yields for Citrus (ton/ha)

BRU	Dry land	Irrigated
TUa3-Makonde	-	92.6

There is good potential to grow citrus in the area provided there is irrigation to supplement water supply from the rainfall. The potential is over 90t/ha, however average production figures in the area is around 60-65t/ha. There is therefore room for improvement from the resource base point of view.

The yield of citrus as well is also below the potential of the area and the project. Production figures indicates yields of 660 cartons/ha (10.5t/ha), whilst the average in the area is 1000-1200 cartons/ha (18t/ha). There is also room for improvements in this regard.

Good yields of citrus are: orange - between 400 and 550 fruits per tree in a year corresponding to 25 to 40 tons per ha per year; grapefruit - 300 to 400 fruits per tree in a year and 40 to 60 tons per ha; lemons - 30 to 45 tons per ha in a year; mandarin - 20 to 30 tons per ha in a year.

The potential to achieve good or economical yields exists, but the whole citrus land (70 ha) need to be re-established to realise the true potential. Parallel to this, good management and agronomic practices are entrenched to ensure consistent yields for at least the first 6 cutting seasons.

# **4.4 WATER RESOURCE ASSESSMENT**

The project is deficient with facilities to supply water. There is an old water pump which was used to supply water to the project but is no longer working. Water on the project is required for general use in the workshop, buildings, toilets, consumption. Whilst the current owner is not residing on the project, there is however an urgent need that the water supply be addressed.

#### 5. PHYSICAL PLAN

#### 5.1 CURRENT LAND-USE AND INFRASTRUCTURE

The project has Citrus and Mango as the main productive enterprises. Below is a table indicating land use on a hectare basis:

Land use	Area (ha)
Citrus	56
Mango	14
TOTAL	70

#### **5.2 CURRENT INFRASTRUCTURE**

The project has no building, toilets and storeroom; these facilities will be required in future. Project buildings form a critical part of support in the operations. Electricity is supplied though Eskom and has been vandalized.

#### **5.3 PROPOSED LAND-USE**

The interventions required on the project will not alter the current land use, but will improve the cropping potential of the current enterprises. Therefore, the proposed actions are necessary to address the current state of the project and improve overall productivity.

This business plan is particularly focussed on the short-term intervention of supplying fertilizer and chemicals for maintenance of the citrus crop in the 2013/14 financial year.

Table 5: Summary of Proposed Interventions

Intervention	Scale	Budget [R]
Citrus Inputs	70 ha	735 000.00
Mentorship	12 months	144 000.00
Capacity building	12 months	61 855.00
TOTAL		940 855.00

#### 6. MANAGEMENT PLAN

#### 6.1. Citrus

Citrus is a warm season crop and an important contributor to the GDP. It is a profitable crop, although, the returns per ha/annum are not as attractive as vegetable crops. This limitation is offset by the reliability of the market and stability of the market price and production costs. However, the risks associated with citrus are minimal.

Citrus requires a long, warm summer growing season with a high incidence of radiation and adequate moisture, followed by a dry, sunny and fairly cold but frost-free winter ripening and harvesting period. Most suitable BRGs in Limpopo for Dry land citrus are the frost-free areas of 1 and 2 (Moist and Dry inland Forest, Thorn and Mixed Veld, 3 and 4 (Moist and Dry inland Hinterland), and 5 and 6 (Moist and Dry Venda Thornveld), 21 (Valley Bushveld) and 22 (Lowveld).

A comprehensive maintenance or plant management plan needs to be implemented to bring the fertility status of the citrus field to optimal level. The citrus on this project has not been properly maintained during the past three seasons. This resulted into lower yields (below average) in the 2008/09, 2009/10 season and projected average yields in the current season. This proposed revival plan need to address this situation. Therefore replanting of the fields need to be coupled with application of good management practices.

Care should also be placed on proper weeding and pruning to improve the RV level of the project. These are improvements that can be made on the management of the project which has a potential to improve the income from the citrus enterprise.

A good management plan therefore seeks to take advantage of the bioclimatic resources of the project, mitigate against limitations posed by natural resources. In the case of this project, the climatic resources are not a limitation, and the soils ranges from low to moderate potential. The successful production of citrus therefore hinges on integrating the bioclimatic resources with sound agronomic principles. The agronomic practices include the use of the right variety for the right field, land preparation, fertilization, planting; weed control, disease control and proper harvesting. Some of these factors are briefly discussed in the preceding sections.

# **Choosing the right Variety**

The choice of a right variety for a specific field is crucial as different varieties perform differently on different soils. Certain poor soils have cultivars that perform and give good yields. It is therefore important that this is addressed during replanting or citrus establishment. Varieties are proclaimed in the Government Gazette. It is illegal to cultivate unlisted varieties. Varieties permitted for planting for each area are reviewed annually. Use of certified clean seedlings will minimize systemic root rot infection.

Economic factors to consider in the variety choice:

- Germination and citrus quality;
- Tolerance of drought and resistance to pests and diseases;
- Response to herbicide tolerance;
- Premature flowering and canopy development;
- Age of harvesting and yield ability; and
- Lodging and rationing ability.

# **Agronomic Practices**

Attention should be drawn to good agronomic practices for good citrus production. The benefits of a new citrus crop (re-establishment) could be short-lived and not sustainable if standard citrus husbandry practices are not implemented. Therefore for the Comprehensive Agricultural Support provided by the state to add value to agricultural productivity and sustainability of project, immediate attention need to be given in order to adhere to these practices. New farmers or beneficiaries need to undergo the citrus course offered by Citrus Growers Association where these are dealt in details. These agronomic practices are in relation to:

# Land preparation

- Ripping vs. deep plough vs. minimum till
- Ridging

#### Fertilization

- Hand planting
- Topdressing

#### Weed control

- mechanical and
- chemical
- Pest and Disease control
- Ripening of citrus
- Maintenance
  - Drains/waterways
  - veggies
- Harvesting
  - Citrus quality (low ash)
  - Pruning
- Annual replant (10%)
  - Fallow

#### 6.2. Citrus

Citrus trees are subtropical in origin and cannot tolerate severe frosts. Citrus production in South Africa is therefore confined to areas with mild and almost frost-free winters where temperatures (not more than once in several years) drop below – 2 °C and almost never below –3 °C. The average minimum temperature for the coldest month should not be below 2 to 3 °C if protection is not provided. Moisture is also a limiting factor in citrus production. Because rainfall is often poorly distributed and in most cases deficient, it is necessary to supplement moisture by irrigation to ensure that moisture stress does not suppress growth and production.

Citrus can be grown in a wide range of soil types provided they are well drained. Fertile, well-aerated soils with a pH of between 6 and 6, 5 are ideal. The growth, development and production of a plant depend on the physical characteristics of the soil such as drainage, density, texture, water-holding capacity, structure, soil depth, the homogeneity of the profile, credibility, and the degree to which water can infiltrate the soil. These characteristics differ in the various soil types. Physical soil properties determine the degree to which water is released for uptake by the plant roots, and the depth of the root system. Within an orchard yield varies greatly from tree to tree, while for a single tree yield varies from year to year. Sometimes a two-year fruit bearing cycle occurs.

#### **Yields**

	Valencias	Navels	Grapefruit	Lemons
First crop (years)	4	4	3	3
Expected lifespan (years)	32	32	18-23	23
Potential production: Mature trees (tons/ha) Likely production Conservative production	60 45-50 35	45 40 30	65 50 35	65 50 40

#### 6.3 Mechanization

There are critical activities for farm mechanization practices that should be performed for example disking, ploughing, planting, fertilization, etc which require a provisioning plan. Due to complexity of agricultural business there are some project machinery that are mandatory to have on your project while other services can be contracted or hired depending on requirements for **sustainable and viable farm business management** e.g. considering both physical farm production and economics.

# **Workshop Management**

Every project should have a working area where tools, project equipment, oils, grease, tyres, tubes, etc need to be kept. Breakdowns always occur on the project during operations, therefore a workshop need to be maintained and managed.

# **Tractor & Equipment Maintenance**

A farm without a tractor and equipment is considered as land and only becomes a farm when it has machinery and equipment to farm with. These assets need to be kept in good and working condition through regular and scheduled service and general maintenance. Makonde Citrus project does not have machinery required to run and maintain the farm.

#### 6.4. CROP ROTATION PLAN

Crop rotation is part of Good Agricultural Practice (GAP), as it breaks down the potential pest/disease cycle in the soil and also allows for effective utilization of soil nutrients. Citrus is an annual and perennial crop and would therefore not be changed/rotated for at least for 20 – 35 years.

However, as a standard practice in the citrus industry, at least 10% of the citrus field need to replanted every year. This ensures a balance in the age of the crop from new plant and between seedlings. This sustains the average tonnage achieved each season.

# 7. SKILLS DEVELOPMENT PLAN

#### 7.1. Skills Assessment

The skills audit conducted during the site visit indicated that the members of the project would require extensive skills development for better management of the project. Capacity building is an on-going process and farmers need to continually update themselves on latest trends and innovations to do business better. Therefore a set of capacity building courses will be required to sustain the knowledge base and also empower other members of the project as well as the project workers

Therefore a set of capacity building courses will be required to sustain the knowledge base and also empower other members of the project and the project workers.

# 7.2. Skills Development Programme

Skills development is considered a critical component of any thriving business. Therefore to address the shortcomings and development gaps as identified during skills audit, the following courses need to be incorporated as part of the projects annual plans:

Table 6.1. Capacity Building Needs

Skill	Institution	Costs/person
Group/Social facilitation	AgriSeta	R 4000.00 X 3 = R 12 000.00
Conflict management	AgriSeta	R 4000.00 X 3 = R 12 000.00
Governance	AgriSeta	R 4000.00 X 3 = R 12 000.00
TOTAL		R 36 000.00

Skills development is considered a critical component of any thriving business. For citrus production, soft skills required for practical application on the field for general workers are also offered by Madzivhandila Agricultural College (see table below). Most of these courses are offered at the project's site.

Table 6.2: Capacity Building Needs: Technical

Course	Duration (working days)	Min learners required	Cost per course per learner	Site	Total Costs for 5 people
Basic Workshop skills	10	when full	1500	Madzivhandila college	4 500.00
Arc welding & gas cutting	10	when full	1560	Madzivhandila college	4 680.00
Citrus Husbandry	4	10	1000	Growers Farm	3 000.00
Applied business management	4	10	1000	Growers Farm	3 000.00
Care of the environment	2	10	450	Growers Farm	4 500.00
Health & safety Reps	1	10	330	Growers Farm	3 300.00
First Aid	3	10	575	Growers Farm	2 875.00
	<u> </u>		•	•	

Capacity building areas for citrus production are also a great need, and the following courses need to address. These can be sought through SEDA or AgriSeta.

- Citrus production
- Value chain in citrus
- Packhouse
- Branding & export markets
- HACCP
- Environmental regulations

25 855.00

# 8. PROJECT EVALUATION AND MENTORING

Makonde Citrus Project does not have a mentor, and it is therefore recommended that one is appointed by the Department of Agriculture through the mentorship programme. The mentor has the responsibility to assist project owner in managing this project. Mentorship should also assist and guide farmer in scheduling work activities, developing a production plan and a breakdown of activities to be implemented in various stages of the crop's growth.

The mentor should **not** or does **not** replace the functioning of extension and advisory services officered by the Department. In fact, the mentor re-enforces extension services and both parties can benefit from each other. Extension services will have more contact with the farmer whereas the mentor can only spend a maximum of 48 hours per month.

#### 9. MARKETING PLAN

# 9.1. Citrus

The marketing of citrus is carried out by the South African Citrus Growers Association (SACGA) and Vhembe Fresh Produce Secondary Co-operative. It is the grower's responsibility to deliver the crop to the cooperative and the Co-op will take the responsibility to market it.

The Makonde Citrus project delivers citrus to Vhembe Fresh Produce Market. All the harvesting operations are done manually with the assistance of seasonal labourers due to lack of necessary machinery and equipment to do it. Transport to the Vhembe Fresh Produce Market is done through the road transport.

# 9.2. Citrus

The citrus industry in South Africa is primarily export directed, with very little imports. On average. 54% of the total citrus production is exported, 25% is processed and 21% is locally consumed as fresh fruit. Exports accounts for 81% of the total value of production.

Citrus is mainly grown for export market and is therefore exposed to global competition and market factors. Maintaining a good position in the market demands high fruit quality and keeping abreast with changes in world market trends. The quality aspect on the fruit, packaging and packhouse has to comply with phytosanitary standards. All these factors have a huge impact on the economics of the citrus enterprise. Makonde Citrus project therefore faces similar challenges of playing this game within the defined rules.

Makonde exports its fruits through an export agent (Cape span) and sells the other percentage to the fruit juice plant/factory Valley farm. The split between the two markets is around 40:60 and some cases 50:50. The most exported fruit is to the Japan (90%), Middle East and Russia. A small percentage goes to the local fruit market, bakkies traders.

#### 10. AGRICULTURAL LOGISTICS

Agricultural inputs (Fertilizers, chemicals, etc) will be purchased at the local suppliers such as NTK Farmers Co-op and Masingo Irrigation for input requirements. NTK Farmers and Masingo Irrigation are established suppliers of all agricultural inputs through linkages with seed companies, agrochemicals, fertilizers, diesel and general farm needs. The two depots are located at Shayandima Industrial, about 35 km from the project.

# 11. RISK ASSESSMENT/SWOT ANALYSIS

STRENGTHS	WEAKNESS	OPPORTUNITIES	THREATS
Physical			
Good road infrastructure to			Natural disasters &
the Fresh Produce Market.			diseases outbreaks
<ul> <li>Access to machinery</li> </ul>			• Fire
<ul> <li>Good water supply</li> </ul>			Electricity costs
			Load shedding
			High production costs
Institutional			
Contract and being member			Global
of the local Market and			competition
Export market			• Unfair trade,
			globally
			Citrus taking over
			citrus
			EU standards
Technical			
Some experience in Citrus	Insufficient		Market agents
farming	experience		
	&		
	knowledge		
	on Citrus		
	production		
	<ul> <li>Challenges</li> </ul>		
	with export		
	market		
	environme		
	nt		
Human			
Available labour within	• Lack of		Labour related issues
community members	capacity		e.g. strikes
			Theft and vandalisation
			of fencing.

# **CORRECTIVE ACTION TO WEAKNESSES AND THREATS**

The identified challenges will need to be addressed through on-going capacity building as elaborated under skills development section of this document. However, every opportunity need to be explored to get exposure on the marketing side of citrus to understand the system, requirements, specifications and the general processes. SEDA & the DTI can play a big role in this regard.

Other challenges will be addressed as follows:

- If extra staff is employed it will be ensured that all human resources challenges are well managed and attended to immediately to prevent losses which can be caused by strikes.
- Fire breaks will be made to prevent fire damages since the business is close to the natural veld for livestock grazing.
- Joining fire protection associations
- Insurance for the crop (Citrus & Mango)

#### 12. FINANCIAL PLAN

# 12.1. Production Capital Requirements

Production requirements are for the Citrus crop of 70 ha and include fertilizer and agrochemicals.

Crop	Cost per ha	Proposed area (ha)	Total Requirement
Citrus inputs	R28 635.00	56	R1 603 560.00
Mango	R16 980.00	14	R237 720.00
Total		70	R1 841 280.00

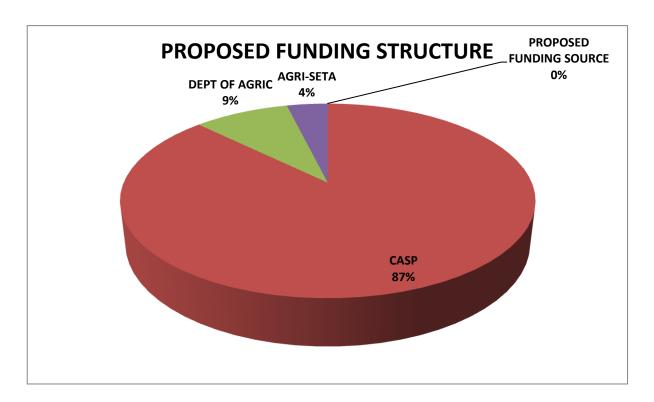
# 12.2 Total Capital Requirements

The table below gives summary of the total capital requirements of the farm for 2013/14 fiscal year. In addition to production inputs, budget allowance for mentorship costs, at a scale determined by the Department of agriculture, rural development and Environmental Affairs.

CAPITAL REQUIMENT	AMOUNT
Production requirements	R1 841 280.00
Capacity building	R100 000.00
Mentorship	R144 000.00
Macro jets and pipes 70Ha	R500 000.00
Delivery Truck	R250 000.00
Store Room	R150 000.00
Electricity Connection	R60 000.00
Drilling and equipping boreholes	R
Filters improvements	
Tractor and Boom spray	
Tractor Mower	
Harvesting Bins and trolley	
Total Capital Requirements	

# 12.3. FUNDING STRUCTURE

In the 2013/14 fiscal year, the total budget requirement for this project is R------ as indicated in the above table. This budget is considered to be the minimum requirement to revive the project's productivity and make it sustainable. The project should thereafter be self-funded. The graphic below illustrates the proposed funding model.



The above chart proposes how the project should be financed and also identifies role players. This is a special intervention where the bulk (87%) of the funding is required from CASP coffers

The project is in dire need to keep the citrus crop in better condition so that the yield outlook is improved, thus the amount capital injection required. The requested funding from CASP will only cover cost of fertilizers and chemicals. The rest of the costs will be accounted for by the farmer. These cost include young plants management of 52 ha citrus (R220 000), project overheads, irrigation, packaging, wages and salaries, etc. This is to highlight that the model doesn't cultivate or promote the dependency syndrome.

#### 12.6. FINANCIAL ANALYSIS

The economic feasibility of the project is determined by both the projected financial statements and the availability of funds from the identified funding organizations. Projected financial statements include amongst others the enterprise budgets, the income and cash flow statements. Financial requirements include funding for project equipment (implements, office equipment), fixed improvements (buildings, irrigation schemes, fence, etc), and land. Enterprise budgets have been attached at the back

of the business plan. The following is the summary of expected incomes, costs and gross margins:

ENTERPRISES	UNITS	INCOME	INPUT COSTS	GROSS MARGIN
	[ha]	(R)	(R)	(R)
Mango	14	732 160.00	567 410.45	164 749.55
Citrus	56	5 702 400.00	5 331 735.82	370 664.18
TOTAL	70 ha	6 434 560.00	5 899 146.27	535 413.73

The expected total income, input costs and gross margin to be generated from these crops is R535 413.73. These expected figures indicate that the project will be economically feasible provided there is proper management of the crop. The summary of the projected cash flow and income statements below further illustrate the economic feasibility of this project.

**CASHFLOW** 

Summary of the Cash Flow Statement for one year.

	Total	M1	M2	M3	M4	M5	M6		И7
Opening Balance		-	-490 677.17	-981 354.34	-1 415 290.46	-1 849 226.59	-1 535 583.76	-1 22	1 940
Cash Outflow	5 774 643.95	490 677.17	490 677.17	433 936.13	433 936.13	490 677.17	490 677.17	490	677.
Cash Inflow	6 434 560.00	-	-	-		804 320.00	804 320.00	804	320.
Surplus/Deficit	659 916.05	-490 677.17	-490 677.17	-433 936.13	-433 936.13	313 642.83	313 642.83	313	642.
Interest		-	-	-	-	-	-	ļ	-
@	p.a.11%								
FINAL BALANCE		-490 677.17	-981 354.34	-1 415 290.46	-1 849 226.59	-1 535 583.76	-1 221 940.93	-908	298

 contribution or grant, either way, the enterprise has the ability to repay that amount in its first year of production. Overall the financials indicate the viability of the project as the net value.

# **INCOME STATEMENT**

Summary of the projected income statement

INCOME STATEMENT FOR THE P	ERIOD	M1	ТО	M12
Cash Value of Production:				
	Poor	Expected	Good	% of TI (d)
Crops:	70%	100%	120%	
Mango	512 512.00	732 160.00	878 592.00	11%
Total (a):	512 512.00	732 160.00	878 592.00	11%
Fruits Citrus	3 991 680.00	5 702 400.00	6 842 880.00	89%
Total (b):	3 991 680.00	5 702 400.00	6 842 880.00	89%
4 504 192.00 6 434 560.00	7 721 472.00	100%		

Total (c):			
TOTAL (a + b= c)			
TOTAL GROSS MARGIN(d-g=h)			
TOTAL GROSS MARGIN (h):			

5 331 735.82	5 331 735.82	5 331 735.82	90%
5 842 856.27	5 842 856.27	5 842 856.27	99%
-1 338 664.27	591 703.73	1 878 615.73	

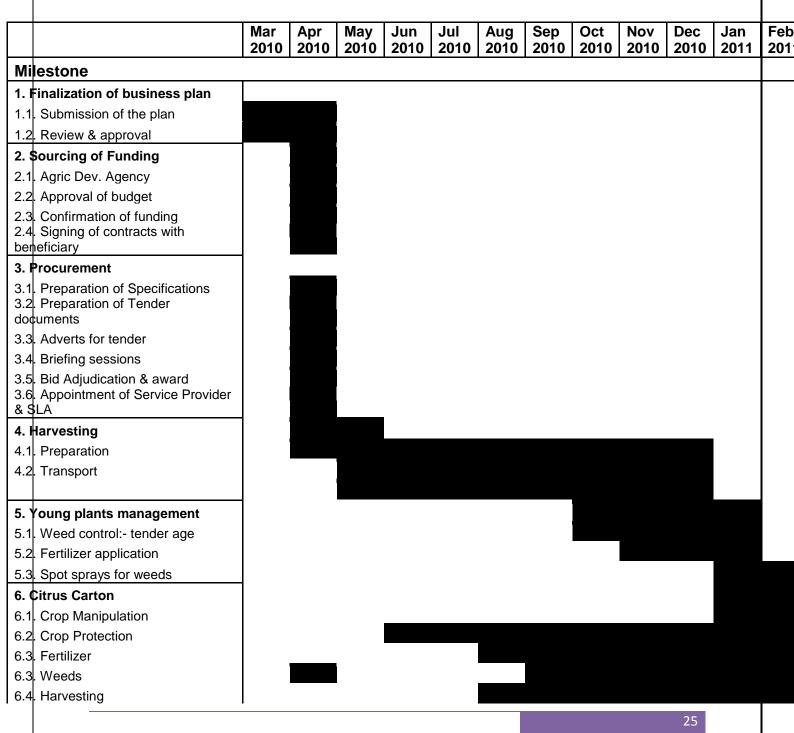
Non Directly Allocatable Costs and	d Fixed Costs:			
		Expected		% of TC(j)
Labour				0%
Miscellaneous	56 290.00	56290	56290	. 1%
Total (i)	56290	56290	56290	1%
Total Cost $(i + g = j)$	5 899 146.27	5 899 146.27	5 899 146.27	100%
NET FARM INCOME (CASH) (h-i=k)	-1 394 954.27	535 413.73	1 822 325.73	
External Factor Costs:				
Total (I):	0	0	0	
FARM PROFIT/LOSS (CASH)(k- l=m)	-1 394 954.27	535 413.73	1 822 325.73	
Minus  Total (n):  Plus				
Total (o)				
DISPOSABLE INCOME (m-n+o=p)	-1 394 954.27	535 413.73	1 822 325.73	
Living Expenses (q)				
NET DISPOSABLE INCOME(p-q=r)	-1 394 954.27	535 413.73	1 822 325.73	
Plus: Opening Bank Balance	0	0	0	
NET CASH POSITION: (r+s)	-1 394 954.27	535 413.73	1 822 325.73	•

The above projected income statement indicates three different financial positions of the proposed business enterprise; poor, expected and good. This is to indicate the influence of management capacity on the enterprise, ranging from 60-80 management units.

The analysis was made on the basis of available information; other unknown costs were left out (like existing loans). Ignoring these costs lead to the positive net cash position of the project, hence indicating that the project will be economically viable in the next financial year.

#### 13. IMPLEMENTATION PLAN

This implementation plan provides a work breakdown structure of the necessary key milestones and activities that need to be undertaken to successfully implement this project. This plan in turn helps in the monitoring of the project, ensure compliance and that deviations are corrected timeously. In developing this plan, assumption was made that funding will be made available at the beginning of the financial year, whilst processes leading to actual implementation would be started in the current financial year (2009/10).



# 9. Project Closure

- 9.1. Commissioning
- 9.2 Handing over
- 9.3. Exit

#### 14. CONCLUSION

Makonde Citrus project reflects positive balance on the cash flow circulation and the financial status (Income Statement) reflect positive figure, this proves that the business is financially viable. The financial injection will further improve the cash flow and general financial position of the business.

This business plan proposes a funding model that integrates role players, from technical side as well as capacity building. The required intervention is very simple, provision of fertilizer and agrochemicals for the maintenance of a citrus crop.

The proposed funding model is an attempt to avoid complete financial dependency of the project from grants and state support. Hence, some of the budget will come from the projects proceeds of the project (citrus ration management costs and project's operational costs) in the new season, 2013/14. CASP requested accounts for 87% of the project budget.

#### **ANNEXURE REFERENCES**

ANNEXURE 1: PROJECT FUNDING PLAN

ANNEXURE 2: ANALYSIS OF ECONOMIC VIABILITY

ANNEXURE 3: LOCATION MAP

ANNEXURE 4: LEGAL DOCUMENTS – BBS FARMING ENTERPRISE CC

ANNEXURE 5: BIORESOURCES INFORMATION

# **ANNEXURE 1:**

	BUDGET [R]	PERCENTAGE OF TOTAL COSTS	PROPOSED FUNDING SOURCE
CITRUS INPUTS	940 855.00	87%	CASP
MENTORSHIP	144 000.00	9%	DEPT OF AGRIC
TRAINING	61 855.00	4%	AGRI-SETA
TOTAL	1 146 710.00	100%	

# PROJECT FUNDING PLAN

ANNEXURE 2:

ANALYSIS OF ECONOMIC VIABILITY

	Gross Margin Analysis For Citrus					
Income		Crop/HA	Crop/Ha	Farm Area		
	Yield (t.c/ha.u.c.)	50	50	50		
	Area (ha	1	1	52		
	Tons	50	50	2600		
	RV ton @ 12.2%	6.4	6.4	332.8		
	RV/ton	R 2 200.00	R 2 200.00	R 2 200.00		
	Citrus Income	R 14 080.00	R 14 080.00	732 160.00		
Total Income		R 14 080.00	R 14 080.00	732 160.00		
Ratoon Costs	На	1	0.9	46.8		
	Fertilizer	R 3 640.00	R 3 276.00	R 170 352.00		
	Chemicals	R 521.28	R 469.15	R 24 395.70		
	Labour	R 208.00	R 187.20	R 9 734.40		
	Fuel and Maintenance	R 37.00	R 33.30	R 1 731.60		

	Sub-total	R 4 406.28	R 3 965.65	R 206 213.70
		_	_	
Establish Costs	Ha	1	0.1	5.2
	Land Preparation	R 4 200.00	R 420.00	R 21 840.00
	Young plants	R 3 200.00	R 320.00	R 16 640.00
	Hand Planting	R 1 100.00	R 110.00	R 5 720.00
	Fertilizer	R 5 204.00	R 520.40	R 27 060.80
	Weed Control	R 781.91	R 78.19	R 4 065.95
	Sundries	R 500.00	R 50.00	R 2 600.00
	Sub-total	R 14 985.91	R 1 498.59	R 77 926.75
	_	_		
Harvest Costs	Tons	1	50	2600
	Cutting Infield Loading &	R 14.00	R 700.00	R 36 400.00
	Transport	R 11.80	R 590.00	R 30 680.00
	Road Transport	R 55.00	R 2 750.00	R 143 000.00
	Sundries	R 3.50	R 175.00	R 9 100.00
	Levies	R 3.00	R 150.00	R 7 800.00
	Sub-total	R 87.30	R 4 365.00	R 226 980.00
Total Operating Exp	penditure	R 19 479.49	R 9 829.24	R 511 120.45
Tatal One as				
Total Gross Margin		R -5 399.49	R 4 250.76	R 221 039.55
J				
Less: Collective Overheads		R/Ha		
	Permanent labour	R 528.00	R 528.00	R 27 456.00
	Sundries	R 70.00	R 70.00	R 3 640.00
	Insurance: crop	R 4.50	R 4.50	R 234.00
	Management	R 480.00	R 480.00	R 24 960.00
Total Overheads		R 1 082.50	R 1 082.50	R 56 290.00
Net Income		-R 6 481.99	R 3 168.26	R 164 749.55

# **GROSS MARGIN: CITRUS**

INCOME	VALUE/COST/HA	FARM AREA
Citrus		135
	42	5 702
TOTAL INCOME	240.00	400.00

CITRUS COSTS			
Crop Manipulation			33
Crop Protection	250.00	750.00	1 215
Crop Protection Chems	9 000.00	00.00	1 213
- Citemie	0 000.00	000.00	168
Electricity	1 250.00	750.00	
Fertiliser	2 500.00	500.00	337
1 Cruii3Ci	2 300.00	300.00	405
Fuel and lubes	3 000.00	000.00	
Inquiron oo	F 000 00	000.00	675
Insurance	5 000.00	000.00	
Levies: Other		-	
Levies:CGA, CSA,		04.00	
NCGA	0.60	81.00	168
Medical	1 250.00	750.00	100
			2
Packing	19.00	565.00	
Picking		_	
<u> </u>			168
Protective Clothing	1 250.00	750.00	
Pruning		_	
Training			40
R&M Irrigation	300.00	500.00	
R&M Tractors	1 000.00	000.00	135
TOWN TRACTORS	1 000.00	000.00	13
R&M Trailers	100.00	500.00	
R&M Vehicles	4 000 00	000.00	135
Raivi veriicies	1 000.00	000.00	13
R&M Workshop	100.00	500.00	
Colorino	7.500.00	E00.00	1 012
Salaries	7 500.00	500.00	81
Consulting- Irrigation	600.00	00.00	01
Transport	2.50	337.50	13
Wages: Harvesting	100.00	500.00	13
Ţ.	- 3100		405
Wages: Production	3 000.00	000.00	04
Water	600.00	000.00	81
- 1	000.00	230.00	101
Weedicides	750.00	250.00	

TOTAL Citrus Costs	R 38 572.10	R 5 207 233.50
GROSS MARGIN	R 3 667.90	R 495 166.50