RUAF Foundation
RESOURCE CENTRES ON URBAN AGRICULTURE & FOOD SECURITY

Thuthukani Broiler Producers

Business Plan

Municipal Development Partnership
MDP

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EXECUTIVE SUMMARY

The proposed Thuthukani broiler project aims to produce 2000 broilers per cycle that will be graded according to weight (1.2kg – 2kg) and according customers' preferences; packaged, labeled, priced and sold to the potential buyers in Bulawayo. These broilers will either be sold whole or as cutlets and would be supplied to 2 hotels, 2 restaurants, individual bulk buyers and 3 supermarkets. Thuthukani broiler project has 100 farmers who are managing the from seed to table [F.S.t.T] innovation project and these will be working in groups of 25 and each of the 4 groups of 25 farmers is expected to produce 500 broilers per cycle.

The initial investment for the project is estimated to be US$ 29260.00, which includes US$17 336.00 in construction, US$ 7900.00 in working capital and US$ 4024.00 in equipment.

The average annual net profit is expected to be USD 5568.00 and the average net profit margin is expected to be 13 % and a pay back period of 5 years 3 months. Thuthukani broiler project will start to realise profits in the first year of its trading but it will not pay out dividends during this period. In year one Thuthukani broiler project has to produce 838 broilers to break even.

A worst case scenario is taken by assuming that the price of broiler chicken is decreased from US$2.00/kg to US$ 1.80, the business will have average profitability of US$1715 .00annually and a pay back period of 17 years 8 months.

The best case scenario is taken by assuming that the price of broiler chicken is increased from US$ 2.00 to US$ 2.20, the business will have an average profitability of US$ 9447.00 annually and a pay back period of 3 years 1 month.

In order to achieve satisfactory results and minimize labour costs, Thuthukani broiler project will be managed by the producers themselves with the assistance F.S.t.T team and technical partners.

1.0 Abbreviations and Acronyms

Table 1: Abbreviations and Acronyms

BCC	Bulawayo City Council
F.S.t.T	From Seed to Table
MoPO	Most Promising Option
MDP	Municipal Development Partnerships
RUAF	Resource Centres on Urban Agriculture and Food Security
UPFS	Urban Producer Field Schools
SWOT	Strength, Weaknesses, Opportunities and Threats
ZOU	Zimbabwe Open University

2.0 BUSINESS IDEA

The Most Promising Option (MoPO) for the Thuthukani broiler project is broiler production and will entail production, processing and marketing broilers that have been dressed, graded according to weight (1.2kg – 2kg), packaged, labeled and sold in large quantities (20kg+) as chicken cuts or whole to supermarkets, hotels, and restaurants in Bulawayo. Broiler production has not been practiced before, meaning that broiler production will start from a zero base.

The innovation in the broiler production will be organised as follows:

Processing and Grading: The dressed broilers will be weighed and graded according to the weights and standards that meet the market requirements. The market analysis results showed that hotels and restaurants preferred whole broilers weighing between 1.2 kg and 1.5kg while the supermarkets preferred those weighing 1.2kg up to 2kg. The supermarkets also registered interests in broiler mixed cutlets and specific cuts of 250g, 500g, 750g, 1kg, 1.5kg and 2kg.

Packaging: The whole broilers will be packed in plastic bags while the pieces will be packed in Kalite half boxes with the top sealed with cling paper. All the products will be labeled with the brand name, weight, and price and expiry date.

Marketing: The broiler producers will have to produce a quality that is preferred by their potential buyers and that is above usual market standards. There will be need for periodic market research to maintain customer conformity and determine current preferences. The producers will also go out to supermarkets and advertise their special broiler through tasting and giving free samples. Pamphlets will also be distributed at strategic points.

Training and capacity building: The producers will receive training mainly through UPFS and from the technical partners on the best production methods. Capacity building will be an ongoing activity that will be based on baseline surveys, monitoring and evaluation results by experts and self/peer evaluation among producers themselves.

3.0 PROJECT DESCRIPTION

The project aims to produce 2000 quality broiler chickens per cycle that meet the customers' expected standards. The fowl run space will be leased from Bulawayo City Council. Farmers will construct the fowl run to house 2000 broiler chickens in batches of 500 per group of 25 producers, 1 administration office, 2 brooders and 1 slaughter room at gum-plantation site. Clean water supply will be from the Bulawayo City Council. The project has 100 producers who have been recruited on a voluntary basis into the broiler production F.S.t.T innovation project. The broiler producers likewise will be organized into four groups of twenty-five to manage 500 chickens in each compartment. The project has been designed to ensure reasonable net profit for the producers in the 18 months phase.

MDP/RUAF and World Vision will assist with seed money for inputs and the producers are expected to pay back the money after they have sold the broilers and they have made reasonable profit to be able to sustain the project and at the same time earn a living. This fund will be a revolving fund which should be passed onto new producers who intend to start an F.S.t.T innovation project

4.0 MARKETING STRATEGY

Due to low production and input shortages of chicks and feeds, people in Bulawayo are now consuming some broiler chickens that are produced in neighbouring countries like South Africa and Botswana. The findings from the market analysis revealed that most customers do not like the taste of these imported chickens. They were described as *fatty and tasteless.* This finding underscores a need to augment efforts of the local broiler producers and to increase the supplies of home grown broilers. In addition, Thuthukani producers have to take an additional step and produce a quality broiler that their potential buyers want**.**

4.1 Competition

The main local competitors for this project are Drummonds, Irvine, Mandalay and other small scale producers. There are also chicken brands important from regional countries which are slightly cheaper but customers do not favour their quality. These competitors are capable of cutting down their price so as to attract the customers. They are also capable of providing good packaging for their products.

4.2 Target markets

The project will target 3 Supermarkets, 2 Hotels, 2 restaurants and individual bulk buyers. However the project is envisaged to expand and provide supplies to 3 Boarding schools, 3 hospitals, 1 prison, 4 hotels and 5 supermarkets as well as regional supermarkets and hotels. This entails frequent markets analysis in order to determine production quantities and qualities and ensure consistence, reliability and trust on the product

4.3 Presentation

Thuthukani broiler project will offer quality broilers to its customers in terms of taste, size presentation and price. In addition to whole chickens will produce packed chicken cuts of 250g, 500g, 750g and 1kg and 2kg so as to accommodate all its customers.

4.4 SWOT Analysis

The table below shows the Strengths, Weaknesses, Opportunities and Treats of the intended broiler production

Table 2: SWOT Analysis

Strength	**Weakness**
-One of the advantages offered by Thuthukani broiler project is that it will produce chickens of high quality and it will also provide continuous supply of broilers to its customers. -Bedding is readily available from the site -Integration of different projects is possible for example poultry and crop production - Labour is readily available and will be provided by the farmers and their families at no costs - Land and water has been provided by BCC at minimal cost. - The project has taken cognisance of social inclusion factors in terms of gender, social status (widow/widower/orphans) and adolescents	-There is no electricity at the site and this will make some operations difficult. - Project members live very far from the project site and this makes some routine operations difficult.
Opportunities	Threats
- Thuthukani broiler project will create employment for many producers as they will get income from the retained earnings - When the product is advertised well the market share will increase hence the profits will also increase. - There is room to expand production to road runners ,layers and rabbit production - Broilers will be produced organically as most consumers prefer organic products. - Presence of BCC game rangers will provide some security at the project site.	*Construction costs* High initial investment is require for the construction of the fowl run, brooders, store room, slaughter house and offices *Competition* There are many competitors for this project, and this will require the Thuthukani broiler producers to produce broilers of high quality and introduce innovations that are have not been introduced by their competitors. *Predators* The project site is very far from the producers' homesteads and there are chances that predators may be a problem

5.0 OPERATIONAL PLAN

Table 5.1.1 shows the calendar for broiler production. Each cycle should be 6 or 8 weeks depending on the weight of the chickens that is on order. The average number of production cycles is estimated to be 5.5 per annum taking into account the disinfection period of 10 days before putting new chicks. The management and coordination of the plan will be done by the producers through the management committee and assistance of the FStT team (Figure 6.1.1). Labour will be provided by the producers themselves

Table 3: Seasonal calendar for boiler production

Age of chicks			Day old	1 week	2 weeks	3 weeks	4 weeks	5 weeks	6 weeks	7 weeks	8 weeks
Activities	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
Preparation: collection of materials, booking chicks and disinfections of the brooder house											
Collection and brooding of chicks, commence starter feeds disinfections of poultry house											
Transfer 2 week old chicks to the poultry house											
Change over of feed											
Organize slaughtering facilities											
Slaughtering, dressing and marketing											
Booking of chicks											
Preparation: collection of materials and disinfections of the brooder house											
Collection and brooding of chicks, commence starter feeds and disinfections of the poultry house											
Transfer 2 week old to the poultry house											
Change of feed											
Organize slaughtering facilities											
Slaughtering, dressing and marketing											

5.1 Production process

The broiler producers will procure their one day old chicks and feeds from Irvines or Ross chicks and Bulawayo one-day-old chicks. The other inputs will be procured from hardware shops, supermarkets and pharmacies. Day old chicks would be managed in the brooders for 2-3 weeks before they are transferred to the fowl run. During the brooding period chicks should be properly fed and given vaccinations in order to keep them in good health. The cycle covers a period of approximately 56 days. After the cycle is complete the fowl run is cleaned and disinfected for 10 days. Proper types of feeds and proper feeding practices have to be adhered to in order to ensure expected maturation at the expected time. Monitoring the chicks for diseases and growth will be an on going process.

5.2 Processing and Grading

After maturation the chickens will be transferred to the slaughter room where they will be dressed using the plucking machine .They will then be graded according customers' preferred weights and stored in the freezer till deliveries to the customers. Those weighing 1.2kg -1.5kg would be supplied to the hotels and restaurants while those which weigh 1.2 up to 2kg will be delivered to supermarkets as they require an assortment of weights for customers to choose from. The chicken cuts will be supplied to the supermarkets and individual customers.

5.3 Transportation

Some customers will collect their chickens while others may request deliveries. Deliveries at a cost will only be done for customers without transport who order mainly 20 broilers or more. Initially the producers will use hired transport until such a time when they have purchased their own delivery truck. All the products will be delivered on time so as to satisfy the customers.

5.4 Pricing and labeling

Pricing will be at US$2.00 /kg and labeling will indicate the organizational logo and contact details, weight, best before date and the price of the pack.

5.5 Marketing

The producers will promote their products through use of leaflets and supermarket displays. The marketing department will take orders before the cycle starts through individual personal phones and from those coming to the site. Eventually there will be a need to open an outlet shop at the site where they will be selling dressed and live chickens as well as chicken offals.

6.0 ORGANIZATIONAL PLAN

6.1 Internal organizational structure

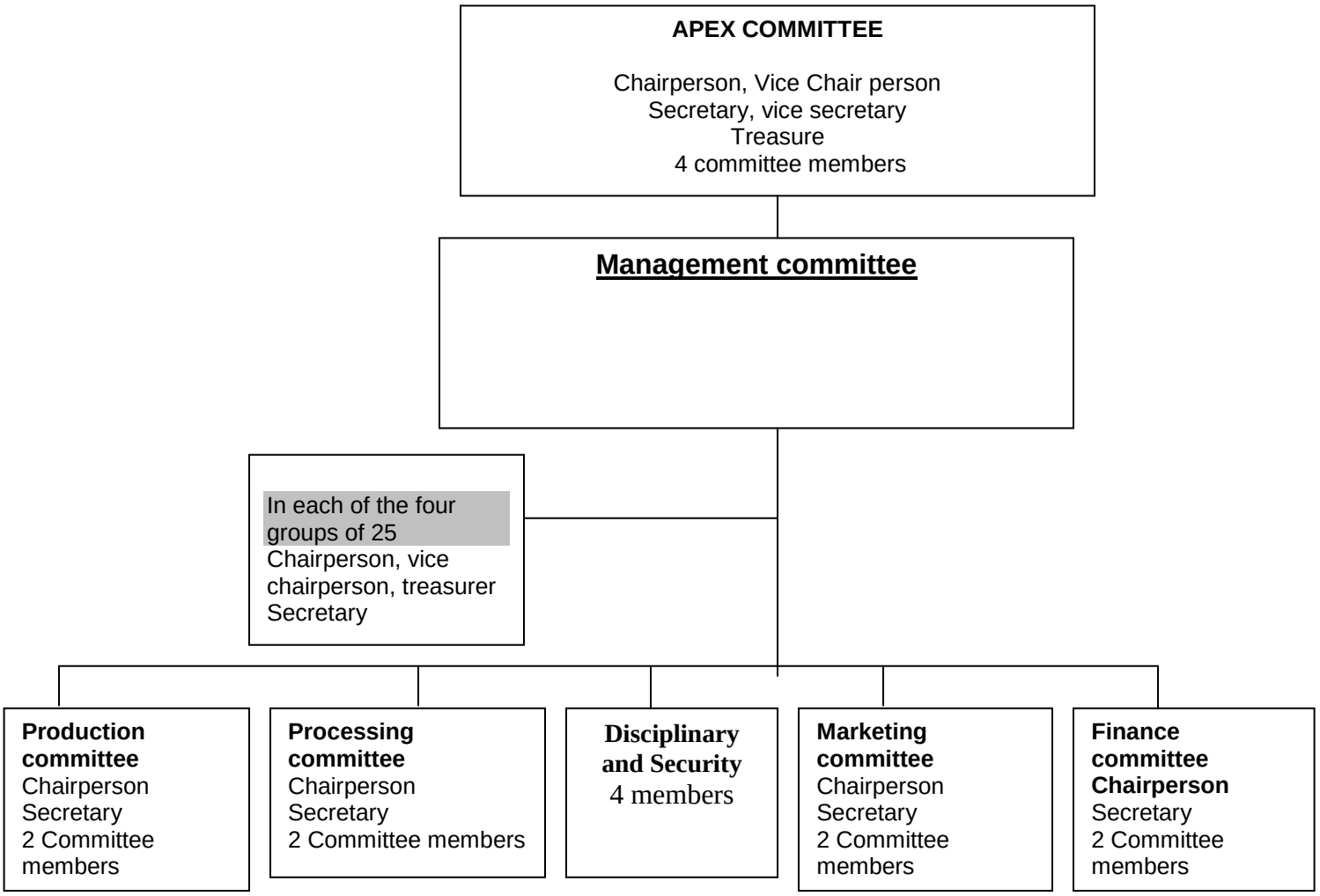

Figure 1: internal organizational structure

Management Committee

Management committee will comprise 4 chairpersons from each of the 4 groups of 25. The management committee will appoint a chairperson, vice chairperson, secretary and treasurer. This committee will be involved in the coordination and management as well as making the overall decisions. It will ensure implementation of the producers' objectives and activities. This committee will be expected to report to the Apex committee which represents 1080 farmers at Gum plantation.

Committees in groups of 25

Each group of 25 producers will also have chairperson who is a member of the management committee, vice chair person, secretary, treasurer. This committee will be responsible for coordinating and ensuring implementation of the activities for the project in that group.

Disciplinary committee

The disciplinary and security committee looks and resolves issues of discipline and security within the broiler production project. It will consist of four members drawn from each group of 25 members .This committee is involved in keeping of peace and law within the organization and good public relations.

Production committee

It will consist of four members drawn from each group of 25 members. The group will support and promote production by ensuring construction of fowl runs, brooders, store rooms and procurements of inputs. It will also be involved in keeping all the production records and maintain accurate records of chicks that have been purchased; mortality rate, growth rate, breed, and inventory of stock. It will also be responsible for slaughtering of broilers and proper disposal of bi products according to health requirements.

Processing committee

This committee will consist of four members drawn from each group of 25 members .These will be involved in all the processing activities of grading, pricing, packaging, and labeling of broilers. Broilers will be graded according to weights and customers' preferences. Pricing will be at US$2.00 /kg and labeling will indicate the organizational logo and contact details, weight, best before date and the price of the pack.

Marketing committee
It will consist of 4 members drawn from each group of 25 members. This committee will be involved in advertising, tenders, contracts supply and delivery of broilers.

Finance committee

The committee will consist of 4 members drawn from each group of 25 members. It will be involved in costing, budgeting, procurement of inputs and fund raising. It will also be responsible for keeping of financial records, allocation of funds, decision making in finance and group saving schemes. This group will be responsible for supervising and monitoring financial records of the 4 groups; it will be answerable to the management committee and is subject to internal or external auditing at regular intervals.

6.2 Partner strategy

The following are some of the key strategic partners for the successful implantation of the broiler FStT innovation project;
Bulawayo City Council will be useful in facilitating the acquisition of land to put up the fowl run structures, permits, leases and bylaws in order to legalize the existence of the project. Bulawayo city council is also in envisaged to play a critical role in the provision of water.

AGRITEX, Livestock Department and Veterinary Services are Government departments that are responsible for providing technical support to the broiler producers that will facilitate proper feeding practices, disease prevention and pests control measures, proper record keeping of key information and statistics.

World Vision Zimbabwe will be responsible for the coordination and implementation of the FStT broiler production innovation project.

SNV will be responsible for facilitating and coordinating the MSF activities and market linkages.

Zimbabwe Open University (ZOU) will be responsible for research and capacity building programmes, inbuilt monitoring, as well as monitor the impact of the project and report results in a systematic and coherent way.

MDP/ RUAF is responsibility for funding the F.S.t.T broiler production innovation project.
Urban producer farmer organizations will be responsible for planning and management of the broiler project and will provide onsite labour for all the activities. This will promote ownership and hence the sustainability of the project.

Other broiler producers
These are broiler producers in Bulawayo who are already into broiler production who will assist in providing a look and learn environment in their project sites. Thuthukani broiler producers will be expected to visit these other broiler producers' projects' sites and observe each and every step of the broiler production cycle.

7.0 FINANCIAL PLAN

This section details calculations, assumptions and methodologies used as a foundation for the projections of the expected financial performance of Thuthukani broiler project

7.1 Initial Investment

The below table (7.1.1) shows different funds required for the establishment of Thuthukani broiler project.

Table 4: Initial investment

Investment requirements				
Descrption		**Quantity**	**unit rate (US$)**	**Total (US$)**
Construction of fowl run				
Land	Square metres	600	2	1200
Wire mesh	Roles	4	200	800
Cement	Bags	200	10	2000
Bricks	Bricks	2000	1	2000
Polythene plastic	Roles	3	210	630
Pit sand	Cubic metres	4	60	240
River sand	Cubic metres	4	60	240
Gum poles	poles	50	8	400
Paddolcks	Paddolcks	9	7	63
Door frames	Frames	9	40	360
Doors	Doors	9	14	126
Quarry stone	Cubic metres	3	210	630
Asbestos	Sheets	50	21	1050
Roofing timber	metres	300	4.2	1260
Roofing nails	Kg	50	7.5	375
DPC	DPC	4	7	28
Reinforce materials	Roles	25	5.6	140
Electrictity		1	4900	4900
Labour				894
Total				**17336**
Working Capital				
Chicks	Chicks	2000	0.6	1200
Feeds- Starter	50Kg bags	40	25	1000
finisher	50Kg bags	120	25	3000
Vet costs	50g/100ml	100	5	500
Packaging materials		2000	0.1	200
Labour				2000
Total				**7900**
Equipment				
Feeders		40	15	600
Drinkers		40	15	600
Infrared light		4	30	120
Knives		8	2	16
Buckets		12	5	60
Swabs		24	2	48
Scale		4	20	80
Deep frezeer		2	1000	2000
Plucking machine		1	500	500
Total				**4024**
TOTAL INVESTMENT COST				**29260**

The initial investment for the project is estimated to be US$ 29260.00, which includes US$17 336.00 in construction, US$ 7900.00 in working capital and US$ 4024.00 in equipment.

7.2 Assumptions

The following are the assumptions for the income statement (see table 7.1.2)

Table 5: Assumptions for the income statement

Maintanance expenses	0.1% of sales
General Expenses	0.2 % of sales
Cost of goods sold	25 % of sales
Price of chickens	US$2 /Kg
Average weight	2 Kg
Mortility rate	5%
Annual increase in price is assumed to be	1%
Number of chicks per year	11000
Number of cycles per year	5.5
Cost of chicks	US$0.60 /bird
Cost of feed per chick	US$1.50
Annual increase in price is assumed to be	1%
Dividends	50%
Tax rate	7%
Heat and light	1% of electricity cost

The production cycle for the project is 66 days, of which 56 days is for the actual production and 10 days for disinfection of the fowl runs until the next cycle has commenced, therefore there are approximately 5.5 cycles in a year. The average weight of the birds is estimated to be 2 kg and sold at a price of US$2.00 /kg. The mortality rate of 5 % is also taken into account even though it might be lower than 5 % or higher if there is poor management. Thuthukani broiler project will start to pay out dividends in the second year of its trading period at 50 % of the net profit. Thuthukani broiler project will also pay corporate tax at 7 %.

7.3 Projected income statement

This is a profitability statement showing the profit or loss from Thuthukani broiler project(see table 7.1.3)

Table 6: projected income statement

Income statement	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Sales	9880	42218	42640	43067	43497	43932	44372
Total Revenue	9880	42218	42640	43067	43497	43932	44372
Cost of goods solds	2470	10555	10660	10767	10874	10983	11093
Total cost of goods sold	2470	10555	10660	10767	10874	10983	11093
Gross profit	**7410**	**31663**	**31980**	**32300**	**32623**	**32949**	**33279**
Gross profit margin (%)	**75**	**75**	**75**	**75**	**75**	**75**	**75**
Cost of chicks	1560	6333	6396	6460	6525	6590	6656
Cost of feed	3900	15832	15990	16150	16311	16475	16640
Heat and light	49	49	49	50	51	50	51
Vet costs	112	480	485	489	494	499	504
water	30	30	30	30	32	32	32
Labour	1300	1900	1900	1901	1901	1901	1903
Maintainance expenses	94	120	140	160	180	200	220
Rent	30	31	31	31	32	32	32
Adrevrtising	10	42	43	43	43	44	44
General expenses	20	84	85	86	87	88	89
Total expenses	7105	24901	25150	25401	25655	25911	26171
Profit be for tax	**305**	**6762**	**6830**	**6899**	**6968**	**7038**	**7108**
Tax	21	473	478	483	488	493	498
Net profit /loss	**284**	**6289**	**6352**	**6417**	**6480**	**6545**	**6611**
Net profit Margin (%)	**3**	**15**	**15**	**15**	**15**	**15**	**15**

Thuthukani broiler project is expected to realise an average net profit of US$ 5568.00 and an average net profit margin of 13%.

7.4 Balance sheet assumptions

The following are the assumptions for the projected balance sheet (see table 7.1.4)

Table: 7.1.4 balance sheet assumptions

accounts receivable	Sales for one cycle
Inventory	75 % of cost of goods sold
Expenses payable	45% of cost of feed

Inventory will be at 75 % of cost of goods sold and expenses payable will be at 45 % of the cost feed.

7.5 Projected balance sheet

The following is the projected balance sheet for Thuthukani broiler project (see table 7.1.5)

Table 7: Projected balance sheet

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Assets							
Cash and Bank	4231	4466	10716	15966	22073	28214	34385
Accounts receivable	7600	7676	7753	7830	7909	7988	8068
Inventory	1853	7916	7995	8075	8156	8237	8320
Total current assets	**13684**	**20058**	**26464**	**31872**	**38137**	**44439**	**50772**
Land	1200	1200	1200	1200	1200	1200	1200
Deep Frezeer	2000	2000	2000	2000	2000	2000	2000
Pluckiing machine	500	500	500	500	500	500	500
Construction	16136	16136	16136	16136	16136	16136	16136
Equipment	4024	4024	4024	4024	4024	4024	4024
less depreciation	-3727	-3737	-3744	-3744	-3744	-3744	-3744
Net Fixed assets	**20133**	**20123**	**20116**	**20116**	**20116**	**20116**	**20116**
Total Assets	**33817**	**40181**	**46580**	**51988**	**58253**	**64555**	**70888**
Liabilities							
Expenses payable	1755	1773	1790	1808	1826	1845	1863
Creditors	765	1141	1154	14503	20687	26905	33155
owners' account	1753	1718	8024				
Total current liablities	**4273**	**4632**	**10968**	**16311**	**22513**	**28750**	**35018**
Capital	29260	29260	29260	29260	29260	29260	29260
Retained earnings	284	6289	6352	6416	6480	6545	6610
Total long term liabilities	**29544**	**35549**	**35612**	**35676**	**35740**	**35805**	**35870**
Total Liabilities	**33817**	**40181**	**46580**	**51987**	**58253**	**64555**	**70888**

Statement of retained earnings	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
Retained earnings at 1 January 2009	0	284	3225.55	6196.6	9404.6	12644.6	15917.1
Net profit(loss) for the year	284	6289	6352	6416	6480	6545	6610
Dividends	0	3347.45	3380.95	3208	3240	3272.5	3305
Retained earnings at 31 December	**284**	**3225.55**	**6196.6**	**9404.6**	**12644.6**	**15917.1**	**19222.1**

Thuthukani broiler project is expected to start distributing dividends in the second year at US$ 3347. 45 and year seven at US$ 3305.00

7.6 Ratio Analysis

Table 7.1.6 shows accounting ratios used by Thuthukani broiler project. These ratios are used to test the profitability, liquidity and stability of the project

Table 8: Ratio analysis

Ratio analysis	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Liquidity ratios							
Current ratio	3.2	4.3	2.4	2.0	1.7	1.5	1.4
Acid test ratio	2.8	2.6	1.7	1.5	1.3	1.3	1.2
Working capital	9411	15426	15496	15561	15624	15689	15754
Profitability ratios							
Gross profit margin (%)	75	75	75	75	75	75	75
Net profit margin(%)	3	15	15	15	15	15	15
Stability ratios							
Return on assets	0.01	0.16	0.14	0.12	0.11	0.10	0.09
Return on capital invested	0.01	0.22	0.22	0.22	0.22	0.22	0.23

The working capital for Thuthukani broiler project will be increasing from USD 9411.00 in year I to USD 15 754.00 in year 7. Working capital is the capital required to finance the business current assets (that is circulating capital which results in the creation of profits). Acid test ratio measures the ability of Thuthukani broiler project to meet its immediate claims without resorting to selling inventory. In year 1 the acid test ratio will be 2. 8 and it will decrease to 1.2 in year 7. Return on capital invested will be rising from 0.01 in tear 1 to 0.23 in year 7 and this is due to escalating profit levels. Return on assets shows how much profit Thuthukani broiler project is able to achieve from the use of its assets.

7.7 Projected cash flows

Table 9 shows the summary of cash inflows and outflows for Thuthukani poultry project.

Table 9: projected cash flows

Statement of cash flows	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
Net income	284	6289	6352	6416	6480	6545	6610
Adjustments to reconcile net income to cash provided by operating activities							
Depreciation	3000	3000	3000	3000	3000	3000	3000
Changes in receivables	-7600	-76	-77	-77	-79	-79	-80
Changes in inventory	-1853	-6063	-79	-80	-81	-81	-83
Changes in creditors	729	13	8	8	9	10	11
Changes in payables	1753	20	17	18	18	19	18
Total adjustments	**-3971**	**-3106**	**2869**	**2869**	**2867**	**2869**	**2866**
Cash provided by operating activities	**-3687**	**3183**	**9221**	**9285**	**9347**	**9414**	**9476**
Cash flows from investing activities *Capital expenditure*							
Investment in fixed assets	-21360	0	0	0	0	0	0
Net cash used in investing activities	**-21360**	**0**	**0**	**0**	**0**	**0**	**0**
Cash flow from financing activities							
Capital injection	29260						
Dividends distributed	0	-3347	-3381	-3208	-3240	-3273	-3305
Cash provided by financing acitivies	**29260**	**-3347**	**-3381**	**-3208**	**-3240**	**-3273**	**-3305**
Cash at the beginning of the year	0	4213	4049	9889	15966	22073	28214
Changes in cash	4213	-164	5840	6077	6107	6141	6171
Cash at the end of the year	4213	4049	9889	15966	22073	28214	34385

Thuthukani broiler project will start to realise profits in the first year of its trading but dividends will only be paid from the year 2 onwards.

7.8 Break- even analysis

Table 7.1.8 shows the volumes needed for Thuthukani broiler project to break even. In year one Thuthukani broiler project has to produce 838 broilers to break even.

Table 10: Break even analysis

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Total Revenues	9880	42218	42640	43067	43497	43932	44372
Total variable costs	5681	22850	23080	23266	23500	23734	23972
Total Fixed costs	1424	2050	2071	2135	2155	2178	2199
Break even volume	838	1206	1218	1256	1268	1281	1294

7.9 Sensitivity analysis (see table 7.1.9)

It is a planning tool or technique for assessing the impact of changes on costs, benefits, and net gains.

A worst case scenario is taken by assuming that the price of broiler chicken is decreased from US$2.00 /kg to US$ 1.80, the business will have average profitability of US$1715 .00 annually and a pay back period of 17 years 8 months.

The best case scenario is taken by assuming that the price of broiler chicken is increased from US$ 2.00 to US$ 2.20, the business will have an average profitability of US$ 9447.00 annually and a pay back period of 3 years 1 month.

Table 11: Sensitivity analysis

Sensitivity analysis	Worst case	Most likely	Best case
Average net profit	US$1715	US$ 5568	US$ 9447
Average net profit margin	3.50%	13%	21%
Pay back period (years)	17 years 8 months	5 years 3 months	3 Years 1 month

8.0 RECOMMENDATIONS AND KEY SUCCESS FACTORS

In order to achieve good results Thuthukani broiler project must ensure that:

- Proper fowl run structures are constructed so that the incidence of predators are minimised.
- Chicks are purchased from reliable suppliers to obtain stock that is free from diseases and deformities.
- There is regular vaccination to avoid contamination
- Proper disinfection of the structures and disposal of bi-products to avoid infections
- Effective UPFS session during each production cycle

9.0 ECONOMIC IMPACT EVALUATION

Thuthukani broiler project is envisaged to empower the producers with expert knowledge and skills in the practical production, processing and marketing of quality broilers. In turn their economic, social, health and nutritional status will improve.