ETHEKWINI MUNICIPALITY

AGRICULTURAL MANAGEMENT UNIT (AMU)

STRATEGIC PLAN

Version 1a - 29 April 2010



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Glossary

- AMU = Agricultural Management Unit
- CSI = Corporate Social Investment
- DAERD = KZN Department of Agriculture, Environment &
- **Rural Development**
- DEDT = KZN Department of Economic Development &

Tourism

DHS = KZN of Human Settlements

DoE = KZN Department of Education

LEISA = Low External Input Sustainable Agriculture

KZN = KwaZulu-Natal

1. PLANNING CONTEXT

1.1 Introduction

This is the first forward planning report for the newly established eThekwini AMU. The need for this type of report is evident from the decision by eThekwini to establish a dedicated AMU to help address its service delivery to tackle poverty. In order to effectively deliver its mandate, the AMU needs to secure resources to implement its Agricultural Development Programme.

More especially, the agrarian economy has an invaluable contribution to make to alleviate poverty within eThekwini, firstly, because land is accessible, secondly, because of the favourable climatic conditions, and thirdly, because it is the easiest economic entry level to address the basic needs of any developing community. The agrarian economy therefore provides a great opportunity to address poverty relief by delivering through the provision of food security and agriculture based local economic development.

The first section of this report provides the planning context by summarising the essentials of sustainable agriculture; the likely development scenarios; the assessment of agricultural development needs; and, a planning process to manage service delivery.

The second section outlines the approaches to sustainable agriculture by introducing firstly the concepts for, and thereafter, an outline of an emerging policy for sustainable agriculture.

The third section builds up the strategic framework for the AMU by drawing from a hierarchy of planning sources which provide the background context for the AMU vision, mission, values, objectives and critical success factors.

The fourth section converts the critical success factors into the AMU development programmes, together with action plans and delivery models.

The fifth section describes the organisational resources required by the AMU to deliver its Strategic Plan. This includes the proposed organisational structure and its roles and responsibilities.

The sixth section produces some funding scenarios for an optimistic future with abundant funding and a frugal future with minimalistic funding that will guide decision makers to make funding commitments.

1.2 Development Scenarios

It is safe to assume that a community that is able to feed itself and is not hungry, is a healthy and generally happy community. This is a very broad generalisation, but one does not need much evidence to compare the likes of the Cuban agrarian economy with those that have embraced the so-called "Green Revolution". There is now overwhelming evidence that the Green Revolution has failed. This is because of unsustainable dependence on fossil based fuels, and derivatives thereof in the form of fertilizers and pesticides, not to mention the vast food travel miles from the farmers field, to the resource intensive agro-processing, to eventually the food plate.

In comparison, Cuban agriculture was transformed by necessity when it could no longer depend on fossil fuels. This Cuban revival is a major success story that was rooted in the re-establishment of sustainable agricultural practices based on organic farming and Permaculture methods. To this end, the development scenarios postulated overleaf explain the possible consequences of unsustainable agricultural practices.

Development Scenarios



1.3 Needs Assessment

To estimate the backlog of needs to address food security can be quite an undertaking if a physical survey is required. There is scant information to accurately estimate this backlog, especially when there is little acknowledgement that factors such as bad nutrition lead to malnutrition and the compromise of peoples' immune systems, and from there, the onset of HIV / AIDs. However, this downward spiral of peoples' health is more than often a lack of food security and good nutrition.

DAERD recently estimated that some 500,000 people in KwaZulu-Natal (KZN) are vulnerable to lack of food security. Given the approximate 10,0m people in KZN, this means that some 5% of households lack food security. The eThekwini Municipality is home to at least 3,5m people, or 35% of KZN. It follows that **some 175,000 people, or 32,000 households in eThekwini Municipality lack food security**, assuming a household size of 5 or 6. However, given the high attrition rate of HIV / AIDs in KZN, and especially in eThekwini with its very high mobility of migrant workers, the number of people who lack food security can easily be double the 175,000 initial estimate.

One can argue the simplicity of this calculation, especially since eThewkini is the economic hub of KZN, but then, at the same time, it is home to the highest number of people living in informal settlements in KZN, where most of the poverty exists. More information is required to determine the spatial spread of food security vulnerable households, but one can generally locate these households in the rural and peri-urban areas, as well as, the informal settlements within eThekwini. Another good spatial indicator is the mapping of educational levels from the eThekwini IDP.

Whilst the lack of household food security can be one measure of assessing the delivery targets of the AMU, another very important factor is the **re-orientation of existing poor agricultural practices towards more sustainable systems** that at least maintain and improve the current levels of agricultural production. The extent of this area still needs to be thoroughly investigated and will be refined in subsequent updates of this report.



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Spatial association of poverty and food insecurity – lack



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The Long Term Development Framework from the eThekwini IDP has targeted poverty reduction to be addressed by 2025, that is, within 15 years. Poverty reduction is synonymous with the provision of food security and food sovereignty. For this reason, the same **15 year timeframe** is used to formulate the AMU Strategic Plan and associated Long-Term Programme, Budget & Delivery Targets that will primarily address food security issues and the adoption of sustainable agricultural practices.

1.4 Planning Process

The **Delivery Management System** in the figure across sets out a framework for how ongoing planning should be undertaken for the AMU. This planning process is derived from mandates and policies that formulate strategies and in turn the long term programme, budget and delivery targets.

However, budget resources will need to be secured for each year, or short term period, depending on the availability of resources and any changes in strategy that are influenced by changes in mandates and policies. In other words, this is an iterative process and requires ongoing management and updating.

Delivery Management System



2. APPROACHES TO SUSTAINABLE AGRICULTURE

2.1 Sustainable Agricultural Concepts

This section is designed to convey some simple sustainable agricultural concepts applicable to human settlements wherein opportunities for enhancing agrarian endeavours should be promoted.

The concepts presented herein are based on Permaculture principles which embraces "low external input sustainable agriculture (LEISA)" and organic farming practices. These practices include the use of no fertilizer, no pesticides, no weeding and no ploughing, therefore substantially reducing input costs and hence allowing greater profit margins. All this is achieved through the application of composting and mulching; companion planting and crop rotation; and, rainwater harvesting. These practices ultimately enhances income generation whilst simultaneously producing healthy nutritious crops which enhances food security and helps offset the ravages of opportunistic diseases, such as, HIV/AIDs. This section illustrates the following types of interventions, namely;-

Sustainable Homestead Gardens :- These are designed to maximize the land use intensity around homesteads by applying Permaculture design principles to enhance food security and limited cash crops.

Sustainable agricultural landscapes / commonage :- This entails the extension of LEISA practices on a larger scale through the use of keyline irrigation and major rainwater harvesting systems onto the commonages to support extensive traditional and/or niche croplands that can enhance income generation. **Village Co-operative / Farmers Support Centre :-** This is designed to create a support base for the development of small emerging farmers wherein surplus produce can be delivered for agro-processing and onward distribution to the markets, and, where a range of services can be provided, such as, a seed bank, hiring of equipment, small loans, etc.

Bio-intensive polyculture methods :- These systems are designed to promote soil conservation by feeding the soil which in turn feeds the plants.

Sustainable technologies :- These proven systems have already been used by the AMU and entail the use of biodigestors and ram-pumps. Biodigestors basically take sewage from housing complexes and other facilities and break this down biologically to yield grey water for use in gardens, methane for gas cooking, and, organic compost.

Food forests :- The ultimate expression of nature is its crowing glory of trees and forests which requires no irrigation, no fertilizers and no management. One can harness this natural upward mobility of a forest to establish a food forest that requires hardly any maintenance and can yield fruits in perpetuity.

Sustainable homestead gardens

Illustration of a sustainable homestead

Food security is to be enhanced by maximizing the land use intensity around homesteads. Elements of development to include;-

- 1. Main house
- 2. Shadehouse
- 3. Greenhouse
- 4. Rainwater tanks
- 5. Orchards
- 6. Swales
- 7. Grains & Vegetables
- 8. Fallow land
- 9. Chicken tractor
- 10. Recovered land
- 11. Herbs and vegetables



Example of rainwater harvesting systems

Grey water should also be recycled into sand / gravel filters for feeding to vegetable beds and trees / orchards



Sustainable agricultural landscapes / commonage



- Establish Keyline Swales for irrigation of both commonage and homesteads (1).
- Establish crop lands and orchards with niche products, such as, organic certified crops, essential oils, fruit and nut trees (2).



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Sustainable agricultural landscapes / commonage

- Integrate large scale rainwater harvesting systems with the keyline system for commonage areas and enhance irrigation to homestead gardens (3).
- Limited till systems that avoid costly heavy machinery that compresses the soil and reduces fertility (4).
- Organic farming systems that avoid the use of chemical fertilizers and toxic pesticides that damages the environment.





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Village co-operative / farmers support centre

A catalyst for the establishment of Sustainable Homesteads and growth of the local agricultural sector, is a sustainable Farmers Support Center. This can utilize and\or add value to an existing facility which can be developed as an agricultural learning center and ultimately into a farmers support center. This Center should become the hub of the local farming and other SME activity. The local district office of the Department of Agriculture should be extensively consulted and encouraged to provide staff and resources to support this Center in the short to medium term until it becomes self sufficient. Some of the key activities performed by this Centre include;-

- Establish demonstration gardens and Permaculture examples
- Establish a plant nursery and seed bank
- Establish support services



The Farmers Support Center should perform as a viable small farm and exhibit best practices of low input sustainable agriculture and provide the following services;-

- Training of farmers
- Propagation of seedlings in nursery
- Storage and exchange of seeds with farmers
- Produce sold on market days
- Agro-processing
- Produce delivered for onward transport to other markets
- Advisory services for farmers
- Hiring of plant and equipment
- Facilitate the application of micro loans
- Provide assistance to emerging SMEs
- Add value to niche produce such as packaging and marketing

Bio-intensive polyculture methods

Typical planting methods



Bio-intensive / polyculture planting



Food Forest example



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Examples of sustainable technologies used by the AMU



Ram-pumps (kinetic energy)





Biodigestor under construction

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2.2 An Emerging Policy for Sustainable Agriculture

This section draws on the aforementioned concepts for sustainable agriculture and pieces them together into a development process which leads to an emerging policy for sustainable agriculture. In other words, the following concepts for sustainable agriculture;-

- Sustainable Homestead Gardens
- Sustainable agricultural landscapes / commonage
- Village Co-operative / Farmers Support Centre
- Bio-intensive polyculture methods
- Sustainable technologies
- Food forests

are pieced together in a theoretical Agri-Village Model, which is then applied to a typical landscape to illustrate the model.

Agri-Village Model :- This theoretical design shows how the nucleolus of a development should contain the village hall, village green / kickabout area, village co-operative, crèche, school, mobile clinic, mini-workshops, value adding facilities, water reservoir, community biodigestor and alternative energy systems. Surrounding this nucleolus are homesteads on at least 0,5 to 1,0 ha, which are in turn surrounded by 5 to 10ha fields for commercial crops and food forests that blend into wild indigenous areas.

Concept layout of sustainable agriculture within human settlements :- The layout concepts from the theoretical Agri-

Village Model are used as an example from the Dukuduku On-Site Resettlement Project. The Agri-Village Model and concept layout of sustainable agriculture within human settlements, now provides the ingredients for the emerging policy for sustainable agriculture, namely, the following policy instruments;-

First policy instrument is for the establishment of **Homestead Gardens to Enhance Food Security**. This policy suggests that basic food security is the mandate of DAERD and municipalities, to provide and should be grant funded. Microfinance institutions (Grameen Bank approach) should be established for small loans for rainwater tanks, polytunnels, inputs, etc.

Second policy instrument is for the Development of Productive Commonage for Commercial Cash Crops.

Commercial projects for niche produce can be part grant and part interest financed. DFIs should be mobilised to fund these projects. Grant to interest funding may be as follows;-1st Loan - 30 / 702nd Loan - 20 / 803rd Loan - 10 / 90

Third policy instrument is for the establishment of Village Cooperative / Farmers Support Centres. The following resources should be co-opted;-Establishment of infrastructure – DEDT Equipment – DFIs Operational support – DAERD & Municipalities.

5Ha Commercial 438.75m Commercial 641.25m Zululand Centre for Sustainable Development Zululand Centre for Sustainable Development Water Stora Nucleus Homestead Gardens Enviro-La 438.75m Multi-Purpose Co 22 Secondary Industries ution Facility Creche Primary School Primary Industry Zululand Centre for Zululand Centre for Sustainable Development Sustainable Development

Agri-Village Model (from the Dukuduku Agricultural Plan)

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Concept layout of sustainable agriculture within human settlements

Legend



Homestead gardens on leasehold or freehold sites 0,5ha

Agricultural allotments on short term leaseholds or PTOs 1,0ha+

Fenced off area for wetland and livestock grazing

Keyline rainwater harvesting swales

Water course

Keyline dam for gravity fed irrigation with ram pumps

Site access

An emerging policy framework



First Policy Instrument

Homestead Gardens to Enhance Food Security

It is important to note the sequential application of these policy instruments. For example, it is pointless to use the 2nd and 3rd policy instruments if household food security has not been satisfied. Similarly, it is pointless to apply the 3rd policy instrument if there is insufficient surplus production of a cash crop which requires value adding processes, and/or, market linkages.

<u>Third Policy</u> <u>Instrument</u> Village Cooperative / Farmers Support Centre





Second Policy Instrument Development of Productive Commonage for Commercial Cash Crops

It is important to note that the funding of a commercial or semi-commercial agricultural operation, such as, a niche cash crop or fish farming, should only be considered if beneficiaries provide collateral and finance, and not only sweat equity.

eThekwini AMU Strategic Plan v1a

3. STRATEGIC FRAMEWORK

3.1 Vision, Mission and Values

This section compiles the Strategic Framework for the AMU. The Strategic Framework for the AMU draws its mandate and policies from the Millennium Development Goals, the KZN Provincial Growth & Development Strategy, and, the eThekwini IDP. The Millennium Development Goals are outlined below and the relevant goals to inform the AMU Strategic Plan are highlighted.

• Eradication of extreme poverty and hunger

- Universal primary education
- · Gender equality and the empowerment of women
- Child mortality
- Maternal health
- HIV/AIDS, malaria and other diseases
- Environmental sustainability
- Global partnerships for development

The KZN Provincial Growth & Development Strategy has already been embedded within the eThekwini IDP, so it suffices to draw from the eThekwini Long Term Development Framework that has targeted the reduction of poverty by 2025. Given this background, the Strategic Framework for the AMU can now be pieced together.

The AMU Vision is as follows;-

"Food security for all eThekwini residents and a thriving urban and rural agriculture sector."

The AMU Mission is as follows;-

"To promote Food Security in a manner that significantly contributes to:

- The health and well-being of eThekwini residents
- Climate change mitigation and resilience
- Environmental sustainability
- Local economic and skills development.
- Food sovereignty"

The AMU Values are the same as the eThekwini IDP, namely;-

Sustainability - How does the initiative contribute to managing our resources in a way that does not prejudice our capacity to do so in the future?

Economically Successful City - To what extent do the methodologies employed contribute to growing the local economy, creating new jobs, promoting BEE & SMME development and supporting local businesses?

Poverty Reduction - How do the programmes and methodologies employed contribute to reducing the risk of increased and growing poverty?

Smart City - How do the programmes and methodologies employed contribute to improving the access to information and knowledge of all citizens in the city?

Caring City - To what extent does the initiative focus on the customer? How does it protect the marginalized?

Democratic & Equal City - How do we promote non-racialism and non-sexism and promote a more tolerant citizenry?

3.2 Objectives and Critical Success Factors

The next part of the AMU Strategic Framework draws from the strategic objectives from the eThekwini IDP, which are contained in the <u>eThekwini Municipal Eight Point Plan</u> as outlined below;-

Sustaining our natural and built environment

Develop, manage and regulate the built and natural environment. Mitigate against Climate Change

Economic development and job creation

Support and Grow New and Existing Businesses Provide Secondary Support to Business Enterprises

Quality living environment

Meet service needs and address backlogs. Address community service backlogs

Safe, healthy and secure environment

Promoting the safety of citizens Promoting the health of citizens Promoting the security of citizens Promoting the safety of municipal assets Pollution Minimization

Empowering citizens

Develop the Municipality as a learning Municipality Develop Human Capital

Promoting Cultural diversity

Create economic opportunities for arts, culture and heritage Promote Sport and recreation within the Municipality

Good governance

Healthy and productive employees Ensure Accessibility and promote governance Create an efficient, effective & accountable administration

Financial viability and sustainability

Budget strategically and sustainably Value for money expenditure Grow and diversify our revenue Sound financial management and reporting

The AMU Strategic Objectives follow from the eThekwini Municipal Eight Point Plan and expand on objectives related to poverty reduction, environmental sustainability and local economic development. The **AMU Objectives** are outlined below;-

- To **promote food security** that will ensure that the population of Durban has access to fresh and nutritious food.
- To **promote food sovereignty** wherein people and communities may produce safe, nutritious and culturally appropriate food.
- To **facilitate economic empowerment** of communities by enhancing access to markets and market logistics.
- To **empower communities** to organise themselves to access the potential of agricultural land.
- To **mitigate against Climate Change** by promoting organic agriculture; the use of renewable energy; and, to reduce the transport input within the food production and distribution system.

- To **encourage local production for local consumption** that will minimise the 'food miles' in the food production and distribution system.
- To **promote sustainable agriculture** through diverse agroecological farming systems tailored to the local culture, economy, geography and climate.
- To **promote "polyculture" systems** that strive to maximise the diversity of produce to achieve higher overall yields.
- To **promote Zero Waste production systems** that recycles waste and minimizes off site waste disposal.
- To **support organic farming** that care of the soil and environment and will not make use of synthetic chemicals.

The Vision, Mission, Values and Objectives provides the basic rationale for the AMU Strategic Framework as shown overleaf. This now follows with specific **Critical Success Factors**, as summarised below, which are expanded into Programmes, Action Plans and Delivery Models in the subsequent section.

- 1. Establishment of Homestead Food Security Gardens
- 2. Development of School Farms
- 3. Support to Mini-Farms
- 4. Support to Informal Settlements
- 5. Support to Agri-Hubs
- 6. Facilitate the development of niche crops
- 7. Support to Markets and Co-operatives
- 8. Development of Human Capital Resources
- 9. Policy development, research & forward planning
- 10. Integration Management

An initiative to be drawn upon by the AMU, is CIFAL Durban, which extract from the eThekwini IDP reads as follows:-

"Through the Municipality's infrastructure, and its ability to provide training for other local authorities, particularly those in Africa, eThekwini was identified by the United Nations Institute for Training and Research (UNITAR) as the most appropriate location to establish one of its affiliate learning centres. Hence, eThekwini Municipality, in partnership with the University of KwaZulu-Natal, the Durban Institute of Technology, Mangosuthu Technikon, the Durban Chamber of Commerce and Industry, and UNITAR, established CIFAL Durban. CIFAL Durban is part of a global training network and its role is to facilitate administrative and specialist/technical capacity building for sustainable development and access to basic services such as water, sanitation, waste management, transportation, energy, public health, and information and communication technologies."

It is interesting to note that CIFAL initiatives elsewhere in the World are using this initiative to create programmes that not only promote sustainable development practices, but simultaneously promotes the development of local economies that strengthens the resilience of communities from the financial knocks that are evident from the global economy.

Critical Success Factors	Objectives		-	
Establishment of Homestead Food Security Gardens	To promote food security			
Development of School Farms	 To promote food sovereignty 	Values	Mission	
Support to Mini-Farms	To facilitate economic empowerment	Sustainability	To promote Food Security in a manner	
Support to Informal Settlements	To empower communities to organise themselves	Economically Successful	that significantly contributes to: • The health and	Vision Food security
Support to Agri-Hubs	To mitigate against Climate Change by promoting organic agriculture	Poverty Reduction	well-being of eThekwini residents	for all eThekwini residents and a thriving
Facilitate the development of niche crops	 To encourage local production for local consumption 	Smart City	 Mate change mitigation and resilience Environmental 	urban and rural agriculture
Support to Markets and Co-operatives	To promote sustainable agriculture	Caring City Democratic & Equal City	sustainability Local economic and skills 	sector 3225 Plan
Development of Human Capital Resources	 To promote "polyculture" systems 	Equar City	development.Food sovereignty	Food security provided to
Policy development, research & forward planning	To promote Zero Waste production systems		1	32,000 households by 2025
Integration Management	To support organic farming	1		<i></i>

AMU Strategic Framework

4. DEVELOPMENT PROGRAMMES

4.1 Programme 1 - Establishment of Homestead Food Security Gardens

Action Plan

- 1. Development of a homestead garden support package.
- 2. Implement pilot schemes of 20 homesteads.
- 3. Extend pilot schemes to 500 homestead gardens per project.
- 4. Establish homestead gardens..
- 5. Provide mentoring to homestead gardens projects.
- 6. Co-opt DHS and DAERD to implement and support an equivalent number of homestead gardens.
- 7. Evaluation report per project.

Delivery Model

This programme is dependent on the development of a suitable homestead garden support package that can be replicated at scale and that is thoroughly based on sustainable agricultural principles. This should entail at least the establishment of a grey water system, composting, vermiculture, landscape rainwater harvesting systems, banana circles, raised beds, some fruit and indigenous trees, distribution of organic seeds, and, training and support.

Once the homestead garden support package has been determined, then it can be initiated via pilot schemes of at least 20 homestead gardens each within targeted communities. The cost of these pilot schemes will be at a premium compared to the cost of replicating this initiative at scale. However, the purpose of the pilot schemes is to ensure that targeted communities are prepared to receive this form of assistance, and if successful and desired, then to roll out this initiative at scale in the form of project schemes of at least 500 homestead gardens. The roll out of these projects should utilize the EPWP wherein small emerging contractors from the area, as well as, local labour, can be deployed to establish the landscape based rainwater harvesting systems, planting of vetiver grass, establishment of grey water systems, etc. These skills are then left within the community to be extended to other homestead garden opportunities.

The need to address the backlog of food security needs via the homestead garden project is immense. For this reason, it is crucial that more pilot projects than roll out projects are initiated so that there are at least an equivalent number of project schemes that can be packaged wherein other funding entities can be coopted, such as, DAERD, DHS, CSI, etc. As the project schemes are being established, it is important to establish a GIS data base of the project by recording the intervention on each homestead. This GIS data base can then be used to monitor and evaluate project performance, and also, to manage and co-ordinate ongoing support and mentoring.



4.2 Programme 2 - Development of School Farms

Action Plan

- 1. Development of a schools farm support package
- 2. Plan and design school farm projects in targeted areas.
- 3. Implement school farm projects.
- 4. Provide support and mentoring to farm school projects.
- 5. Co-opt DoE and others to implement and support an equivalent number of projects.
- 6. Monitoring and evaluation report per project

Delivery Model

This programme is dependent on the development of a suitable school farm support package that can be replicated at scale and that is thoroughly based on sustainable agricultural principles. This should entail at least the establishment of a grey water system, a sewage biodigestor system, composting, vermiculture, landscape rainwater harvesting systems, rainwater tanks linked to a reservoir, banana circles, raised beds, fruit and indigenous trees, distribution of organic seeds, and, major training and support. The training should entail a special training curriculum for scholars, including competitions for best garden and outreach initiative.

Once the school farm support package has been determined, then it can be piloted within specific communities that can benefit from "downstream" farming initiatives. The cost of these school farm projects should include a socio-economic cost-benefit analysis that will reasonably estimate the downstream / multiplier benefits of such a project within the community.

It should be noted that any school farm project comes at a relatively high price, but the multiplier benefits can outweigh the initial price. What is then critical is the dedicated support and mentoring that such a project requires and must be budgeted otherwise this type of asset will deteriorate at great socio-dynamic expense to the community. It is important to realize that this will be a legacy type project within a community, and also for eThekwini, who should then co-opt the likes of DoE to fund other similar projects.

4.3 Programme 3 - Support to Mini-Farms

Action Plan

- 1. Support the most needy existing mini-farm schemes.
- 2. Identify, plan and design new mini-farms.
- 3. Develop and support at least half of the planned new minifarms.
- 4. Provide mentoring to mini-farms.
- 5. Co-opt DAERD to implement an equivalent number of minifarms.
- 6. Mentoring to established mini-farms.
- 7. Evaluation report per project.

Delivery Model

The are some 600 odd existing mini-farms on the eThekwini data base that have been supported in recent years. These minifarms have received a mixed bag of support which makes for the assessment of these initiatives somewhat complex due to the nature of the support and the local community socio-dynamics. Nonetheless, there are varying degrees of success which have been captured onto the data base.

Given this mixed bag of deliverables and experiences, it is easiest to determine specific intervention based on the principles of sustainable agriculture. Foremost is the provision of landscape rainwater harvesting systems that are augmented by limited till systems. This intervention at least mitigates against soil erosion and enhances soil fertility, which simultaneously weans the project off, or in part, the dependency on municipal water supply for irrigation. For some mini-farms, it may be prudent to establish a grey water system linked to a large biodigestor that is fed by at least 10 households. A second intervention to existing mini-farms is the training in sustainable agricultural practices, followed by, the establishment of raised beds and a food forest canopy (in part), and, the distribution of organic seeds. The food forest canopy can be initiated by the planting of certain types of acacia trees in grids at 20m centres that act as a resilient pioneer species that provides semi-shade and simultaneously draws up water and minerals to the surface of the soil for use by food crops. The initial acacia canopy will also facilitate the growth of fruit trees and bananas as an understorey.

It is important to wean off the existing mini-farms from direct support and align them with mentoring support. For this to succeed, it is paramount not to squander resources in repeating the mistakes on these existing mini-farms, especially since there are many more potential mini-farms to be established.

Besides the support to existing mini-farms, new mini-farms will need to be identified, planned, designed, implemented and supported in a systematic manner. However, the experiences gleaned from the existing mini-farms provides a rich pool of determine a right sized approach that can be replicated at scale for new mini-farms.

Assessment of existing mini-farms from GIS data base



- Lindokuhle farm is situated in ward 2 at Mkhizwana area.
- The farm is successful, farmers are **committed to work**.
- Farmers **need more land** because the land is too small for 22 members
- These are the groups that could run successful **fish projects**

- The farmers require irrigation, watering cans, tools, seeds. & access road.
- They have had support previously with seeds, pipes and sprinklers.
- They feed their families only but would like a bigger market
- The farm needs fencing & gate.
- The farmers have received help from the advisor from the **DAERD**.
- The crops need **insecticides** to prevent destruction by insects.
- The farmers get water from neighbours and they require connecting pipes to the garden

4.4 Programme 4 - Support to Informal Settlements

Action Plan

- 1. Development of a food security support package for informal settlements.
- 2. Implement pilot schemes of 20 households.
- 3. Extend pilot schemes to 500 households per project.
- 4. Establish household gardens within informal settlements.
- 5. Provide mentoring to informal settlement projects.
- 6. Co-opt DHS and DAERD to implement and support an equivalent number of food security interventions within informal settlements..
- 7. Monitoring and evaluation report per project.

Delivery Model

This programme is extremely challenging in that much food insecurity and poverty exists within informal settlements. Furthermore, many informal settlements are transit camps for migrant workers who never really put down their sweat equity in these areas, preferring to invest their hard won savings in their traditional rural homes. Nonetheless, there is a large number of informal settlements within eThewkini that will take some time to be addressed through the provision of formal housing. Furthermore, the slum clearance programme is designed to relocate informal settlements in precarious areas to areas better suited for the delivery of formal housing development.

For the above reasons, food security initiatives within informal settlements needs to be carefully targeted and planned. To this end, it makes sense to target those informal settlements that are planned to be relocated but where it is envisaged to be a long time off, as well as, those that will eventually be formalised in-situ. Any food security intervention within an informal settlement will therefore require considerable co-ordination with other service delivery entities within eThekwini. Furthermore, the socio-dynamics within the targeted informal settlement needs careful consideration and only those communities with a stable leadership should be targeted in order to mitigate against project failure risk and fruitless expenditure.

Nonetheless, given the relatively higher development risks within informal settlements, the resilience of their residents provides a fertile ground for the application of many innovative sustainable agricultural systems, such as, tyre gardens, stacking systems, grey water recycling, organic waste recycling and vermiculture, and, limited landscape rainwater harvesting systems. In addition, training, distribution of organic seeds and fruit trees, and, mentoring, should be provided as the support package.

The first step towards food security initiatives within informal settlements is the development of an appropriate support package. Once this support package has been determined, then it can be initiated via pilot schemes of at least 20 household gardens each within targeted informal settlements. Again, the cost of these pilot schemes will be at a premium compared to the cost of replicating this initiative at scale. However, the purpose of the pilot schemes is to ensure that targeted informal settlements are prepared to receive this form of assistance, and if successful and desired, then to roll out this initiative at scale in the form of project schemes of at least 500 household gardens.

Tyre garden





Verticle stacking





The roll out of food security project schemes within informal settlements of 500 households gardens each should again utilize the EPWP data base to source and develop local contracting skills.

The need to address the backlog of food security needs within informal settlements is huge. Again, for this reason, it is crucial that more pilot projects than roll out projects are initiated so that there are at least an equivalent number of project schemes that can be packaged wherein other funding entities can be co-opted, such as, DAERD, DHS, CSI, etc.

The delivery of food security initiatives within informal settlements needs to be closely monitored, evaluated and co-ordinated via a GIS data base which can be shared with other service delivery programmes.

4.5 Programme 5 - Support to Agri-Hubs

Action Plan

- 1. Develop & support Northdene Agri-Hub (1).
- 2. Develop & support Newlands Agri-Hub (2).
- 3. Develop & support Mariannhill Agri-Hub (3).
- 4. Develop & support Umbumbulu Agri-Hub (4).
- 5. Identify, plan & design new Agri-Hubs (5).
- 6. Develop & support new Agri-Hubs (5).
- 7. Monitoring and evaluation report per project.

Delivery Model

This programme is designed to provide the backbone to the AMU's strategy by establishing centres of best practice and innovation which can be used to undertake training programmes and to co-ordinate the delivery of other AMU programmes.

There are a variety of agri-hubs that eThekwini had developed, and/or, acquired for the AMU, such as, Northdene (1), Newlands Mashu Permaculture Learning Centre (2), Mariannhill (3) and Umbumbulu (4). Eventually, all existing and new agri-hubs will need to be planned and co-ordinated in accordance with the IDP's spatial development framework to ensure maximum outreach and support to needy communities. Furthermore, a hierarchy of agri-hubs is envisaged that should be symbiotic to each other and supportive of delivery programmes.





Satellite Hubs



Farmer Associations /



Support Hierarchy of Agri-Hubs

R&D, aquaculture hatchery, grow-out fingerlings, plant tissue culture, seedling nursery, effective micro-organism production, vermiculture, demonstration gardens of biointensive technologies.

Provide direct support to homestead & community gardens. Linkages with DAERD, FBOs & NGOs. Each hub will support an agric-zone and include: demonstration gardens, agric help desks, database of growers, primary distribution points for produce, seed distribution, etc.

The intention is also to use existing structures and train / mentor farmer groups who are sufficiently competent to train neighboring food gardens within their farmer association region.



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4.6 Programme 6 - Facilitate the development of niche products

Action Plan

- 1. Plan and design the Soya Growing Programme.
- 2. Implement the Soya Growing Programme.
- 3. Plan, design and implement 2 pilot fish farming projects.
- 4. Plan and design the Fish Farming implementation programme.
- 5. Monitoring and evaluation report per project.

Delivery Model

This programme is designed to introduce niche products that can add value to food security and also add value to local economic development. The development of these niche products will be undertaken at the agri-hubs from where implementation programmes will be planned and designed for rollout within needy communities.

The planned Mariannhill Agri-Hub includes the development centre for the organic soya project where crop production systems can be tested together with the seed bank and soya value adding processes.

The Northdene Agri-Hub includes a pilot fish farm whose production systems are being refined for potential rollout on suitable tracts of land. This fish farm can also grow fingerlings to supply various mini-farm projects and/or farm entrepreneurs who are keen to venture into mini-fish farms. The consideration of niche products needs to be based on sound sustainable agricultural ethics and principles. For example, the organic soya to be developed is the edamame variety that is highly nutritious and can contribute both to food security nutrition and local economic development. In particular, organic soya products are highly sought after amongst retailers and consumers who are prepared to pay a premium for this product. Furthermore, the overall development risk of soya production is relatively low, provided of course, that adequate resources are secured to ensure that the project contracts the necessary scientific and technical production skills.



Livestock farming ventures should only be seriously considered when the conversion ratio between feed input and net edible output is financially viable as a poverty relief project. In other words, this does not mean that all livestock farming is not financially viable, but rather, that livestock farming ventures can raise commercial finance in lieu of government funding. The production conversion rate of livestock is generally as follows;-

- Beef is 36 kg of feed to 1 kg of net beef.
- Chicken is 25kg of feed to 1 kg of net chicken
- Fish is 1.6 to 2.5 kg of feed to 1kg of net fish

The above conversion ratios clearly favours fish farming, both from a food security nutritional aspect and its contribution to local economic development.

A number of water and sewage treatment works within eThekwini that have been de-commissioned and are now available for aquaculture projects. Support and collaboration for fish farming ventures has been co-opted from Professor Rana (Chair at Sterling University Scotland and at Stellenbosch), and, UKZN (Transfer Technology Office)



Rural fish-farm - Wetland biofilter concept (tilapia)





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4.7 Programme 7 - Support to Markets and Co-operatives

Action Plan

- 1. Test the viability of value adding processes.
- 2. Development of agro-processing capacity at markets.
- 3. Enhance market linkages and logistics.
- 4. Support emerging co-operatives with value adding processes and market linkages.
- 5. Secure loan guarantee finance to underwrite defaulting borrowers.
- 6. Mobilize micro-finance operators to engage agricultural entrepreneurs.
- 7. Evaluation report per project.

Delivery Model

This programme is essentially designed to enhance market linkages between producers and consumers; to assist co-operatives to establish value adding processes; and, to facilitate interactions between micro-finance operators and farming entrepreneurs.

There is a need for ongoing market intelligence and research in order to assess new market opportunities and value adding processes. This will also entail the strengthening of market linkages, especially with the private sector. For example, the likes of Woolworths and Pick-n-Pay have a growing organics market but are struggling to secure regular supplies, whilst at the same time, there are many small scale emerging farmers who are organic by default but are logistically struggling to supply the organic retailers. To this end, this programme can then assist and organise a particular farmers association to secure supply contracts with retailers. Moreover, many retailers are especially keen to support their Corporate Social Investment programme by buying from small scale historically disadvantaged farmers. Some value adding processes to be considered include, amongst others;- maize, sugar cane, soya, fruit, nuts, essential oils and vegetables.



The **Grameen Bank** in Bangladesh has an incredible track record in assisting individuals and community based ventures. The default rate of borrowers from the Grameen Bank is only 2%. Many other developing countries have tried to emulate the Grameen Bank, but have failed. The major reason for these failures is a deviation from simplicity. For example, the only lending criteria and administration required by the Grameen Bank is 4 friends of the borrower to act as personal collateral. All that is required to implement a Grameen Bank equivalent in South African communities is a loan guarantee fund to leverage micro-finance operators into this market and underwrite any bad debts.

Some typical value adding agro-processes to consider

Maize value adding





Organic Essential Oil Production and Processing







Organic Sugar Production with a sugar mill and packaging plant





Organic fruit production and Processing (Drying and packaging)





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Organic certification as a value adding process

The illustration across attempts to show how complex it can be to comply with all the relevant organic certification standards, especially since no organic standards have yet been developed in South Africa. For this reason, South African retailers and exporters use international standards, and/or, make up their own requirements. Whilst IFOAM sets the international standard guidelines for good organic farming practices, each country uses these guidelines to establish their own specific standards and quality systems. Independent organic certifiers are then engaged to certify agricultural entities. In any event, there is much overlap amongst various quality systems, and it makes sense to develop ONE "internal standard" which simplifies matters by combining different quality systems which are acceptable both locally and internationally. Moreover, it also makes good business sense to combine the criteria from Fair Trade, especially since one is developing and empowering small scale farmers in marginalised rural areas by creating linkages directly to the markets, thereby omitting unnecessary handling fees by middlemen.

In order to make the cost of organic certification more affordable for small scale farmers, a Group Certification Scheme for the SGG is the logical choice. However, this requires an Internal Quality Management System whose function is;- to manage risk; continually develop and enhance the Internal Standard; internal inspection of all members' farms; approvals and sanctions; ongoing training; maintaining a data base of farmers and their production; and, maintaining quality management documentation. All this is necessary in order to enhance the quality and performance of a SGG. Failure to maintain the Internal Quality Management System will jeopardize the organic status of a SGG.

Overlapping compliance standards





7.8 Programme 8 - Development of Human Capital Resources

Action Plan

- 1. Training of staff in sustainable agricultural practices.
- 2. Training of NGOs, municipal staff and farmers in sustainable agricultural practices.
- 3. Establish career pathways to attract and retain staff.
- 4. Support professional development for staff.
- 5. Develop training / info materials for Establish at least 8 mobile outreach Farmer Support Group (FSG) teams to conduct training workshops.
- 6. Conduct FSG workshops within communities..
- 7. Monitoring and evaluation report per community workshop.

Delivery Model

More than often, the most under-resourced and overlooked activity is that of training and empowerment, and especially insofar as developing skills and capacity to entrench sustainable agricultural practices. For this reason, a dedicated programme is required to deliver training to all sectors of the agricultural development industry, such as, officials, service providers, NGOs, CBOs, farmers associations, small emerging farmers, etc. Furthermore, career pathways should be developed to attract and retain quality officials. There will also be a need to re-skill aspiring service providers with development approaches promoted by the AMU.





However, the major component of this programme is the training and empowerment of small scale farmers. To this end, there is a need to create an identity for this specific programme, so that farmers within communities become aware of its outreach and start to form Farmer Support Groups that organises farmers to share expertise and solve common problems. The proposed name of this outreach training programme is "Amasondo Luhlaza", which translates to "Green Wheels".

The Amasondo Luhlaza should be very visible and practical, such as, a customized off road trailer that can support a temporary outdoor workshop venue for at least 30 people, and, be able to stock training manuals, brochures, posters and organic seeds. The Amasondo Luhlaza should deliver a .basic modular training components such as;-

Module 1 :- Use of local resources - Cleaning, greening, composting, mulching, vermiculture, fruit and indigenous tree planting, and, distribution of organic seeds.

Module 2 :- Sustainable farming practices – Rainwater harvesting, grey water systems, and, seed harvesting and exchange.

Module 3 :- Intensive farming systems - Stacking systems, alley cropping systems, and, food forest systems.







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4.9 Programme 9 - Policy development, research & forward planning

Action Plan

- 1. Research and develop sustainable models of agriculture and design intervention processes.
- 2. Monitor and evaluate interventions in the field.
- 3. Develop policies, strategies and funding norms and standards for sustainable agricultural interventions.
- 4. Conduct agricultural marketing research for niche products and value adding processes.
- 5. Update Strategic Plans, prepare long term Development Plans, and, prepare Annual Business Plan for the AMU.
- 6. Integrate AMU plans within eThekwini IDP.
- 7. Prepare funding motivations.

Delivery Model

This programme is responsible for maintaining and updating the overall **Delivery Management System** as shown in the figure across. The crux of the Delivery Management System is the continual update of the strategic plan based on the long term needs and delivery targets, and from there, secure resources that will achieve these targets incrementally via annual delivery targets.

The other important aspect of this programme is the research and development of best sustainable agricultural practices and the formulation of affordable and replicable delivery programmes.

Delivery Management System



4.10 Programme 10 - Integration Management

Action Plan

- 1. Demonstrate and influence how to apply best practices for sustainable agricultural within housing and water supply projects, namely, grey water, biodigestors, rainwater harvesting, and, housing layouts.
- 2. Share best practices for sustainable agriculture with DAERD and co-opt resources.
- 3. Package projects and co-opt resources from DSW, DEDT and other eThekwini Departments.
- 4. Host regular annual workshops to showpiece best practice policies and projects.

Delivery Model

The AMU is a new entity within eThekwini and as such has not yet mustered the resources required to achieve its long-term goals. For this reason, a dedicated programme is required to integrate the plans of the AMU within other spheres of government and also the private sector in order to co-opt resources and transfer innovative systems. In other words, integration management will be responsible for ensuring that the plans of the AMU are showcased to other entities in order to transfer cross cutting best practice and innovative systems. In addition, integration management should also co-opt other government entities to replicate successful delivery programmes, such as, homestead gardens, school farms, mini-farms, etc.

The AMU can also influence the planning and design of housing settlements, which falls outside its mandate, to cater for agricultural development opportunites (as shown across).





Typical housing layout on a spur development

A sterile, unhealthy, unsafe, mono-culture built environment that subdues community spirit and forms a barrier to the natural environment.

Compact row housing layout within a sustainable environment

A vibrant, diverse and safe built environment that promotes a sense of community, urban agriculture and an appreciation of the natural environment

5. ORGANISATIONAL RESOURCES

The AMU will need to recruit suitable and experienced staff that works in a holistic and complementary manner to implement the AMU Strategic Plan. The work functions of the AMU are highly integrated and cross-cutting to effectively deliver a large number of projects at scale. This suggests that the most suitable organisational structure is a matrix structure that clearly defines functional and project responsibilities as illustrated in the figure across.

The proposed organisational structure overleaf provides for the following components;-

AMU Programme Management :- To manage, co-ordinate and integrate the planning, implementation, training and resources components of the AMU in a holistic manner that maximizes deliverables for the available resources that will promote sustainable agricultural practices.

AMU Planning :- To manage, co-ordinate and integrate all aspects of research and development, development planning, and, marketing and logistics.

AMU Training :- To plan, package, procure, co-ordinate and integrate all aspects of training within, and especially project implementation, and also with other AMU components in order to ensure that project beneficiaries are receive appropriate skills training. To manage service providers appointed for specific training projects.



AMU Implementation :- To plan, package, procure, coordinate and integrate all aspects of programme implementation with other AMU components in order to achieve project specific deliverables. To manage service providers appointed for specific implementation projects.

AMU Resources :- To ensure that nurseries, depots and other specialist facilities are resourced, maintained and well operated.

To ensure that Agri-Hubs are resourced, maintained and well operated. To co-ordinate AMU Resources within the delivery projects.



AMU Programme Management

Management Unit / Post	Work Responsibility	Skills Requirement
 AMU Programme Management Programme Manager PA assistant 	To manage, co-ordinate and integrate the planning, implementation, training and resources components of the AMU in a holistic manner that maximizes deliverables for the available resources that will promote sustainable agricultural practices.	Development practitioner with at least 15 years experience in the agricultural, local economic development, and, built environment sectors, and, with proven programme management experience.
Strategic Support Team • Agricultural experts	To advise the AMU on cutting edge agricultural best practices. To assist with packaging of projects. To assist with strategic advice.	Panel of industry experts with specialist skills who can be called upon at short notice for specific assignments.
 Finance, Monitoring & Evaluation Financial Officer Monitoring & Evaluation Specialist 	To maintain overall financial control of the budget . To undertake independent performance assessment of projects. To report on a regular basis on the overall performance of the AMU.	Senior financial controller with at least 5 years experience. Development practitioner with at least 5 years experience in community development projects.

AMU Planning

Management Unit / Post	Work Responsibility	Skills Requirement
AMU Planning Planning Manager 	To manage, co-ordinate and integrate all aspects of research and development, development planning, and, marketing and logistics.	Development planning practitioner with at least 10 years experience in the agricultural, local economic development, and, built environment sectors, and, with substantial knowledge and experience in sustainable development.
Research and Development • Agricultural Researcher	To research cutting edge best practices for sustainable agriculture. To initiate pilot innovative projects for best practice applications. To manage and co-ordinate all aspects of research and development, including service providers.	Agricultural specialist and innovator with a Permaculture / organic farming background and at least 10 years experience.
 Development Planning Development Planner 	To prepare and update on an annual basis the long-term development programme. To prepare and refine annual development plans in accordance with available resources. To prepare and update strategic development plans. To prepare project specific development plans.	Development planning practitioner with at least 10 years experience in the built environment and agricultural sector, specialising in sustainable development practices, and, who has worked extensively on planning and local economic development projects.
 Marketing and Logistics Agricultural Marketing Specialist 	To undertake marketing and logistics studies that will facilitate improved local trading opportunities. To plan, co-ordinate and initiate marketing and logistics improvement plans. To research niche crops that will promote local economic development.	Agricultural Marketing Specialist and innovator with at least 10 years experience in local markets, distribution systems and logistics.

AMU Implementation

Management Unit / Post	Work Responsibility	Skills Requirement
 AMU Implementation Implementation Manager 	To plan, package, procure, co-ordinate and integrate all aspects of programme implementation with other AMU components in order to achieve project specific deliverables. To manage service providers appointed for specific implementation projects.	Development practitioner with at least 10 years experience in the agricultural, local economic development, and, built environment sectors, and, with substantial knowledge and experience in programme and project management and labour based construction.
EPWP & CWP Data Base • Data Base Manager	To establish and maintain a data base of small contractors throughout eThekwini for deployment by the AMU. To ensure that small contractors are registered and comply with all necessary procurement requirements. To liaise with other facets of the AMU and establish suitable work packages for small contractors to undertake. To co-ordinate the training and skilling of small contractors to undertake specific work packages.	Built environment practitioner, such as, a quantity surveyor or engineer, with at least 10 years experience in working with labour based construction and small works.
 Service Providers Homestead Gardens School Farms Mini-Farms Informal Settlements Niche Crops Agri-Hubs 	To undertake specific projects as directed by the Implementation Manager.	Service providers with a proven track record and registered on eThekwini data base of service providers.

AMU Training

Management Unit / Post	Work Responsibility	Skills Requirement
AMU Training • Training Manager	To plan, package, procure, co-ordinate and integrate all aspects of training within, and especially project implementation, and also with other AMU components in order to ensure that project beneficiaries are receive appropriate skills training. To manage service providers appointed for specific training projects.	Development practitioner with at least 10 years experience in the agricultural, training sector, and, with an understanding of NQF educational system.
 Green Wheels Training (Amasondo Luhlaza) Training co-ordinator Training Facilitators (8 teams of 2 each, plus 4 standby) 	To establish and develop the Amasondo Luhlaza mobile outreach programme. To co-ordinate the Amasondo Luhlaza with the AMU Implementation. To establish and develop the Amasondo Luhlaza mobile outreach programme.	Agronomists with a Permaculture background and at least 5 years experience who are self starters, innovators and good communicators.
Institutional Training Educator 	To undertake specific training modules to various government entities, service providers, and specific community groupings, as directed by the Training Manager.	Agronomists with a Permaculture background and at least 7 years experience who are self starters, innovators and good communicators.
Special TrainingSpecialist Educators	To undertake specific specialist training modules to various government entities and service providers, as directed by the Training Manager.	Outsourced to specialists as required.

AMU Resources

Management Unit / Post	Work Responsibility	Skills Requirement	
AMU Resources • Resources Manager	To ensure that nurseries, depots and other specialist facilities are resourced, maintained and well operated. To ensure that Agri-Hubs are resourced, maintained and well operated. To co-ordinate AMU Resources within the delivery projects.	Facilities specialist with at least 10 years experience in managing facilities and with a financial background.	
 Nurseries & Depots Nursery Managers Equipment Manager Specialist Facilities 	To manage and maintain specialist facilities as required.	Agronomists / specialists with at least 10 years experience in managing a facility.	
Agri-Hubs Northdene Manager Newlands Manager Mariannhill Manager Umbumbulu Manager 	To manage and maintain specialist facilities as required.	Agronomists / specialists with at least 10 years experience in managing a facility, and, who are self starters, innovators and good communicators.	

6. DEVELOPMENT IMPACT MODELING

6.1 Financial Analysis

A detailed financial model has been constructed that portrays the estimated delivery targets over a 3-year period for all 10 Development Programmes. This financial model can be refined as further planning information becomes available. Furthermore, this financial model can be used to explore other scenarios.

At this stage, only two scenarios have been developed, whose summary is shown overleaf, namely;-

The **Ideal 3-Year Development Programme**, which is located in the "Flourishing Agricultural Sector" as shown in Section 1.2. This scenario makes for a "feast" of service delivery given an abundance of resources.

The **Minimalistic 3-Year Development Programme**, which is located within the "Innovative Agricultural Sector" as shown in Section 1.2. This scenario makes for "frugal" service delivery given a scarcity of resources.

Financial Conclusion

Under the Ideal 3-Year scenario, there can be a significant impact on enhancing food security and related local economic development, whilst under the Minimalistic 3-Year scenario, the only programmes that can be resourced is the Amasondo Luhlaza Training Programme and the development of existing agri-hubs. Given the current scarcity of resources, the Ideal 3-Year scenario is highly unlikely, unless there is otherwise political persuasion to re-direct resources to the AMU. The only realistic scenario is therefore the Minimalistic 3-Year scenario wherein the AMU Training and AMU Resources components should be well established to ensure that some outreach service delivery is effected.

6.2 Strategic Plan approval process

The financial modeling concludes the current version of this report. To take this report further, the following actions are suggested;-

- 1. Workshop this Strategic Plan report within the AMU stakeholders to refine and edit the whole document and to determine any other development funding scenarios.
- 2. Workshop the refined Strategic Plan report with the AMU stakeholders to adopt to table to eThekwini funding decision-makers.
- 3. Once funding has been secured, then prepare the Annual Work Plan with specific programmes / projects and delivery targets.
- 4. Package projects within the approved Annual Work Plan.
- 5. Monitor and evaluate service delivery.
- 6. Update the Strategic Plan in light of achievements for the Annual Work Plan.

IDE	IDEAL 3-YEAR DEVELOPMENT PROGRAMME					
#	Programme	Delivery Targets	Year 1	Year 2	Year 3	Total
1	Establishment of Homestead Food Security Gardens	15 000	R 36 540	R 36 520	R 36 520	R 109 580
2	Development of School Farms	15	R 3 240	R 3 220	R 3 220	R 9 680
3	Support to Mini-Farms	1 500	R 82 440	R 82 420	R 82 420	R 247 280
4	Support to Informal Settlements	15 000	R 13 040	R 13 020	R 13 020	R 39 080
5	Support to Agri-Hubs	10	R 13 500	R 19 200	R 13 700	R 46 400
6	Facilitate the development of niche crops	2	R 2 720	R 3 240	R 2 760	R 8 720
7	Support to Markets and Co- operatives	20	R 6 660	R 11 660	R 12 160	R 30 480
8	Development of Human Capital Resources	3 000	R 10 560	R 19 760	R 18 860	R 49 180
9	Policy development, research & forward planning	Development Plan	R 1 000	R 1 000	R 1 000	R 3 000
10	Integration Management	100% counter- funding	R 640	R 640	R 640	R 1 920
		Totals	R 170 340	R 190 680	R 184 300	R 545 320

	#	Programme	Delivery Targets	Year 1	Year 2	Year 3	Total
	1	Establishment of Homestead Food Security Gardens	12 500	R 18 290	R 36 520	R 36 520	R 91 330
	2	Development of School Farms	6	R 680	R 1 300	R 1 940	R 3 920
	3	Support to Mini-Farms	870	R 34 440	R 30 820	R 30 820	R 96 080
	4	Support to Informal Settlements	12 500	R 6 540	R 13 020	R 13 020	R 32 580
2	5	Support to Agri-Hubs	9	R 7 900	R 15 400	R 11 200	R 34 500
	6	Facilitate the development of niche crops	2	R 520	R 1 740	R 1 460	R 3 720
	7	Support to Markets and Co- operatives	8	R 1 560	R 2 460	R 2 460	R 6 480
1	8	Development of Human Capital Resources	1 500	R 5 760	R 10 460	R 9 860	R 26 080
	9	Policy development, research & forward planning	Development Plan	R 520	R 520	R 520	R 1 560
	10	Integration Management	100% counter- funding	R 320	R 320	R 320	R 960
			Totals	R 76 530	R 112 560	R 108 120	R 297 210

MINIMALISTIC 3-YEAR DEVELOPMENT PROGRAMME

Key funding areas (1&2)