



Food Security Programme Evaluation Report 2016/2017 to 2020/2022

SUMMARY OF EVALUATION RECOMMENDATIONS

The evaluation of the Food Security Programme 2016/2017 to 2020/2022 noted the following recommendations:

DESIGN EVALUATION

Improved targeting and marketing

The Food Security Programme needs to be marketed widely to the targeted communities. This will ensure that beneficiaries are not only the elderly but also the youth and school learners. Targeting must also be intensified for community members who are already gardening as this helps with longevity of gardening and sustained interest.

Improved criteria for most likely successful beneficiaries: The districts that targeted beneficiaries who had an interest in gardening, had higher success rates in terms of retention when compared to those that did not take gardening interest into account. This finding ascertains that agency enhancing aspect of any food security programme has a higher change of sustainability and further empowerment, attesting to the need to employ the six-pillar framework of food security.

Capacity building platforms

The WCDOA should look at having more platforms for food security beneficiaries to engage with each other. They can also look for opportunities to pair these households and community garden owners with bigger farms for training and capacity building for them to be proficient gardeners. WCDOA should also have a planned, structured schedule of training for beneficiaries.

Collaborations and partnerships

There is a need to strengthen partnerships with other spheres of government, NGOs, and business. This will result in increased support of the beneficiaries of the food security programme. Memoranda of understanding must be drawn up and agreements entered by the different players to ensure support of the programme.

Complementary interventions to expand food security programme design to encompass all six pillars of food security.

The Food Security Programme needs to be enhanced by other interventions to include all six pillars of food security that provide income to the beneficiaries. There is need to partner with organisations that can provide credit and training as this can enhance agency and sustainability to beneficiaries that have the potential to run a small-scale business other than selling their garden produce.

IMPLEMENTATION EVALUATION

Monitoring and Evaluation

The Western Cape Department of Agriculture (WCDOA)should establish a monitoring and evaluation (M&E) system. This entails having a M&E framework which focuses on planning, monitoring, reporting and evaluation. This could initially be via a M&E consulting firm whilst capacity building is taking place. In the third phase of the programme (2022/2023-2027/2028), it is highly recommended that a base line study aimed at collecting the initial data of the beneficiaries be commissioned.

Database for food security beneficiaries

A database with details of beneficiaries should be established to form primary data for recording and storing details of beneficiaries. This would make it easy to conduct follow up visits more efficiently and to update contact details regularly. The current system is on excel and is not as strong and secure as a relational database stored using SQL or other similar system.

Train gardeners on sustainable methods of gardening

WCDOA officials need to intensify training on sustainable methods of gardening, this can improve sustainability and agency, the new pillars of food security. This should be done in conjunction with addressing environmental, economic, and social dimensions of sustainability simultaneously, at every stage of a food system. Household gardens in particular need more of this training.

Use of manure and greywater

The use of manure should be encouraged amongst beneficiaries, it is an element reflecting the sustainability pillar of food security. Own manure is economical; thus, capacity building should include how to make own compost, manure and using own waste and other local recyclable material.

Water security is critical for food availability (Pillar of Food Security) as it leads to adequate and excess production, which is important for income generation (access: pillar of food security). Therefore, water harvesting techniques that can be imparted to beneficiaries are important, the purchase of jojo tanks should be encouraged.

OUTCOME EVALUATION

Complimentary Interventions

Complementary interventions once introduced will have the potential to improve food security outcomes amongst beneficiaries. It would also enhance agency and sustainability to beneficiaries that have the potential to run a small-scale business other than selling their garden produce.

GENERAL

Human Resources

The WCDOA should establish a Directorate dedicated solely for food security with sufficient human resources to conduct programme implementation and monitoring. In addition, WCDOA officials can improve the current implementation by following through on the Theory of Change activities as well as learning from other officials that are having better success.

Streamlining of Operations Between WCDOA and CASIDRA

While the arrangements between the WCDOA and CASIDRA seem to be working, there is need for the two entities to sit and clearly outline their roles and responsibilities with respect to the programme to minimise inefficiencies and role clashing.

EXECUTIVE SUMMARY

This report presents the evaluation of the Western Cape Department of Agriculture (WCDOA) Food Security Programme for the 2016/17 to 2021/22 financial year periods. The period in question was characterised by global economic downturn and the impact of the COVID-19 pandemic.

Brief Programme Description

The Food Security Programme was initiated in 2009 with the aim of enhancing household food security amongst the vulnerable and citizens of limited means within the Western Cape province. The programme provides stater packages to selected households, community, and schools with the objective of assisting beneficiaries establish and maintain a food security initiative such as a garden, poultry and piggery. The intended outcome of the programme is to increase levels of food security amongst the targeted beneficiaries so as to improve the general household food security in the province.

Methods

Surveys

Three surveys were designed for the different types of food security initiatives that the WCDOA focused on. The surveys were designed to capture demographic data of beneficiaries as well as programme implementation and outcome evaluation questions.

Sampling Procedure

Cluster sampling was used, and each of the eight districts in the province was used as a cluster. A sampling strategy of 10% was applied per district per year. Beneficiaries were randomly selected from each cluster, based on the number of beneficiaries per year.

The sample size of respondents was as follows per District:

- Cape Town: Households (632); Community (42); Schools (6)
- Cape Winelands: Households (128); Community (16); Schools (1)
- Central Karoo: Households (149); Community (1); Schools (1)
- Eden: Households (87); Community (12); Schools (0)
- Little Karoo: Households (194); Community (18); Schools (5)
- North-West Coast: Households (74); Community (2); Schools (11)
- Overberg: Households (153); Community (3); Schools (4)

Structured key informant interviews

Interviews were conducted with officials from the WCDOA and CASIDRA. The interviews aimed at gaining more insight into the conceptualisation, design, and implementation of the food security initiatives related to the evaluation period. These interviews also informed the revision of an existing TOC.

Food security tools

Traditionally, food security is measured using the four pillars of food security namely availability, access, utilisation, and stability. For the first time in the Western Cape Food Security Programme evaluation, two additional pillars to food security measurement were introduced. These were in the form of agency and sustainability. Each of these pillars is measured using the wing tools; **Access** (Household Food Insecurity Access Scale (HHFIAS); **Utilisation** (Household Dietary Diversity Score, HDDS); **Stability** (Income, yields), **Agency** (Empowerment and agency indicator), **Sustainability** (economic-income, assets, environment; size of garden, gardening with chemicals or not, social network/meet with others).

Document analysis

During the evaluation, several documents were requested and studied to inform the findings of this evaluation. The main documents were the WCDOA strategic documents, the policy on food and security; project completion reports from CASIDRA and internal operation programme records.

Overview of Findings

Design Evaluation

A diagnostic analysis of the Food Security Programme conducted via a literature review revealed the following:

- The WCDOA Food Security programme has enough elements to be able to fulfil its needs. When used as an intervention for household food security and if implemented correctly, food security initiatives can improve food security at the household level. There is however room for improvement, the WDOA food security programme currently focuses on four pillars of food security and there would be more benefit if it focused on six pillars.
- There is need for the WCDOA to focus on six pillars of food security to get maximum benefits from the food security programme. Historically the focus has been on availability, access, utilisation, stability. More work is required on the additional two pillars namely, agency, and sustainability.

The diagnostic analysis of the Theory of Change (TOC) of the WDCOA revealed the following:

- The WCDOA officials had a clear understanding of what the theory of change (TOC) entails, and after the interviews with them, an updated TOC was developed. The current TOC contained key programme activities, outputs and outcomes but lacked inputs and resources required to ensure programme functionality. In addition, there was no clear demarcation between short medium-and-long-term outcomes. A revised TOC is presented incorporating all the identified elements.
- Other Key lessons were:
- Food gardens should be complemented by other subsidiary projects linked to gardening such as other economic generating projects to enhance diet, household income and capacity to absorb shocks and trends like droughts and climatic change. This is particularly the case in some parts of the district where farming is seasonal, and the areas are drier and experience less rain fall per year.
- There is need for land and water to be adequate for the gardens to thrive.
- Knowledge of gardening as well as availability of gardening tools are essential for a garden to be successful.
- Community gardens require ongoing support from the community and conflict resolution strategies to prolong their existence.
- There is need for ongoing support and adequate human resources for the programme to work.
- Working with other partners assists with consolidating support to the programme beneficiaries.

Implementation Evaluation

The beneficiaries to the household initiatives were derived from local municipalities' indigent lists. They come from communities that are identified as vulnerable and of limited economic means.

In terms of the community gardens, participants came from the same communities, but had access to bigger land spaces than their backyards and worked as a team in the garden. Similarly, the school gardens consisted of school staff, parents, and leaners of that school. The beneficiaries suited the description as per the TOC and programme description.

Beneficiaries surveyed versus the ones still actively gardening were as follows (respectively):

Household Gardens

- Cape Town (1100)/ (68.04%)
- Cape Winelands (94)/60.63%)
- Central Karoo (146)/ (100.00%)
- Eden (61)/ (73.77%)
- Little Karoo (123)/ (85.83%)
- North-West Coast (46)/ (65.21%)
- Overberg (126) / (74.60%)
- Swartland (94)/ (64.89%)

Community Gardens

- Cape Town (42)/ (88.09%)
- Cape Winelands (16)/ (50.00%)
- Central Karoo (/) (100.00%)
- Eden (12)/ (16.66%)
- Little Karoo (18)/ (61.11%)
- North-West Coast (2)/ (50.00%)
- Overberg (3)/ (100.00%)
- Swartland (17)/ (64.70%)

Schools

- Cape Town (6)/ (100.00%)
- Cape Winelands (1)/ (100.00%)
- Central Karoo (1)/ (100.00%)
- Eden (0)/ (0/00%)
- Little Karoo (5)/ (17.85%)
- North-West Coast (11)/ (39.28%)
- Overberg (4)/ (14.28%)
- Swartland (0)/ (0.00%)

Beneficiary characteristics:

Gender: Most household beneficiaries were female (66.54%) validating the fact that women are significantly more interested in participating in agricultural initiatives compared to males

Age: The age breakdown shows an aging population that was provided with household garden support packages. The average age of the beneficiaries is 55 years.

Household Income: Most households live on a grant and their monthly income is below R5000.00

Youth Representation: The youth (aged 18-35 years), formed 6.81% of the beneficiaries.

Disability Status: There were 10.36% beneficiaries living with a disability, this is above the national average of 7.5%. (Statistics South Africa, 2014). The participation in food gardens platforms breaks the social

exclusion among people, thus encourages those individuals who are physically challenged to be part of the community.

Key activities and sufficiency of resources

- Overall, the main activities of implementing the programme which included enrolment, training and programme monitoring were performed in all districts, notwithstanding nuances in how some activities were performed. Nuances included different enrolment methods, while other districts used the municipal indigent register some did not, other districts had planned training whilst others did not. In other cases, district officials engaged in planned monitoring of beneficiaries whilst in others they followed up only on special occasions such as garden competitions or upon being prompted by the beneficiaries.
- The main challenge that was identified in the implementation evaluation was inadequate human resources to monitor and run the programme efficiently. As a result, programme monitoring via return visits to beneficiaries was done haphazardly and was insufficient.
- The training of beneficiaries was ad hoc, and beneficiaries indicated that they needed more training and further assistance.
- Water was a challenge in the Central and Little Karoo, whilst land seemed to be adequate and beneficiaries also using old tyres and tins for planting.
- Collaboration with other organisations occurred but at an extremely low level. The partnerships
 that seemed to work well were those with the Community Development Workers (CDWs) and
 with CASIDRA. On the other hand, the profiling and selection of beneficiaries was done very well
 by all districts and the selected beneficiaries met the required characteristics.
- A high number of beneficiaries reported using own manure Household (75.98%), Community (73%) and Schools (81%). Officials indicated that they encouraged beneficiaries to have sustainable and organic gardens by using manure.

Key Lessons learnt from programme implementation

- Smaller community groups had better outcomes in terms of longevity and conflict resolution.
- Community and school gardens interacted more with fellow gardeners, whilst the household gardens had little interaction, and therefore less social capital and loss of potential benefits resulting from knowledge sharing and other social capital benefits.
- There was little participation from the youth and the average age of the beneficiaries was 55 years.
- Gardeners required more training than was provided by the department in particular dealing with pest control.
- The key programme features that led to success were identified as follows.
 - ✓ Commitment
 - ✓ Availability of support from family
 - ✓ Prior knowledge of gardening, piggery and chicken rearing
 - ✓ Availability of resources and implements
 - ✓ Monitoring and Evaluation visits
- Most (95%), beneficiaries expressed appreciation for the opportunity provided to them by the government. Regardless of the type of garden, all beneficiaries were positive about the programme. Most were proud of their projects and the growth they have experienced over the years.

To what extent have the recommendations in the Management Improvement Plan following the 2014 evaluation been implemented?

- Non sole reliance on Indigent register to select beneficiaries, officials use CDWs to identify beneficiaries that fit the 'indigent'.
- Garden size considerations: The size of garden space was not used to disqualify beneficiaries as container planting, vertical trellises were considered as options for beneficiaries.
- Implementation of a Take-home training manual proved beneficial to beneficiaries.
- Improved criteria for most likely successful beneficiaries: The districts that targeted beneficiaries who had an interest in gardening, had higher success rates in terms of retention when compared to those that did not take gardening interest into account. This finding ascertains that agency

enhancing aspect of any food security programme has a higher change of sustainability and further empowerment, attesting to the need to employ the six-pillar framework of food security.

Outcome Evaluation

- The result of the Household Food Insecurity Access Scale (HHFIAS) shows that, on average, about 58% of the community is food secure while 42% are food insecure. The implication of the result shows that there is an improved accessibility to nutritious food within the community.
- This might connect to the noted participation of the community members in food gardens due to other reasons such as social connectedness.
- In terms of household beneficiaries, the evaluation showed that only 7.84% household beneficiaries were found to be food insecure, the majority were mildly and moderately food secure. This may be attributed to their various sources of income including social grants (48.37%).
- With regards to the household dietary diversity score (utilisation pillar), the result shows that 85% of the community gardens are mildly food insecure while 4.3% and 10.14% are moderately and food insecure, respectively.
- When looking at household gardens, 41.51% were found to be food insecure, while 58.49% were found to be food secure.
- A large proportion of the household food garden beneficiaries indicated that their income status had either become less (52%) or stayed the same (40%) after taking part in the intervention. This is indicative of the fact that the beneficiaries relied on government grants as their main source of income. Little or no income came from the garden, although gardens were used as a source of food that had little impact on their income.
- A large proportion (59.08%) of the household beneficiaries indicated that they spent more than 50% of their income on food. This is indicative of a community of poor households. The Living Conditions Survey report (2015) states that in South Africa, poor households spend close to 40% or more of their income on food (Statistics South Africa, 2015). Since their participation in the programme, 50% indicated that they spent less of their income on food, whilst the other half claim to spend the same or more.
- To determine if the programme was being successful, two proxy variables were used, namely the ability of beneficiaries to sell their produce and retention rate (how many beneficiaries are still active since commencement of funding of the sample measured), community gardens had a higher success rate (84%) compared to household gardens (23.43%) when it came to the ability to sell produce. On the other hand, the retention rate was lower for community (61.05%) as compared to household (75.00%) and schools with a rate of 88.89%.
- Success in community gardens can be attributed to the fact that most community gardens existed before being funded and they had more experience in the trade, whether it was vegetable gardens, poultry, or piggery. Community gardens had a good network with other gardeners, and this provided the additional support and advice, similar with school gardens.
- In terms of the active chicken & pig projects (61%), it was found that these projects pre-existed before the food security project funding. This suggests that they had knowledge of chicken rearing and running the business. Some of these projects also employed full time workers.

Key recommendations

Monitoring and Evaluation: Consistent programme monitoring and follow up support from WCDOA officials.

Database: Establishing a robust database for recording and storing details of beneficiaries to assist with monitoring and evaluation. The current excel database is not sufficient.

Human Resources: Have a directorate dedicated to food security with sufficient human resources to conduct programme implementation and monitoring. Officials must implement the programme as per the TOC and learn from those that are more successful.

Improved targeting and marketing: Market the programme widely in the targeted communities, to include the youth and school learners. Target people with gardens and already showing interest in gardening.

Capacity building & Food security six pillar definition: WCDOA should also offer training often and have a planned, structured schedule of training for beneficiaries and provide other platforms for capacity building. Any training should be conceptualised with the understating that food security encompasses six pillars. The six pillars should be considered in programme design & implementation.

Collaborations and partnerships: Strengthen partnerships with other role players to provide more support to beneficiaries.

Complementary interventions: Food security needs to be enhanced by other interventions that provide income to the beneficiaries. There is need to partner with organisations that can provide credit and training to beneficiaries that have the potential to run a small-scale business other than selling the produce they get from their garden. This will improve the overall goal of food security and economic status of the beneficiaries.

Train gardeners on sustainable methods of gardening: WCDOA officials need to intensify training on sustainable methods of gardening, including use of own manure and greywater. This should be done in conjunction with addressing environmental, economic, and social dimensions of sustainability simultaneously, at every stage of a food system. Household gardens in particular need more of this training.

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1. INTRODUCTION TO THE EVALUATION

1.1 Introduction

Socio-economic challenges arising from slowing economic performance, job losses and shrinking job markets compounded by increasing migration into urban areas exert pressure on per capita incomes for the most vulnerable individuals, families, and communities. These pressures culminate in food insecurity at the household and community levels thereby compelling various government structures to initiate programmes focusing on food security over and above the other social services demands.

As stated by Minister of Agriculture in the Western Cape Dr Meyer (2020), "We are encouraging households to start vegetable gardens. The ability to provide food for oneself and one's family promotes dignity and wellness." The Western Cape provincial government has a keen interest in the development of food security initiatives.

Food security is an area of key interest amongst governments worldwide. This interest has translated into initiatives designed to enable individuals to be food secure. As observed by Adeoluwa et al., (2021), South Africa presents a paradox of a country which is nationally food secure, with a wealth of institutions and targeted food policies, a strong research system and developed social welfare programmes, yet under- and over-nutrition persist. In South Africa, various government structures from national to local authorities engage in food security initiatives. While these initiatives have been designed and implemented, it is imperative that they be evaluated to see if they are still relevant and are producing the intended value and benefits to beneficiaries.

1.2 The Western Cape Food Security Initiatives Background

The Western Cape province is the third largest province in South Africa with a land size of 129,462 square kilometres (10.6% of total land) and a population of approximately 6.5 million people (11.5% of total population) of the country (Statistics South Africa, 2016).

This report focuses specifically on the evaluation of the food security initiatives from the provincial Western Cape Department of Agriculture implemented between 2016 and 2021. The 2016 Community Survey found that the Western Cape had the lowest number of households who ran out of money to buy food in the last 12 months at 13.2% (against a national average of 19.9%). The 2015 General Household Survey found that 17.4% of households in the Western Cape had inadequate access to food and resorted to cutting back on the quantity consumed or number of meals and/or eating a monotonous diet or undesirable foods. For the same reporting period, 6.6% of households in the Western Cape cited inadequate access to food highlighted in terms of running out of food, going to bed hungry, or going for a full day and night without eating. Invariably, the City of Cape Town due to the population density had the highest rate of food insecure households across all the metros in the country, with 31% of households reporting food access challenges (Statistics South Africa, 2016).

Food insecurity in the Western Cape is most prevalent among Black People (Africans and Coloured population groups), with African households making up 53% and Coloured households constituting 41% of those with inadequate access to food. Furthermore, female-headed households are more likely to be food insecure than male-headed households in the Western Cape.

Given the above context, the Western Cape Department of Agriculture (WCDOA) has adopted a proactive approach towards reducing challenges associated with food insecurity through the development of appropriate food security initiatives to cater for the needs of the province. One such intervention is the food security programme.

1.3 Food Security Programme

The Food Security Programme was inaugurated in 2009 aimed at assisting vulnerable citizens who had challenges in obtaining food. Typically, beneficiaries are individuals on the local municipality indigent list. Normally, the beneficiaries will have been identified and registered as needy individuals by Community Development Workers. This programme provides food garden, piggery, as well as one day chicken rearing support packages distributed by the WCDOA extension workers spread across the province with support from the project implementing partner CASIDRA.

The support packages are distributed to the identified vulnerable food insecure households, groups of community members and schools that qualify. The key focus of the programme is to promote and empower community members to produce their own food using the space available to them or to rear livestock such as pigs or chickens to supplement their food needs. The programme's premise is that through the intervention, households and communities will not only provide food security but improve their life skills, health, and self-sufficiency and with time, sell excess produce.

Depending on their location, availability of land, as well as the micro-climate of their area, appropriate nutrition related starter support packages are provided by the WCDOA to beneficiaries.

2. PROGRAMME DESCRIPTION

The programme description provides a summary of the programme, its objectives, and key activities.

2.1 Key features of the food security programme

The following are the objectives of the food security programme as per the WCDOA Strategic Plan for 2015/2016 to 2020/2021:

Table 1: Key Features of the Programme

Strategic Objective	Facilitate access to affordable and diverse food for the food insecure and vulnerable communities.
Objective Statement	Support, advise and coordinate the implementation of the food security policy.
5-Year target	7 975 Food security projects implemented as per integrated Food Security Strategy of SA (IFSS-SA).
Baseline	The Department supported a total of 328 community and 5000 household gardens in the past 5 years and this is expected to increase as the demand for support has risen as per the general household survey.
Justification	A report published in 2013 by the FAO assessing the state of food insecurity in the world established that South Africa is one of only three African countries that are food secure at a national level. Despite this achievement, Statistics South Africa's general household survey indicates that between 10 – 15% of households were still vulnerable to hunger in 2011. The underlying causes of these challenges include a declining trend in subsistence food production, cost of food relative to incomes of the poor and poor dietary habits leading to malnutrition. Therefore, government is expected to assist the food insecure and vulnerable communities with the means to produce their own food as a contribution to the NO 7, Vibrant, equitable, sustainable rural communities and food security for all, and PSG 3, Increase wellness, safety and tackle social ills.
Links	Due to the complex nature of food insecurity, the Department will strengthen links with national departments, other provincial departments, local governments, and civil society structures involved in the food security delivery space.

The WCDOA provides the beneficiaries with various support packages depending on their need and what they are producing (see Table 2 below).

Table 2: Support Packages Provided by the WCDOA to Beneficiaries

Chicken Support	Piggery Medicine & Feed Support	Vegetable	Water tank support		
8 x Chicken Layers	1 x Dectomax	Tools	Compost	Seeds	Irrigation
1 x Feeder	1 x Syringe and needle	1 x Spade Lasher	10 x Compost	Beetroot	Installation of complete vertical water tank 2500lt with build out slab 400m, 12m gutter material and water tap with anchors
1 x Drinker	1 x Terramycin	1 x Rake 16th	1 x 10 kg Eco Pellets	White Pumpkin	
6 x Chicken Feed 50KG	5 x Porker Meal 40kg	1 x Garden Toolset Lasher	1 x 3.1.5 10kg Organics	Squash Rolet	
	5 x Sow and Boar Meal 40kg	1 x 10L Watering can	Production Inputs: 1 x 50L Drum	Carrot	
	6 x Bran 40k	1 x 2Lt Spray can	1 x 5L Bucket	Sweet Corn	
			1 x Vermi Compost Kit	Onion Texas Grano	
			Netting: 1 x 5m x 3m 40% netting	Cabbage	
				Green Peas	
				Green Beans	
				Watermelon	

2.2 Key activities and stakeholders involved in the food security programme

Table 3 summarises the key activities related to the food security programme. The table also identifies the stakeholders responsible for these activities.

Table 3: Key Activities and Stakeholders

Activity	Responsible Stakeholder
Household profiling and beneficiary	District Manager, Extension Officers,
identification	Community Development Workers (CDW)s
Identification of households from the	District Manager, Extension Officers,
Municipal Indigent register	Community Development Workers (CDW)s,
	Local Municipality
Completion of application form	Beneficiaries
Processing of application forms and	District Manager; CPAC
submission to Commodity Project Allocation	
Committee (CPAC).	
Approval letters sent to approved	District Manager
beneficiaries	
Project Management	CASIDRA
Procurement of support packages	CASIDRA
Distribution of support packages	Extension Officers
Training and Demonstrations	Extension Officers and Service Providers
Identification of suitable sites for gardening	Beneficiaries
Growing food in the garden	Beneficiaries
Use of food in households	Beneficiaries
Selling/Exchange of produce	Beneficiaries
Support and Extension services to	Extension Officers; Other Government
beneficiaries	departments, NGOs
Monitoring and Evaluation of programme	District Manager, Extension officers; Service providers; Elsenburg staff

To drive the above programme, a total number of 62 extension officers provide some form of support to the initiatives. These officers have other roles and responsibilities. In general, their performance management is not directly based on the performance or success of the food security initiatives. The officials have other programmes they have to deliver on and the food security initiatives usually take a backstage.

3. PURPOSE OF THE EVALUATION AND METHODOLOGY

The focus of the evaluation is to:

- o Review the design of the programme to see the extent to which the design of the current programme is fit for its intended purpose.
- Review the implementation of the programme to date to critically review programme implementation and identify what is working, inefficiencies and possible optimal means for improvement.
- o Review the outcome of the programme and specifically to identify whether the programme is having the intended outcomes to its beneficiaries.
- o Propose changes and areas of improvement to the programme.

This section outlines the methods and procedures adopted for the evaluation. The type of evaluation utilised is described and justified followed by the methods used to facilitate the evaluation.

3.1 Type of Evaluation Adopted

The evaluation of the Food Security Programme followed a mixed method approach (qualitative and quantitative) with the objective of understanding the evaluation problem. In this evaluation, three components were considered namely: the design, implementation, and outcome.

3.1.1 Design Evaluation

The National Evaluation Policy Framework (DPME, 2012) defines the design evaluation as the analysis of the theory of change, inner logic, and consistency of a programme either before a programme starts, or during implementation to see whether the theory of change is working. Its main object is to assess the quality of the indicators and the assumptions using secondary data and to see if the design of an intervention is robust. In conducting the design evaluation, the DPME proposes that seven key areas be considered:

- Diagnostic analysis of status quo
- Consideration of options
- Theory of Change
- Target group
- Log frame
- Planning implementation
- Summary: Will it work?

Using DPME evaluation framework, the food security programme was analysed through an interrogation of the structure and modus operandi of the problem. The evaluation sought to probe how it has been put together in its structure and approach with the intention of conceptualising the theory of change.

3.1.2 Implementation Evaluation

An implementation evaluation also known as a process evaluation, focuses on the implementation process and attempts to determine how successfully the programme followed the strategy laid out in the logic model (Rossi et al., 2004)). The implementation evaluation provides information about programme performance and assists in avoiding a 'black box evaluation' by preceding an outcome or impact evaluation. Therefore, the implementation evaluation is a complement to an impact evaluation. Its findings provide information about the quality and quantity of the services provided by the programme so that this information can be integrated with findings on their impact (Rossi et al., 2004).

3.1.3 Outcome evaluation

This part of the evaluation consisted of outcome evaluation questions. An outcome evaluation measures the program effects in the target population by assessing the progress in the outcomes or outcome objectives that the program is to achieve. Outcomes are defined as a state of the target population or social condition that a policy is expected to change (Dunn, 2018). Hence, outcomes refer to the benefits that products or services have for the participants and are different from outputs which refer to the delivery of the service.

3.2 Evaluation Design

An evaluation design is a structure created to produce an unbiased appraisal of a programme's benefits. The design of the evaluation depends on the evaluation questions and the resources available (Cook & Campbell, 1979). The design used for the evaluation was a post evaluation design which requires collecting data on the programme group after the programme has been implemented. This design was chosen because there was no baseline data collected from the beneficiaries when the programme started.

Evaluation questions per component

Design Evaluation

- i. Is there a thorough diagnostic analysis of the Food Security programme and its needs?
- ii. Is the implicit Theory of Change of the Food Security Programme adequate for the purpose it aims to serve?

Implementation Evaluation

Service utilisation questions

- Who are the beneficiaries of the Food Security Programme?
- How many beneficiaries were reached?
- What were the characteristics of the beneficiaries?
- What is their socio-economic status?
- Who dropped out of the WCDOA Food Security Programme and why?

Activity and process questions

The following activity/process evaluation questions were answered:

The questions relate to the first three elements of the Programme Theory namely inputs, activities, and outputs.

Input related questions:

Were required resources in place and sufficient?

Activity/Output related questions:

- Were activities implemented as planned? (How often, when, where, and duration?).
- Did the activities vary from one site to another?
- Are the human resources and administrative capacity for management of the Programme sufficient?
- Is the partnership environment for management of the Food Security Programme sufficient?
- What activities worked well? What activities did not work so well?
- How satisfied are program beneficiaries?
- To what extent have the recommendations in the Management Improvement Plan following the 2014 evaluation been implemented?

Outcome Evaluation

- Did the program produce or contribute to the intended outcomes in the short, medium, and long term?
- For whom, in what ways and in what circumstances?
- What were the features of the program and context that made a difference?
- What are the major lessons that can be drawn from the more sustained and successful home, school, and community food security and nutrition?
- What is the difference between the success rate of households and community Food Security initiatives; and what accounts for this?
- What difference has been made in terms of the socio-economic and household food security status of beneficiaries?

4. Scope, sampling procedure and data collection approach of the evaluation

The period covered by the evaluation is five -year period from 2016/2017 to 2020/2021 financial years. The evaluation was conducted on the food security programme initiative in the Western Cape Province.

4.1 Sampling procedure

Cluster sampling was used, and each of the eight districts in the province was used as a cluster. A sampling strategy of 10% was applied per district and per year. The standard sample for each category of respondents was determined using the Cochran's equation.

4.2 Data collection approach

A mixed method approach was used to conduct the evaluation. This combined quantitative and qualitative methods.

4.2.1 Surveys

Surveys were used to collect data from beneficiaries. Three surveys were designed for the different types of food security initiative namely the households, community, and school gardens. The survey consisted of beneficiary details and socio-economic status, implementation, and outcome evaluation questions.

4.2.2 Structured key Informant interviews

Interviews were conducted with officials from seven out of eight districts in the province, the majority being District Managers. Two officials from the WCDOA head office (Elsenburg), were also interviewed. The interviews aimed at gaining more information on the implementation related issues primarily conceptualization, design, and implementation of the initiatives. These interviews informed the revision of the existing theory of change and provided insights on current status quo of project from an official perspective. The data collected from the key informant interviews also formed a basis for developing areas of improvement that can be implemented on the programme.

4.2.3 Food security tools

Traditionally, food security is measured using the four pillars of food security namely availability, access, utilisation, and stability. For the first time in the Western Cape Food Security Programme evaluation, two additional pillars to food security measurement were introduced. These were in the form of agency and sustainability. Each of these pillars is measured using the wing tools; **Access** (Household Food Insecurity Access Scale (HHFIAS); **Utilisation** (Household Dietary Diversity Score, HDDS); **Stability** (Income, yields), **Agency** (Empowerment and agency indicator), **Sustainability** (economic-income, assets, environment; size of garden, gardening with chemicals or not, social network/meet with others).

4.3 Data processing and analysis

Once collected data was processed as follows:

- Qualitative data from the survey was analysed and grouped into main themes. These themes informed the graphs that were used in the findings section.
- Quantitative data was analysed using STATA, a data analysis software, to work out statistics such as proportions, averages, and cross tabs.

5. LIMITATIONS OF THE EVALUATION

The following limitations were noted with respect to the overall data collection and related evaluation activities:

The major limitation of the evaluation was that it was conducted after the intervention took place (Post Evaluation design). Some beneficiaries had stopped gardening, whilst others could not be reached as they may have changed their contact details. Whilst questions were asked about the implementation of the evaluation, responses were limited only to the beneficiaries available at the time of evaluation.

Time and budget constraints and difficulty in locating beneficiaries using the GPS coordinates provided by the WCDOA, made it difficult to visit all districts within the allocated time.

5.1 Data collection challenges

The following are some notable challenges that affected the data collection processes. However, none of them had a significant impact on the quality of data collected:

- The field workers had difficulties accessing some beneficiaries because the details of GPS location provided by the WCDOA was either a church or school, indicating that in some cases, the garden support packages were distributed at a central location in the community and all the beneficiaries provided with support packages on that day were recorded as living there.
- Contact details of some beneficiaries were outdated, and therefore could not be reached.
- Some "listed" beneficiaries claimed to have not received any support package from the WCDOA.
- Duplicates of beneficiary names were found across different years.
- Some beneficiaries were not cooperative and refused to talk to field workers.
- Some beneficiaries are employed full time and were not available during the day for them to be surveyed.
- No contact details were provided for some projects, particularly the community projects. This slowed down the field workers in conducting the work on community projects as they had to rely only on the GPS pin provided and after driving all the way, the location was either wrong or the beneficiary was not available to talk to them. In other cases, the beneficiary asked the field workers to return on another day, and in some cases, they did not honour the appointment.
- Other areas in the City of Cape Town Metropole had high levels of crime. A team of field workers in this district were robbed and the vehicle they were travelling in was almost hijacking whilst they were on duty.
- In terms of fieldworkers, some students were used, and some chose to return to college at the beginning of the term. Replacements had to be recruited and trained, which caused delays in some instances.
- Other fieldworkers left the project when they found full time employment, also prompting the lead evaluators to find and train replacements.
- WCDOA officials were difficult to find for Key Informant Interviews, as a result only two (25.00%) out of the eight targeted officials were interviewed. In the District offices, seven out of eight officials (87.50%) were interviewed.
- Loadshedding impacted heavily with the smooth operation of the evaluation.
- Significant cost of fuel and its associated ripple effect on other costs impacted on the evaluation as there were constant price changes that also affected planning.

6. FINDINGS OF THE EVALUATION

The findings of the evaluation will be reported based on the evaluation questioned and per evaluation component.

6.1 Design evaluation

Is there a thorough diagnostic analysis of the food security programme and its needs?

6.1.1 Analysis from literature review

The results from the literature review showed that the food security programme has enough elements to be able to fulfil its needs. When used as an intervention for household food security and if implemented correctly, food security programmes can improve food security at the household level.

The literature review revealed that there is need for the WCDOA to focus on six pillars of agriculture to get maximum benefits from the food security programme. The six pillars being: availability, access, utilisation, stability, agency, and sustainability. The two crucial elements of the programme that need to be considered are agency and sustainability, empowerment is also a crucial aspect. Training of beneficiaries will therefore need to be enhanced to include these two elements. Beneficiaries should be encouraged to take control of their situation, as merely relying on assistance from the WCDOA is not enough. Sustainability means that gardeners should be taught the importance of using organic farming systems to remain sustainable. Whilst it was revealed in interviews with the WCDOA officials that the department encourages use of grey water and homemade manure, there is room for improvement in terms of social and economic sustainability, particularly at the household level.

6.1.2 Theory of change

Is the implicit theory of change of the food security programme adequate for the purpose it aims to serve?

6.1.2.1 Theory of change for the Food Security Programme

The theory of change (TOC) consists of six elements, the situation, assumptions, external factors, potential unintended results, risks, and the logic framework (see comprehensive report for the full TOC).



FOOD SECURITY PROGRAMME

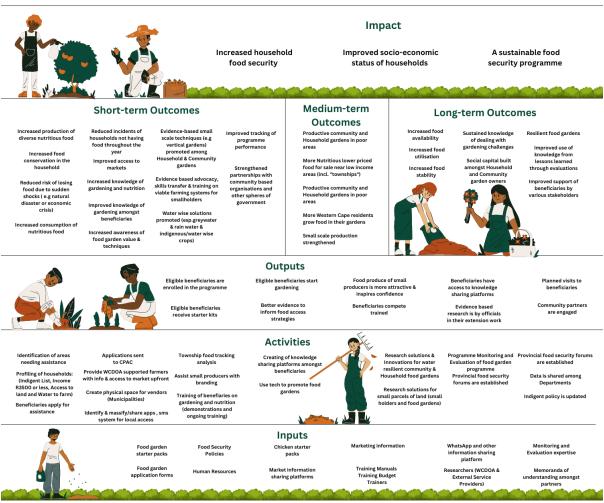


Figure 1: Logic Framework of the TOC: Food Security Programme

6.1.3 Conclusion: Design evaluation

The design evaluation revealed that there was a TOC for the food security programme. The officials had a clear understanding of what the TOC entails and after the interviews with them an updated TOC was developed, as depicted in Figure 1 above. The interviews with officials clarified activities that formed part of the TOC. The literature review conducted for the evaluation revealed that the updated TOC had adequate components and had potential to lead to expected outcomes if implemented correctly.

6.2 Implementation evaluation

6.2.1 Beneficiaries

Who are the beneficiaries of the food garden food security programme?

The beneficiaries of the programme consisted of households listed on local municipalities' indigent lists. They come from communities that are identified as vulnerable and low income. In terms of the community gardens, participants came from the same communities, but had access to bigger land spaces than their backyards and worked as a team in the garden. Similarly, the school gardens consisted of school staff, parents, and leaners of that school.

How many beneficiaries were reached?

Table 4: Beneficiaries reached: all garden types

District	10% target	Actual Sample	10% target	Actual	10% target	Actual
	sample size	size (Households)	sample size	sample size	sample size	sample
	(Households)		(Community)	(Community)	(Schools)	size
						(Schools)
Cape Town	388,5	632	15.8	42	5.6	6
Cape						
Winelands	120,2	128	6.2	16	1.4	1
Central						
Karoo	76,5	149	1.9	1	0.8	1
Eden	100,1	87	4.4	12	0.4	0
Little Karoo	53,3	194	3.6	18	1.3	5
North-West						
Coast	42,9	74	4.3	2	1.2	11
Overberg	139,8	153	4.2	3	1.2	4
Swartland	79,1	127	4.2	17	0.9	0
Total	1000,4	1 544	44.7	111	12.8	28

Not all beneficiaries were surveyed, as seen in Table 4. An attrition level of 28.76% was found in the household beneficiaries. A big proportion of these households (50.00%) moved to another area. This shows that social factors of the households have significant impact on their participation in food gardens.

Who dropped out of the WCDOA food security programme and why?

Table 5: Active Beneficiaries all garden types

All Districts	Household beneficiaries surveyed	% Active	Community beneficiaries surveyed	% Active	School beneficiaries surveyed	% Active
Total	1100	74.09%	73	66.36%	27	88.80%

Various reasons were provided by beneficiaries who had stopped gardening. The most common reasons were vandalism, theft, lack of seeds and other reasons. In community and school gardens, often when the leader left the rest lost interest, the other common reason was that members got other employment or economic opportunities.

6.2.2 Characteristics of the beneficiaries

What were the characteristics of the beneficiaries?

Table 6 provides a breakdown of the gender of household gardens beneficiaries as well the representation of women. Most studies have shown that participation in agricultural operations is significantly influenced by gender. According to Etwire et al (2013) women are more interested in taking part in agricultural activities than men. These results support Etwire et al., (2013)'s findings. The level of participation by female is significantly high in all sampled districts.

Table 6: Household beneficiaries' gender

Female	Male	Total	% Female
732	368	1100	66.54

6.2.3 Age distribution and youth representation

Table 7: Household beneficiaries' age

Mean	Minimum	Maximum	% Youth
54.67	18	93	75(6.81%)

The age breakdown shows an aging population that were provided with household garden support packages. The average age of the beneficiaries was 55 years. This could be attributable to the selection criteria being the indigent list of the local municipalities. These residents are normally pensioners who own Reconstruction and Development Programme (RDP) houses. On the other hand, the youth, aged between 18 and 35 years, constituted 6.81%. Youth involvement is crucial in solving economic challenges and unemployment which has a bearing on food security in the household.

6.2.4 Representation of people living with disabilities

Table 8: Representation of people living with disabilities

Living with a disability	Total	% Living with a disability
114	1 100	10.36%

People living with disabilities are vulnerable and prone to unemployment and it is vital that they are encouraged to take part in the food garden programme. Although there are significant socio-economic differences among the ethnic groups in communities, the participation in food garden platforms breaks the social exclusion among people, thus encourages those individuals who are physically challenged to be part of the community.

6.2.5 Educational level

It has been established that households' decisions to participate in any agricultural initiatives or platforms are positively impacted by their educational status. Education enables a person to weigh the benefits of any projects before deciding to accept or take part in them using the knowledge they have learned in school. In this evaluation beneficiaries with a qualification higher than matric had a retention rate of above 83% whilst those with matric had a 71% rate and those with a qualification less than matric had a rate of 74%.

Table 9: Educational level of participants

Degree	Diploma	Less than matric	Matric	Total
6	23	913	158	1100

What is their socio-economic status?

6.2.6 Household income

Another aspect that influences food gardens is household income. To diversify their diet and source of food, many households engage in food gardens. The findings show that the majority of engaged households is primarily made up of pensioners or state old pension grant dependents whose income is less than R5000.00. In most cases, they cannot afford to buy all the food items, thus some households participate in food gardens to meet their meal demands.

Table 10: Household income

District	R0 -5000	R5000- 10000	R10000 -15000	% R O - 5000	Average number of people employed per household	Average Number of people receiving a grant per household
Total	1057	41	2	96.09%	0.82	1.21

6.3 Characteristics of the food gardens system

6.3.1 Type of produce

The food gardens produced similar vegetables across the three categories of household, community, and schools. The most common being spinach, beetroot, cabbage, carrots, onions, potatoes, and peppers. Amongst the community garden beneficiaries, there were some who were producing chickens, eggs, and pigs.

6.3.2 Organic system

Table 11: Use of own manure versus purchased chemicals

Garden type	Percentage of beneficiaries using own manure
Household	75.98%
Community	73%
School	81%

All gardens use sustainable ways of gardening. This is indicated by the fact that all types of gardens had a high percentage of use of own manure instead of purchased chemicals.

6.3.3 Water source

Table 12: water source by garden type

Water Source	Household	Community	School
Municipal Water	84.62%	15.38%	3.70
Tank and Municipal water	13.87%	20.51%	
Tank and Borehole			77.79%
Neighbours and schools	00.30%		
Boreholes	00.21%	38.46%	18.51%
Greywater	01.00%	2.58%	
Dam/River		23.07%	
Total	100.00%	100.00%	100%

At the household level, although the majority of household gardens surveyed use municipal water (84.62%), there is wide usage of water tanks. The evaluation also noted that the number of beneficiaries that have received a water tank as part of their garden support package are few in numbers (13,87%). There was limited mention of the use of greywater (1% households and 2.58% community gardens and none for school gardens). Municipality water is expensive and may have a direct impact on the continuity with the garden project. Use of sustainable gardening methods helps to save the environment and contributes towards the maximisation of yields for gardeners. The WCDOA officials need to intensify training on sustainable methods of gardening. This should be simultaneously done while addressing environmental, economic, and social dimensions of sustainability, of a food system at every stage.

6.3.4 Networks for sharing information

The community and school garden members often network with other gardeners to share information and advice. They engage with other gardeners via WhatsApp groups and Facebook. They share seedlings, seeds, and organic fertilizer.

Community gardeners visit other gardens to get new ideas. They also encourage each other to go for seminars and training, exchange seeds, compost, and seedlings. They also help each other when one of them needs more labour.

The community and school gardens therefore seemed to be better connected compared to household gardens which tend to be isolated.

6.4 Selection of beneficiaries

How were beneficiaries selected?

Officials described a similar process of profiling households and identifying areas that needed intervention. This process involved use of census data or Community Development Workers (CDW)s to identify areas with households that needed intervention via the food garden programme. However, there were nuances in terms of the application process and use of indigent list. In some cases, officials did not use the indigent list at all but self-selected households that suit the description of 'indigent'. In other cases, the officials approached households with existing gardens, whilst in other cases officials waited for potential beneficiaries to approach the office and apply for the programme. This usually followed information sessions that were provided in communities.

In terms of community and school gardens, the beneficiaries organised themselves and approached the department. Officials merely played a coordinating and encouraging role. In other instances, officials facilitated land rentals via the local municipality.

6.5 Sufficiency of human resources and administrative capacity for programme management

Are the human resources and administrative capacity for management of the programme sufficient?

Key informant interviews with officials revealed that most districts did not have adequate human resources to support the programme. The interviews revealed that the officials had multiple deliverables that they had to achieve in their portfolios such as commercialisation of small-scale farmers. They expressed concern that there were too many households, community, and school gardens to follow up hence, they did not have time to monitor the programme efficiently.

6.6 Programme implementation monitoring

How is programme implementation monitored?

The issue of inadequate human resources was augmented by the responses to this question. Most officials indicated that they did not have sufficient time to monitor programme implementation, as a result this was done on an ad-hoc basis rather than on a planned and systematic basis. Two districts reported having a planned schedule of programme monitoring, whilst one district stated only returning to the beneficiaries when prompted by special events such the World Food Programme event.

6.7 Resources in place and sufficiency

Were required resources in place and sufficient?

In this question, resources not only human, but land and water were explored. The answers came from a combination of the key informant interviews as well as the beneficiaries' survey answers. The responses from the officials indicated that for household gardens there was enough land for gardening. Households were encouraged to use their back yards and make use of hydroponic methods if possible. They were also encouraged to use old tins and tyres for planting purposes.

When it came to community gardens, the requirement was that they have access to at least half a hectare of land. They also needed security of tenure or permission to use that land, which posed a challenge. The WCDOA officials engaged with the local municipalities to assist in facilitating access to land available in the community but that did not always produce positive results.

Water proved to be a scarce resource in the Little and Central Karoo areas. Due to low and infrequent rainfall, these areas needed bigger water storage tanks than in other areas and this made the intervention more expensive. The challenge of infrequent rainfall and prolonged periods of drought in these areas affected production during certain months of the year when beneficiaries were not able to produce anything from their gardens. Further, beneficiaries indicated that they had enough tools and tanks provided by the WCDOA, but needed more compost, manure, seeds, assistance with pest control and further training.

6.8 Partnership environment

Is the partnership environment for the management of the Food Garden Programme sufficient?

The most common collaborative activity that the officials mentioned was with other spheres of government. Local governments came up as the most collaborative partner and provided indigent lists from which to select beneficiaries for the programme. The CDWs employed by local government departments assisted in profiling and identifying suitable beneficiaries for the programme.

Another government department mentioned was the National School Nutrition Programme (Dept of Education), a key partner in the school gardens which sits in the CPAC where decisions are made regarding which projects to fund.

Two districts mentioned having relationships with Non-Governmental Organisations (NGOs) that help them with funding. All officials identified CASIDRA as an implementing partner that is crucial to the funding and project management of the food garden programme. Although collaborative activities are limited in the food garden programme, there is room for improvement. Due to the highly specialised field of agriculture, there are very few players to collaborate with. Key interview respondents mentioned that NGOs were more involved in other social issues in their areas but very few were in the field of agriculture.

6.9 Beneficiaries training

What type of training is provided to the beneficiaries?

A crucial component of the food garden programme relates to the training of beneficiaries. All the WCDOA officials indicated that before being issued with garden support packages, beneficiaries were provided with basic training over a half day duration. The training focused on demonstrating how to plant seeds and seedlings as well as other best practice in running home based or community-based gardening. Similarly, those who benefited from chickens and piggery funding received some training on how to care for either poultry or livestock, respectively. In one district, an official mentioned that a handbook was left with beneficiaries for further reference.

How often is training provided?

WCDOA officials gave diverse responses. Others indicated that there was an effort to do training on a quarterly basis as per a planned schedule whilst others provided training only when a need arose from the beneficiaries. On the other hand, when beneficiaries were asked whether they had received any training from the WCDOA, only 46% agreed.

6.10 Challenges faced in implementing the programme

Challenges encountered were looked at from the perspective of the WCDOA as well as the beneficiary.

6.10.1 Challenges faced by WCDOA officials

The officials interviewed identified challenges which included capacity to implement the programme, safety of staff members in targeted communities, issues with supply chain management, beneficiary, and climate related challenges.

6.10.1.1 Supply-chain-related issues

One official highlighted the exorbitant cost of starting a garden. The official believed that the involvement of CASIDRA pushed the cost to about R4000 per garden and that this could be significantly reduced.

6.10.1.2 Human resource shortages

As alluded earlier, another concern that officials expressed was the large number of beneficiaries they had to assist with a small staff complement. One official said, "for now it's more like chasing numbers but not really looking in us rolling out what is it exactly that we must roll out." Another official was quoted as saying "I do not think we have enough workforce to monitor or follow up across the three subcategories of projects. It is impossible with the current number of staff." Another official from a different district added that, "The other one is staff capacity especially because we don't do just 10 gardens, we do like over a 100 under normal circumstances in the district and to monitor that is a bit difficult."

6.10.1.3 Safety of staff in implementing the programme

Safety of staff was raised as a challenge in one district. The official mentioned that government officials were targeted when they visited some areas. It was reported that some unruly community members stole support packages from the officials' vehicles. In one instance, two officials were shot at but were not injured, fortunately.

6.10.1.4 Beneficiary related challenges

The commitment of beneficiaries posed a challenge towards the implementation of the programme. In some cases, there were reports of beneficiaries selling the support packages or taking support packages and just keeping them in their backyards. In terms of community gardens, there were reports indicating poor commitment leading to challenges for members to continue working together. In some instances, poorer commitment led to group conflict which led to the breakup of the group. It must be mentioned however that group conflict was rare but where it was apparent it had negative consequences.

One official noted that there was a lack of knowledge regarding the value of adding vegetables to one's diet and that beneficiaries needed education on the importance of having a vegetable garden.

In one district, an official mentioned that working with the Department of Education to establish food garden was a challenge as there was little interest from that department.

6.10.1.5 Climate related challenges

The Central and Little Karoo face more challenges related to drought and insufficient water as compared to the other six districts. In these two districts, beneficiaries may require some form of innovative mechanisms of obtaining water and storing it. For the food garden intervention to work, the support packages must include bigger water tanks than in other parts of the province. This might impact the cost of providing the support packages but is likely to be a mechanism through which gardens can be sustained.

6.10.2 Challenges faced by beneficiaries

Household gardens expressed various challenges, the most pressing being poor training in good agricultural practices resulting in lack of knowledge gardening techniques, crops to grow as well as in pest control. Beneficiaries also lamented on the lack of fertiliser and compost. Other challenges included theft of produce by other community members and lack of ongoing support from the WCDOA officials.

In terms of the community and school projects, the main challenge experienced was loss of interest from group members. In most cases, the group members ended up being a married couple or a family which used to be part of a bigger community group. In other cases, when the main member died or lost interest, the other members stopped taking part in the project. School gardens cited lack of resources, theft of both produce and equipment, lack of irrigation systems and pests.

6.11 Beneficiaries' satisfaction

How satisfied are beneficiaries?

Most (95%), beneficiaries expressed appreciation for the opportunity provided to them by the government. Regardless of the type of garden, all beneficiaries were positive about the programme. Most were proud of their projects and the growth they have experienced over the years.

What were the particular features of the program and context that made a difference?

The common theme that emerged was the commitment of the beneficiaries. Officials stated that better outcomes came from the beneficiaries who were committed to their gardens. These beneficiaries also reached out to the officials when they needed help, and some were selling excess produce or exchanging it with other gardeners.

In one district, the difference was attributed to a specific extension officer who initiated a garden club or frequent visits to gardens and encouraged the beneficiaries to visit the other gardens as well. The food gardens in the specific area were thriving due to this initiative. This district has had a remarkably high rate of active gardens in the last six years.

In most rural parts of the province, it was an added advantage for the beneficiaries because they had prior farming knowledge and most of them had grown up within a farming community. In that regard, these beneficiaries needed little training and guidance and had good outcomes from their gardens.

Beneficiaries, particularly the elderly who had support from younger family members fared better than those without support. **Figure 2** summarises the key features that made a difference:

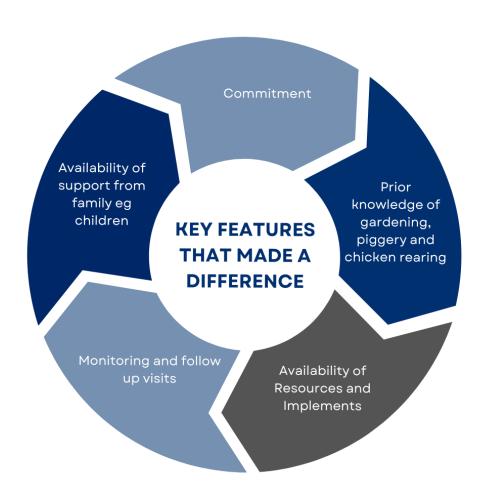


Figure 2: The key features that made a difference

What defines a successful project?

This question was directed to the officials. Two main themes emerged from respondents: longevity and selling or exchanging of garden produce. One official was quoted as saying

You will find that there are people who started with a 4x4 square meter but within a year or two, they have doubled or tripled because we have provided them with seeds or seedlings, they have planted now a variety of crops compared to when they started, and they have started selling surplus to the community.

6.12 Selected case studies and lessons learnt

This section discusses a few case studies that demonstrate important lessons learnt from the programme

Case 1

Samantha¹ Chickens was funded as a community project, but it is run by a woman named Samantha, and her father. They employ one full time employee. The project has been active for the past six years. Samantha rears broiler chickens, and at the time of evaluation she had about 100 broiler chickens. She sells chickens for a living and uses some of the produce in the household. There are twelve people who benefit from the project.

Lessons learnt:

- Community projects are challenging to manage. However, it would seem, as in the
 case of Samantha Chickens, that family-oriented cases could be developed as there
 is likelihood for success because of strong ties.
- To avoid conflict, conflict management and conflict resolution mechanism should be part of the training provided to beneficiaries of the initiative.
- The community projects should benefit from the provision of the SHEP training that will bolster the prospects of success of the project.

Case 2

Anita Koopman² is a 69-year-old woman with a household garden in Hermanus. Her food garden is the size of two doors. She was funded in 2020 by the WCDOA and has a thriving garden where she grows beetroot, cabbage, parsley, and spring onions. She reported that she spends less money on food monthly and she is less worried about food security for her family. Anita also reported that she would often call the department officials to ask questions and request help. In some instances, she was able to send a WhatsApp image to ask for information related to pesticides.

Lessons learnt:

- Individual effort combined with adequate support produces success. Anita's example
 highlights that it is not the size of the garden that matters but the desire to do well and
 support from those with the technical knowhow.
- While it might be expensive to offer support to the numerous household gardens, Anita's example indicates that offsite help can be provided to beneficiaries. She was able to make phone calls and send images on WhatsApp, thus getting assistance without the officials going to her place.

Case 3

Gogo Nomzamo Dladla is a woman aged 93 residing in, Cape Town. She is a vegetable gardener and uses containers for vegetables in her backyard. She has been gardening for 50 years. She reported that life has become expensive especially during the COVID-19 pandemic. What helped her ease the burden of having nutritious food was a garden that could provide her with produce to supplement her food requirements. Gogo Dladla also stated the help she received from her family, particularly those younger energic ones who often helped her do some more physical work and not having to buy some of her food.

¹ Some names have been changed.

Lessons learnt:

- Beneficiaries who are of age require help from family and friends to assist with more physical work.
- There is a need to incorporate younger people so that they too may develop some interest in food production.

Case 3

Spicey chicken project was one of the food security initiatives in the province aimed at ensuring that people have adequate income to access food. The project produced eggs as the main enterprise with the aim to sell and generate an income for continuous production and self - reliance.

Due to group dynamics such as conflict, weak decision-making processes, and lack of commitment from beneficiaries, the project lapsed and failed to achieve the desired objective of improving the livelihoods of its members. Disease outbreak and production technical mismanagement also contributed significantly to the failure.

Lessons learnt:

- Skills development beneficiaries should be trained prior to embarking on any business venture, especially one that involves others.
- Beneficiary number contributes toward the survival and success of any projects.
 Groups should be kept smaller and people with similar objectives and set of behavioral attributes must be put together to form groups.

Case 3

Cape Kids primary school has a thriving school garden project that has won accolades at local, regional, and national levels. The project owes its success to the dedication and innovation of the teacher responsible for it. Teacher Dimples' selfless nature saw her work with learners even during weekends. The school is part of the National School Nutrition Programme (NSNP), a government intervention programme aimed at enhancing the educational experience of the needy learners. The programme was introduced in 1994 for poverty alleviation, specifically initiated to uphold the rights of children to basic food and to contribute to learning in schools.

Lessons learnt:

- Resolute teachers who use innovative teaching methods and combine the garden initiative with other learning objectives are likely to be more successful in developing a functional garden capable of meeting the NSNP requirements.
- Competitions for the NSNP programme help in incentivising teachers and learners in aiming to achieve more with their projects. These competitions must be encouraged.
- Having a dedicated gardener to support the teacher and learners especially during the school holiday seasons is essential. It ensures the sustainability of the project.
- The need for security to protect the produce and equipment for the garden was apparent as some locals stole from the initiative.
- There are a lot of possibilities that emerged from the school project that could be identified at the Cape Kids School Garden project such as:
 - possibility of digitalising information transfer between the school and the extension officers.
 - developing community of learning and sharing information with teachers will help improve their skills

o expanding the programme to encourage the learners establish gardens at home. This will instil a culture of gardening which may become handy when they leave school.

6.13 Conclusion: Implementation Evaluation

Overall, the main activities of implementing the programme which included enrolment, training and programme monitoring were performed in all districts, notwithstanding nuances in how some activities were performed. Beneficiary surveys provided more insight into programme implementation based on their experience. The main challenge that was identified in the implementation evaluation was inadequate human resources to monitor and run the programme effectively and efficiently. WCDOA officials have numerous programmes to attend too.

The household and community gardens are very labour-intensive due to their large numbers. As a result, programme monitoring via return visits to beneficiaries are not coordinated and tend to be done haphazardly and was insufficient. The training of beneficiaries is done in an ad-hoc manner which is inadequate and results in poor outcomes. Some beneficiaries indicated that they never received any training beyond what was stated on the day they received the gardening support packages.

As indicated from the findings, beneficiaries require training and support to ensure success. While some form of collaboration existed with some organisations such as NGOs, and other governmental agencies, the extent of that collaboration is minimal and would require concerted effort at leadership level to ensure a multistakeholder approach is adopted when implementing community development programmes such as the food security programme. The partnerships that seemed to work well were those with the CDWs and CASIDRA. On the other hand, the profiling and selection of beneficiaries was done well by all districts and the selected beneficiaries met the characteristics of the intended beneficiaries.

Through periodic monitoring and evaluation, lessons from successful and failed garden can be used to improve the programme. Training related to group dynamics, conflict management, business management and appropriate agricultural advice related to production of specific commodities should be provided to beneficiaries as a priority.

6.14 Outcome Evaluation

What difference have food gardens made in terms of the socio-economic and household food security status of beneficiaries?

6.14.1 Self-reported responses

This part of the evaluation required beneficiaries to answer situation-based questions to report whether their situation had improved, remained the same or had become worse.

6.14.2 Socio-economic questions

How has your monthly income changed since you participated in the programme

A significant proportion of the household food beneficiaries indicated that their income status had either become less (52%) or stayed the same (40%) after taking part in the intervention. This is indicative of the fact that the beneficiaries relied on government grants as their main source of income. This is evident in the fact the 23,43% of household sell their produce. The fact that the evaluation was conducted as the world was weathering the impacts of COVID-19, gives credence to the results received from the beneficiaries.

What percentage of your income did you spend on food before participating in the programme?

A large proportion (59.08%) of the household beneficiaries indicated that they spent more than 50% of their income on food. This is indicative of a community of poor households. The Living Conditions Survey report states that in South Africa, poor households spend close to 40% or more of their income on food (Statistics South Africa, 2017).

How has your monthly income changed since you participated in the programme? Since their participation in the programme, 50% indicated that they spent less of their income on food, whilst the other half claim to spend the same or more.

What is the difference between the success rate of households and community food gardens/projects; and what accounts for this?

To determine if the programme was being successful, two proxy variables were used, namely the ability of beneficiaries to sell their produce and retention rate (how many beneficiaries are still active since commencement of funding of the sample measured, community gardens had a higher success rate (84%) compared to household gardens (23.43%) when it came to the ability to sell produce). On the other hand, the retention rate was lower for community (61.05%) as compared to household (75.00%) and schools with a rate of 88.89%. The success rates in terms of community gardens being able to sell more than other beneficiaries can be attributed to the fact that most community gardens existed before being funded and they had more experience in the trade, whether it was vegetable gardens, poultry, or piggery. Community gardens had a good network with other gardeners, and this provided the additional support and advice, features which can also be attributed to school gardens.

What is the status of household level chicken and pig farming in terms of its viability and success?

The food security programme also funded beneficiaries with one day chicks and piglets to set up chicken and pig food security initiatives. The evaluation sampled a total of 22 projects of which 19 were chicken based while three were piggery based. Of the sample contactable, 38.46% were inactive whilst 61.54% were still active.

Various reasons were provided by beneficiaries for not being active. These included ill-health, lack of financial resources to continue with the chicken project, inadequate knowledge of disease control and theft.

6.15 Conclusion: Outcome Evaluation

The purpose of this evaluation was to provide empirical evidence on the performance of the food security programme. The six pillars of food security namely, food availability, access to food, utilisation of food, and stability of supply of food; agency of people involved and sustainability of acquiring the food formed the core of the survey questions that was used to conduct the evaluation. Each pillar is associated with an established food security measurement tool such as the HHFIAS (availability, access, agency); Household Dietary Diversity Score (HHDDS) (access, utilisation) and adjusted Women's Empowerment in Agriculture Index (WEIA) (agency and sustainability). Using appropriate questions from the food security measurement tools, the evaluation collected data from beneficiaries associated with households and communities and school initiatives that received funding from the WCDOA.

The food security findings were based on both several tools to reflect all pillars of food security as detailed in the methodology of this evaluation. In relation to households, HHFIAS (access, availability) and HDDS (availability and utilisation) were dominant tools used while an adjusted WAEI and Sustainability indicators were used to elucidate agency as a function of

empowerment that based on HHFIAS, approximately 58% of the community garden evaluated were found to be food secure. This finding is an indication that almost 60% of household could access food at the time of this evaluation. It is plausible that the percentage of the food secure household may increase with better support that could enhance agency and employ sustainable production, economic and social parameters in design and implementation. With regards to food security in the community food gardens, food security was lower despite the potential to sell more. It is advisable to address common problems such as free rider issues when groups work in primary agriculture, in this case, in community food gardens. The free rider issues in community gardens may explain the much lower food insecurity in the household data.

Another tool used to assess food security was the HDSS and it revealed that those participating were found to be mildly food insecure based on the HHDS (utilisation pillar) indicating a less diverse diet, an important indication that those participating were not benefiting from diverse diets. This indicates that planted crops were not thought out in relation to diversity of their nutrition profile. This is a common mistake that may shows poor Agri-nutrition linkages from poor extension support to farmers on what crop to plant for nutritional benefit This is not positive for general wellbeing and health outcomes especially the children's first 1000 days of life's health outcomes, the elderly, and women of childbearing age.

Invariably, less information due to weak extension, may lead to less agency and sustainability for community production yet with support this can be an appropriate local food supply asset that contributes to local food system, more so in urban areas.

6.16 Household food gardens

Based on the household evaluation using Household Food Insecurity Access Scale (HHFIAS), only 7.84% household beneficiaries were found to be food insecure, the majority were mildly and moderately food secure. Given that 48.3% had other sources of income, this may be the reason for a better food security outcome. Those active in food gardening at present were the most food insecure, the poorest engage in food gardening and had no 'off farm' income. This finding is important as it indicates the need for appropriate support in food gardening and community gardening so that productivity can improve and may lead to sales for successful gardeners.

In comparing households and community food security, the result shows that households (8.19%) are more food secure than community (2.8%). The result of the paired sample t-test is significant at 1%. This shows that the mean food security of the household is statistically larger than that of community.

Agency and empowerment analysis pillar of food security in this evaluation showed that most households had poor agency, they were not linked to other gardeners in any form of association and thus had no avenue to practice voice and own food production issues. This is negative for scaling up food production and more cash will be used for purchasing food that may be easily grown and saving household income for other non-food purchases. On a positive note, it was evident there was more vegetable consumption among participants in food gardening at household level, compared to community gardens, a positive indication of micronutrients intake. This is important for nutrition security, which has important health and long-term economic outcomes for households especially in combating stunting which has negative long-term economic and social impacts.

Further, to analyse pillars individually we deemed it fit to explore what components of the pillars contribute to the sustainability of this food security programme. Sustainability was assessed as a food security pillar to address the importance of environmental, economic, and social dimensions. It was found that that 33% of the respondents participate in farm-based organization such as co-operations, which are important for social capital.

A Principal Component Analysis (PCA) was conducted to determine components of the six pillars that contributed to the results in the outcome evaluation. The PCA identified key indicators within each pillar that played a role the evaluation. For the sustainability pillar, the results showed that credit decisions, access to grants, training, purchase decisions and farm ownership were the indicators that explained the variations in sustainability. For the accessibility pillar; indicators of household food insecurity such as limited variety of food; eat what never wanted to eat; whole day/night without food; there is no food at home; as well as eating fewer meals were the variations explaining accessibility. It was found that the stability pillar (stability of food supply) was sustained with an improved monthly income and sale decisions. It was further found that access to grant, training, purchase decision and farm ownership contributed to the agency pillar.

It can be concluded that community garden participation has potential to improve social assets and social cohesion in communities because it brings the community interested in food gardening together. However, for the community being together to be harnesses for improved food gardening, it will be important for extension support to advise on crop diversity to yield both nutrition security and market demand. Platforms such as Hello Choice are prepared to buy from small farmers and gardeners if they are organised and plant produce that is demanded by markets. Further, it can be concluded that the most vulnerable engage in household gardening and lack other income, that off farm income such as social grants contribute significantly to household food security and can be supplemented by food gardens. However, sustainability of interventions such as these need to address all food security pillars particularly agency of growers, extension service support and market access.

7. RECOMMENDATIONS

The evaluation of the Food Security Programme commissioned by the WCDAO during the financial periods 2016/2017 to 2020/2022 noted the following recommendations:

DESIGN EVALUATION

7.1 Improved targeting and marketing

The food security programme needs to be marketed widely to the targeted communities. This will ensure that beneficiaries are not only the elderly but also the youth and school learners. Targeting must also be intensified for community members who are already gardening as this helps with longevity and sustained interest. Field days, competitions, community newspaper, social media platforms, school assemblies as well as the use of community development workers is strongly encouraged. These initiatives should be carefully planned around the agricultural calendar so that supply chain related issues around procurement of support packages can be coordinated.

Improved criteria for most likely successful beneficiaries: The districts that targeted beneficiaries who had an interest in gardening, had higher success rates in terms of retention when compared to those that did not take gardening interest into account. This finding ascertains that agency enhancing aspect of any food security programme has a higher change of sustainability and further empowerment, attesting to the need to employ the six-pillar framework of food security.

7.2 Capacity building platforms

The WCDOA should look at having more platforms for food security beneficiaries to engage with each other. They can also look for opportunities to pair these households and community garden owners with bigger farms for training and capacity building for them to be proficient

gardeners. WCDOA should have a planned, structured schedule of training for beneficiaries. The post COVID-19 pandemic saw a steep increase in the adoption of technology by South Africans across all income levels. This provides technology and digital systems-based training and initiatives to be introduced and integrated into the main programme. The evaluation team noted the growth in MOOCs globally. The WCDOA upon checking the feasibility of such internet-based options may introduce technology-based training facilitated via the internet to beneficiaries where extension officers and other mentors can provide online support to registered beneficiaries.

7.3 Collaborations and partnerships

There is need to strengthen partnerships with other spheres of government, NGOs, and business. This will result in increased support for the beneficiaries of the food security programme. Memoranda of understanding must be drawn-up and agreements entered into by the different players to ensure support of the programme. On the same note, the all partners must be trained on the same value systems that form the core-of the project. This will ensure uniformity of training provided to beneficiaries and goal congruency amongst stakeholders.

7.4 Complementary interventions to expand food security programme design to encompass all six pillars of food security

Food security need to be enhanced by other interventions that provide income to the beneficiaries. There is need to partner with organisations that can provide credit and training to beneficiaries who have the potential to run a small-scale business other than selling their garden produce.

IMPLEMENTATION EVALUATION

7.5 Monitoring and Evaluation

The WCDOA should establish a monitoring and evaluation system. This entails having a M&E framework which focuses on planning, monitoring, reporting and evaluation. This could initially be via a M&E consulting firm whilst capacity building is taking place at the WCDOA. In the third phase of the programme (2022/2023-2027/28) it is highly recommended that a base line study aimed at collecting the initial data of the beneficiaries be commissioned. This will ensure that annual check on the programme is done to adjust any activities that impact on the success of the programme. Monitoring and evaluation should not be treated as an event or a post implementation activity but as a key imperative in ensuring programme success. The implementing partner, CASIDRA has monitoring and evaluation framework agreements in place that can be used for this purpose.

7.6 Database for food security beneficiaries

There is need for establishing a robust database for recording and storing details of beneficiaries. This would make it easy to conduct follow up visits more efficiently and to update contact details regularly. This database will also make it easier to pick up duplicates where beneficiaries are provided with starter packs twice under the same reporting period and other similar errors.

7.7 Train gardeners on sustainable methods of gardening

WCDOA officials need to intensify training on sustainable methods of gardening. This should be done in conjunction with addressing environmental, economic, and social dimensions of sustainability simultaneously, at every stage of a food system. Household gardens in particular need more of this training.

7.8 Use of manure and greywater

The use of manure should be encouraged amongst beneficiaries, it is an element reflecting the sustainability pillar of food security. Own manure is economical; thus, capacity building should include how to make own compost, manure and using own waste and other local recyclable material.

Water security is critical for food availability (Pillar of Food Security) as it leads to adequate and excess production, which is important for income generation (access: pillar of food security). Therefore, water harvesting techniques that can be imparted to beneficiaries are important, the purchase of JoJo tanks should be encouraged

OUTCOME EVALUATION

7.9 Complimentary Interventions

Complementary interventions once introduced will have the potential to improve food security outcomes amongst beneficiaries. It would also enhance agency and sustainability to beneficiaries that have the potential to run a small-scale business other than selling their garden produce.

GENERAL

7.10 Human resources

The WCDOA should establish a Directorate dedicated solely for food security with sufficient human resources to conduct programme implementation and monitoring. The evaluation noted that extension officers are spread thinly over several programmes impacting on their ability to provide the necessary support.

7.11 Streamlining of operations between WCDOA and CASIDRA

While the arrangements between the WCDOA and CASIDRA seem to be working, there is need for the two entities to clearly outline their roles and responsibilities with respect to the programme. In some instances, procurement may be made on items that are not suitable or needed for specific parts of the province. The province has eight agricultural districts that have unique needs. Extension officers know what is needed and what can grow in an area. That information must be provided and signed off to ensure CASIDRA procures what is needed for a specific area. To facilitate this, annual indabas between the department and CASIDRA must occur to ensure that all parties remain focused on the outcomes.

ANNEXURE 1: COMPREHENSIVE EVALUATION REPORT See Comprehensive Evaluation report, available for viewing at the WCDOA

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