Khulisa Management Services (Pty) Ltd

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WESTERN CAPE PROVINCE CASE STUDY REPORT

Diagnostic/Implementation Evaluation of Nutrition Interventions for Children from Conception to Age 5

South Africa Department of Performance Monitoring and Evaluation (DPME)

Nutrition SLA 12/0287

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Ante Natal Care
APP	Annual Performance Plan
EPI	Expanded Programme on Immunisation
ART	Antiretroviral Treatment
BANC	Basic Antenatal Care
BFHI	Baby Friendly Hospital Initiative
M2M	Mothers-to-Mothers
CD	Community Development
CBO	Community Based Organisation
COCT	City of Cape Town
MUAC	Mid-Upper Arm Circumference
CNDC	Community Nutritional Development Centres
DOE	Department of Education
DAFF	Department of Agriculture, Forestry, and Fisheries
DOH	Department of Health
DOA	Department of Agriculture
DRPW	Department of Roads and Public Works
DSD	Department of Social Development
FSD	Farmer Support and Development Programme
FSP	Food Security Programme
WC	Western Cape
ECD	Early Childhood Development
FGD	Focus Group Discussion
HCBC	Home and Community based Care
HIV	Human Immunodeficiency Virus
HOD	Head Of Department
IDP	Integrated Development Plan
IEC	Information, Education and Communication
IEC	Information Education, and Communication
IMCI	Integrated Management of Childhood Illnesses
INP	Integrated Nutrition Program
IT	Information Technology
IYCF	Infant and Young Child Feeding
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MEC	Member of the Executive Committee
NDA	National Development Agency
NDOH	National Department of Health
NGO	Non-Governmental Organisation

NPO	Non-Profit Organisation
OPD	Out-patient Department
ORS	Oral Rehydration Salts
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary Health Care
PMTCT	Prevention of Mother to Child Transmission
SASSA	South African Social Security Agency
SETA	Sector Education and Training Authority
SOP	Standard Operating Procedure
SP	Special Programmes
TB	Tuberculosis
TSF	Targeted Supplementary Feeding
UN	United Nations

GLOSSARY

Ante-natal	Before birth; during or relating to pregnancy
Basic Antenatal Care (BANC)	The regular preventive care recommended for women during pregnancy that benefits both mother and child. Essential interventions include identifying and managing obstetric complications and infections, promoting healthy behaviours such as breastfeeding, giving medical information around biological changes, and giving nutritional counseling and vitamins to prevent maternal anaemia and malnutrition and to enhance a healthy pregnancy outcome. In South Africa, the recommended schedule for BANC is 4 visits during pregnancy starting in the first trimester. Routine BANC plays a part in reducing maternal death rates, miscarriages, birth defects, low birth weight, and other preventable health problems.
Beneficiaries	Beneficiaries in this evaluation included pregnant women and/or caretakers of children 0-5 years of age who were present at health facilities during fieldwork. Beneficiary focus groups were carried out as part of this evaluation.
Breast milk substitute	Any food being marketed or otherwise represented as a partial or total replacement for breast milk whether or not it is suitable for that purpose.
Breastfeeding Protection, Promotion and Support.	In South Africa, Breastfeeding Protection, Promotion and Support consists of 4 main activities: (i) enforcement of the International Code on Marketing of Breast milk substitutes (e.g. responsible advertising about breast-milk substitutes and effective legislation to define and monitor unacceptable marketing), (ii) behavioural change from mothers to exclusively breastfeed (no other liquids or solid foods) for the first six months of life and after introducing solids at 6 months of age, continued breastfeeding for up to 2 years, (iii) promotion of breastfeeding during delivery, and (iv) workplace opportunities to breastfeed. Combined, these actions have been shown to promote more optimal breastfeeding behaviours which in turn reduces diarrhoea, acute respiratory infections, and malnutrition in infancy.
Complementary Feeding	The feeding of solid foods that are readily consumed and digested by the young child and that provide additional nutrition to meet all the growing child's needs. The recommended age range for beginning complementary feeding is from 6 months of age.
ECD food support	Provision of food at Early Childhood Development (ECD) centres is one element contributing to South Africa's Food Security Strategies. DSD subsidises registered ECD centres based on the number of children enrolled. The DSD signs 1-year Service Level Agreements under which the ECD Centre receives ZAR15 per child per day and a portion of this is to be spent on food. The DoH provides guidance on meal plans for ECD centres, and these are meant to guide the centres and DSD in assuring nutritious meals for children.
Exclusive Breastfeeding	Defined as "an infant's consumption of human milk with no supplementation of any type (no water, no juice, no nonhuman milk, and no foods) except for vitamins, minerals, and medications."[1] National and international guidelines recommend that all infants be breastfed exclusively for the first six months of life. Breastfeeding may continue with the addition of appropriate foods for two years or more. Exclusive breastfeeding has dramatically reduced infant deaths by reducing diarrhoea and infectious diseases. It has also been shown to reduce HIV transmission from mother to child, compared to mixed infant feeding.

[1] WHO. Accessed in January 2014. http://www.who.int/elena/titles/exclusive_breastfeeding/en/.

Food Access	Food Access, or "Access to food" is fundamental to South Africa's social safety net, as it provides supplemental food through various means including soup kitchens or food parcels for at-risk groups. Food Access is a key element that contributes to South Africa's Food Security Strategies.
Food Fortification	The process of adding vitamins and minerals to food. The main reasons for adding nutrients to food is to restore losses due to processing, storage and handling of foods; to improve overall nutritional quality of the food supply; and as a public health measure to correct recognised dietary deficiency(ies). Fortifying everyday staples means people become healthier, live longer, and lead more productive lives. Infant mortality is less likely to occur and children show higher levels of physical and mental development, resulting in improved performance in school. In South Africa, the following vitamins and minerals are added to maize and wheat flour: Vitamin A, Vitamin B1, Vitamin B2, Vitamin B6, Niacin, Folic Acid, iron and zinc, and iodine is added to salt.
Food prices/zero-VAT rating	Since 1984, South Africa has removed VAT (i.e. zero-VAT rated) from certain basic foodstuffs as a means to make basic foods more accessible to the poor. Currently the following foods are zero-rated: brown bread, maize meal, samp, mealie rice, dried mealies, dried beans, lentils, tinned pilchards/sardines, milk powder, dairy powder blend, rice, vegetables, fruit, vegetable oil, milk, cultured milk, brown wheaten meal, eggs, edible legumes and pulses of leguminous plants. This is a mechanism to enhance access to food and contain food prices
Food Security (output 2 of Outcome 7)	The South African Government's Output 2 of Outcome 7 is "improved access to affordable and diverse food". Food Security in South Africa consists of four main strategies implemented through the combined efforts of the Department of Agriculture, Forestry and Fisheries (DAFF), DoH, and DSD: (i) ensuring access to food (through various DSD interventions), (ii) improved nutrition security (through various DoH health and nutrition interventions), (iii) improved food production capacity of households and poor resourced farmers (DAFF), and (iv) development of market channels for food (DAFF).
Growth Monitoring and Promotion (GMP)	Growth Monitoring (GM) is the process of periodic, frequent measurements of the growth of a child in comparison to a standard. GMP is a prevention activity comprising of GM linked with promotion (usually counseling) to increase awareness about child growth; improve caring practices; and serve as the core activity in an integrated child health and nutrition programme. As an intervention, GMP is designed to affect family-level decisions and individual child nutritional outcomes.
Household Food Production and Preservation	Household food production / food preservation is one component of South Africa's Food Security Strategy. DAFF has promoted and supported home gardening as well as school, community, and clinic gardens to complement and supplement the food parcels programme carried out by the Department of Social Development (DSD) as part of its Food Security strategy. DSD now promotes home gardening as part of its Sustainable Livelihoods programme.
IMCI (Integrated Management of Childhood Illnesses)	IMCI is an integrated approach to child health that focuses on the well-being of the whole child and that aims to reduce death, illness and disability and to promote improved growth and development among children under five years of age. IMCI includes both preventive and curative elements that are implemented by families and communities as well as by health facilities. WHO notes that if implemented well, IMCI can reduce under-five mortality and improve nutritional status. In South Africa, IMCI is delivered through health facilities by IMCI-trained nurses as part of the primary health care package of services.

Improved Hygiene Practice	Improved water quality, improved disposal of human excreta, and interventions that promote hand washing have been shown to reduce diarrhoea. Repeated diarrhoea incidence in the first two years of life significantly increases the risks of being stunted by age two years, and some water, sanitation and hygiene interventions may improve height growth in children under five years of age. In South Africa, most hygiene education, improved water quality, and sanitation is delivered through local government/municipalities, although the DoH is also responsible for hygiene education as part of the primary health care package of services.
Indicator	A monitoring and evaluation term for an objectively verifiable measurement which reflects the activity; assumption, or effect being measured.
International Code of Marketing of Breast Milk Substitutes	An international health policy framework for breastfeeding promotion adopted by the World Health Assembly (WHA) of the World Health Organisation (WHO) in 1981. The Code was developed as a global public health strategy and recommends restrictions on the marketing of breast milk substitutes, such as infant formula, to ensure that mothers are not discouraged from breastfeeding and that substitutes are used safely if needed. The Code also covers ethical considerations and regulations for the marketing of feeding bottles and teats.
Intra-partum	During childbirth or during delivery.
Lactation	The secretion or production of milk by mammary glands in female mammals after giving birth
Mainstreaming Interventions	Mainstreaming an intervention involves planned action, including legislation, policies or programmes, in any area and at all levels[2]. It is the process of bringing together common functions within and between organizations to solve common problems, developing a commitment to a shared vision and goals, and using common technologies and resources to achieve these goals[3]. It is a strategy for making concerns and experiences an integral part of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres[2].
Malnutrition	A broad term describing the condition that develops when the body does not get the correct amount of kilojoules, vitamins, minerals, and other nutrients it needs to maintain healthy tissues and organ function. Commonly used as a broad term to refer to under nutrition and over nutrition.
Management of Moderate Malnutrition	See Targeted Supplementary Feeding.
Management of Severe Malnutrition	A medical and a social disorder, whereby malnutrition is the end result of chronic deprivation by carers who because of poor understanding, poverty, or family problems are unable to provide the child with the nutrition and care that is needed. Successful management of severely malnutrition requires both medical and social interventions. If the illness is viewed as only a medical disorder, the child is likely to relapse when returning home. In South Africa, management of severe malnutrition is mainly delivered through district and other tertiary hospitals, although health workers at all levels are responsible for identifying cases.
Micronutrient deficiency	Occurs when the body does not have sufficient amounts of essential vitamins or minerals required by the body. Deficiency occurs when there is insufficient dietary intake and/or insufficient absorption and/or suboptimal utilisation of the vitamin or mineral.

[2] Anon. International Labour Organization (ILO). 2013. http://www.ilo.org/public/english/bureau/gender/newsite2002/about/defin.htm

[3] http://www.afro.who.int/en/clusters-a-programmes/iss/immunization-systems-support/integrated-child-survival-interventions.html

Micronutrient supplementation	Enhancing or boosting the nutritional content of one's diet with vitamins or minerals. Young children are highly vulnerable to micronutrient deficiencies as they have low body stores of these nutrients, and can have low intake due to improper feeding practices, and losses due to infections. Micronutrient supplementation in pregnancy and during early childhood is associated with proper growth and decreased complications of infections. In South Africa, the most common micronutrients given to pregnant women are Iron and Folic Acid, along with general multi-vitamins. Children in South Africa are supposed to be given routine Vitamin A supplementation.
Mixed Feeding	Feeding breast milk along with infant formula, baby food and even water.
Moderate malnutrition	A growth measure between minus two (-2) and minus three (-3) standard deviations from the median of the standard reference population.
Morbidity	Refers to the state of being diseased or unhealthy within a population.
Mortality	Refers to the number of deaths in a population.
Nutrition	The process of providing or obtaining the food necessary for health and growth. The intake of food, considered in relation to the body's dietary needs. Good nutrition – an adequate, well balanced diet combined with regular physical activity – is a cornerstone of good health. Poor nutrition can lead to reduced immunity, increased susceptibility to disease, impaired physical and mental development, and reduced productivity.
Nutrition Education and Counseling	Enhancing the quality of the diet, by educating about foods and what quantities are needed in order to achieve optimal dietary intake. This can also include counseling on micronutrient supplements. There is some evidence that nutrition training of health workers improves energy intake, feeding frequency, and dietary diversity of children between six months and two years of age. In South Africa, health facilities have the prime responsibility for delivery nutrition education and counseling, but with PHC re-engineering it is expected that community based nutrition education and counseling will be strengthened.
Obesogenic	Causing and leading to obesity.
ORS (Oral Rehydration Salts)	A dry mixture of salt and sugar/glucose (sodium chloride) which is mixed with water to prepare a solution of used for treating dehydration due to diarrhoea or other causes. UNICEF In South Africa, both ORS and Zinc are given to children during diarrhoeal episodes.
Over nutrition	A form of malnutrition which occurs if a person consumes too many kilojoules.
Overweight	A form of over nutrition. Scientifically defined as weight for height above two standard deviations from the median weight for height of the standard reference population.
PHC Re-engineering	A restructuring of the South African health system to better implement Primary Health Care to take comprehensive services to communities with an emphasis on disease prevention, health promotion and community participation. PHC Re-engineering is focused on strengthening the district health system (DHS) through three cohesive and co-coordinated streams: (a) the deployment of ward based PHC outreach teams; (b) strengthening of school health services; and (c) deployment of district clinical specialist teams aimed at improving maternal and child health in particular.
Post-partum	After childbirth.
Prioritised Nutrition Interventions	Prioritised nutrition interventions are services which have policies, guidelines, protocols, budgetary allocation and are actually delivered on the ground to all or most eligible patients/clients as evidenced by coverage rates or other measures.
Regulations	Refers to rules issued by Parliament governing the implementation of relevant South African legislation. Examples of regulations issued under the Foodstuffs, Cosmetics, and Disinfectants Act (Act 54 of 1972) in South Africa, include R. 991 relating to foodstuffs for infants and young children, and R146 relating to the labelling, marketing, educational information, and responsibilities of health authorities related to general foodstuffs.

Sanitation	Refers to facilities that ensure hygienic separation of human excreta from human contact, including flush or pour flush toilet/latrine to piped sewer system, septic tank or pit latrine; ventilated improved pit (VIP) latrine; pit latrine with slab; and composting toilet.
Severe acute malnutrition	Defined as below minus three (-3) standard deviations from the median of the standard reference population, mid-upper arm circumference (MUAC) less than 115 mm, visible severe thinness, or the presence of nutritional oedema[4].
Stunting	Too short for one's age. Scientifically defined as height for age below minus two standard deviations from the median height for age of the standard reference population.
Supplementary feeding	Additional foods provided to vulnerable groups, including moderately malnourished children.
Targeted Supplementary Feeding (TSF)	An intervention to treat moderate malnutrition in South Africa. TSF is mainly delivered through health facilities and is intended as a short-term intervention with specific entry and exit criteria. The intervention includes the provision of food supplements according to age-specific needs and disease-specific conditions.
Under nutrition	A form of malnutrition that occurs if the diet does not provide adequate kilojoules and protein for growth and maintenance, or if the person is unable to fully utilize the food eaten due to illness; the outcome of insufficient food intake, inadequate care and infectious diseases. It includes being too thin for one's age (underweight), too short for one's age (stunting), dangerously thin for one's height (wasting) and deficient in vitamins and minerals (micronutrient deficiencies).
Underweight	Under nutrition that is scientifically defined as weight for age below minus two standard deviations from the median weight for age of the standard reference population.
Wasting	Underweight for one's height. Scientifically defined as weight for height below minus two standard deviations from the median weight for height of the standard reference population. A child can be moderately wasted (between minus two and minus three standard deviations from the median weight for height) or severely wasted (below minus three standard deviations from the median weight for height).
Zinc	An essential mineral with a wide variety of functions within the human body. Zinc is needed to repair wounds, maintain fertility in adults and growth in children, synthesize protein, help cells reproduce, preserve vision, boost immunity, and protect against free radicals, among other functions.

[4] World Health Organization. Supplement – SCN Nutrition Policy Paper 21. Food and Nutrition Bulletin, 27 (3). 2006. http://www.who.int/nutrition/topics/malnutrition/en/

1 INTRODUCTION

Malnutrition in infants and young children typically develops during the period between 6 and 18 months of age and is often associated with intake of low nutrient or energy dense diets, consisting predominantly of starch-rich staples, and frequent infections. Linear growth (i.e. height) and brain development are especially rapid during the pregnancy first 2 years of life and young children are particularly susceptible to growth failure and developmental delays if they are not breastfed and are fed complementary foods with low nutrient/energy density and poor bioavailability of vitamins and minerals. Furthermore, conditions of poor hygiene and sanitation can lead to frequent infections, which further impairs children's nutritional status. Infant and child malnutrition contributes to increased morbidity and mortality, impaired intellectual development, suboptimal adult work capacity and even increased risk of disease in adulthood.

1.1 Background to the Nutrition Evaluation

Although nutrition programmes have been in place in South Africa since the 1960's, they were not very effective in reducing malnutrition because they focused primarily on providing food to the needy and not the underlying causes of malnutrition (i.e. illness, poor household access to food, inadequate maternal and child care, poor access to health services, and an unhealthy environment with limited access to clean water and sanitation).

In the mid-1990's the Government introduced the Integrated Nutrition Programme (INP) which aimed to improve nutrition through emphasizing collaboration between Government departments (inter-sectoral collaboration of line departments) to promote joint action for addressing nutrition problems. Inter-sectoral collaboration was envisioned mainly between the Departments of Health (DOH), Social Development (DSD), Agriculture, Forestry, and Fisheries (DAFF), and Rural Development and Land Reform (DRDLR)as these departments each deliver food and nutrition interventions specific to their sector. The expected outcome of this approach was to improve nutritional status of South Africa's vulnerable populations, namely pregnant women and children under the age of five.

To date, however, malnutrition persists as an underlying cause and contributor to child mortality and morbidity in South Africa. Indeed, South Africa is one of only 15 countries where little to no progress has yet been made in reducing under-five mortality by two-thirds[1] (Millennium Development Goal 4), and although this situation is partly due to South Africa's heavy burden of HIV, it is also due to a variety of underlying factors, including poor infant and child nutrition as evidenced by the recent 2012 South African National Health and Examination Survey (SANHANES)2 which found that 21.6% of children age 0-5 are stunted, and 5.5% are underweight.

> In South Africa, a large percentage of young children age 0-5 show signs of malnutrition: 21.6 % are stunted, and 5.5 % are underweight for their age (2012).

Given this, the Department of Performance Monitoring and Evaluation (DPME) in the Presidency commissioned the "Diagnostic/Implementation Evaluation of Nutrition Interventions for Children from Conception to age 5" to examine critical systemic and implementation issues that inhibit or enable access to nutrition interventions for pregnant women and children under the age of 5.

The findings from this evaluation are meant to assist the Government in improving implementation of existing nutrition interventions by identifying inhibiting or enabling factors that affect access to

nutrition services (particularly among children) and to support the scale-up of interventions as required.

1.2 Objectives/Terms of Reference (TOR) for this Evaluation

This qualitative evaluation aims to identify the factors contributing to effective or non-effective implementation of 18 nutrition interventions being delivered by Government, with an emphasis on the first 4 interventions as listed in Table 1 below. The full terms of reference for this evaluation can be found in Appendix D.

Table 1: 18 Nutrition Interventions Explored in this Evaluation

Nutrition Intervention *(NB: the first four interventions (bolded) are the main focus of the evaluation)*	**Responsible Department**
1. Breastfeeding support*	**Health**
2. Management of moderate malnutrition including targeted supplementary feeding*	**Health**
3. Household food production and preservation (home gardening)	**DAFF**
4. Food access (e.g. food parcels, soup kitchens)	**DSD**
5. Early Childhood Development (ECD) (food in ECD centres)	DSD
6. Complementary feeding*	Health
7. Food fortification (Vitamin A, Iron and Iodine)*	Health
8. Micronutrient including Vitamin A supplementation*	Health
9. Oral Rehydration Salts (ORS) and Zinc*	Health
10. Management of severe malnutrition*	Health
11. Deworming	Health
12. Growth monitoring and promotion including the use of Mid-Upper Arm Circumference (MUAC) measurements	Health
13. Nutrition education and counselling (part of all of these)	Health
14. Improving hygiene practice (including in relation to water and sanitation)	Health
15. BANC (Basic ante-natal care) – education and supplements, timing	Health
16. IMCI (Integrated management of childhood illnesses)	Health
17. Access to (nutritious) food, food prices	DAFF
18. Food security (output 2 of outcome 7 in the National Priority Outcomes)	DRDLR/DAFF

* High impact interventions

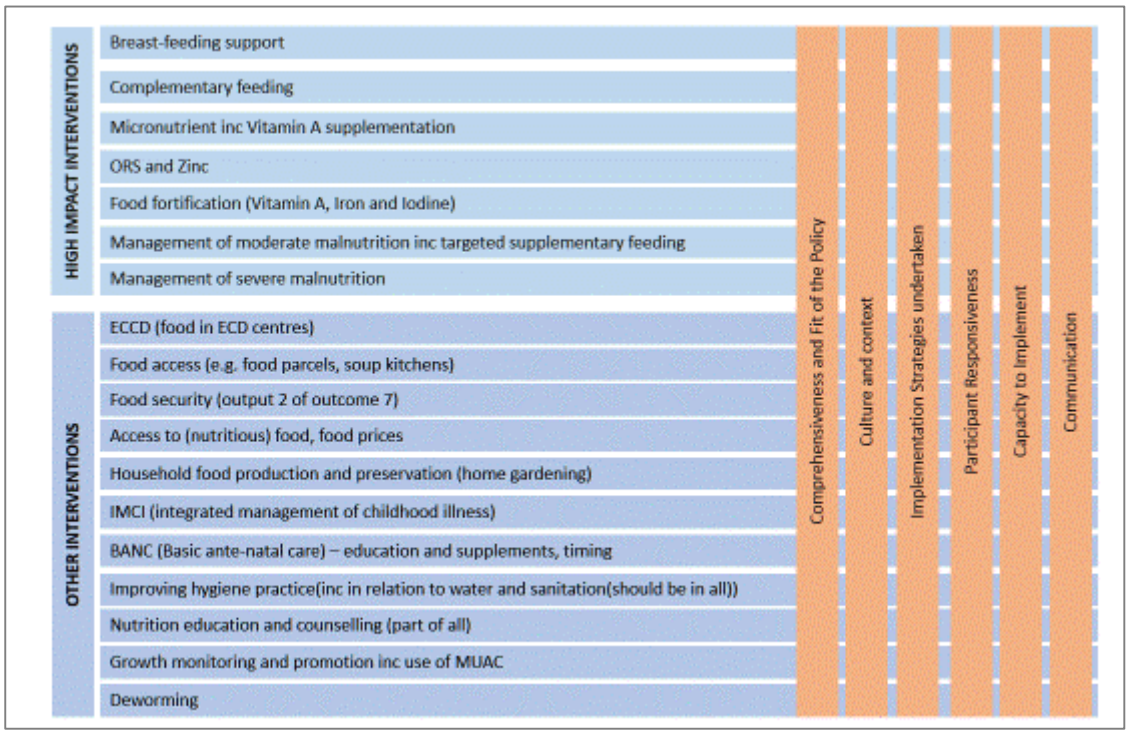
1.3 Approach

Khulisa's approach to the evaluation examined the following six moderating factors that have been identified as influencing the policy implementation:

1) the policy's content and fit for the local environment,
2) the institutional context and culture, including readiness to change and the extent of commitment at all levels through which the policy passes,
3) the various implementation strategies (i.e. models) devised for carrying out the policy,
4) the institutional capacity to implement the policy,
5) participant responsiveness, and
6) communication to the general public and within government itself.

These moderating factors comprised the "lens" through which Khulisa examined the implementation of the INP and its 18 nutrition interventions, and for answering the 17 evaluation questions put forth in the TOR. Figure 1 below depicts this conceptual approach in graphical form.

Figure 1: Conceptual Framework for the Evaluation



1.4 Methodology

1.4.1 Literature Review

The starting point for this evaluation was a literature review that provided the context for this implementation evaluation. The literature review examined the following relevant topics:

1. Current health and nutrition status of children under 5 and pregnant women in South Africa;
2. South Africa's policy framework on maternal and child nutrition;
3. A review of nutrition policies and interventions from 5 countries that have successfully improved their nutrition performance (Brazil, Colombia, Malawi, Mozambique, and Malaysia). These countries were selected by the Evaluation Steering Committee as comparisons to South Africa based on one of the following two reasons:
    - the country has similar economic or infrastructure characteristics to South Africa but much better nutrition performance at a national level (i.e. Brazil, Colombia, and Malaysia), or
    - the country is geographically proximate to South Africa and thus has similar environmental and cultural characteristics, but again better nutrition performance (i.e. Malawi and Mozambique);
4. An analysis of implementation issues present in the literature.

1.4.2 Fieldwork

Sampling

Before we began fieldwork, the Evaluation Steering Committee identified the geographic areas where fieldwork was to be carried out and the important subgroups or categories of people to be sampled. These are further described below.

Stage 1: Selection of Provinces

Aside from data collection at national level, the Evaluation Steering Committee identified 4 provinces (purposefully-selected) for the reasons indicated below:

Table 2: Justification for the provinces sampled

Province	Justification
KwaZulu- Natal	Its emphasis on community nutrition
Western Cape	The general perception that nutrition and health programmes are well implemented in the Western Cape
Free State	The general perception that nutrition and health programmes are well implemented in the Free State
Eastern Cape	Its unique development profile and its challenges in implementing government programmes

Stage 2: Selection of Districts

In each province, 2 districts were purposefully selected based on their levels of performance (i.e. high performing and low performing). We obtained recommendations from provincial nutrition focal persons regarding the names of high-performing districts in their province. Selection of the poor-performing districts were identified with the Evaluation Steering Committee using the following criteria:

- NDOH score for district's performance in child health indicators
- NDOH pilot districts for implementing the NHI (these tend to be districts with vulnerable population and have a high burden of disease, and have demonstrated poor performance in 27 socio-economic, health service and financial and resource management indicators).
- Rural Development scores for district performance
- Agriculture scores for district performance
- DSD district performance scores

Two of the poor-performing districts chosen with the Evaluation Steering Committee (in FS and WC) were revised, with the final sample of districts being presented in Table 3.

Table 3: Districts included in the sample

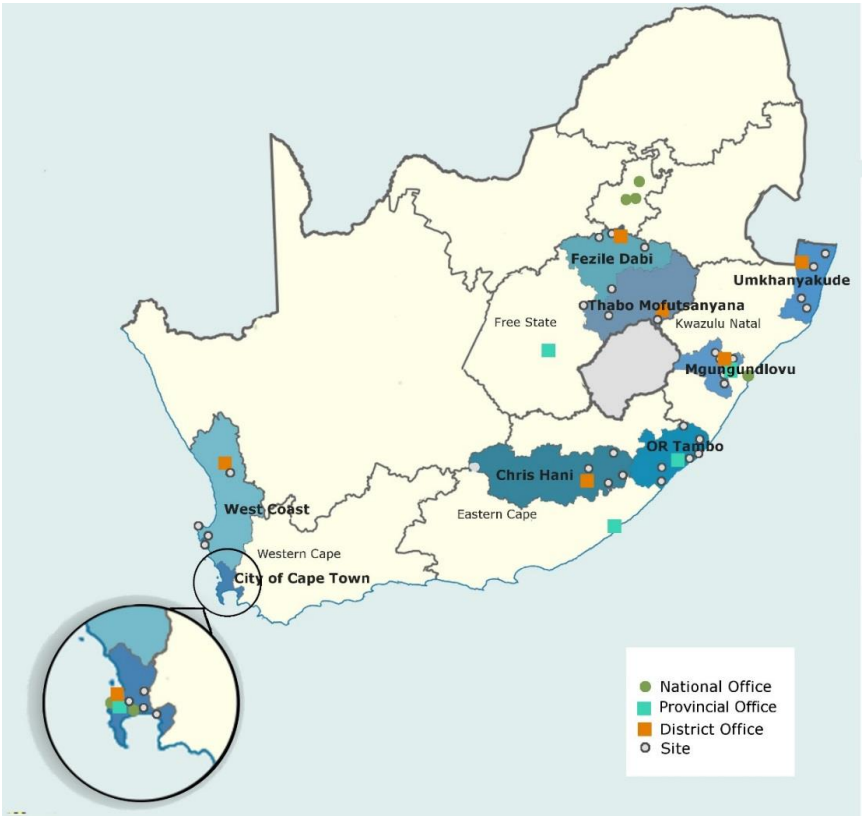
PROVINCE	HIGH PERFORMING DISTRICTS		POOR PERFORMING DISTRICTS	
	District Name	Justification	District Name	Justification
Eastern Cape	Chris Hani	Recommendation from the EC nutrition focal person.	OR Tambo (Umtata)	NHI pilot site Poor Child Health indicator score Poor Rural Development indicator Score
KZN	Umgungundlovu	Recommendation from the KZN nutrition focal person.	Umkhanyakude (Mkuze / Jozini)	Poor Child Health indicator score Poor Rural Development indicator Score High poverty levels based on DSD indicators
Free State	Thabo Mofutsanyane	Recommendation from FS nutrition focal person	Fezile Dabi	Recommendation from Nutrition Manager in FS province

PROVINCE	HIGH PERFORMING DISTRICTS		POOR PERFORMING DISTRICTS	
	District Name	Justification	District Name	Justification
Western Cape	West Coast	Recommendation from WC nutrition focal person.	City of Cape Town	Recommendation from Nutrition Manager in WC province

Stage 3: Selection of Facilities/Organisations

In each district, Khulisa randomly selected 4 health facilities according to their geographic status (urban/rural), and purposefully selected 4 NGOs that work in food/nutrition. This resulted in a total sample of 32 health facilities and 16 NGOs as across the 4 provinces.

Figure 2: Fieldwork Locations



Stage 4: Selection of Individual Respondents

Key informant respondents were purposefully sampled based on a list of stakeholders provided by the Evaluation Steering Committee. The sampling strategy for beneficiaries was based on a convenience sample obtained during site visits to health facilities and NGOs. The method for data collection in each group in the sample is indicated in brackets in Table 4.

Table 4: Proposed Respondents *(and method of data collection)*

1) **National Level Respondents** *(in-depth interviews)*
   - National DOH nutrition managers
   - National DSD managers
   - National Rural Development food/nutrition managers
   - National Agriculture food security managers
   - National ECD managers
   - Bilateral Donors: USAID, CDC
   - Multi-lateral Donors: UNICEF, WHO
   - Relevant local and international health/development organizations:
   - Relevant food industries
2) **Provincial Level Respondents in WC, EC, FS, and KZN** *(in-depth interviews)*
   - Provincial DOH nutrition managers
   - Provincial DSD nutrition managers
   - Provincial Rural Development food/nutrition managers
   - Provincial Agriculture food security managers
3) **District Level Respondents** *(in-depth interviews or focus group discussions)*
   - District DOH nutrition managers
   - District DSD nutrition managers
   - District Rural Development food/nutrition managers
   - District Agriculture food security managers
4) **Health Facility Respondents** *(in-depth interviews or focus group discussions)*
   - MCH nurse or nursing assistant
   - Counsellors for pregnant women and/or mothers of young children
   - Community health workers attached to health facilities
5) **NGO Respondents** *(in-depth interviews or focus group discussions)*
   - Programme or Site Manager
   - Community workers
6) **Beneficiary Respondents** *(focus group discussions)*
   - Pregnant women and mothers of children under 5 years present at health facilities
   - Beneficiary participants in NGO programmes

Data Collection Methods

Data collection methods used in the evaluation are as follows:

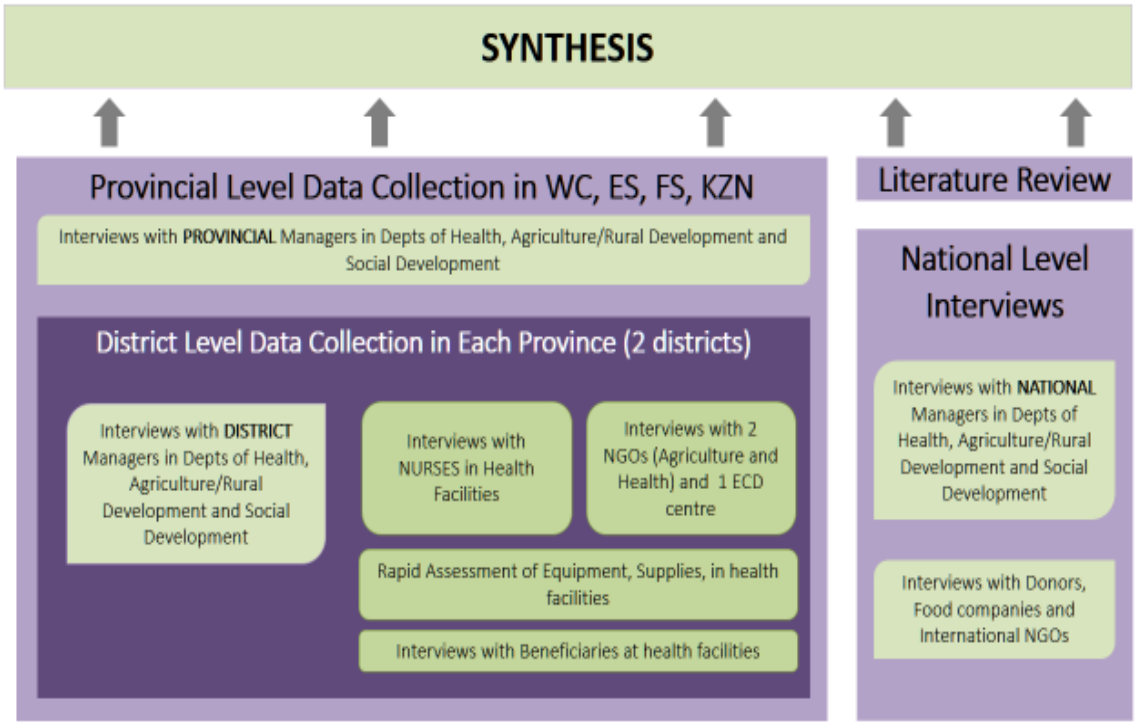
1. Semi-structured Key Informant Interviews
2. Focus Groups with beneficiaries
3. Rapid Performance Assessments of health facilities
4. Assessment of Health Worker Knowledge around nutrition

Table 5 below presents the data collection methods used, the target respondents for each method, as well as the content explored. Figure 3 summarises the data collection components of the evaluation.

Table 5: Data Collection Methods and Target Respondents by Content

Method	Target Respondents	Content explored
Key informant interviews	Relevant Government managers at national, provincial, and district levels	• Perceptions on current needs and practice around nutrition • Moderating factors (i.e. policy content and fit, organisational context and culture, commitment, capacity, facilitation processes that affect participant responsiveness, and communication) • Institutional arrangements • M&E for food/nutrition • Funding levels
	Food industry representatives	
	Bilateral and multilateral donors and international health/development NGOs	
	Health facility staff or managers	
	Representatives from CBOS/NGOS involved in food/nutrition programmes	
	Programme managers at district level, groups of health staff at facility level	
	Representatives from community-based projects and services (ECD, agriculture, health)	
Focus Group Discussions	Beneficiaries	• Experiences with food and nutrition programmes and services • Satisfaction with services • Need for food/nutrition support
Rapid Performance Assessment	Health Facilities	Review of relevant infrastructure, equipment, and supplies for delivering nutrition interventions
Assessment of Health worker Knowledge	Nurses, counsellors, or others providing nutrition services	Knowledge of diagnostic steps and counselling around breastfeeding difficulties, growth faltering, and knowledge of the benefits of micronutrient supplementation

Figure 3: Summary of Data Collection Components of the Evaluation



1.4.3 Western Cape Sample

In Western Cape Province, of the planned 29 sites, data was collected at 21 sites as presented in Table 6 below. Key informants (Table 7) were interviewed about various aspects of the nutrition interventions that are implemented, the resources (financial and human) available for nutrition interventions, and enabling and constraining factors related to implementation.

Table 6: Actual Data Collection points in Western Cape Province

Provincial Offices Interviewed		
Provincial Department of Health (DOH) – Cape Town Provincial Department of Social Development (DSD) – Cape Town Provincial Department of Agriculture and Rural Development (DARD) – Elsenburg		
District Offices Interviewed		
Metro: City of Cape Town District	District Department of Health – South Peninsula District Department of Agriculture – Goodwood District Department of Social Development – Eersterivier	
West Coast District	District Department of Health – Vredendal District Department of Agriculture – Moorresburg District Department of Social Development – Vredenburg	
Health Facilities Interviewed	**Urban**	**Rural**
Cape Town Metropole	Crossroads 1 Clinic -Crossroads Dr. Ivan Toms Clinic– Cape Town Mayenzeke Clinic- Khayelitsha Bloekombos Clinic-Kraaifontein	
West Coast District		Lalie Cleophas Clinic – Hopefield Clan William Clinic – Vredendal Langebaan Clinic – Langebaan Van Rhynsdorp Clinic – Vredendal
NGOs Interviewed		
ECD site: ACVV Delft Creche– Voorburg Agriculture/home gardening: Masiphile Food Garden Project - Khayelitsha PEPFAR-funded health project: Mothers2Mothers NGO – Cape Town Non-PEPFAR funded health project: Philani Child Health Centre – Cape Town		

Table 7: Data Collected in Western Cape Province

Stakeholder Group	No. Interviews / FGDs			No. Respondents**
	Planned	Actual	%	
DOH Managers	3	2	67%	2
DSD Managers	3	2	67%	4
DOA Managers	3	1	33%	1
NGOs	4	1	25%	1
Health Facilities	8	8	100%	9
Beneficiary FGDs	8	7	88%	21
TOTAL	**29**	**21**	**72%**	**38**

Other Assessments	Planned	Actual	%
Health Facilities Rapid Assessments	11	10	91%
Assessment of Health Workers' Nutrition Knowledge	25	17	68%

***Because interviews were often held with more than one person at the same time, the number of respondents can be greater than the number of interviews or FDGs held.*

1.4.4 Data Recording and Capturing

During each interview or assessment, the researcher took extensive notes on the instruments specific to the interview. An interview guide provided researchers with further guidance on when to probe for answers and when not to. The notes were then captured in Excel for data analysis and then coded according to themes.

1.4.5 Data Analysis

Quantitative data collected in the KIIs, FGDs, Health Facilities Rapid Assessments, and Health Worker's Assessment of Nutrition Knowledge were analysed using descriptive statistics.

Qualitative data collected under the KIIs and FGDs were analysed using content analysis, from the notes that had been transcribed into Excel. The following criteria were utilised to determine the 'reliability and validity' of the data.

1. Truth value/Credibility: Truth value describes the level of confidence the researcher has with the truth of the findings based on: research design, informants and context.
2. Consistency/Dependability: Due to the non-experimental and complex nature of qualitative research, variability is expected and consistency is explained as dependability. Dependability requires that variability is tracked and explained and informant's range of experience from typical to atypical experience explained.
3. Neutrality: Neutrality in qualitative research involves neutrality in relation to data rather than the investigator.

Once the qualitative notes were checked for reliability and validity, these were coded for themes. These themes were tabulated and reported on according to the KII and FGD questions.

1.4.6 Reports Produced

Case Study reports were prepared for each of the four provinces where fieldwork took place, as well as for each of the four priority interventions. In all, 12 reports were prepared for this evaluation as listed below:

1. Literature Review
2. Fieldwork Report
3. Breastfeeding Case Study
4. Targeted Supplementary Feeding Case Study
5. Home Gardens Case Study
6. Food Access Case Study
7. KwaZulu-Natal Provincial Case Study
8. Eastern Cape Provincial Case Study
9. Free State Provincial Case Study
10. Western Cape Provincial Case Study
11. Final Evaluation Report
12. Summary of Final Evaluation Report (1-5-25)

1.5 Limitations of the Evaluation

By their nature, qualitative evaluations of policies and programme implementation allow examination of the broader context, rather than specific measurements of compliance to policy elements or programmatic guidelines. This evaluation's extremely broad scope (18 interventions, 17 research questions, and investigation of 6 moderating factors) resulted in very lengthy interviews with respondents who often had time constraints. Consequently, many respondents gave only cursory information around the issues that we sought to explore more deeply.

Because nutrition interventions for pregnant women and children under 5 in the health sector far outweigh the number of nutrition interventions in the social development and agriculture sectors, the evaluation's sampling framework is biased toward respondents from health. In addition, at provincial, district, and local levels, most respondents were able to speak knowledgeably about nutrition interventions implemented by their specific government department, but few were able to comment on the adequacy of implementation for interventions outside their sector. Consequently, data collected from social development and agriculture is sparse compared to that collected from health, making generalisations on implementation in agriculture and social development more difficult.

1.6 Data Collection Challenges

Data collection in the Western Cape was significantly delayed until ethics clearance could be secured for both the WC provincial Department of Health and the City of Cape Town. Khulisa applied for, and expected to receive, ethics approval in January/February 2013; however, it was only granted on 4 April 2013. Only after this date could Khulisa officially apply for ethics clearance from both the WC provincial DOH as well as the City of Cape Town, and this took a further 10 days. Consequently, data collection only began on 22 April 2013, and due to this delay, the researcher was pressed to juggle data collection with other pre-scheduled commitments in May. Unfortunately, this negatively affected the quality of data that was collected, and there is much missing information for the WC interviews compared to the data collected in other provinces. Other fieldwork challenges included respondents' concerns around confidentiality, time constraints, and logistical challenges.

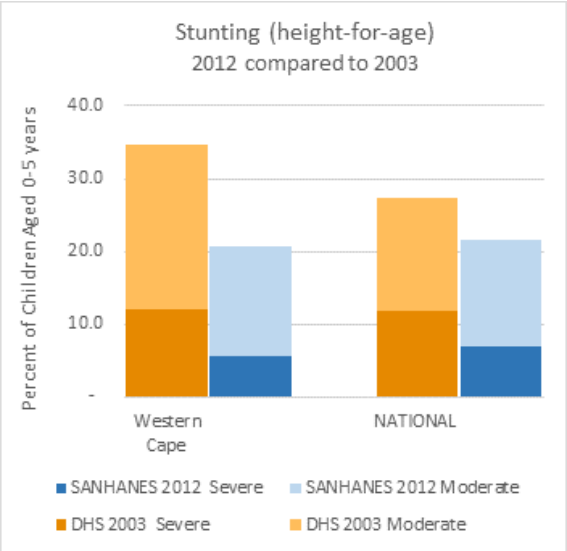
2 FINDINGS: NUTRITION CONTEXT

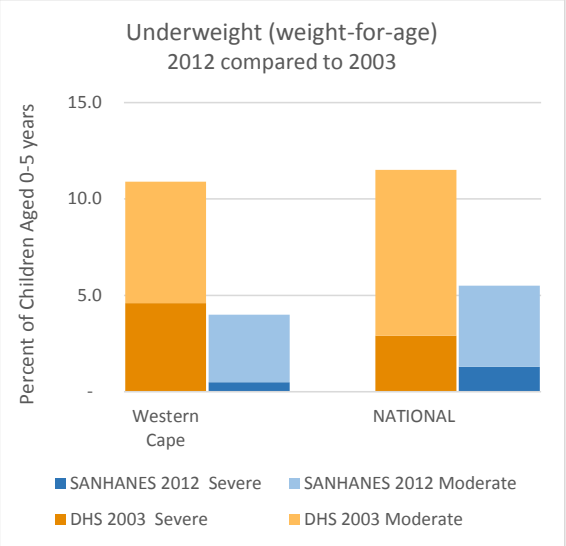
2.1 Nutrition Status of Young Children in Western Cape Province

Comparing the nutritional status of children under 5 in the Western Cape between two nutrition surveys – the 2003 Demographic and Health Survey (DHS) and the 2012 South African National Health and Nutrition Examination Survey (SANHANES) – shows that nutritional status has improved in line with national trends (Figure 4).

Overall, the proportion of WC children under 5 who are severely stunted or underweight has declined, although stunting still affects a large percentage of young children, and stunting rates are approximately equal to the national average. Encouragingly, slightly fewer children are underweight compared to the national average.

Figure 4: Nutritional Status of Children under 5 Years of Age in WC Province (DHS 2003 and SANHANES 2012)





2.2 Perceived Nutrition Needs in Western Cape

The general perception among WC respondents in this evaluation is that underweight is the most common nutrition problem in the province (Figure 5), although some DOH and NGO respondents exhibit a growing awareness of a rising problem of obesity. Only a few respondents noted stunting as a problem in children under 5.

Respondents believe the main underlying reasons stated for these nutrition problems are lack of knowledge, poor eating behaviours and unavailability of food. However, there are noticeable differences in reasons given between the types of respondents (Figure 6).

- Health managers and staff are more likely to recognize health and illness factors as an underlying reason for malnutrition.
- Health managers and staff were also the only respondents who recognized poor or no breastfeeding as a contributing factor to poor nutrition.
- All respondents noted lack of knowledge of nutrition as a contributing factor.
- Interestingly, although they were more likely to identify overweight as a nutrition problem, DOH managers were the only group that did not identify behavioural factors as contributing to malnutrition in general.
- NGO respondents only attributed knowledge and behavioural factors to the nutrition problems they saw in the province.
- Food security was recognised by nearly all respondents as a contributing factor.

Figure 5: Perceived Maternal-Child Nutrition Problems in the Western Cape

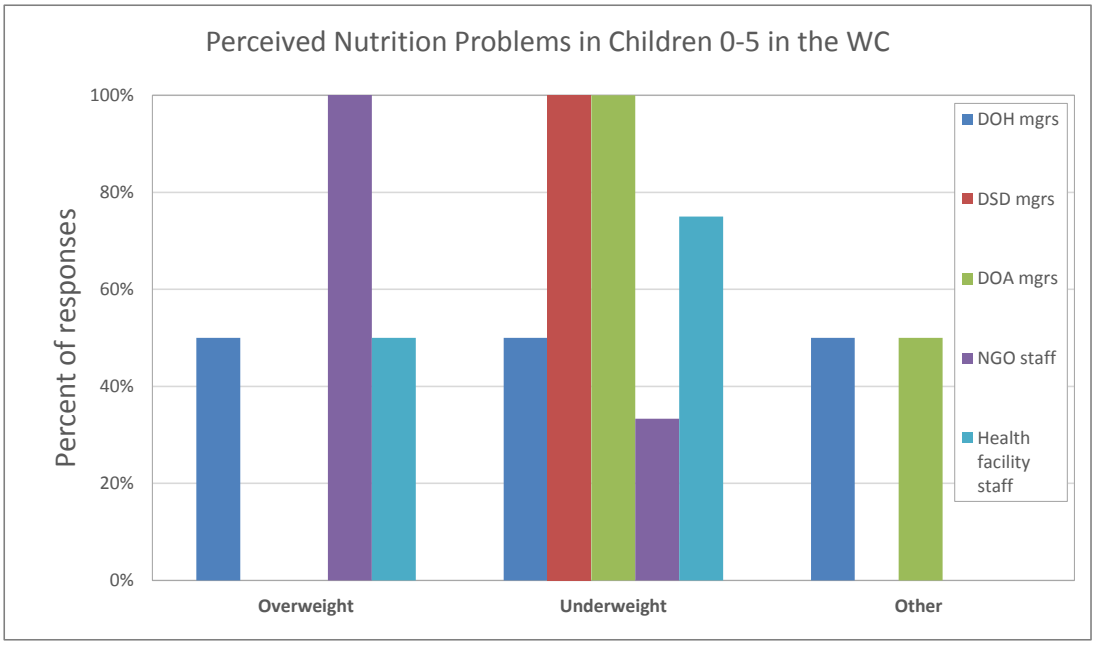
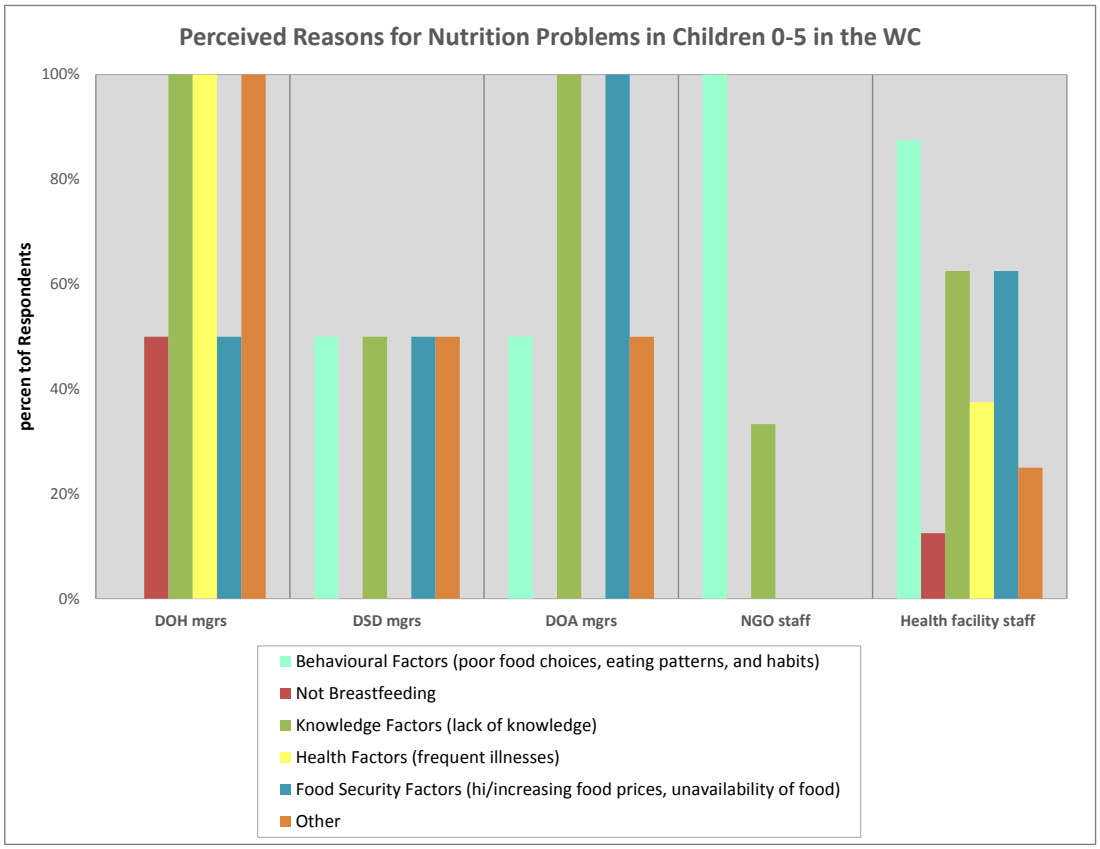


Figure 6: Perceived underlying reasons for maternal-child nutrition problems in WC



2.3 Nutrition Actors in the Western Cape Province

Nutrition interventions in the province are implemented through government departments and partnerships with NGOs and CBOs. Within government, nutrition services and programmes are

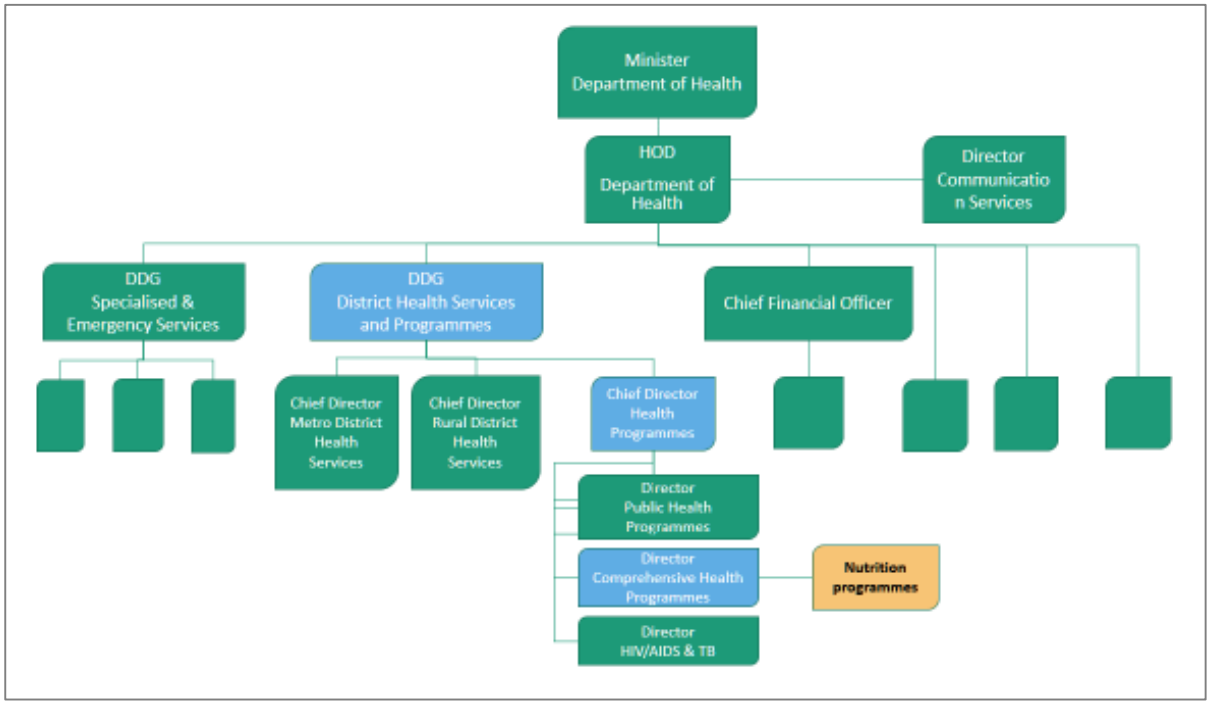
implemented within the provincial Departments of Health (DOH), Social Development (DSD) and Agriculture and Rural Development (DARD. In the Cape Town Metropole, the provincial government and the City of Cape Town have a service level agreement (SLA) in place around the delivery of Primary Health Care services, under which nutrition services are included.

2.3.1 WC Department of Health (DOH)

The WC DOH recognises malnutrition as a major contributing factor to morbidity and mortality, and has stated "improved nutrition and food security" as one of its goals for the MCHNW and Nutrition programme. The programme links with cross cutting issues including HIV, AIDS, TB and other chronic debilitating conditions. Liaison and co-operation with other departments and programmes (e.g. Education, Social Development, local Government) assists with case prevention and implementation.

Within the DOH, nutrition is a sub-directorate within the Directorate of Comprehensive Health Programmes / Division of District Health Services and Programmes (Figure 7).

Figure 7: Organogram of Nutrition within WC Health Department



Source: Adapted from the APP 2011-2012 (pg. 34), 2012-2013 (pg. 50); Organogram of the senior management of the Department (http://www.westerncape.gov.za/dept/health/documents/plans/2011)

Implementation of the Integrated Nutrition Programme in the DOH is facilitated by District Nutrition Coordinators, and at facility and community-level by dieticians, nurses, and community-based workers. The programme links with cross cutting issues including HIV, AIDS, TB and other chronic debilitating conditions. Liaison and co-operation with other departments and programmes (e.g. Education, Social Development, and local Government) assists with case prevention and implementation.

Maternal, Child and Women's Health (MCWH) and Nutrition services are rendered at all facilities within the Province, including secondary, tertiary and specialised hospitals and within communities, including community outreach programmes. Nutrition priorities for the province are focused on the

following 5 strategic areas:

1. Advocacy for the integration of nutrition into relevant sector strategies and programmes.
2. Positioning nutrition strategically within the health sector.
3. Delivering the key nutrition interventions through appropriate actions at each of the following levels:
    - PHC clinic services
    - Hospital Based services
    - Community Based services
    - Population based services
4. Strengthening human resources to deliver effective nutrition services.
5. Strengthening Information base for effective nutrition services

In the WC-DOH Annual Performance Plan (APP) 2011/2012[3], the provincial nutrition programme noted its launch of the Road to Health Booklets as the key rallying tool to enhance child nutrition, with special focus on prevention, and implementation of the following to improve child nutrition and health outcomes:

- Behaviour change interventions such as breast-feeding promotion, protection and support; complementary feeding and healthy eating;
- Micro-nutrient programmes; and
- Therapeutic feeding

The DOH Nutrition programme has invested in community level IEC materials through developing a pocket for the Road to Health Booklet with the following messages at the back:

- Monitoring your child's growth regularly is the quickest way to detect health problems in your child early.
- Vitamin A helps your child to fight illness. Take your child to the clinic for vitamin A supplementation drops every six months from 6 months to 5 years of age.
- Exclusive breastfeeding: babies need only breast milk for the first 6 months of life.
- Breastfeed your baby as often and as long as the baby wants to feed.
- Learn to know when your baby is hungry. The signs are, looking for the breast (rooting), putting the hands in the mouth and making suckling noises.
- Introduce solid food only after six months. Start with soft mashed foods and progress to solid family foods.

2.3.2 WC Department of Social Development (DSD)

The DSD APP 2012/13[4] presents a recent shift in strategic approach for improving food access in the province. The department's strategy of "poverty alleviation and reduction" was changed in 2011 to "enhanced livelihoods" with a strong focus on income and food security. The Sustainable Livelihoods Programme aims to provide nutrition and social support services for children, their primary caregivers and households at risk of hunger.

DSD in the Western Cape implements several targeted feeding initiatives at ECDs; Mass participation, Opportunities and access, Development and Growth (MOD) Centres; and Old Age

Service Centres. DSD also currently investigates a work-for food programme where able bodied unemployed persons are offered the opportunity to contribute to their communities in exchange for a stipend and a meal.

Two DSD directorates are involved in implementing nutrition-related interventions in the province:

1) Community Development Directorate which finances community-based NPOs to provide food to the vulnerable and needy through (i) distribution of food parcels as part of social relief to persons affected by disasters and/or undue hardship, .and (ii) operation of community nutritional development centres (CNDCs). The CNDCs reflect a strategic shift from dispersed feeding sites to feeding in structured environments and aims to provide nutritional support services to children (and their families) who are almost on the verge of being malnourished or/and facing growth faltering (i.e. falling outside the DOH's Nutritional Therapeutic Programme). The programme also targets those who do not qualify for Social Relief of Disaster support from SASSA. More than 22,000 were reached with these services in 2011/12[5].

   Eligible CNDC beneficiaries are identified through referrals from DOH and SASSA, but the period of time that they participate in the service is determined by DSD social workers. Approximately 48 sites are presently in operation[6]. A Community Development (CD) director works closely with the CD managers at district level, and social work coordinators to implement the various CD and food access interventions.

2) ECD Directorate which provides small grants (R15 per child per day) to registered ECD Centres, half of which is meant for nutritious meals for children who attend. The ECD centres are meant to provide two cooked meals with vegetables and a fruit, but one respondent indicated that many ECD centres don't provide proper meals, blaming lack of financial resources.

   DSD also helps ECDs to start gardens for a source of fresh produce for the centre. At provincial level, an ECD director works closely with the ECD management forum, service level offices at district level, social work coordinators and ECD principals to implement the ECD intervention.

2.3.3 WC Department of Agriculture and Rural Development

The WC DARD delivers its services through seven programmes[7]:

1. Farmer Support and Development
2. Rural Development
3. Sustainable Resource Management
4. Technology Research and Development
5. Agricultural Economics
6. Structured Agricultural Training
7. Veterinary Services

Food security is a sub-programme under the Farmer Support and Development (FSD) programme, and is a key strategic objective in the province – PSO 8: Promoting Social Inclusion and Reducing Poverty. Food security focuses on preventing malnutrition by capacitating food-insecure

households and communities to be food secure and by promoting social inclusion and poverty reduction. The Food Security Directorate is headed by a director who works closely with district level food security coordinators, food security officers, and extension officers who work directly in allocated communities.

Community and home gardens are a main Food Security interventions to address both food and nutrition problems[8]. As of April 2012, the province had established more than 500 food gardens in the province. In 2013/14, the province allocated R11 million for establishing 1036 home food gardens[9].

The FSD programme is also responsible for the administration of CASP (Comprehensive Agricultural Support Programme) and Ilima Letsema grant funding. CASP promotes and facilitates agricultural development in the farming community through providing agricultural support services targeted largely at (but not exclusively) smallholder and previously disadvantaged farmers[10]. Although a variety of targets are listed for the CASP programme, and there is an indicator for reaching women farmers, there is no explicit mention of better nutrition as a goal or outcome for the CASP programme. Ilima Letsema grants are aimed at vulnerable farming communities to increase their agricultural production and improve farming skills, and to improve food production at both household and national level[11]. Again, the documentation for this programme has no mention of targeting women or households with young children.

2.3.4 City of Cape Town (COCT)

The City of Cape Town (COCT), oversees nutrition interventions and services which are included in its service level agreement with the Western Cape Province. Community Health Services are provided by clinics, day hospitals (also known as Community Health Centres) and Midwife Obstetric Units (birthing units or MOUs) and include the following nutrition-related services:

- Pregnancy tests, antenatal care, birthing and post-natal care.
- Well baby clinics (baby feeding, development assessment, weight monitoring and immunisation)
- Curative care for children (acute and chronic illnesses such as coughs, colds, diarrhoea, skin rashes and asthma etc.)
- Family planning (contraception methods and advice, including referrals for termination of pregnancy)
- Pap smear screening (30 - 59 years screening for cancer of the cervix)
- Diagnosis and treatment of TB
- Treatment of sexually transmitted infections
- Voluntary Counselling & Testing for HIV and Aids and treatment of opportunistic infections
- Curative care for adults (acute and chronic illnesses such as flu, bronchitis, diabetes, hypertension etc.).

However, not all services are provided at all facilities, and only clinics provide adult curative acute and chronic care (those are usually provided at all Community Health Centres) while MOUs are often the only providers of antenatal, birth and post natal care12.

2.3.5 Non-Governmental Organisations (NGOs) and Other Organisations

Numerous other organisations are involved in extending the reach of the nutrition programme, particularly in and around Cape Town, some of which are listed below.

- **BADISA** is a religious charity that provides nutrition rehabilitation support to local communities in the Cape.
- **Bossom buddies** SERVES THREE STATE HOSPITALS IN SOMERSET WEST BY PROVIDING PRACTICAL AND EMOTIONAL SUPPORT TO NEEDY NEW mothers.
- The **Cape Agency for Sustainable Integrated Development in Rural Areas (Casidra)**, an implementing agency of its sole shareholder, the Provincial Government of the Western Cape (PGWC). As a Schedule 3D Public Entity (Provincial business entity), Casidra resides and is funded under the Western Cape Department of Agriculture.
- **Catholic Welfare and Development** is an umbrella organisation, comprised of ten programmes and ten community development centres in the Greater Cape Metropole and in rural areas of the West Coast, Boland and Matsikama. Its main nutrition support is in the form of Nutrition rehabilitation and Breastfeeding peer counsellors.
- **The Donald Woods Foundation** is a charity working in health and education in rural areas of the province.
- The **Etafeni Day Care Centre Trust**, which provides holistic community-based care for AIDS-affected and vulnerable children and their caregivers in Nyanga township in Cape Town. They currently run a Nutrition Rehabilitation Programme and Breastfeeding Peer Counsellor Project in Nyanga.
- **FoodBank South Africa** procures food (and essential non-food groceries) from donors such as producers, manufacturers, retailers, government agencies, individuals and other organisations, and then dispatches/delivers the food to depots in communities where partner NGOs distribute it to needy households.
- **George Child and Family Welfare Society** is an NGO providing child protection and ECD services to children and families in previously disadvantaged areas of George.
- **La Leche League**, an NGO supporting breastfeeding with mothers, provides Breastfeeding Peer Counsellors at birthing & antenatal units in Cape Town Metropole area.
- **Masiphile food garden project** a community garden project in Khayelitsha.
- **Mothers2Mothers** an NGO focused on supporting Prevention of Mother to Child Transmission (PMTCT) for HIV-positive women.
- **Philani Health and Nutrition Project** is a community-based NGO committed to the protecting the rights of every child to proper nutrition and healthcare in communities where malnourished children and destitute mothers are most vulnerable.
- **South African Social Security Agency**, under DSD.
- **Stellenbosch University** which has a food security initiative

3 FINDINGS: PROVINCIAL STRUCTURE

3.1 Nutrition leadership and management arrangements in Western Cape

The Food Security Programme within the DARD drives a provincial Food and Nutrition Workgroup in partnership with DSD, DOE, DOH, and local government of the City of Cape Town. This working group has developed strategic objectives for the Food and Nutrition strategy that has been approved by cabinet. Other than this working group, there doesn't appear to be any other mechanism for broadly coordinating and leading nutrition across different government departments and stakeholders in the province.

Nutrition leadership and management appears to be specific to the government department implementing a specific intervention; many respondents at provincial and district level are satisfied with the level of leadership and management provided by their respective departments. Positive characteristics of nutrition leadership and management commonly mentioned by respondents include: good administrative processes, clear directives from management, good decision making and follow-through, coordinating structures established, and on-going communication. But DSD respondents at district level noted limited human resources as a management challenge for their nutrition related efforts.

3.2 Planning in Western Cape Province

The DOH Nutrition Sub-directorate has its own APP complete with vision, mission, goals, strategic objectives, performance indicators at output and outcome level with targets, and detailed activity-based budgets. The 2011/12 plan also reflects the involvement of various NPOs at provincial, district, sub-district and local municipality levels.

DSD drives the ECD task team and the ECD stakeholder meetings.

3.3 Resource Allocation – Human and Financial

All government departments have allocated human and financial resources to manage their nutrition interventions, as evidenced by their operational plans and APPs which indicate available and allocated human and financial resources as well as required human and financial resources.

3.3.1 WC Department of Health

At provincial level, the WC-DOH Nutrition sub-Directorate is led by a Deputy Director and two Assistant Directors, all of whom have academic degrees in nutrition (2 Masters and 1 Bachelors). At facility level, however, recruitment and retention of skilled medical and nursing staff is a challenge, as evidenced by a shortage of professional nurses, in particular those with post basic qualifications[13].

The Nutrition sub-directorate also has its own APP, whose requirements are reflected as a separate line item in the provincial health APP (Table 8). Encouragingly, nutrition funding has increased substantially from R17 million in 2008/2009 to a planned R29 million in 2014/15.

Table 8: Western Cape DOH APP 2012/201314

Table 2.26: Summary of payments and estimates – Programme 2: District Health Services

Sub-programme R'000	Outcome						Medium-term estimate			
	Audited 2008/09	Audited 2009/10	Audited 2010/11	Main appro-priation 2011/12	Adjusted appro-priation 2011/12	Revised estimate 2011/12	2012/13	% Change from Revised estimate 2011/12	2013/14	2014/15
1. District Mangement [c]	164 641	212 080	238 329	288 047	264 602	250 022	263 372	5.34	282 322	300 300
2. Community Health Clinics [b,c]	649 969	760 215	891 434	978 983	981 270	972 572	1 041 401	7.08	1 108 394	1 168 706
3. Community Health Centres [b]	705 342	813 712	935 306	1 019 448	1 042 270	1 037 345	1 127 754	8.72	1 204 910	1 272 042
4. Community Based Services [b]	106 033	119 334	128 499	145 645	148 277	151 158	157 842	4.42	166 660	175 617
5. Other Community Services				1	1	1	1		1	1
6. HIV and Aids [a]	268 931	383 531	554 971	660 614	660 614	660 614	738 080	11.73	927 547	1 074 487
7. Nutrition	17 068	18 885	19 854	24 680	24 680	25 302	26 920	6.39	28 529	29 812
8. Coroner Services	83 538			1	1	1	1		1	1
9. District Hospitals [b]	1 030 902	1 312 167	1 506 969	1 642 713	1 646 014	1 698 079	1 939 715	14.23	2 087 358	2 212 392
10. Global Fund	113 376	102 606	92 018	166 462	181 583	143 653	203 009	41.32	209 388	230 314
Total payments and estimates	3 139 800	3 722 530	4 367 380	4 926 594	4 949 312	4 938 747	5 498 095	11.33	6 015 110	6 463 672

Despite the dedicated and growing budget line item, there are observations of human and material resource shortages in the Western Cape. A 2011 review of nutrition personnel in the province[15], found that

- Foodservice workers were the largest group of nutrition personnel (n=509; 79%), followed by dieticians (n=64; 10%), managers (n=31; 5%), auxiliary workers (n=28; 4%), and administrative workers (n=15; 2%).
- Sixty-two per cent (62%) of the nutrition workforce was located in urban areas and only 38% in rural districts.
- Hospital and district dieticians both experienced limited resources, a high workload due to shortage of staff, and lack of acknowledgement and support from administrative and supply chain management.
- District dieticians were also hampered by lack of space for consultations, poor referrals from doctors, insufficient posts for nutrition advisers, and difficulty in communicating with Xhosa-speaking patients.
- Hospital dieticians were hampered by insufficient interaction with district dieticians, a lack of dieticians for specialised units, and poor salaries affected morale.

These findings were echoed during this evaluation. At facility level respondents indicated that nursing staff are overstretched in providing various services (e.g. breastfeeding and nutrition counselling for adults and children, as well as TB and ANC services), and as a result quality of nutrition education and counselling services are compromised. Additional staff, particularly nutrition counsellors or dieticians, were recommended to improve both implementation and quality of implementation at clinics.

The nutrition knowledge of WC nurses is good compared to that of other provinces (Figure 8), and most nurses were able to provide comprehensive answers to questions around management of mothers with breastfeeding difficulties, although there are some gaps in knowledge around growth faltering and the benefits of micronutrient supplementation (Figure 9 to Figure 12). The average knowledge score of WC nurses in urban areas (53%) was significantly better than WC nurses in rural

areas (34%).

Figure 8: WC Nurses' Average Nutrition Knowledge Compared to Other Provinces

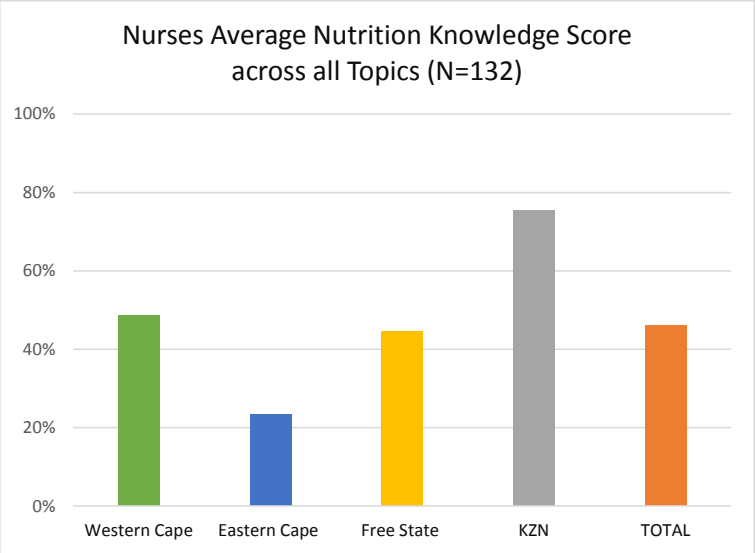


Figure 9: WC Nurses' Knowledge around Diagnosing Breastfeeding Difficulties

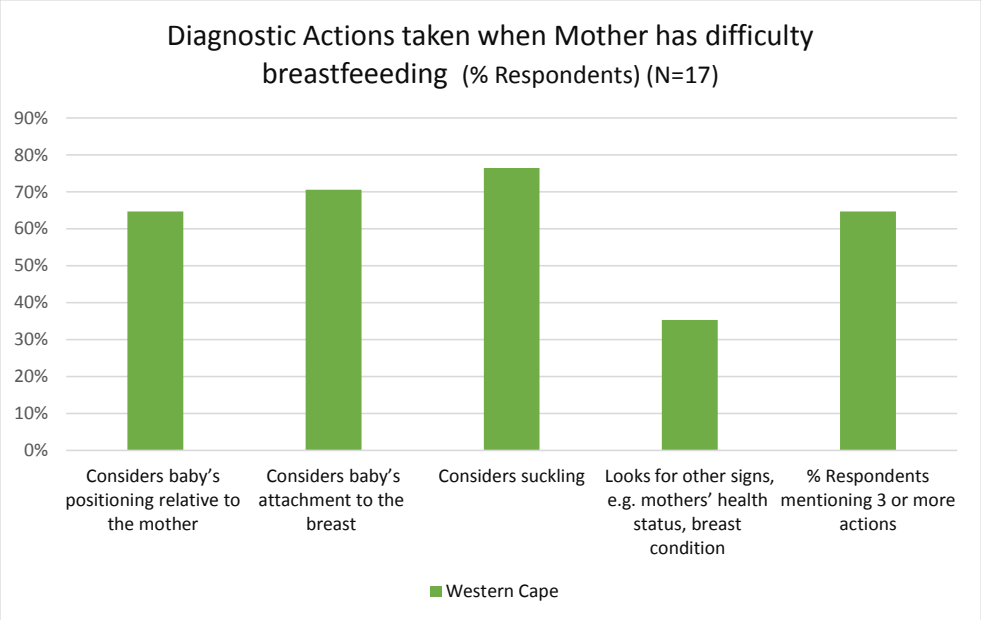


Figure 10: WC Nurses' Knowledge around Counselling Mothers with Breastfeeding Difficulties

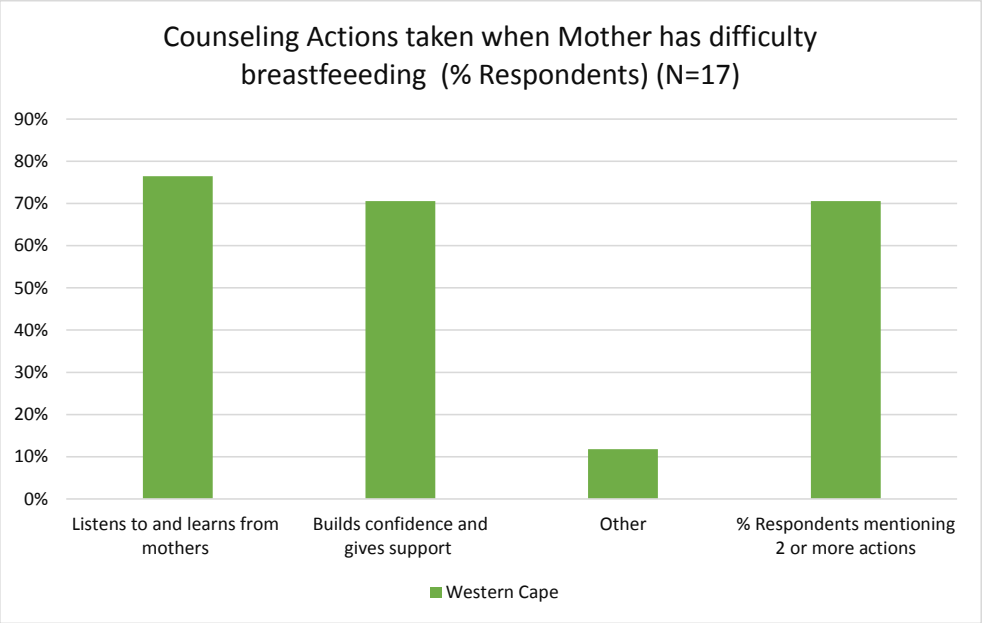


Figure 11: WC Nurses' Knowledge around Counselling Mothers when Children aren't growing well

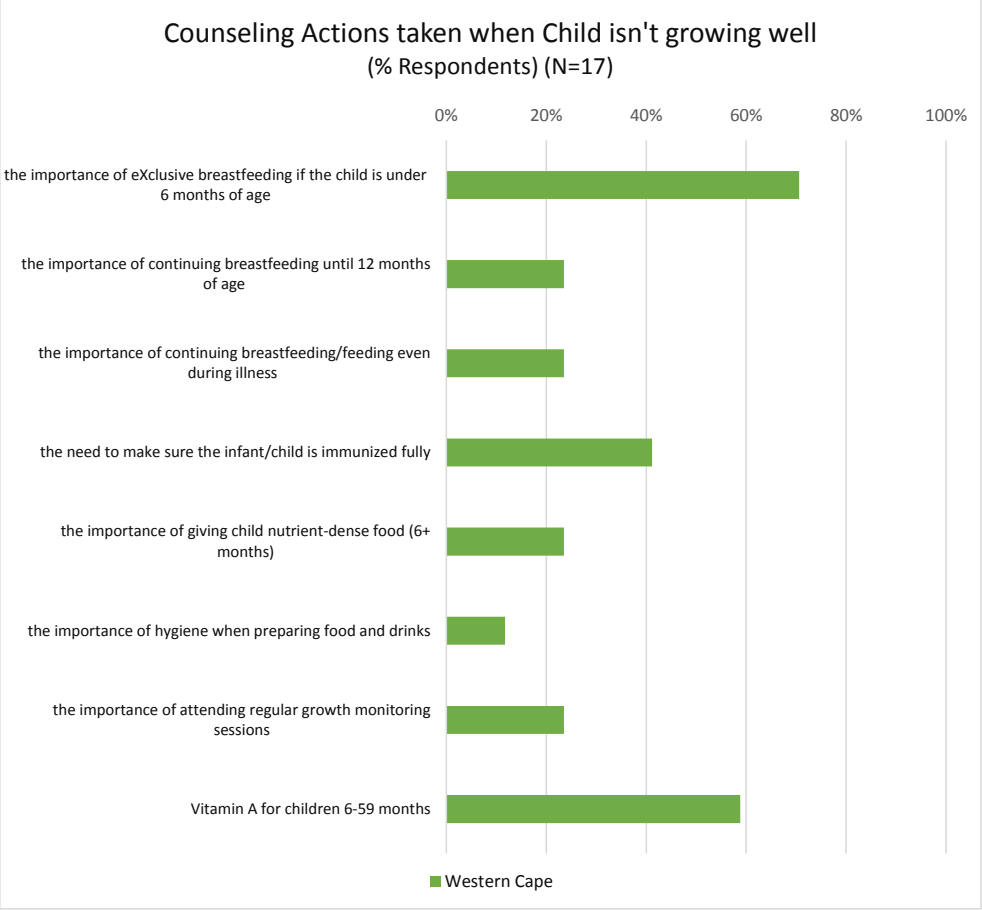


Figure 12: WC Nurses' Knowledge of the Benefits of Micronutrient Supplementation

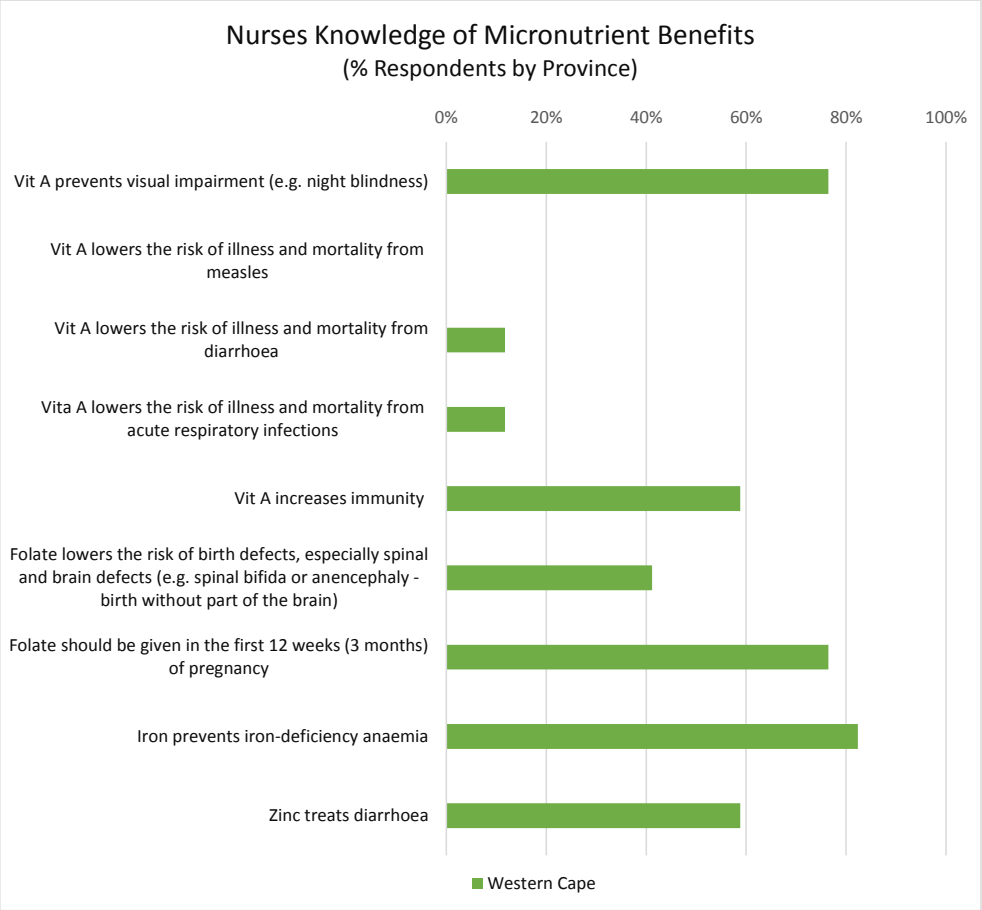


Table 9 presents the status of materials and infrastructure related to the delivery of nutrition interventions in the health facilities assessed. Although the sample is small, half the facilities lack adequate infrastructure (especially counselling rooms) and IEC materials to effectively deliver nutrition programmes. Many facilities were missing key micronutrient supplements (Iron, folic acid) and nutrition IEC materials – particularly the latest IYCF policy (seen in only 44% of clinics).

A few health facilities (11%) reported stock outs of some nutrition products in the 6 months prior to data collection, but encouragingly no expired products were found at facilities during fieldwork.

Table 9: Status of Materials and Infrastructure in WC Health Facilities

Element	% of WC health Facilities (N=9)
Infrastructure	
Sufficient space for counseling	89%
Sufficient no. consultation rooms	78%
Sufficient no. counseling rooms	56%
IEC Materials (Posters or Pamphlets available in the health facility)	
Vitamin A	100%
Promotion of EBF	78%
Handwashing Posters at basins	78%
Handwashing Posters at toilets	78%
Healthy Eating/Dietary Guidelines	67%
Management of Severe Malnutrition	56%

Complementary Feeding	56%
Nutrition During Pregnancy	44%
Feeding of the Sick Child	44%
Breastfeeding in the context of HIV	33%
Policies, Protocols, Guidelines (available in the health facility)	
Vitamin A Supplementation	100%
Management of Severe Malnutrition	100%
PHC Tick Register	100%
Malnutrition Supplementation Register	100%
Nutrition Supplementation Guidelines	89%
HIV and Infant Feeding	78%
IYCF Policy	44%
Equipment, Drugs, Supplies (available in the health facility)	
functioning adult weighing scale	100%
Length measuring boards	100%
MUAC Tape	100%
Road to Health Cards - Girls	100%
Vitamin A Capsules 100,000	100%
Vitamin A Capsules 200,000	100%
Zinc	100%
NTP/TSF Porridge	100%
functioning baby weighing scale	89%
Road to Health Cards - Boys	89%
Iron	89%
Oral Rehydration Salts	67%
Folic Acid	67%

3.3.2 WC Department of Social Development

DSD's APP contains indicators and targets for ECD support (of which nutrition is one component) and for targeted feeding schemes. However, there is no detailed financial information which unpacks this specifically for nutrition-related interventions.

In terms of human resources, respondents indicated that social work coordinators have a large number of ECD centres to monitor and support, and that HR shortages impede this. As a result, NGOs are often engaged as a mechanism to provide a linkage between ECD centres and other SAG services. While this partially addresses the referral role of the coordinators, it doesn't fill the need or the gap for oversight and monitoring.

3.3.3 WC Department of Agriculture and Rural Development

The Provincial DARD APP contains indicators and targets for Food Security support. However, there is no detailed financial information which unpacks this support, specifically for nutrition-related interventions (Table 10). However, one respondent from provincial DARD said that 40% of the provincial food security budget is reportedly spent in the City of Cape Town. Table 10 shows that DARD's budget for food garden projects was significantly greater in 2009/10 (R32 million) than in recent years when the annual budget/expenditure has hovered between 10-11 million Rands.

With respect to HR, the DARD's Food Security programme has more than 22 percent of its posts vacant (Table 11). This impedes the department's ability to promote and support food security in the province.

Table 10: Western Cape DARD APP 2013/1416

Expenditure estimates

Table 5: Programme: Farmer Support and Development

Sub-programme	Expenditure outcome			Adjusted appropriation	Medium-term expenditure estimate		
R thousand	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Farmer-settlement and Development	33 371	95 897	135 682	141 460	167 796	174 869	180 665
Extension and Advisory Services	45 048	29 574	32 022	33 801	31 941	33 300	34 906
Food Security	32 244	10 025	11 353	11 648	9 882	10 200	11 942
Casidra (Pty) Ltd	5 700	8 377	10 958	17 940	18 268	19 488	20 384
Farm Worker Development	12 280	11 464	0	0	0	0	0
Total	**128 643**	**155 337**	**190 015**	**204 849**	**227 887**	**237 857**	**247 897**
Change to 2008 budget estimate	18.3%	42.9%	74.8%	88.4%	109.6%	118.8%	128.0%

Table 11: Western Cape DARD Employment and Vacancies by programme 2013[16].

Table 1 Employment and vacancies by programme, 1 April 2013

Programme	Number of posts	Number of posts filled	Vacancy Rate %	Number of posts filled additional to the establishment
Administration	138	110	20.3	69
Sustainable Resource Management	77	59	23.4	11
Farmer Support and Development	115	89	22.6	49
Veterinary Services	133	116	12.8	8
Research and Technology Development Services	309	278	10.0	3
Agricultural Economic Services	35	23	34.3	0
Structured Agricultural Education and Training	141	120	14.9	5
Rural Development Coordination	10	10	0.0	34
Total	**958**	**805**	**16.0**	**179**

3.4 Coordination with other government departments

Various coordination mechanisms exist which differ according to levels of implementation, whether strategic, administration or service delivery levels.

At provincial level, there are three (3) nutrition coordinating mechanisms as listed below, but some respondents believe that there are too many forums at provincial level that represent the communities' interest. These respondents believe that it would be better to cluster such fora to save resources and time, and for better integration at community level:

1. DARD-driven PSO Work Group 4 for Food and Nutrition, an inter-departmental group comprised of representatives from DOH, DSD, Local government (City of Cape Town), and Rural Development and Land Reform. This group is meant to meet bi-monthly, but 2 meetings were cancelled in the first half of 2013.
2. ECD Task team which reportedly convenes monthly,
3. ECD Stakeholder meetings which also reportedly meet monthly.

At district and local municipality levels, government departments work closely with community forums and local municipalities to address issues related to nutrition, food access and food security. At these levels, meetings are generally held monthly.

While these coordination efforts are useful for information sharing and building relationships

amongst departments, the respondent from DARD noted that coordination is challenged by insufficiently integrated information systems and budgets, and the absence of "one stop" solutions to beneficiaries' food and nutrition problems. As such, the DARD plans to develop a coordination strategy that strengthens referral systems between government departments on food and nutrition interventions.

4 FINDINGS: FOCUS INTERVENTIONS

4.1 Breastfeeding Support

The WC-DOH has undertaken several initiatives to promote and support breastfeeding in the province:

- DOH has developed and implemented an internal communication strategy for the IYCF Policy to ensure that communication within the DOH on this policy is clear, simple, and adequate.
- DOH has worked hard to accelerate internal Mother Baby Friendly Initiative (MBFI) (which replaced BFHI in 2012) assessments and reassessments in preparation for national external assessments and reassessments of MBFI facilities.
- The DOH has developed a pocket for the Road to Health card with the following infant feeding and infant care messages emphasizing exclusive breastfeeding:
    - *"Exclusive breastfeeding: babies need only breast milk for the first 6 months of life",*
    - *"Breastfeed your baby as often and as long as the baby wants to feed",*
    - *"Learn to know when your baby is hungry. The signs are, looking for the breast (rooting), putting the hands in the mouth and making suckling noises" and*
    - *"Introduce solid food only after six months. Start with soft mashed foods and progress to solid family foods"*.

4.1.1 Delivery Channels of Exclusive Breastfeeding support

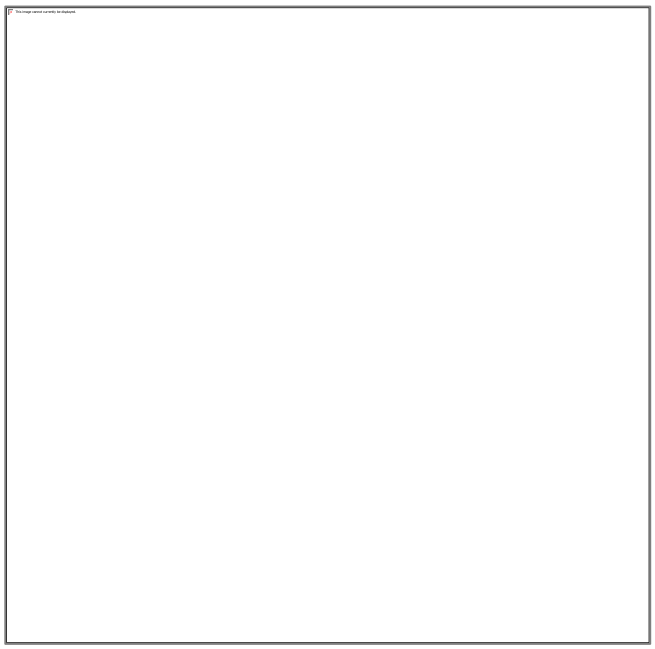
Exclusive breastfeeding support is provided through MBFI in maternities, as well as education and counselling of pregnant and new mothers in both clinic- and community-based settings. The province has a framework for promoting breastfeeding as depicted in Figure 13 below.

In health facilities, breastfeeding information is provided in ANC and PMTCT services. IEC materials are largely in local languages. The Mothers2Mothers programme organises support groups for HIV positive mothers identified at ANC and PMTCT services, and support for infant feeding is a focus area of the M2M support groups.

To advocate for and promote exclusive breastfeeding practise, the province organises health events and campaigns (such as door to door exclusive breastfeeding campaigns, Breastfeeding Week amongst others), breastfeeding peer counsellor projects, and NGOs often participate in community level activities.

Some respondents indicated that the new Breastfeeding policy has added increased workload for nurses, and consequently, the counselling is treated as a "tick box" activity and isn't implemented correctly, as staff aren't committed or motivated to implementing the new policy. In addition, it was noted that women who have been on ARVs for longer times are the most reluctant to breastfeed.

Figure 13: Western Cape Framework for Breastfeeding Support



4.1.2 Guidelines, Protocols, and Policies

To guide quality and adherence to norms and standards, DOH uses the following for Breastfeeding Support:

- Mother Baby Friendly Initiative (MBFI),
- Western Cape Policy Framework and implementation for breastfeeding restoration,
- Infant and Young Child Feeding Policy,
- Road to Health Guidelines,
- Tshwane Declaration,
- Breastfeeding and HIV Guidelines, and
- Little green book of breastfeeding management

In addition, training curriculum from Mother2Mothers and the Helping Mothers Saving Babies were also mentioned by staff at facility level

4.1.3 Human, Material, and Financial Resources

In health facilities, exclusive breastfeeding (EBF) support is delivered as nutrition education and counselling by Enrolled Nursing Assistants. In all clinics except 1, nurses received a 20-hour training on breastfeeding. While most respondents believe DOH has adequate human and material resources to promote EBF, some identified a need for additional staff, in particular, nutritional advisors to help follow-up existing malnutrition cases.

Nurses' knowledge of how to manage mothers with breastfeeding difficulties as well as children who are not growing well was found to be adequate (Figure 9 to Figure 11), although only a few nurses indicated the importance of breastfeeding or general feeding during illness and the importance of hygiene when preparing food and drinks.

4.1.4 Linkages and Referrals

Clinical services are strengthened by linkages with community based support and care through breastfeeding peer counsellors, Community Health Workers (CHWs), social workers, and NGOs such as Mothers2Mothers and Bosom Buddies. However, there are no strong linkages between DOH and other government food/nutrition interventions at community level such as DSD food access or DARD food security programmes.

4.1.5 Monitoring and Evaluation

The province annually collects and reports on the number of MBFI accredited facilities, but aside from the standard DHIS indicators, there was no mention of any other nutrition indicators that are collected and reported. There appear to be no data elements for breastfeeding promotion activities that are delivered in health facilities.

Recognising that not all programme indicators can be collected in the routine systems, some respondents noted that the importance of funding research to track programme implementation. However, there are competing priorities with WC-DOH around which data elements to track.

4.1.6 Beneficiary Participation and Responsiveness

During beneficiary interviews, mothers of young children confirmed that they have been taught about safe infant feeding practices. The main messages received from the DOH staff focus on exclusive breastfeeding and initiation of complementary feeding at 6 months. Despite this, numerous respondents in health facilities noted that interference from family and community members means mothers are unable to exclusively breastfeed, and other mothers have excuses to avoid breastfeeding and even demand formula, especially HIV+ mothers due to their fear of passing HIV to their children through breast milk.

Beneficiary interviews indicate that In the WC, exclusive breastfeeding for the first 6 months is not a strong cultural practise and the rate of mixed feeding is high. Even with intensive breastfeeding support from Mothers2Mothers and Bosom Buddies, many mothers reported that they do not breastfeed due to social and cultural barriers. One such reason given was that older women who stay with the children encourage early introduction of solids (i.e. “ouma meelbol”). It was therefore suggested that more effort should be directed to co-opting grandmothers to encourage breastfeeding and complementary feeding.

Whilst exclusive breastfeeding is encouraged, there is also adequate support for formula fed babies, and there is clear advice around making formula feeding a safe method of infant feeding in cases where breastfeeding is not an option.

4.2 Targeted Supplementary Feeding

4.2.1 Delivery Channels

The Targeted Supplementary Feeding Programme (TSF) provides nutritional supplements to prioritized groups including malnourished children, pregnant and lactating mothers, people with HIV, people on ART, those infected with TB and other chronic illnesses. TSF is implemented through various health services such as ART, TB, and IMCI. Nurses are responsible for delivering this service with monitoring and support from dieticians and other Primary Health Care managers and Supervisors. Some respondents mentioned that because the intervention targets HIV positive individuals there is a stigma attached to participating in the programme.

4.2.2 Guidelines, Protocols, and Policies

The following documents guide the implementation of the TSF programme in the Western Cape Province:

- Targeted Supplementary Feeding guidelines,
- Revised malnutrition register, and
- Enteral feeding guidelines.

4.2.3 Human, Material, and Financial Resources

Frequent stock-outs of TSF food supplements were reported, especially the porridge for adults. Supply management needs to be improved to ensure a steady supply. Some smaller clinics lack sufficient storage space for the TSF products. One proposed solution was that someone at district level should be responsible for supply management of TSF products and other commodities for the heath sector.

4.2.4 Linkages and Referrals

Linkages for TSF are easily managed within DOH relevant service points. DOH has a referral protocol for TSF clients and their enrolment in the programme. However, the ultimate service provider remains the dieticians based at all levels of care (i.e. at PHCs, CHCs, and hospitals). In some communities, Hope Foundation NGO helps out with follow-up and referral of defaulters on this programme to the nearby clinic. In addition, Philani Mentor Mothers has identified around 2000 malnourished children -- most of whom were not identified as malnourished children at the clinics -- and refers them for health services.

No linkages with DSD food access interventions or DARD home gardens intervention were mentioned for the TSF programme.

4.2.5 Monitoring and Evaluation

The researcher did not obtain any information on the data elements being tracked for this intervention.

4.2.6 Beneficiary Participation and Responsiveness

Reportedly, some adults dislike nutritional supplements in a form of porridge, and also dislike the flavour of the porridge. But DOH staff encourage patients to use the product for their own benefit. In addition, respondents noted that certain immigrants, particularly Somalis and Zimbabweans, often presented with underweight children who need targeted feeding supplementation. Respondents also noted that households who consume only TSF and who also have food shortages do not readily improve their health status. Furthermore, it was noted that just treating one individual in a household does not appear to remedy many of the malnutrition cases.

4.3 Food Access

4.3.1. Delivery Channels

ECD Centres form a large part of DSD's food and nutrition support to children under 5 years of age. The support provided is mainly in the form of financial subsidies for food and menu guidelines. One enabling factor for implementing this intervention are the ECD gardens, which several respondents

highlighted as a contribution to better nutrition for the children.

A partnership with the University of the Western Cape secures additional support from students/interns who visit ECD sites once per quarter to give talks on healthy living and nutrition. Over and above this, there appears are cases of local support for the ECD site, e.g. a nearby old age home donating extra vegetables and supplies to the centre.

Targeted Food Distribution and Feeding Centres: DSD uses NGOs as the main implementers for the food distribution and feeding interventions. DSD also implements a variety of mechanisms to promote the intervention – such as road shows, awareness campaigns, SASSA, community referrals, and CHWs to reach the targeted populations.

4.3.2. Guidelines, Protocols, and Policies

The *Children's Act 38 of 2005* and the *Western Cape Provincial Government Policy on the Funding of Non-Governmental Organisations for rendering Social Welfare Services17* generally guides implementation of DSD nutrition interventions. Specifically the ECD programme is guided by the ECD protocol and the DOH menu guidelines.

However, there appear to be no guidelines for ECDs to follow in how to prepare food for children in their care, and respondents indicated that centres need to prepare meals without "*killing all the nutrients*".

4.3.3. Human, Material, and Financial Resources

ECD Centres: DSD trains ECD staff but the capacity of teachers has not yet reached the desired levels. Furthermore, there is a lack of management capacity in the ECD programme adequately, however regular visits by DSD staff was indicated by ECD staff.

Targeted Food Distribution and Feeding Centres: No information was obtained on resources for this intervention.

4.3.1 Monitoring and Evaluation

The researcher did not obtain any information on the data elements being tracked for this intervention.

4.3.4. Linkages and Referrals

ECD Centres: Respondents said the referral system from ECD centres to other nutrition services is effective. DSD Social Work Coordinators are meant to refer cases of malnutrition directly to dieticians in nearby clinics and to social and agricultural services; but a few respondents indicated that NGOs largely organise these referrals, presumably because of staffing shortages and high workloads for the Social Work Coordinators. ECD sites on their own (rather than through the Social work Coordinators) also directly refer to SASSA, local social workers, and DOH clinics.

DOH occupational therapists and dieticians visit ECDs to screen children and refer undernourished children to health facilities and for financial support. NGOs also identify households in the community who need support. In addition there is the support from students and the University of the Western Cape that is described in section 4.3.1 above.

Targeted Food Distribution and Feeding Centres: No information was obtained on linkages and referrals for this intervention.

4.3.5. Beneficiary Participation and Responsiveness

ECD Centres: Parents appreciate the service and children reportedly get healthier as a result of the feeding support. However, ECD managers noted that parents regularly and consistently send unhealthy snacks with their children, despite the ECDs prohibiting junk food.

Targeted Food Distribution and Feeding Centres: No information was obtained on beneficiary responsiveness for this programme.

4.4. Household Food Production and Preservation (Home Gardening)

During the 2011/2012 financial year, the Food Security Programme conducted a survey of household and community projects initiated since 2007. The result is that 62% of the gardens are still productive18.

4.4.1. Delivery Channels

The Food Security Program (FSP) uses extension officers, food security officers, Community Agricultural groups and CHWs to promote the establishment of home and community gardens. In addition, each year FSP provides awards to 20 historically disadvantaged communities (with funding up to R50,000) to start community gardens. Special priority is given to women and youth groups who wish to apply for the funding.

NGOs also assist by facilitating home and community gardens. The Masiphile Food Garden project and the NGO Abelimim Bezekya, both based in Khayelitsha, promote food gardens and nutrition education in the community. These groups indicate that in addition to establishing gardens, there is a need for increasing awareness around the concepts of food security in the community, and improving IEC materials around the home gardening intervention.

No respondents mentioned efforts in promoting Food Preservation, suggesting that these are either not occurring at all, or are very diluted and less visible.

4.4.2. Guidelines, Protocols, and Policies

The only guiding documents mentioned for the Home Gardening programme are Integrated Food and Nutrition Strategy and the Food Security Strategy.

4.4.3. Human, Material, and Financial Resources

DARD has adequately trained staff to implement agricultural projects and food security interventions. Most of the staff are agriculturalists whose training included a nutrition component. Theft of tools in community gardens is a problem reported by the NGOs working in this area.

4.3.2 Monitoring and Evaluation

The DARD annual report presents the numbers of gardens established in the province, but the researcher did not obtain further information on other data elements being tracked for this intervention.

4.4.4. Linkages and Referrals

At provincial level, DARD appears to have strong links with other government departments; however that is not the case at service delivery levels. The weak links are seen particularly with DOH facilities.

4.4.5. Beneficiary Participation and Responsiveness

Respondents confirmed to have been educated on the importance of household food production; however there is no mention of food preservation activities at household levels. In addition, the Masiphile Food Gardens NGO in Khayelitsha noted that although many sell their garden produce rather than consume it, although some surplus is given to hospices and pre-schools.

5 FINDINGS: OTHER FOOD/NUTRITION INTERVENTIONS

Table 12 presents some strengths and weaknesses found with the other 12 nutrition interventions that are part of the INP.

6 FINDINGS: THE FOOD INDUSTRY IN THE PROVINCE

Only the provincial DOH mentioned any relationship with food companies. Without naming the companies, the respondent mentioned that food companies positively contribute by providing Continuing Professional Development (CPD) training and updates on products. In this province, DOH staff have been trained on the International Code of Marketing Breast milk Substitutes to prevent undue influence by manufacturers. By the end of 2011, 20, 000 staff had been trained in this area.

7 RESULTS

Table 13 below summarises the principle strengths and weaknesses of the implementation of other nutrition programmes in Western Cape Province.

Table 12: Respondents' Views on Implementation of Other Nutrition Interventions

Nutrition Intervention	Reported Main Delivery Channel	Reported Guidance / Protocols	Respondents' General Perceptions on effectiveness of the service in addressing Nutrition
Basic Antenatal Care	– ANC sites – PMTCT sites	– Infant Feeding Counselling Guidelines – BANC Protocol – City and Province ANC guidelines	ADEQUATE. Encouragingly, this intervention caters to teen mothers through youth clinics sessions offered one afternoon a week -after school. The province conducts an Awareness Day once each year to promote the service. There is concern, however, that not all patients get equal attention; one respondent indicated that those who arrive on time get extra attention.
Complementary Feeding	– Well baby clinics – CHWs – Mothers peer mentoring – NPOs	– Infant Feeding Counselling Guidelines – Infant and Young Child Feeding Policy	INADEQUATE. Respondents indicated that this intervention is not reaching enough mothers, particularly given the social and cultural factors that interfere with mothers' ability to practice the advice given. There is need for engaging more community support particularly from older women (grandmothers).
IMCI	– IMCI Nurses	– IMCI Guidelines – UNICEF 2011 guidelines	ADEQUATE. Mothers come to the clinic when their babies are ill. But the internal information system (tick sheet) is not user friendly and many health workers use note books. This is a barrier to effective implementation of the service.
ORS/Zinc	– ORS corners – Health education – IMCI nurses – Households for initiation before coming to the clinic and continuous treatment – CBOs conduct health and hygiene counselling and education	– IMCI guidelines – Zinc Supplementation guidelines – Clinical guidelines of Western Cape DOH 2011/2012	No information was obtained on the adequacy of this intervention

Nutrition Intervention	Reported Main Delivery Channel	Reported Guidance / Protocols	Respondents' General Perceptions on effectiveness of the service in addressing Nutrition
Micronutrients Supplements Including Vitamin A	– IMCI nurses – Staff trainings – CHWs – Dieticians and Nutritionists.	– Vitamin A supplementation guidelines – Food Based dietary guidelines	ADEQUATE, except that all nurses are not trained on the RTH card, and as a result they can omit the Vitamin A checks. There is some concern from some respondents over iron deficiency. There is some confusion about the administration of Vitamin A 50, 000 units as most health facilities do not stock them anymore. There are frequent stock-outs of folic acid, and iron tablets.
Growth Monitoring And Promotion	– Staff trainings on IYCF policy – Baby wellness clinics – IMCI nurses – CHWs-MUAC tapes –	– IYCF Policy – Standard procedures for growth monitoring and promotion – Road to Health Booklets	ADEQUATE. Most RTH cards (95%) reviewed during the evaluation had the weight of the baby plotted. But only 89% of clinics had a functioning baby weighing scale (Table 9). Improvement is needed in ensuring measuring equipment (scales and length boards) are standardised, functioning, and available in all facilities.
Management of Severe Malnutrition	– Dieticians – IMCI nurses – CHWs – Training of health workers on the policy	– Management of moderate to severe malnutrition – WHO 10 steps	No information was obtained on the adequacy of this intervention
Deworming	– IMCI nurses – CHWs – Well baby clinics – EPI campaigns – ECD sites	– IMCI – Essential Drug List	No information was obtained on the adequacy of this intervention
Nutritional Counselling	– ANC – PMTCT – IMCI nurses – Dieticians	– Food based dietary guidelines – Infant feeding counselling protocol	Most beneficiaries noted receiving information and education from the clinics around not drinking alcohol or smoking during pregnancy, IYCF, exclusive breastfeeding (EBF). Although the messages are being provided, many beneficiaries say they are not practicing them – especially EBF – for social and cultural reasons.

Nutrition Intervention	Reported Main Delivery Channel	Reported Guidance / Protocols	Respondents' General Perceptions on effectiveness of the service in addressing Nutrition
Improving Hygiene Practice	– ECD centres – School health teams – Community education outreach teams – IEC Materials	–	The main hygiene issues relate to the use of dummies and unclean bottles for feeding. Mothers bring the best bottles when visiting the clinic and dress their babies with new clothes, but this doesn't reflect what is happening in homes. Enabling factors for this intervention are interdepartmental linkages and achievable targets.
Food Fortification	–		No information was obtained on the adequacy of this intervention

Table 13: Principal Strengths and Weaknesses in Western Cape Province.

Implementation Factor	Implementation Strengths / Enabling Factors	Implementation Weaknesses / Inhibiting Factors
Institutional Culture and Context Includes readiness to change and the extent of commitment at all levels through which the policy passes	Western Cape has invested in staff capacity building and skills transfer in line with changes and updates in policy. In general, there is buy-in from staff at all levels and regular monitoring and feedback. There is a noticeable culture of social inclusions particularly at the service implementation level. Relevant staff are consulted when necessary and are invited to trainings/updates when there is a change in policy or introduction of guidelines	Some staff have not totally bought-in to supporting exclusive breastfeeding of HIV infected mothers There is still a challenge of exclusive breastfeeding especially among teen mothers and working mothers. There appears to be a communication gap regarding breast milk expression-as it rarely came up during data collection. Different knowledge and experiences exist between generations and it appears that the generation of grandmothers are not adequately absorbing exclusive breastfeeding messages. Elderly women tend to encourage early solid feeding and as they usually play a role in raising their grandchildren, have a significant impact on the implementation of the intervention.
Implementation Strategies Used the various implementation strategies (i.e. models) devised for carrying out the policy	Community based interventions facilitate community implementation of nutrition interventions. In rural areas, staff-periodically take facility-based nutrition interventions out to beneficiaries. NGOs play a significant role in food access interventions as well as communicating nutrition/health information to beneficiaries.	At times, community based organizations (CBOs) collect extra information i.e. information outside the need of the implementing government department and forms. Generally, reporting by CBOs is often delayed due to transportation issues. There are poor linkages between food security service delivery level and implementers of other nutrition interventions.

Implementation Factor	Implementation Strengths / Enabling Factors	Implementation Weaknesses / Inhibiting Factors
Participant Responsiveness facilitation processes and interactions that influence participant responsiveness	Participants seem to be generally receptive to the nutrition/food security interventions They attend community forum meetings where they are updated on development and are able to provide input.	There is slow uptake of the home gardening intervention when compared with DOH and DSD interventions because of the level of effort and commitment required. There appears to be a stigma attached to the "porridge" provided as part of the Targeted Supplementary Feeding Program due to its association with HIV/AIDS patients. In addition, both children and adults seem to dislike the taste. High alcohol consumption remains a challenge hindering proper infant feeding in some homes and pregnant mothers consuming alcohol. Economic factors e.g. transport costs, at times inhibit the uptake of facility-based nutrition interventions.
Capacity to Implement Adequacy of financial, material, and human resources to implement the policy	Management has political will and vision to implement and resources are generally allocated to match the needs identified. Staff tend to have the appropriate skill level.	For some interventions, a shortage of skilled personnel and some key programme materials hinders implementation. At the service delivery level, a shortage of facility-based nutrition counsellors and dieticians was identified as an issue. .
Communication	There are clear communication protocols for both internal and external communications. Policy changes are clearly communicated to all relevant staffs.	One respondent noted that umbrella messaging (SMSs to large audiences) does not have an impact in this province.

8 CONCLUSIONS

Western Cape Province has developed mechanisms to support and nurture the implementation of food and nutrition security efforts at household, facility and community levels. Three line departments (DOH, DSD, and DARD) along with a myriad of NGOs actively promote specific food and nutrition interventions. DARD leads a provincial Food and Nutrition workgroup to coordinate the execution of food and nutrition programmes of the line departments; however, there is no evidence of more strategic and independent leadership above the three departments that are responsible for implementation of their specific nutrition interventions. Related to this is the absence of a consolidated information system that holds the myriad of data elements related to food, nutrition, and nutritional status for vulnerable individuals, households, and communities. Such an information system would contribute to more strategic leadership in decision making for food and nutrition security. Fortunately, WC DOH is currently busy setting up a consolidated information system.

There is some evidence that coordination at district and community level could be improved, particularly in ensuring that cases of under-nutrition and food insecurity are effectively linked between the services of DOH, DSD, and DARD.

Of the 18 food and nutrition interventions that were generally examined in this evaluation, the largely-mainstreamed DOH interventions should address the underlying disease factors of poor nutrition. However, implementation is not without its challenges, among which are over-worked nurses who provide nutrition counselling in a seemingly perfunctory manner, frequent stockouts of necessary materials (e.g. TSF supplies, folic acid, and iron) and the absence of adequate growth monitoring equipment in some facilities. These have the potential to hamper the effectiveness of services delivery and to achieving the goals of enhanced child nutrition. In the agriculture sector, there are good results in the home gardening programme, but because coverage is reportedly concentrated in the Cape Town metropolitan area, there may be need to expand the programme to other less populated areas of the province.

Insufficient attention is given to effectively supporting complementary feeding as an adjunct to education and counselling on exclusive breastfeeding (EBF). Although beneficiaries confirm receiving the EBF message, they do not practice what they have been taught. HIV positive mothers in particular appear reluctant to breastfeed. Accordingly, there is need to intensify the messages around EBF and complementary feeding, particularly in reducing stunting and the growing prevalence of overweight in very young (ages 0-3) children. Implementing these interventions requires extensive community outreach into the homes of mothers and children to counteract conflicting traditional practices advocated by family members.

Effective targeting of nutrition interventions is uneven across government departments. Many DOH nutrition interventions are specific to pregnant women and young children, but utilisation of these services can decline rapidly after the child is older than 6 months of age. In comparison, there is no evidence of DSD or DARD nutrition interventions being specifically targeted to the needs of young children and pregnant women; rather poverty or food insecurity is used as the main criterion for enrolling individuals and households into these programmes. But to achieve greater nutrition effect, more specific targeting of young children is necessary for all nutrition and health services. This means the DOH must to find ways to reach children older than 6 months with health services, and DSD/DARD must use the presence of pregnant women or children under 5 in a household as a criterion for targeting their food and nutrition interventions. Using ECD centres is not a sufficient targeting mechanism for DSD as most of the children in these centres are 3 years and older, and miss

out on the critical 0-2 age group.

Finally, staffing shortages within the DOH impede the effective delivery of nutrition education and counselling. However, an innovation in Western Cape is the DSD's partnerships with universities to provide university students with internships, while at the same time alleviating staff shortages.

9 RECOMMENDATIONS

1. Consider establishing a provincial-level food and nutrition coordinating mechanism that is driven by an institution that is not a line ministry.
2. Develop outcome-level indicators, targets, and reporting requirements for the provincial coordinating forums. Consolidate information systems between DOH/DSD/DARD for better monitoring of implementation and effects of food and nutrition interventions.
3. Place nutrition advisors or nutrition counsellors in facilities to decrease the work load of nurses and dieticians hence improving the quality of services render.
4. To counteract resistance by HIV infected mothers to exclusive breastfeeding, revise exclusive breastfeeding messages to include more clinical and medical reasons why it is the best option to breastfeed even if HIV infected.
5. Consider establishing milk banks to improve the coverage of exclusive breastfeeding, or any other similar interventions.
6. Tailor infant feeding messages to better fit specific target audiences, e.g. teen mothers, working mothers, grandmothers, etc.
7. Devise an overall communications campaign to better change cultural attitudes/beliefs and behaviours around young child feeding in the general public at large.
8. Explore how each department can better engage and fund community level CBOs and NGOs in delivering a consolidated and comprehensive package of food and nutrition interventions (e.g. growth monitoring, micro-nutrient supplementation, home gardens, nutrition counselling, IYCF support groups, food parcels, ECD meals, etc.) to better realise nutritional impact for pregnant women and children under 5.
9. DARD to consider emphasising "nutrition-led agriculture" in its new Food Security Strategy with a focus on nutrition objectives and targeting pregnant women and households with young children.
10. Direct more resources for empowering vulnerable groups to both produce and preserve food at household, cooperative and community levels.
11. DOH and DARD to explore the possibility of establishing partnerships with universities to assist in community-level delivery of nutrition interventions.

APPENDIX A: TERMS OF REFERENCE

DEPARTMENT OF PERFORMANCE MONITORING AND EVALUATION

THE PRESIDENCY

Terms of Reference for Diagnostic/Implementation Evaluation of Nutrition Interventions for Children from Conception to age 5

RFP / Bid number: 12/0287

Compulsory briefing session
Date: 27 August 2012
Time: 11.00-13.00
Venue: Room 222, East Wing, Union Buildings

Please note that security procedures at the Union Buildings can take up to 30 minutes.

Bid closing date:
16.00 19 September 2012 with provision of an electronic and 6 hard copies.

1 Background information and rationale

1.1 Background to the intervention being evaluated

South Africa is in a nutrition transition which includes the coexistence of under- and over-nutrition which is evident between and within populations and across age groups. Under-nutrition has stayed roughly constant in South Africa since the early 1990s. Despite our relatively high per capita income, the country has rates of child stunting comparable to other lower-income countries in its region, and higher rates of stunting than lower-income countries in other regions. While some indicators show improvement, several conditions seem to have worsened over the past decade. In addition, children's nutritional status varies considerably among the nine provinces and possibly within each province. This has bearing on targeting and prioritization for interventions and resource allocation. Malnutrition undermines progress towards the Millennium Development Goals (MDGs) directly to those goals related to poverty, maternal health, child mortality and education, and indirectly to the remaining MDGs. Nutrition is critical for, inter alia, the improvement of maternal and child health, as underscored in the Negotiated Service Delivery Agreement

Since the democratisation of South Africa, the Government has remained consistently committed to reducing malnutrition in children and mothers. The appointment of the Nutrition Committee by the Minister of Health in August 1994 to investigate an Integrated Nutrition Strategy for South Africa was the beginning of a new chapter in nutrition in South Africa. In considering the sectoral and multi-faceted causes of malnutrition, the Committee recommended an Integrated Nutrition Strategy (INS) with three components, namely health facility-based services, community-based nutrition programmes and nutrition promotion. Instead of the fragmented and mostly food-based approaches of the past, the INS was to implement complementing strategies and follow an integrated approach to address nutrition problems. The INS was adopted in the Department of Health's White Paper for the Transformation of the Health System in South Africa (1997) and served as the basis for the Integrated Nutrition Programme (INP) for South Africa.

Priority interventions for the Integrated Nutrition Programme for children under five are as follows:

- Infant and young child feeding, which include promotion of safe infant feeding practices;
- Micronutrient malnutrition control-supplements, fortification and food diversification;

- Facility-based nutrition interventions including management of severe malnutrition;
- Growth monitoring and promotion;
- Disease-specific interventions such as nutrition interventions for children living with TB, HIV&AIDS and other debilitating conditions;
- Maternal nutrition which includes provision of micronutrients.

The beneficiaries of nutrition-related interventions and the coverage are as follows:

- Vitamin A provided to post-partum women = 760 000 (current coverage is 94%);
- Vitamin A provided to children from 6 to 59 months – 3 673 584 (current coverage 6-12 months = 90%, and 12-59 months = 41%;
- Nutritional interventions provided to people infected with TB, HIV and AIDS – 640 281;
- Malnourished children (including moderate and severely malnourished) – 134 832;
- School going children through the school nutrition programme – 7 125 273;
- Exclusive breastfeeding promoted to all children under six months old – current coverage of 25% of children from zero to six months.

The health sector is leading and harnessing the efforts to achieve Outcome 2: "A long and healthy life for all South Africans". The Strategic Plan of the National Department of Health (NDOH) provides a framework of the implementation of the 10 Point Plan of the health sector for 2009-2014, which is aimed at creating a well-functioning health system capable of producing improved health outcomes. The outcome-based approach adopted by government to accelerate the implementation of the NDOH Strategic plan guides the development of specific strategies in the sector. The four key outputs that the health sector should produce to achieve Outcome 2 are: increasing life expectancy; decreasing maternal and child mortality; combating HIV and AIDS and decreasing the burden of diseases from Tuberculosis; and strengthening health systems effectiveness.

Improving the nutritional status of the population should benefit the health system and reduce the economic burden of medical treatment and care in a number of ways. It can reduce the demand for curative treatment, and thus the number of patients, shorten the duration of hospital stays and improve recovery rates. Reduced patient loads at primary health care facilities can facilitate improved delivery of nutrition and other preventive and promotive services. Therefore, implementing proven nutrition interventions at scale will contribute in achieving Outcome 2 of the health sector.

The expected outcome of nutrition-related interventions is improving the nutritional status of the South African population, with specific reference to the most vulnerable groups, namely; pregnant women and children under the age of five. The desired outcomes are mainly:

- Reduction of stunting in children;
- Reduction of underweight in children;
- Reduction of case fatality rate due to severe acute malnutrition;
- Reduction of micronutrient deficiencies especially Vitamin A, iron, zinc and iodine;
- Promoting healthy eating amongst the children and adults to combat chronic diseases of lifestyles such as diabetes, cancers and cardiovascular diseases;
- Improving nutritional status of individuals living with chronic and other debilitating conditions.

Recent reports from government, notably the diagnostic report from the National Planning Commission also reflected the need to address the problem of child malnutrition in South Africa. The 2008 input paper from the Development Bank of Southern Africa on "Combating Malnutrition" also highlighted the need to act with speed in tackling malnutrition. The contribution of malnutrition as an underlying cause and major contributor to infant mortality in South Africa has been highlighted through various reports. This has prompted the Minister of Health to urge government to scale-up key child survival interventions such as breastfeeding to contribute in reducing infant mortality rate.

The economic costs of under-nutrition are substantial: productivity losses to individuals are estimated at more than 10 percent of lifetime earnings, and losses to gross domestic product may be as high as 2–3%. The estimated budget allocation for nutrition related interventions in provinces under the health budget vote is R320 million. Therefore the evaluation is important because of the investment that government is making on nutrition related interventions for under-five children. Identifying bottlenecks in scaling up nutrition related interventions targeting children under five will contribute better programme planning and resource allocation.

In order to understand problems of malnutrition and resources and systems needed at different levels, the "UNICEF Conceptual Framework (1990) should be used as a guide. The conceptual framework outlines in diagrammatic form the multiple causes of malnutrition operating at various levels in society. The framework also focuses on the processes, programmes and policies that need to happen at the higher level to ensure that reductions in maternal and child under-nutrition will not only be achieved in the short term, but will be maintained in the long term, will be sustainable, and will be transmitted from one generation to another. Public and private sector interventions need to influence household decision-making to influence nutrition.

The multi-sectoral nature of nutrition requires various government departments, donor agencies and the industry to work together. The following stakeholders within and outside government are critical in the successful implementation of various nutrition related interventions: Departments of Basic Education, Social Development, Agriculture, Trade and Industry, Treasury, Water Affairs, Rural Development and Land Reform, United Nations agencies, food industry, NGOs and other development partners. The Integrated Nutrition Programme became operational in 1994.

Various nutrition interventions are currently being implemented. Table 1 shows a list of the interventions to include in this evaluation.

Table 1: Nutrition interventions to be covered by this evaluation (*= high impact interventions drawn from Copenhagen Consensus of 2012 and the Lancet Series 2008)

Interventions to cover	Department responsible
Breast-feeding support*	Health
Complementary feeding*	Health
Food fortification (Vitamin A, Iron and Iodine)*	Health
Micronutrient inc Vitamin A supplementation*	Health
ORS and Zinc*	Health
Management of severe malnutrition*	Health
Management of moderate malnutrition inc targeted supplementary feeding*	Health
Deworming	Health
Growth monitoring and promotion including the use of MUAC	Health
Nutrition education and counselling (part of all of these)	Health
Improving hygiene practice (including in relation to water and sanitation) – should be in all	Health
BANC (Basic ante-natal care) – education and supplements, timing	Health
IMCI (integrated management of childhood illnesses)	Health
Household food production and preservation (home gardening)	DAFF
Access to (nutritious) food, food prices	DAFF
Food security (output 2 of outcome 7)	DRDLR/DAFF
Food access (eg food parcels, soup kitchens) (DSD)	DSD
ECD (food in ECD centres) (DSD)	DSD

The evaluation should feed into other government priorities that are geared towards the reduction of infant mortality in South Africa, especially policy initiatives such as re-engineering of Primary Health care

that are pioneered by the Department of Health. The recent review of the ECD interventions also provides an opportunity to address issues of nutrition comprehensively, focus on the most vulnerable members of the society. Malnutrition is an underlying cause of the death of children in one-third of the total of children's deaths in South Africa. Malnutrition undermines economic growth and reduces the productivity of people trying to work their way out of poverty. It is estimated that 2-3% of the national income of a country can be lost to malnutrition. Therefore it is imperative that South Africa act now to address problems of malnutrition, since we have been identified as one of the 36 countries where 90% of the world's stunted children resides.

1.2 Purpose of the evaluation

The evaluation will focus on identifying the critical system and implementation issues inhibiting or enabling people's access to nutrition-related interventions targeting children from conception to below the age of five, how these should be addressed and scaled up where appropriate.

The evaluation will provide the opportunity to re-focus interventions targeting children under five.

2 The focus of the evaluation

2.1 Evaluation questions

The key evaluation questions that this evaluation will address include:

- Do relevant **policies** exist for these interventions (those in table 1), have they been adopted by appropriate departments/levels of government, are they funded, and are they coherent across sectors?[1] Are there policy gaps?
- Does government have the appropriate policy and **regulations** to avoid inappropriate marketing of products affecting child nutrition? What are the gaps in monitoring and enforcement? How consistent is this across government? Why are some regulations not being applied effectively, or not enforced? Is there sufficient capacity in regulatory agencies? What type of partnership with industry is appropriate to promote child nutrition and development?[2]
- To what extent are nutrition interventions from different agencies (government and non-government) influencing household decisions and **reaching under 5 children** across the country (from secondary data and facility monitoring) and which are being carried by government and which by non-government agencies?
- Are **high impact interventions** being prioritised in practice? See Table 1 for a list of high impact interventions.
- What interventions are being **implemented effectively**, what aren't?
- **Why** are some interventions not being implemented effectively and efficiently and what is needed to strengthen, upscale and sustain them? Sub-questions include:
    - How far is nutrition **mainstreamed** into the work of relevant services which impact directly on children? These services should be defined in the inception report.
    - Are there appropriate **plans** to implement these nutrition interventions, are they included in departmental strategic plans, APPs and operational plans?
    - Is there appropriate **leadership** for nutrition at the respective levels and are they empowered to play that role?
    - Are there **relevant workers** (not necessarily professional dieticians or nutritionists) to address nutrition-related interventions?
    - Do key staff (government and non-government) at different levels have the **skills** to play the roles they need to play and deliver the services needed?

[1] A list will be provided
[2] Note some work has been happening in terms of food control agencies

- Do the PHC and other service facilities have the necessary equipment, guidelines, protocols and supplies to deal with nutrition in under-five children?
- Do service standards/norms exist for relevant interventions?
- Are resources allocated appropriately and sufficiently (this would draw on international evidence of cost-benefits)
- In terms of the service delivery model operating in practice, do we have appropriate systems and structures operating at community level to have effective outreach to communities (eg community-based services such as nutrition advisors, and platforms for community involvement). How extensive are these?

➢ What institutional arrangements are currently in place within and across departments and agencies (government, private sector, community actors) to address child nutrition and what is needed to improve the effectiveness of nutrition interventions?

➢ What monitoring and evaluation systems are in place and needed to monitor and improve the evidence base for and implementation of nutrition-related interventions?

2.2 Intended users and stakeholders of the evaluation

The key potential users of the evaluation results and how they may use it are shown in Table 2.

Table 2: Users and their use of the evaluation results

User	Key question	How they may use the evaluation results
Political leadership at national and provincial levels	• What do we need to do to ensure that our children are well nourished and able to use their full potential? • What institutional arrangements and M&E is needed across departments and agencies (government, private sector, community actors) to improve the effectiveness of nutrition interventions for children?	• Reprioritise resources • To strengthen intergovernmental cooperation (and with civil society) around child nutrition and development?
All departments and provinces	• What interventions are being implemented effectively, what aren't and where are the gaps? • Why are some interventions not being implemented effectively and efficiently and how can we strengthen, upscale and sustain them? • How does each department's role need to be strengthened to address this?	• Overcoming blockages and improving implementation • Reprioritise resources • Collaborate more effectively with other agencies
Development partners and NGOs	As above plus: • Where are the key gaps where our support can make a difference?	• Prioritise funding and support to programmes
Staff at facility or community level	• What skills and support do we need to ensure we can deliver services appropriately	• Recognising their shortcomings • Motivate for the support they need Allocating their time differently • Motivating and mobilising the community more appropriately
Industry	• How can industry's products and services be more appropriate in addressing child	• Refocusing products and services

User	Key question	How they may use the evaluation results
	nutrition • What type of partnership with government is appropriate to promote child nutrition?	• Appropriate partnerships established

2.3 Scope of the evaluation

Table 3 shows the issues which are to be covered, and those to be excluded.

Table 3: Scope of the nutrition evaluation

To be included	To be excluded
System issues include policy, the design of programmes, budgets, how processes work in practice	
Period from conception to age 5 Women pregnant/caring for children under 5	Exclude children >5 Women of child-bearing age who are not pregnant, and are not caring for children under 5
Link with HIV	
Main intervention programmes targeting under 5s across government	Indirect issues such as Child Support Grant. Build on existing CSG evaluation.
Underweight and overweight	
ECD	Don't cover what already covered by ECD Diagnostic Review
Public health interventions including at community level	Exclude tertiary and district hospitals except for management of severe acute malnutrition (SAM). Main focus not on clinical interventions
Budget for wider nutrition interventions beyond the Integrated Nutrition Programme, but will also look at previous INP budget for infant formula.	
Role of industry and how government engages with industry	
Relate to international experience eg in middle income countries	

3 Evaluation design

The key elements of the design include:

1. Good literature review to draw together existing research and evaluation (a set of core documents will be provided at the bidders briefing).
2. Review of existing national and provincial policies, regulations and interventions to show how these cohere or not and govern provision (bearing in mind that most nutrition action is taken at household level).
3. Some comparison with other middle-income countries, especially where data is limited. The countries should be suggested in the inception report.
4. Overview of all the interventions and the progress/not and challenges using secondary data.
5. Four provinces selected for detailed case studies to explain what is occurring and why (including those working well, those working less well). This should include KwaZulu Natal where there is

extensive community-based nutrition work happening, Western Cape, Free State/North West and Eastern Cape. These should cover urban to remote rural communities and facilities, perhaps 6 per province, covering a relatively well performing district and a poorly performing. See Annex 2.

6. Some high impact interventions selected for detailed case studies (probably breast-feeding support, targeted meal supplementation, management of severe malnutrition and possibly Vitamin A supplementation) as well as household food production and preservation (home gardening). These should show the linkages and value chain between household and the decisions made, community, facility, district, province and national level including the private sector. This should explain and illustrate implementation challenges and proposals to strengthen.
7. Thorough institutional analysis to understand how within and across departmental systems, structures, capacity, organisational culture and leadership is facilitating or limiting impacts. This will build on the landscape analysis.
8. Recommendations should take a short/medium/long term perspective.

APPENDIX B: METHODOLOGY

LITERATURE REVIEW

The starting point for this evaluation was a literature review that provided the context for this implementation evaluation. The literature review examined the following relevant topics:

1. Current health and nutrition status of children under 5 and pregnant women in South Africa;
2. South Africa's policy framework on maternal and child nutrition;
3. A review of nutrition policies and interventions from 5 countries that have successfully improved their nutrition performance (Brazil, Colombia, Malawi, Mozambique, and Malaysia). These countries were selected by the Evaluation Steering Committee as comparisons to South Africa based on one of the following two reasons:
    - the country has similar economic or infrastructure characteristics to South Africa but much better nutrition performance at a national level (i.e. Brazil, Colombia, and Malaysia), or
    - the country is geographically proximate to South Africa and thus has similar environmental and cultural characteristics, but again better nutrition performance (i.e. Malawi and Mozambique);
4. An analysis of implementation issues present in the literature.

SAMPLING

Before we began fieldwork, the Evaluation Steering Committee identified the geographic areas where fieldwork was to be carried out and the important subgroups or categories of people to be sampled. The four stages involved are further described below.

Stage 1: Selection of Provinces

Aside from data collection at national level, the Evaluation Steering Committee identified 4 provinces (purposefully-selected) for the reasons indicated below:

JUSTIFICATION FOR THE PROVINCES SAMPLED

Province	Justification
KwaZulu-Natal	Its emphasis on community nutrition
Western Cape	The general perception that nutrition and health programmes are well implemented in the Western Cape
Free State	The general perception that nutrition and health programmes are well implemented in the Free State
Eastern Cape	Its unique development profile and its challenges in implementing government programmes

Stage 2: Selection of Districts

In each province, 2 districts were purposefully selected based on their levels of performance (i.e. high performing and low performing). We obtained recommendations from provincial nutrition focal persons regarding the names of high-performing districts in their province. Selection of the poor-performing districts were identified with the Evaluation Steering Committee using the following criteria:

- NDOH score for district's performance in child health indicators
- NDOH pilot districts for implementing the NHI (these tend to be districts with vulnerable population and have a high burden of disease, and have demonstrated poor performance in 27 socio-economic, health service and financial and resource management indicators).
- Rural Development scores for district performance
- Agriculture scores for district performance
- DSD district performance scores

Two of the poor-performing districts chosen with the Evaluation Steering Committee (in FS and WC) were revised, with the final sample of districts being presented in the table below.

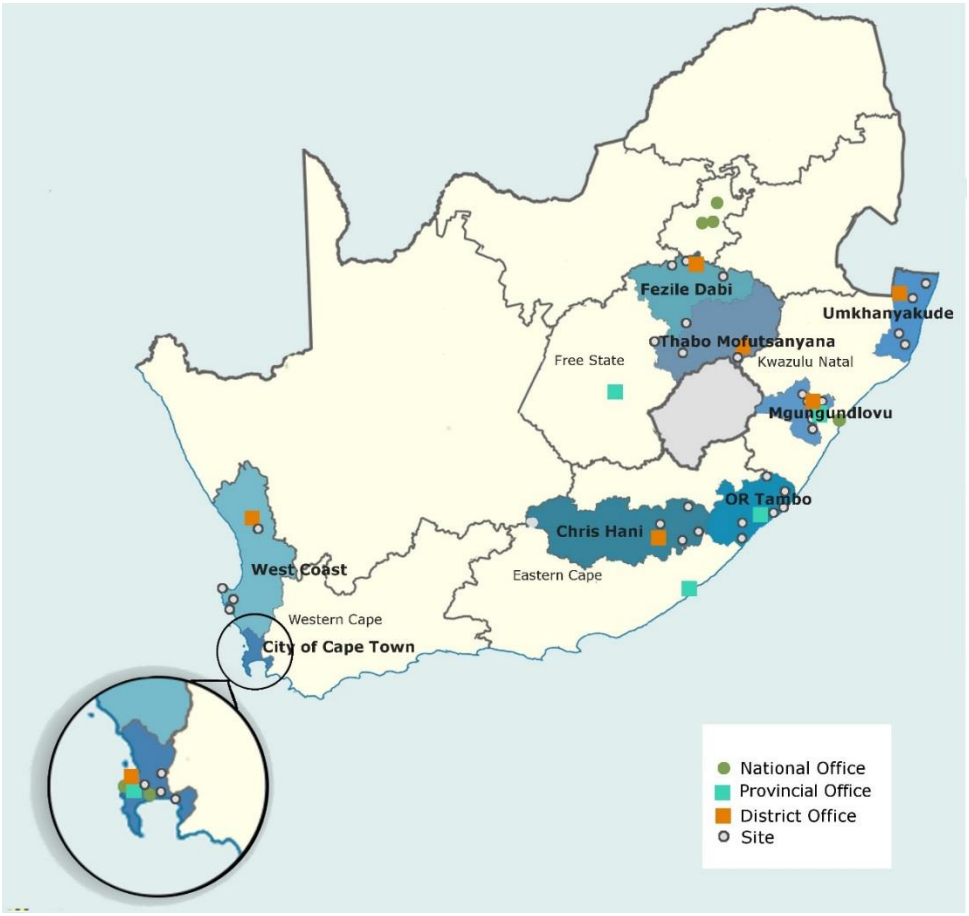
DISTRICTS INCLUDED IN THE SAMPLE

PROVINCE	HIGH PERFORMING DISTRICTS		POOR PERFORMING DISTRICTS	
	District Name	Justification	District Name	Justification
Eastern Cape	Chris Hani	Recommendation from the EC nutrition focal person.	OR Tambo (Umtata)	NHI pilot site Poor Child Health indicator score Poor Rural Development indicator Score
KZN	uMgungundlovu	Recommendation from the KZN nutrition focal person.	Umkhanyakude (Mkuze / Jozini)	Poor Child Health indicator score Poor Rural Development indicator Score High poverty levels based on DSD indicators
Free State	Thabo Mofutsanyane	Recommendation from FS nutrition focal person	Fezile Dabi	Recommendation from Nutrition Manager in FS province
Western Cape	West Coast	Recommendation from WC nutrition focal person.	City of Cape Town	Recommendation from Nutrition Manager in WC province

Stage 3: Selection of Facilities/Organisations

In each district, Khulisa randomly selected 4 health facilities according to their geographic status (urban/rural), and purposefully selected 4 NGOs that work in food/nutrition. This resulted in a total sample of 32 health facilities and 16 NGOs as across the 4 provinces.

FIELDWORK LOCATIONS



Stage 4: Selection of Individual Respondents

Key informant respondents were purposefully sampled based on a list of stakeholders provided by the Evaluation Steering Committee. The sampling strategy for beneficiaries was based on a convenience sample obtained during site visits to health facilities and NGOs. The method for data collection in each group in the sample is indicated in brackets in the box below.

Proposed Respondents (and method of data collection)

1) **National Level Respondents** *(in-depth interviews)*
   - National DOH nutrition managers
   - National DSD managers
   - National Rural Development food/nutrition managers
   - National Agriculture food security managers
   - National ECD managers
   - Bilateral Donors: USAID, CDC
   - Multi-lateral Donors: UNICEF, WHO
   - Relevant local and international health/development organizations:
   - Relevant food industries
2) **Provincial Level Respondents in WC, EC, FS, and KZN** *(in-depth interviews)*
   - Provincial DOH nutrition managers
   - Provincial DSD nutrition managers

- Provincial Rural Development food/nutrition managers
- Provincial Agriculture food security managers

3) District Level Respondents *(in-depth interviews or focus group discussions)*

- District DOH nutrition managers
- District DSD nutrition managers
- District Rural Development food/nutrition managers
- District Agriculture food security managers

4) Health Facility Respondents *(in-depth interviews or focus group discussions)*

- MCH nurse or nursing assistant
- Counsellors for pregnant women and/or mothers of young children
- Community health workers attached to health facilities

5) NGO Respondents *(in-depth interviews or focus group discussions)*

- Programme or Site Manager
- Community workers

6) Beneficiary Respondents *(focus group discussions)*

- Pregnant women and mothers of children under 5 years present at health facilities
- Beneficiary participants in NGO programmes

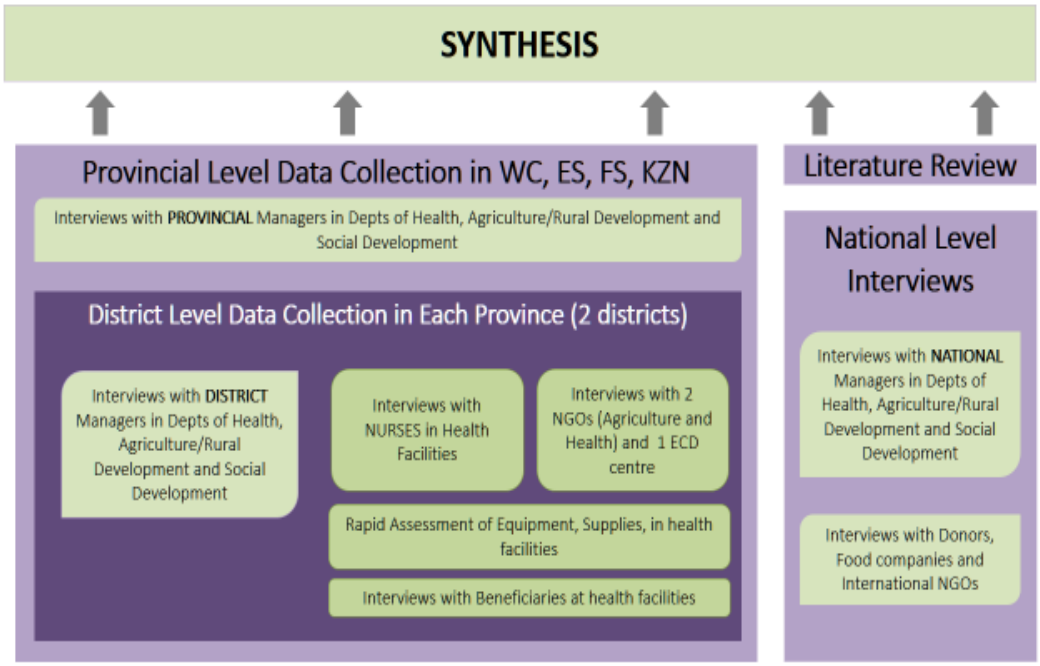
DATA COLLECTION METHODS

Data collection methods used in the evaluation are as follows:

1. Semi-structured Key Informant Interviews
2. Focus Groups with beneficiaries
3. Rapid Performance Assessments of health facilities
4. Assessment of Health Worker Knowledge around nutrition

The figure below summarises the data collection components of the evaluation.

Summary of Data Collection Components of the Evaluation



The table below presents the data collection methods used, the target respondents for each method, as well as the content explored.

Data Collection Methods and Target Respondents by Content

Method	Target Respondents	Content explored
Key informant interviews	Relevant Government managers at national, provincial, and district levels	• Perceptions on current needs and practice around nutrition • Moderating factors (i.e. policy content and fit, organisational context and culture, commitment, capacity, facilitation processes that affect participant responsiveness, and communication) • Institutional arrangements • M&E for food/nutrition • Funding levels
	Food industry representatives	
	Bilateral and multilateral donors and international health/development NGOs	
	Health facility staff or managers	
	Representatives from CBOS/NGOS involved in food/nutrition programmes	
	Programme managers at district level, groups of health staff at facility level	
	Representatives from community-based projects and services (ECD, agriculture, health)	
Focus Group Discussions	Beneficiaries	• Experiences with food and nutrition programmes and services • Satisfaction with services • Need for food/nutrition support
Rapid Performance Assessment	Health Facilities	Review of relevant infrastructure, equipment, and supplies for delivering nutrition interventions
Assessment of Health worker Knowledge	Nurses, counsellors, or others providing nutrition services	Knowledge of diagnostic steps and counselling around breastfeeding difficulties, growth faltering, and knowledge of the benefits of micronutrient supplementation

PLANNED VS. ACTUAL DATA COLLECTION

The fieldwork was conducted in 100 of the intended 104 intended locations (96%). The missing locations include: one national level interview (not conducted because of difficulties in scheduling or refusals), two district level offices (not interviewed in the Western Cape (DOA for West Coast district and DOH for City of Cape Town Metro)), and one health facility in the Free State.

As shown in in the table below, 143 interviews and Focus Group Discussions (FGDs) were conducted across these 100 locations. Half of these were held at Government offices or health facilities, 30% were Beneficiary FGDs, and the remaining 20% were with NGOs or other (donor representatives, international agencies, and private companies). Many interviews were conducted with more than 1 respondent, resulting in the total number of respondents being more than 400 people.

Two additional assessments were conducted at health facilities: (i) a rapid assessment of relevant equipment and supplies for delivery of nutrition interventions, and (ii) an assessment of health worker's knowledge around nutrition interventions.

FIELDWORK PLANNED AND ACTUAL

Data Collection Method and Stakeholders Group	No. of Interviews / FGDs			Total No. Persons interviewed
	Planned	Actual	%	
Individual or Group Interviews				
National Government Managers	4	5	125%	7
Representatives of International NGOs	4	7	175%	8
Donors	3	4	133%	5
Private Food Companies	4	4	100%	8
Provincial Government Managers	12	15	125%	22
District Government Managers	24	21	88%	37
Health Facilities	32	31	97%	61
Local NGO	8	8	100%	18
ECD Centre	4	5	125%	12
Focus Group Discussions				
Beneficiaries FGDs at health services and community projects	48	40	83%	267
TOTAL	**143**	**140**	**98%**	**445**

Other Assessments	Planned	Actual	%	No. Persons Reached
Health Facilities Rapid Assessments	40	36	90%	--
Health Worker's Assessment of Nutrition Knowledge	76	132	174%	136

A breakdown of the number of respondents per province can be seen in in the table below.

ACTUAL NO. INTERVIEWS AND FGDS CONDUCTED BY PROVINCE

	Western Cape		Free State		KwaZulu-Natal		Eastern Cape		National Level		Total	
	No. Interviews / FGDs	No. Resp.	No. Interviews / FGDs	No. Resp.	No. Interviews / FGDs	No. Resp.	No. Interviews / FGDs	No. Resp.	No. Interviews / FGDs	No. Resp.	No. Interviews / FGDs	No. Resp.
DOH Mgmt	2	2	4	5	3	4	3	7	1	2	13	20
DSD Mgmt	2	4	5	6	3	7	4	6	2	3	16	26
Ag Mgmt	1	1	3	5	3	7	3	5	2	2	12	20
Donors, companies	--	--	--	--	--	--	--	--	14	21	14	21
NGOs (local) /ECD	1	1	4	7	4	15	4	7	--	--	13	30
Health Facilities	8	9	7	7	8	31	8	14	--	--	31	61
Beneficiary FGDs	7	21	10	69	11	106	12	71	--	--	40	267
TOTAL	**21**	**38**	**33**	**99**	**32**	**170**	**34**	**110**	**19**	**28**	**139**	**445**

NB: *No. Resp* = Number of respondents across the interviews and focus group discussions. Because interviews were often conducted with more than one person, the number of respondents is often greater than the number of interviews or FDGs held.

DATA RECORDING AND CAPTURING

During each interview or assessment, the researcher took extensive notes on the instruments specific to the interview. An interview guide provided researchers with further guidance on when to probe for answers and when not to. The notes were then captured in Excel for data analysis and then coded according to themes.

DATA ANALYSIS

Quantitative data collected in the KIIs, FGDs, Health Facilities Rapid Assessments, and Health Worker's Assessment of Nutrition Knowledge were analysed using descriptive statistics.

Qualitative data collected under the KIIs and FGDs were analysed using content analysis, from the notes that had been transcribed into Excel. The following criteria were utilised to determine the 'reliability and validity' of the data.

1. Truth value/Credibility: Truth value describes the level of confidence the researcher has with the truth of the findings based on: research design, informants and context.
2. Consistency/Dependability: Due to the non-experimental and complex nature of qualitative research, variability is expected and consistency is explained as dependability. Dependability requires that variability is tracked and explained and informant's range of experience from typical to atypical experience explained.
3. Neutrality: Neutrality in qualitative research involves neutrality in relation to data rather than the investigator.

Once the qualitative notes were checked for reliability and validity, these were coded for themes. These themes were tabulated and reported on according to the KII and FGD questions.

REPORTS PRODUCED

Case Study reports were prepared for each of the four provinces where fieldwork took place, as well as for each of the four priority interventions. In all, 11 reports for dissemination prepared for this

evaluation as listed below:

1. Literature Review
2. Breastfeeding Case Study
3. Targeted Supplementary Feeding Case Study
4. Home Gardens Case Study
5. Food Access Case Study
6. KwaZulu-Natal Provincial Case Study
7. Eastern Cape Provincial Case Study
8. Free State Provincial Case Study
9. Western Cape Provincial Case Study
10. Final Evaluation Report
11. Summary of Final Evaluation Report (1-5-25)

LIMITATIONS OF THE EVALUATION

By their nature, qualitative evaluations of policies and programme implementation allow examination of the broader context, rather than specific measurements of compliance to policy elements or programmatic guidelines. This evaluation's extremely broad scope (18 interventions, 17 research questions, and investigation of 6 moderating factors) resulted in very lengthy interviews with respondents who often had time constraints. Consequently, many respondents gave only cursory information around the issues that we sought to explore more deeply.

Because nutrition interventions for pregnant women and children under 5 in the health sector far outweigh the number of nutrition interventions in the social development and agriculture sectors, the evaluation's sampling framework is biased toward respondents from health. In addition, at provincial, district, and local levels, most respondents were able to speak knowledgeably about nutrition interventions implemented by their specific government department, but few were able to comment on the adequacy of implementation for interventions outside their sector. Consequently, data collected from social development and agriculture is sparse compared to that collected from health, making generalisations on implementation in agriculture and social development more difficult.

Data collection in the WC was significantly delayed due to the need to secure ethics clearance from the province before the commencement of field work. This delay led to time constraints on the part of the researcher which in turn resulted in less complete data for the WC compared to that for the other 3 provinces.

APPENDIX C: LIST OF RESPONDENTS INTERVIEWED BY LOCATION

All the respondents indicated that they wanted their names withheld for this evaluation. As such, the positions only are indicated in the table below.

Provincial Respondents:
1. DOH, Deputy Director and Manager of the Nutrition programme
2. DSD, Director: Children and Families
3. DOA, Food and Security Acting Director General
District Respondents:
4. DOA, District Manager
5. DSD, ECD Coordinator
6. City of Cape Town Nutrition Co-ordinator
7. DOA, District Manager
8. DSD, Corporate Service Manager
9. DSD Social Worker
10. DSD Social Worker
11. DOH, Assistant manager: Facility – based
Facility Respondents:
12. Bloekombos Clinic, Facility Manager
13. Bloekombos Clinic. Senior Professional Nurse
14. Clanwilliam Clinic, Operational Manager
15. Lalie Cleophas, Operational Manager
16. Langebaan Clinic, Clinic Manager
17. Van Rhynsdorp Clinic Dietician
18. Crossroads One Clinic. Clinic Manager
19. Dr Ivan Toms Clinic, Clinic Manager
20. Mayenzeke Clinic. Facility Manager
21. Social worker
22. Social Worker
NGO Respondents:
23. Mothers2Mothers, Deputy Operations Manager
24. Mothers2Mothers, Community Worker
25. Mothers2Mothers, Community Worker
26. Mothers2Mothers, Community Worker
27. Mothers2Mothers, Community Worker
28. Mothers2Mothers, Community Worker
29. Mothers2Mothers, Community Worker
30. ACVV Delft Creche, Principal
31. Philani Child Health and Nutrition, Senior Coordinator
32. Philani Child Health and Nutrition, Dietician
33. Masiphile Food Garden, Senior Agriculture Officer
34. Masiphile Food Garden, Project Leader

APPENDIX D: DOCUMENTS CONSULTED AND REFERENCES

1. Western Cape Final Nutrition Consolidated Plan 2011-2012.
2. Western Cape circular: Summary table of policies/protocols and guidelines.
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