Khulisa Management Services (Pty) Ltd

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KwaZulu-Natal CASE STUDY

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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This report has been independently prepared by Khulisa Management Services (Pty) Ltd. The Evaluation Steering Committee comprises the Presidency, Department of Performance Monitoring and Evaluation in the Presidency, The Department of Health, the Department of Social Development, the Department of Agriculture, Forestry, and Fisheries, and UNICEF. The Steering Committee oversaw the operation of the evaluation, commented and approved the reports.

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LIST OF ABBREVIATIONS AND ACRONYMS

AED	Academy for Educational Development
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Treatment
ARV	Antiretroviral
AWA	Active Women's Association
BANC	Basic Antenatal Care
BFHI	Baby Friendly Hospital Initiative
CCGs	Community Care Givers
CHCs	Community Health Centres
DAEA	Department of Agriculture and Environmental Affairs
DAFF	Department of Agriculture, Fisheries, and Forestry
DIS	District Information System
DOH	Department of Health
DSD	Department of Social Development
ECD	Early Childhood Development
FHI	Family Health International
FY	Financial Year
HCBC	Home and Community Based Care
HIV	Human Immunodeficiency Virus
HOD	Head of Department
HMBASA	Human Milk Banks Association of South Africa
ID	Identity Document
IEC	Information, Education, and Communication
IMCI	Integrated Management of Childhood Illnesses
INP	Integrated Nutrition Programme
INS	Integrated Nutrition Strategy
IYCF	Infant and Young Child Feeding
KZN	KwaZulu-Natal Province
M&E	Monitoring and Evaluation
M2M	Mothers2Mothers
MBFI	Mother-Baby Friendly Initiative
MCH	Maternal and Child Health
MCWH	Maternal, Child, and Women's Health
MEC	Member of the Executive Council
MUAC	Mid-Upper Arm Circumference
NGO	Non-Government Organisation
ORS	Oral Rehydration Salts
OSS	Operations Sukuma Sakhe
OVC	Orphans and Vulnerable Children
PATH	Programme for Appropriate Technology in Health

PEM	Protein Energy Malnutrition
PEP	Post Exposure Prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary Health Clinic
PMTCT	Prevention of Mother to Child Transmission
PN	Professional Nurse
RtHB	Road to Health Booklet
SANHANES	South African National Health and Nutrition Examination Survey
SASA	South African Sugar Association
SASSA	South African Social Security Agency
TB	Tuberculosis
U5	Under 5 (years of age)
UKZN	University of KwaZulu-Natal
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WC	Western Cape Province
WHO	World Health Organisation
ZAR	South African Rand

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 counselling 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.
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.

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

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 counselling) 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.
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.

[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

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 Counselling	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 counselling 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 counselling, but with PHC re-engineering it is expected that community based nutrition education and counselling 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 frequent infections and intake of low nutrient or energy dense diets, consisting predominantly of starch-rich staples. Linear growth (i.e. height) and brain development are especially rapid during, pregnancy and the first 2 years of life. 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 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 1960s, they were not very effective in reducing malnutrition because they focused primarily on providing food to the needy, rather than on 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-1990s, 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. 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[5] (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)[6] 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 aged 0-5 show signs of malnutrition: 21.6 % are stunted, and 5.5 % are underweight for their age (2012).

[5] UNICEF. *Levels & Trends in Child Mortality. Report 2011*. Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation. http://www.unicef.org/media/files/Child_Mortality_Report_2011_Final.pdf.

[6] HSRC. South African National Health and Nutrition Examination Survey. 2012. http://www.hsrc.ac.za/en/research-outputs/view/6493 and http://www.hsrc.ac.za/en/research-areas/Research_Areas_PHHSI/sanhanes-health-and-nutrition

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 TOR for this evaluation can be found in Appendix A.

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*	DOH
2. Management of moderate malnutrition including Targeted Supplementary Feeding*	DOH
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*	DOH
7. Food fortification (Vitamin A, Iron and Iodine)*	DOH
8. Micronutrient including Vitamin A supplementation*	DOH
9. Oral Rehydration Salts (ORS) and Zinc*	DOH
10. Management of severe malnutrition*	DOH
11. Deworming	DOH
12. Growth monitoring and promotion including the use of Mid-Upper Arm Circumference (MUAC) measurements	DOH
13. Nutrition education and counselling (part of all of these)	DOH
14. Improving hygiene practice (including in relation to water and sanitation)	DOH
15. BANC (Basic ante-natal care) – education and supplements, timing	DOH
16. IMCI (Integrated management of childhood illnesses)	DOH
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 / Methodology

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

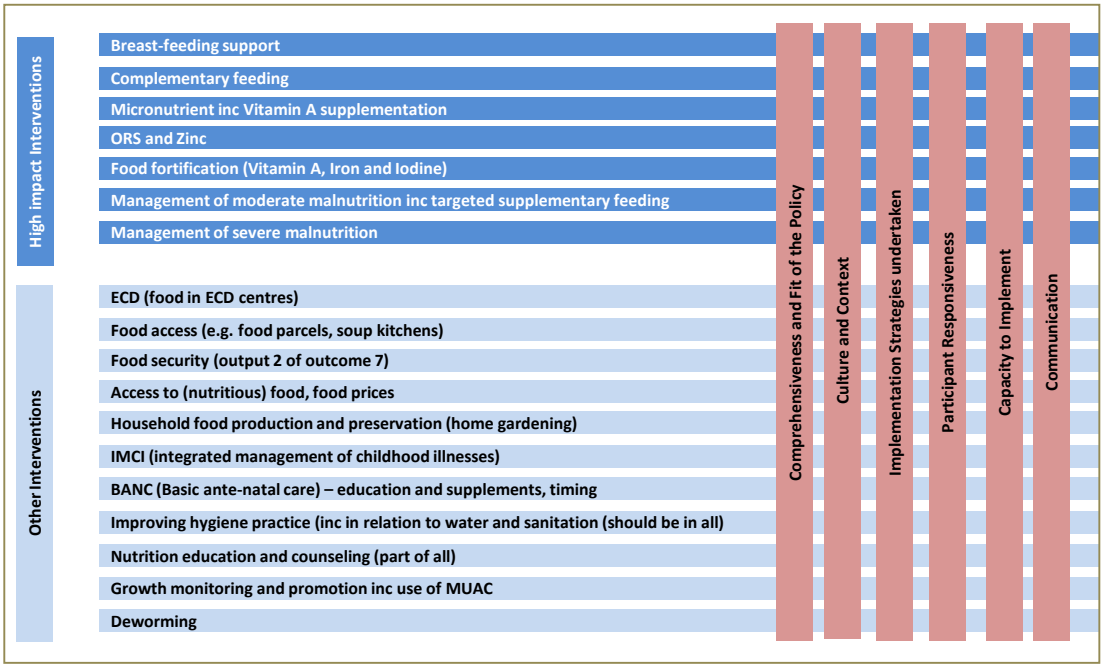
1) The policy's content and fit for the local environment
2) The institutional context and culture, including readiness to change and the extent of commitment at all levels through which the policy passes
3) The various implementation strategies (i.e. models) devised for carrying out the policy
4) The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

5) Participant responsiveness

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



1.3.1 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, Columbia, 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, Columbia, 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

1.3.2 FIELDWORK

Data collection then took place at national level and in four provinces (Western Cape, Eastern Cape, Free State, and KwaZulu-Natal). At national level, Key Informant Interviews (KIIs) were held with relevant national government managers as well as with representatives from international NGOs, donor organisations, and private food companies. In each province, KIIs were held with relevant provincial managers in the Departments of Health, Agriculture, and Social Development, as well as with representatives from 3 NGOs and 1 ECD centre in each province.

Two districts were purposefully selected in each province and KIIs were held with relevant district managers in the Departments of Health, Agriculture, and Social Development. Within each district, 4 health facilities were randomly selected for fieldwork and staff were interviewed. In addition, in each health facility, Khulisa also conducted Focus Group Discussions (FGDs) with beneficiaries, Rapid Assessments (RAs) of nurses' nutrition knowledge, and RAs of the health facilities' equipment, supplies, and guidelines.

Figure 2: Main Data Collection Components of the Evaluation

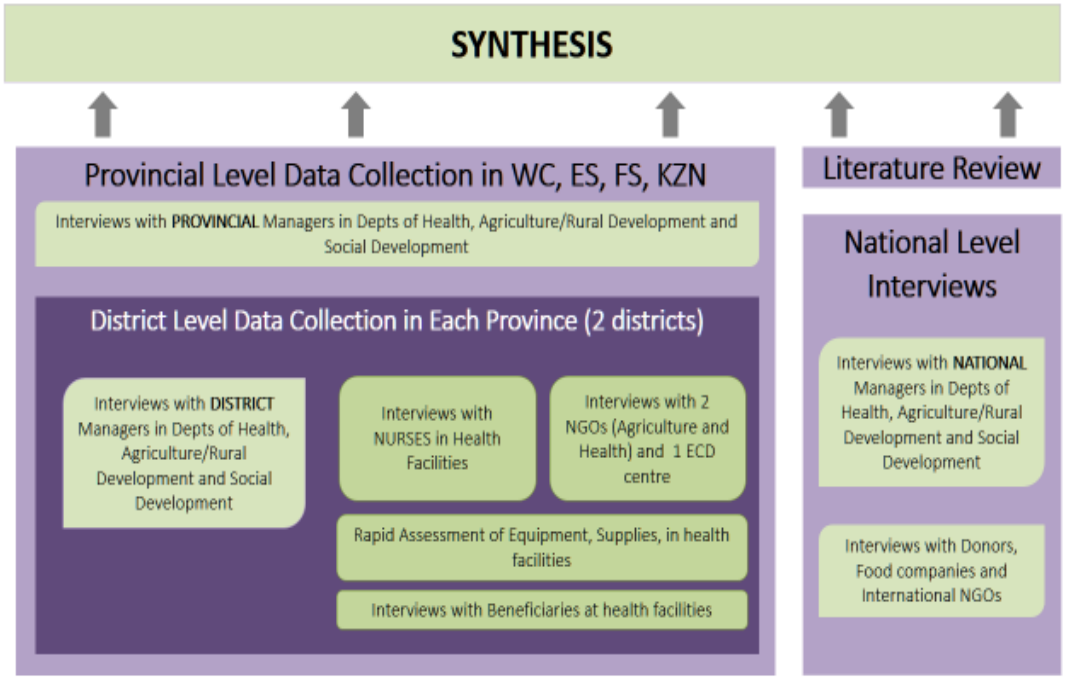


Table 2 presents a summary of planned and actual data collection, and Figure 3 presents a map of data collection sites.

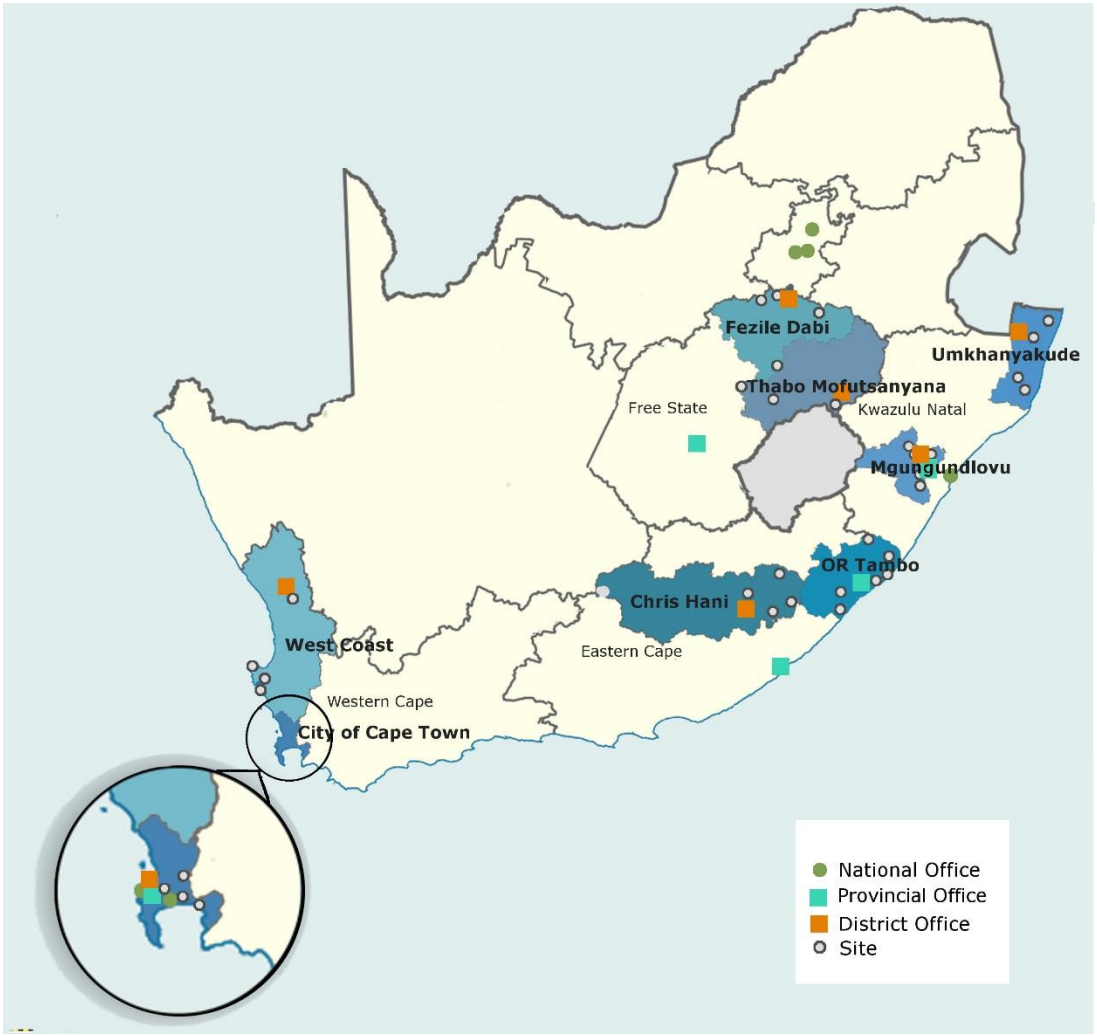
Table 2: Fieldwork Conducted

Data Collection Method and Stakeholders Group	No. of Interviews / FGDs		
	Planned	Actual	Response Rate %
Individual or Group Interviews			
National Government Managers	4	5	125%
Representatives of International NGOs	4	4	100%
Donors	3	4	133%
Private Food Companies	4	4	100%
Provincial Government Managers	12	15	125%
District Government Managers	24	21	88%
Health Workers in Health Facilities	32	31	97%

Data Collection Method and Stakeholders Group	No. of Interviews / FGDs		
	Planned	Actual	Response Rate %
Local NGO	8	8	100%
ECD Centre	4	5	125%
Focus Group Discussions			
Beneficiary FGDs at health services and community projects	48	40	83%

Other Assessments	Planned	Actual	Response Rate %
Health Facilities Rapid Assessments	40	36	90%
Rapid Assessment of Nurses' Nutrition Knowledge	76	132	174%

Figure 3: Fieldwork Locations



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 were 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

1.4 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, particularly in the Western Cape (WC). Consequently, many respondents gave only cursory information around the issues that Khulisa sought to explore more deeply.

As the INP's nutrition interventions for the health sector far outweigh the number of nutrition interventions in the social development and agriculture sectors, the evaluation's sampling framework is biased towards 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. As a result, 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 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.

A detailed description of the methodology used in the evaluation is found in Appendix B to this report.

1.5 KZN Data Collection

In KwaZulu-Natal (KZN), data was collected at 21 sites as presented in Table 1 below. In each site, various key informants were interviewed about the nutrition needs in their area, the types and quality of nutrition interventions that are implemented, the resources (financial and human) available for nutrition interventions, and enabling and constraining factors related to implementation. The vast majority of the sites and respondents were from the health sector, and this was purposeful as indicated in the detailed Methodology section presented in Appendix B of this report.

Table 3: Actual Data Collection Points in KZN

Provincial Offices Interviewed		
Provincial Department of Health (DOH) – Pietermaritzburg Provincial Department of Social Development (DSD) – Durban Provincial Department of Agriculture and Environmental Affairs (DAEA) – Pietermaritzburg		
District Offices Interviewed		
uMgungundlovu District	District DOH – Pietermaritzburg District DAEA – Cascade District DSD – Pietermaritzburg	
uMkhanyakude District	District DOH – Jozini District DAEA – Mtubatuba District DSD – Ulundi (A cluster office that oversees 3 district municipalities including UMkhanyakude District, with an office in Hlabisa.)	
Health Facilities Interviewed	**Urban**	**Rural**
UMgungundlovu District	Eastwood Clinic – Eastwood Howick Central Clinic – Howick	Maguzu Clinic – Maqongqo Nxamalala Clinic – Impendle
uMkhanyakude District	Machibini Clinic – Hlabisa KwaMsane Clinic – Hlabisa	Oqondweni Clinic – Hluhluwe Thengane Clinic – Manguzi
NGOs Interviewed		
ECD site: Khuzwayo ECD – Ingwavuma Agriculture/Home gardening: KwaDindi Community Mushroom Project – Greater Edendale PEPFAR-funded health project: EastBoom Clinic/Kheth'Impilo – Pietermaritzburg Non-PEPFAR funded health project: Active Women Association – Chatsworth		

Table 4: Number of KIIs/FGDs and Respondents in KZN

	No. KIIs/FGDs	**No. Respondents**
Provincial and District DOH managers	3	4
Provincial and District DSD managers	3	7
Provincial and District DOA managers	3	7
NGO staff	5	15
Health facility staff	8	31
Beneficiaries through focus groups at all data points	12	151
TOTAL	**34**	**215**

1.6 Data Collection Challenges

In general, all respondents were cooperative and willing to answer all the questions to the best of their abilities. However, several challenges were experienced in scheduling and carrying out the actual data collection (KIIs and FGDs), particularly given the rush to collect data in late November/early December before the December 2012 holidays.

The main challenge was the manner in which the evaluation itself and sampled sites were introduced to the province. DSD and DOH both indicated receiving only a one sentence email about the evaluation, and then not being fully informed about how and why the sites were selected. This led to the researcher struggling to set up and confirm provincial interviews initially, although the researcher was able to resolve these issues directly.

A second challenge was when junior staff members were assigned to be the main respondents for interviews. For example, at one Early Childhood Development (ECD) site, the researcher expected to meet with the "*ECD District Manager*" as indicated by DSD contact person, i.e. a person making

ECD implementation related decisions at district level, only to find that a Social Work Coordinator was delegated to be the main respondent. Likewise, at the uMkhanyakude District DAEA, the researcher expected to meet with a district manager, however, an extension officer acting as the food security advisor, was instead delegated as the main respondent. These last minute substitutions resulted in the need for the researcher to contact the departments again and request meetings with senior managers to get the additional required information for the evaluation, resulting in the use of additional time and resources.

Data collection at facility level was challenging as the interviews and focus group discussions had to be accommodated between on-going clinical work.

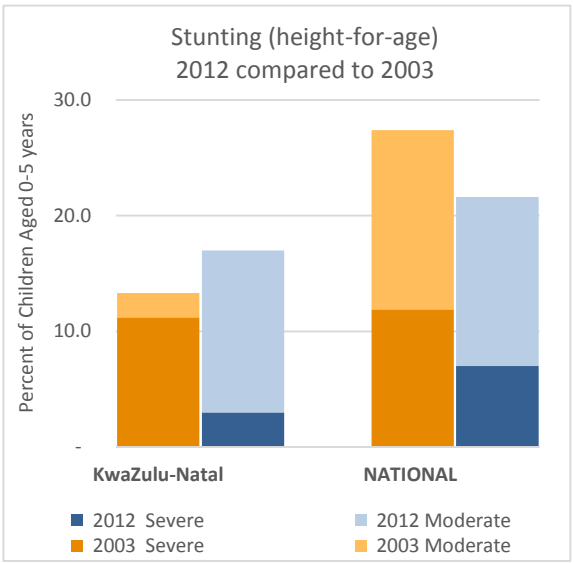
All these challenges, however, did not affect the quality and reliability of data collected. They were managed in a manner that ensured that bias was reduced as much as possible.

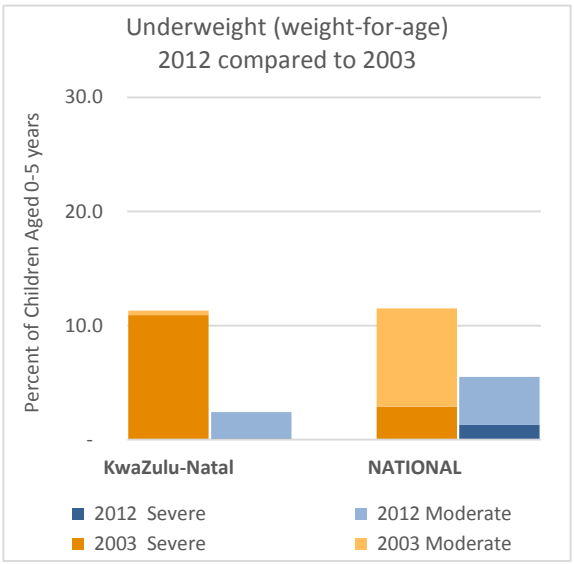
2 FINDINGS: NUTRITION CONTEXT

2.1 Nutrition Status of Young Children in KZN

When comparing two nutrition surveys– the 2003 Demographic and Health Survey (DHS) and the 2012 South African National Health and Nutrition Examination Survey (SANHANES) –for the nutritional status of children under 5 in KZN results show that severe stunting and wasting has significantly decreased in line with national trends, and the proportion of KZN children under 5 who are severely stunted or underweight has decreased since 2003. However, moderate stunting has increased (Figure 4). Encouragingly, fewer children overall are stunted or underweight compared to the national average, and severely underweight children are now virtually non-existent.

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





2.2 Perceived Nutrition Needs in KZN

In contrast to the situation described above, most respondents in this evaluation perceive children under five being underweight to be the province's most common nutrition problem. (Figure 5), although a few respondents (mostly from the health sector) identified stunting and obesity as a nutrition problem for young children.

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

- Only health facility staff recognise health and illness factors as an underlying reason for malnutrition
- Nearly all respondents (except those from DAEA) recognised poor or no breastfeeding as a contributing factor to poor nutrition. This reflects the province's priority in promoting breastfeeding
- Food security and lack of knowledge about nutrition were recognised by nearly all respondents as contributing factors to the food and nutrition problems in KZN

Figure 5: Perceived Maternal-Child Nutrition Problems in KZN

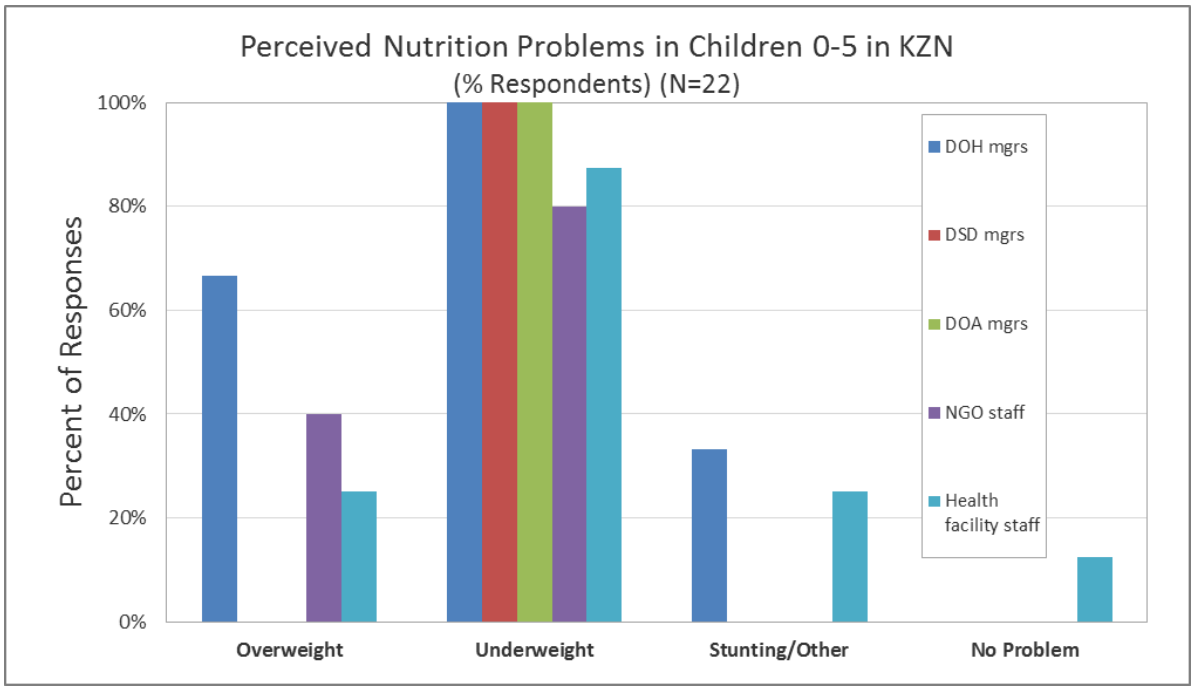
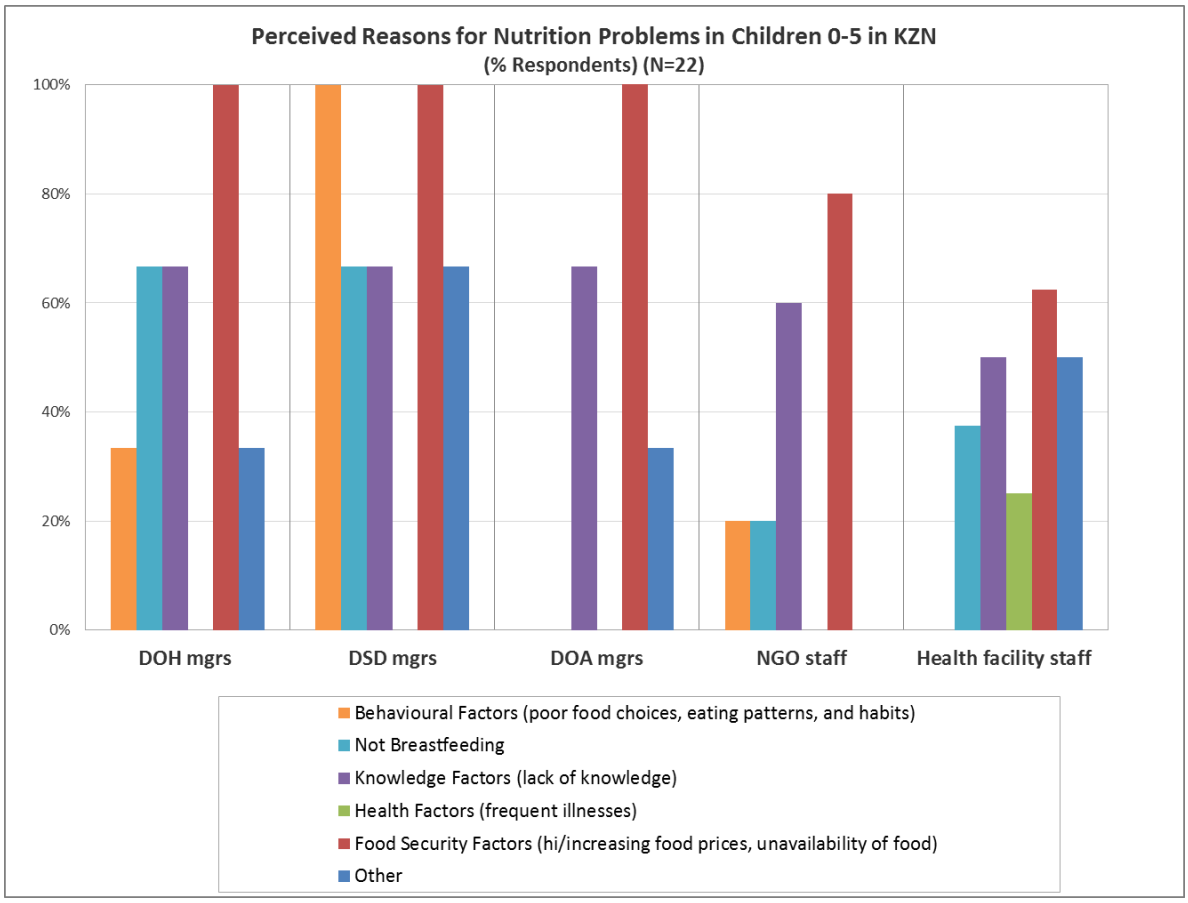


Figure 6: Perceived Underlying Reasons for Maternal-Child Nutrition Problems in KZN



- Agriculture and clinic based staff do not see behavioural factors as being the main issues contributing to malnutrition, compared to rising food prices , poverty and

In KZN, the perceived nutritional needs of pregnant women and children under 5 vary according to the implementers of the nutrition intervention. Furthermore, different implementers use their specific departmental/organisational business and operational plans to render services.

2.3 KZN Nutrition Actors

The 3 key government departments implementing nutrition interventions are the DOH (through the Nutrition Directorate), the DSD (and its agency the South African Social Security Agency (SASSA)), and the provincial DAEA. These departments work closely with community-based non-governmental organisations (NGOs), thus extending their reach.

While the DAEA's food security activities are not specifically designed for pregnant women and children under 5, the department has some targeted activities in some areas for women, pregnant women and Orphans and Vulnerable Children (OVCs).

The principal NGO implementers of nutrition interventions in KZN are United Nations Children's Fund (UNICEF), Mothers2Mothers (M2M), University of KwaZulu-Natal (UKZN), Programme for Appropriate Technology in Health (PATH) and FoodBank. Most of these NGOs receive President's Emergency Programme for AIDS Relief (PEPFAR) funding through United States Agency for International Development (USAID). These NGOs work at both the provincial level as well as directly with certain districts. There are also community level implementers such as ECD centres, Home and Community Based Care (HCBC) service providers, clinics, and community based nutrition initiatives facilitated by the DOH (such as Infant Feeding Committees, Community Care Givers (CCGs), Breastfeeding Support Groups, etc.), and community based agricultural initiatives facilitated by the DAEA through its extension officers.

2.3.1 KZN Department of Health (DOH)

KZN DOH implements the INP which is driven by the Provincial Nutrition Directorate and facilitated by district nutrition programme managers (also referred to as "district nutrition coordinators" or "district nutritionists"). The programme is implemented by hospital based dieticians, nurses at CHCs and Primary Health Clinics (PHCs) and CCGs at the community level.

As one of the three main nutrition implementers in KZN, the DOH Provincial Nutrition Directorate, through districts and facilities, has identified a need to have adequate nutrition experts or nutrition focal personnel at facility level. To this end, the DOH has initiated a programme of placing nutrition advisors to directly address nutrition problems and activities at facility/community level. Nutrition advisors are CCGs who have been/will be trained in nutrition in order to render nutrition support and non-clinical interventions at clinic level. According to the provincial business plan 2012/2013, of the 655 positions created for CCG nutrition advisors, only 20 positions have so far been both trained and employed. Training of nutrition advisors by the University of KwaZulu-Natal (UKZN) is currently underway and will continue until the target has been met. Furthermore, during the interviews in the targeted districts, the district nutrition programme managers indicated the need to have sub-district nutrition coordinators, so that nutrition programmes can be better managed and facilitated. However, no concrete plans were identified at any level of the nutrition directorate calling for the employment of such personnel.

DOH facility-based staff identified the need for periodic (e.g. annual) refresher trainings on all nutrition interventions as one of the key interventions that could improve their ability to deliver

better nutrition services. It was pointed out that when DOH organises nutrition-related trainings (such as for the Road to Health Booklet (RtHB), Infant and Young Child Feeding (IYFC) Policy, etc.), only a select number of nurses/doctors/other targeted personnel are requested to attend the training sessions in an effort to minimise the disruption to service delivery at facilities. The trained personnel are then expected to transfer their newly acquired skills and knowledge upon their return to the facility. However, respondents reported that this usually does not happen and there appears to be little or no follow-up to ensure that the training is cascaded down to the facility level.

2.3.2 KZN Department of Social Development (DSD)

DSD's Social Welfare Services Programme directly enhances food access for needy individuals through financial support to ECD centres, food vouchers, food parcels, and soup kitchens. DSD's main channel for reaching children under 5 years of age is through its support of ECD.

Under the Children Services Directorate of the Social Welfare Programme, a senior manager drives the ECD Programme in the province. This senior manager works with a cluster ECD manager and Social Work Coordinators to facilitate the implementation, monitoring, and support of the ECD intervention at community level. DSD funds ECD Centres at a rate of R15 per child per day attended. This fee which is calculated monthly according to attendance and is to be used on food for the children (50%), salaries (30%), and maintenance of the centre (20%).

Through SASSA, DSD indirectly enhances food access for needy individuals, through its administration of social grants[7]. These provide additional income to beneficiaries thus increasing their ability to access food.

2.3.3 KZN Department of Agriculture and Environmental Affairs (DAEA)

It should be acknowledged that the DAEA does not directly target the group under investigation, but rather should be focussing on food security in general. DAEA was observed by the researcher as being the least organised nutrition implementer in KZN. DAEA was, as explained by DAEA respondents, "expected" to implement a food security programme which links to a food preservation programme, however, in this financial year, it has only implemented seed distribution.

The staffing of the Food Security Directorate has been unstable for the past two years; the programme has had several changes of senior managers and the new senior manager has only been in the position since November 2012. At the time of this evaluation, the Food Security Directorate was working on a catch-up plan to try and achieve at least the training goals initially included in its 2012/2013 business plan, so that the Directorate has something to report in the overall Annual Departmental Report.

Respondents reported that the organisational needs for the DAEA Food Security Directorate include: (i) A proper structure for the Food Security Programme; (ii) Create and fill food security positions which are currently funded by other programmes (such as the Nguni Cattle Project) or which are filled by extension officers who are expected to address food security issues in addition to their normal daily extension work (iii) Train the food security team at all levels in nutrition, home economics and value adding training, and (iv) Finalise its KZN Provincial Food Security Framework which is based on the national framework.

[7] The various income-related grants include Grant for Older Persons, Disability Grant, War Veterans Grant, Care Dependency Grant, Foster Child Grant, Child Support Grant, Grant-in-aid, Social Relief of Distress. http://www.sassa.gov.za/

Through the work of DAEA food security facilitators and extension officers, the goal of the DAEA Food Security Programme is to transform food-insecure households and communities into food secure households and communities with a continuous food supply. In order to reach this goal, the DAEA's plan is to implement one home garden, one institution garden, one community garden, one home fruit tree per household. Community agricultural projects (including both gardening and livestock farming), and assist gardening projects with water harvesting and other necessary requirements (e.g. mechanisation, training and support). However, in reality, the DAEA has only managed to successfully distribute seeds.

2.3.4 Non-Governmental Organisations (NGOs)

Four NGO respondents reported various programmes and related needs for nutrition implementation.

Kheth'Impilo NGO has nutritional counselling which is rendered by lay counsellors and professional nurses working with HIV and TB infected patients and by community advocates who visit homes at the community level. A Kheth'Impilo respondent said

> *"We are uniquely positioned to address HIV/AIDS in the high prevalence districts throughout South Africa and our mission is to support the South African Government in achieving its goals to scale up quality services for the management of HIV/AIDS in the Primary Health Care sector. We take pride in our work, focusing on the implementation of realistic and attainable interventions and solutions that address the needs of people infected and affected by HIV/ AIDS"*

Although Kheth'Impilo only provides nutritional counselling at this stage, the organisation indicated a willingness to do more as it has the human resource capacity and networks to do so. More funding will, however, be required to implement an expanded offering of nutrition related deliverables. In addition, nutritional counselling is one of their PEPFAR grant agreement deliverables, but because none of their staff are trained in nutritional counselling or nutrition, they have identified the need for training in this regard.

KwaDindi Agricultural Project has identified the need for the DAEA to continue financial support and for DAEA to move beyond just seed distribution, but also delegate extension officers to train all recipients of seeds distributed on basic gardening skills. KwaDindi Mushroom Project provides job opportunities for locals as well as cooked mushroom meals to nearby ECD centres. They reported that communities are also benefiting economically from selling the surplus as there is a high demand for this type of mushroom.

Khuzwayo ECD Centre indicated a need for training in nutrition and food preparation.

The Active Women's Association (AWA)[8] carries out most of its work through the support of the private sector. One of AWA's key activities is its feeding scheme through which it regularly provides meals for around 800 men, women and children at a time. Since the launch of the project in 2005, AWA has distributed free meals to many areas across KZN.

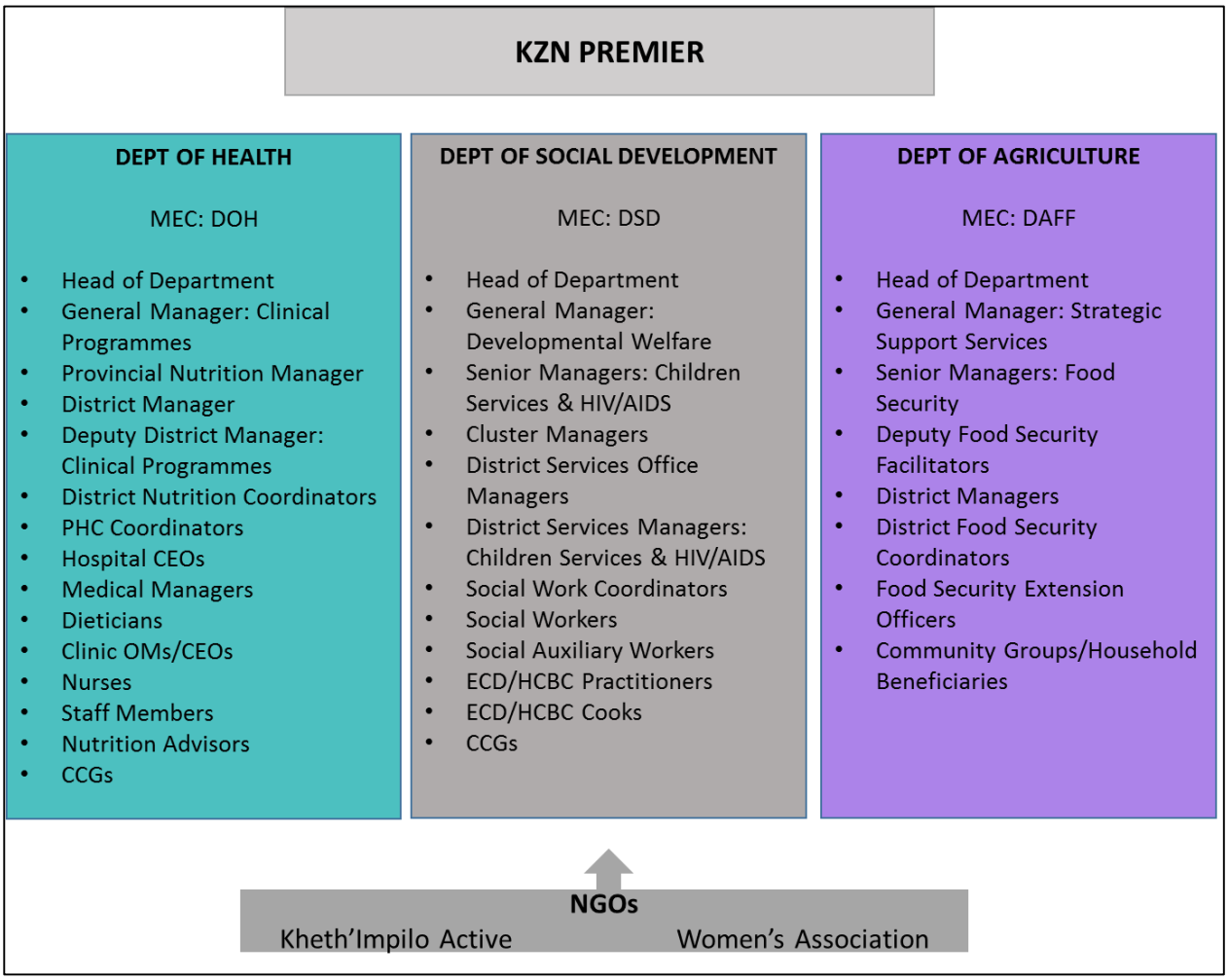
[8] www.activewomen.co.za

3 FINDINGS: PROVINCIAL STRUCTURE

3.1 Nutrition Leadership and Management Arrangements in KZN

As depicted in Figure 7 below, the championing of nutrition and interventions geared to enhancing access to food in the province is driven from the very top level. The premier adapted former President Thabo Mbeki's "War on Poverty" campaign and launched it as Operation Sukuma Sakhe (OSS) - one of KZN's Flagship Programmes. Nutrition is a key element of OSS in KZN. The premier's office, through its deputy director general, convenes OSS meetings every month with ad hoc meetings in between. All nutrition/food access/food security programme managers are part of these weekly OSS meetings referred to as "war rooms".

Figure 7: Nutrition Hierarchy IN KZN



DSD has representation at the OSS through a senior manager at provincial level and social work coordinators at ward levels. DSD has also realigned its interventions to ensure that ECD is a flagship programme which is promoted in OSS meetings.

DAEA Food Security Programme has had minimal representation at the OSS in this current financial year. At district level, DAEA Food Security Programme was observed as weak by some of the evaluation respondents because of limited food security interventions implemented in the current financial year and because of lack of proper structure. Moreover, DAEA only has skeleton staff for

food security at district and sub-district levels, and most of the extension officers are in acting positions for food security posts. In uMgungundlovu district, DAEA management perceives food security as an intervention that is totally managed from Head Office, with little involvement or responsibility on the part of the district management team.

NGOs are mainly represented at district, local municipality and ward levels. Kheth'Impilo participates in the District AIDS Council and sits in extended district management meetings. No participation of Kheth'Impilo was detected at OSS forums at ward, municipal, or district levels. Aside from its feeding scheme, AWA is not involved in other food access/nutrition programmes and is not part of any long term food coordination mechanisms, even OSS.

OSS activities and coordination at provincial, district, local municipality, and ward levels ensures that nutrition is a priority and it is well represented in KZN. However, the evaluation found that OSS is most strongly visible at the premier and ward levels.

3.2 Plans for Implementation of Nutrition Interventions in KZN

In KZN, most respondents described two cross-cutting plans to implement nutrition/food access -- Operation Sukuma Sakhe (OSS) and Zero Hunger.

The DOH Departmental Operational Plan highlights interventions for nutrition in the current financial year. In addition, the DOH Nutrition Directorate has its own business plan for provincial level, which districts use to devise their own district-specific business plans for implementing nutrition at district level.

Similarly, DSD has department-wide operational plans and directorate-specific plans that detail food access interventions as part of their service package.

DAEA also has an operational plan at provincial level but no such plans were identified at district and sub-district levels.

None of the NGOs included in this evaluation had specific nutrition or food access or food security plans. Kheth'Impilo implements nutritional counselling to HIV/AIDS and TB patients but no implementation plan for this was observed because this is a small portion of the organisation's focus. Although AWA has an active feeding scheme, no plans appeared to be in place governing this intervention. The KwaDindi Community Agricultural project has clear plans for income generation but vague plans for nutritional interventions. The NGOs who participated in this study were referred by the relevant provincial departments and/or the PEPFAR programme and were selected based on their willingness to participate in the evaluation. However, as it turned out, none of them focus directly on nutrition of pregnant women and children under the age of 5.

The ECD site has a dietary plan or a guideline that it follows on a weekly and daily basis. And, although it has a clear vision to provide a safe environment, educationally stimulate, and provide nutrient dense meals to children under the age of 5, it does not have enough skilled staff or financial resources to implement the nutrition intervention effectively. One explanation appears to be the site's heavy reliance on limited DSD funding and small tuition fees paid by only a few parents of learners, which does not provide enough funding to fully adhere to the daily dietary guidelines. A combination of limited financial resources and skilled personnel were observed as the main factors contributing to the ECD site not fully adhering to the dietary guidelines given to them.

DOH and DSD respondents confirmed that there is a clear vision and commitment to implement nutrition/food access interventions in their respective departments whilst DAEA respondents

unanimously (aside from the provincial senior manager) were not clear about the DAEA vision or commitment of senior management to food security interventions as not much has taken place in 2012/13.

3.3 Resource Allocation – Human and Financial

With the exception of DAEA, KZN has financial and human resources allocated to nutrition in the province. Respondents from DOH and DSD unanimously confirmed that financial resources are adequately allocated to implement nutrition intervention in the province. However, all NGO respondents indicated financial challenges to implement community-based nutrition activities to support and enhance the work done by government departments.

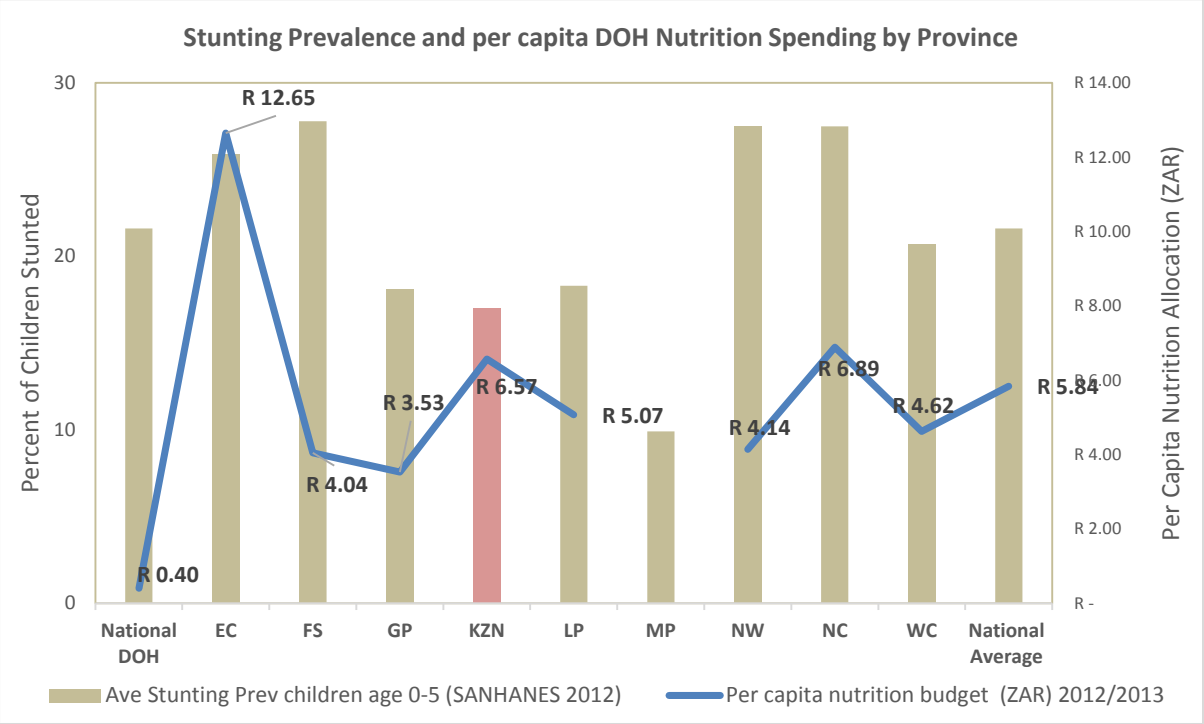
3.3.1 KZN Department of Health

The provincial DOH appears to have both "adequate" (working) financial resources and a strategy to acquire adequate human resources for nutrition in the province. For the 2012/13 financial year, DOH allocated ZAR 6,120,000 to deliver the nutrition programme in the province[9]. This includes compensation of staff, nutrition equipment and supplies (such as child length boards, adult scales, adult and paediatric Mid-Upper Arm Circumference (MUAC) tapes, lactating dolls, feeding cups, food, micro-nutrient supplements, targeted supplementary feeding, etc.), IEC and marketing of nutrition interventions, training, office administration and other relevant logistics and operational costs. This represents 0.49%[10] of the district health services budget--slightly lower than the average of 0.57% in the other provinces.

Figure 8 presents a comparison between the KZN and other provinces in terms of U5 stunting prevalence and per capita DOH allocations for nutrition in the 2012/13 APP budgets. Of all the provinces, KZN has a more balanced allocation of finance in proportion to the prevalence of child stunting in the province.

[9] KZN DOH Nutrition Directorate Business Plan 2012-2013. 15 March 2012
[10] KZN DOH *Annual Performance Plan 2012/13*.

Figure 8: U5 Stunting Prevalence and Per Capita DOH Nutrition Allocation (2012)[6, 10]



With respect to human resources, Table 5 summarises the posts approved, filled and vacant for key nutrition positions in the province. DOH has successfully created and filled almost all nutrition clinical positions except for the newly-created positions of CHC/PHC based nutrition advisors. However, the figure for this cadre will soon increase to 655 as there were nutrition advisors in training during the time of this evaluation.

Table 5: DOH Human Resources for Nutrition in KZN (December 2012)

Level	Personnel Category	Posts Approved	Posts Filled	Total Posts Vacant
Provincial Nutrition Directorate	Managers and Administrative Support	9	6	3 - Administrative support staff (1 - Deputy Programme for Food Service Dietician which has been motivated for).
District	Dieticians	12	11	1
Hospital/CHC	Clinical Dieticians	141	123	18
CHC / PHC	Nutrition Advisors	655	20	635
TOTAL		**817**	**160**	**657**

The nutrition knowledge of KZN nurses is superior to that of other provinces (Figure 9), and in nearly every measure (Figure 10 to Figure 13) nurses were able to provide comprehensive answers to the questions around management of mothers with breastfeeding difficulties, growth faltering, and the benefits of micronutrient supplementation. On average, knowledge levels were only slightly higher in urban areas (80%) than rural areas (72%), and in high performing districts (81%) compared to low performing districts (70%).

Figure 9: KZN Nurses' Average Nutrition Knowledge Compared to Other Provinces

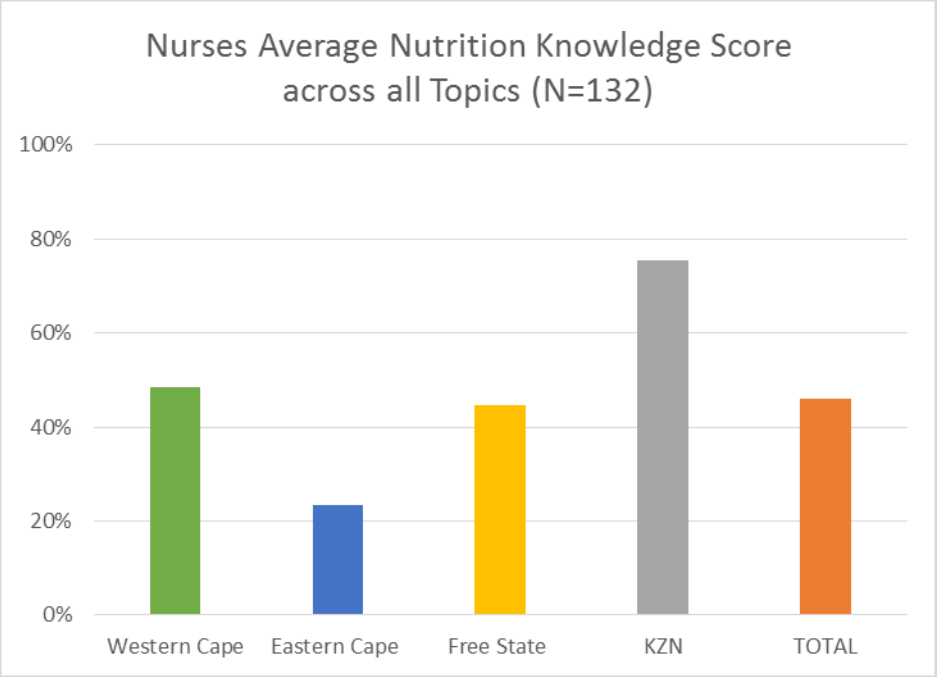


Figure 10: KZN Nurses' Knowledge around Diagnosing Breastfeeding Difficulties

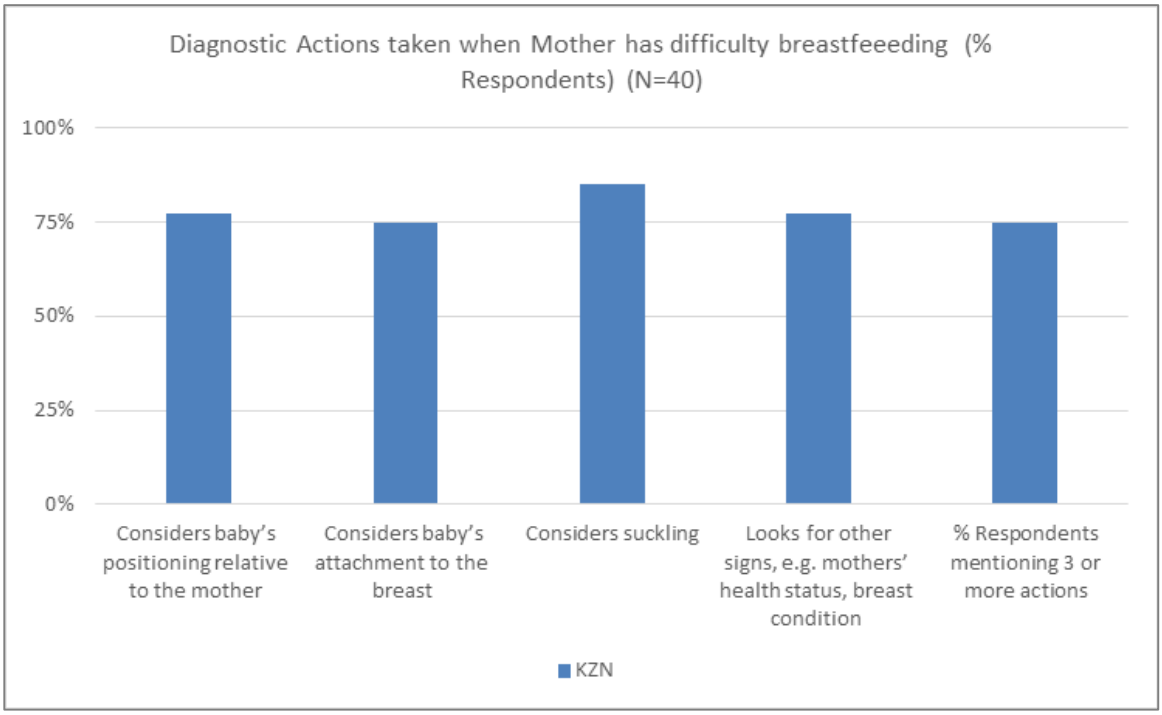


Figure 11: KZN Nurses' Knowledge around Counselling Mothers with Breastfeeding Difficulties

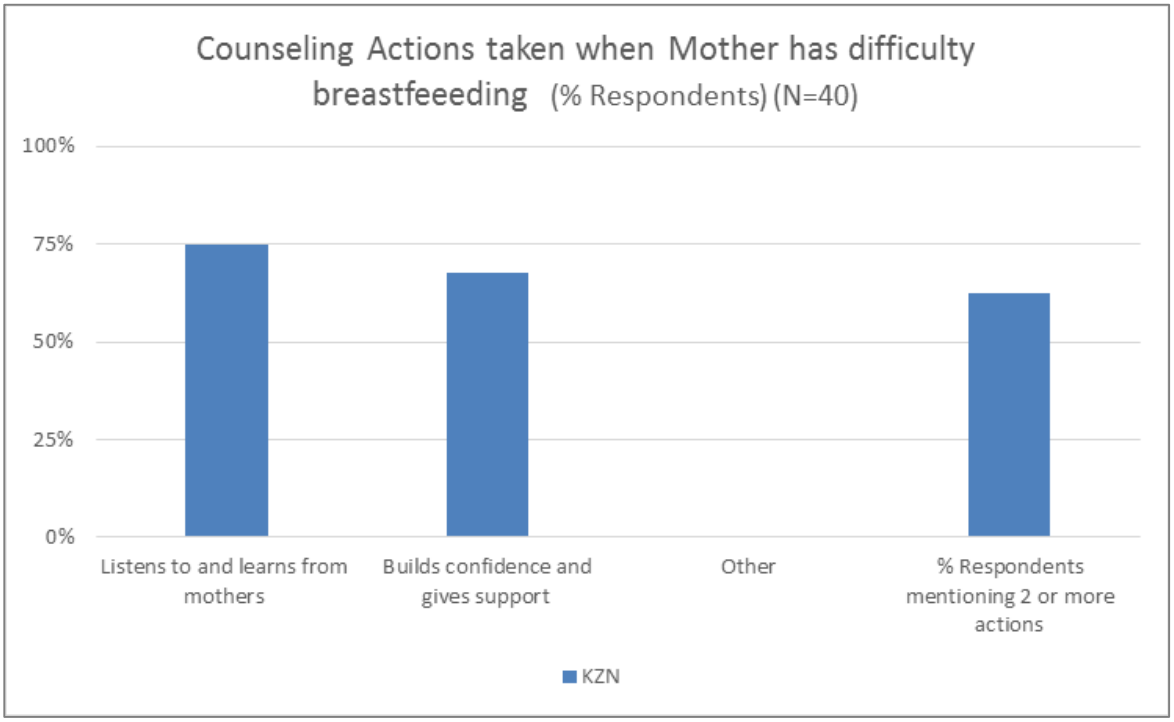


Figure 12: KZN Nurses' Knowledge around Counselling Mothers when Children aren't

growing well

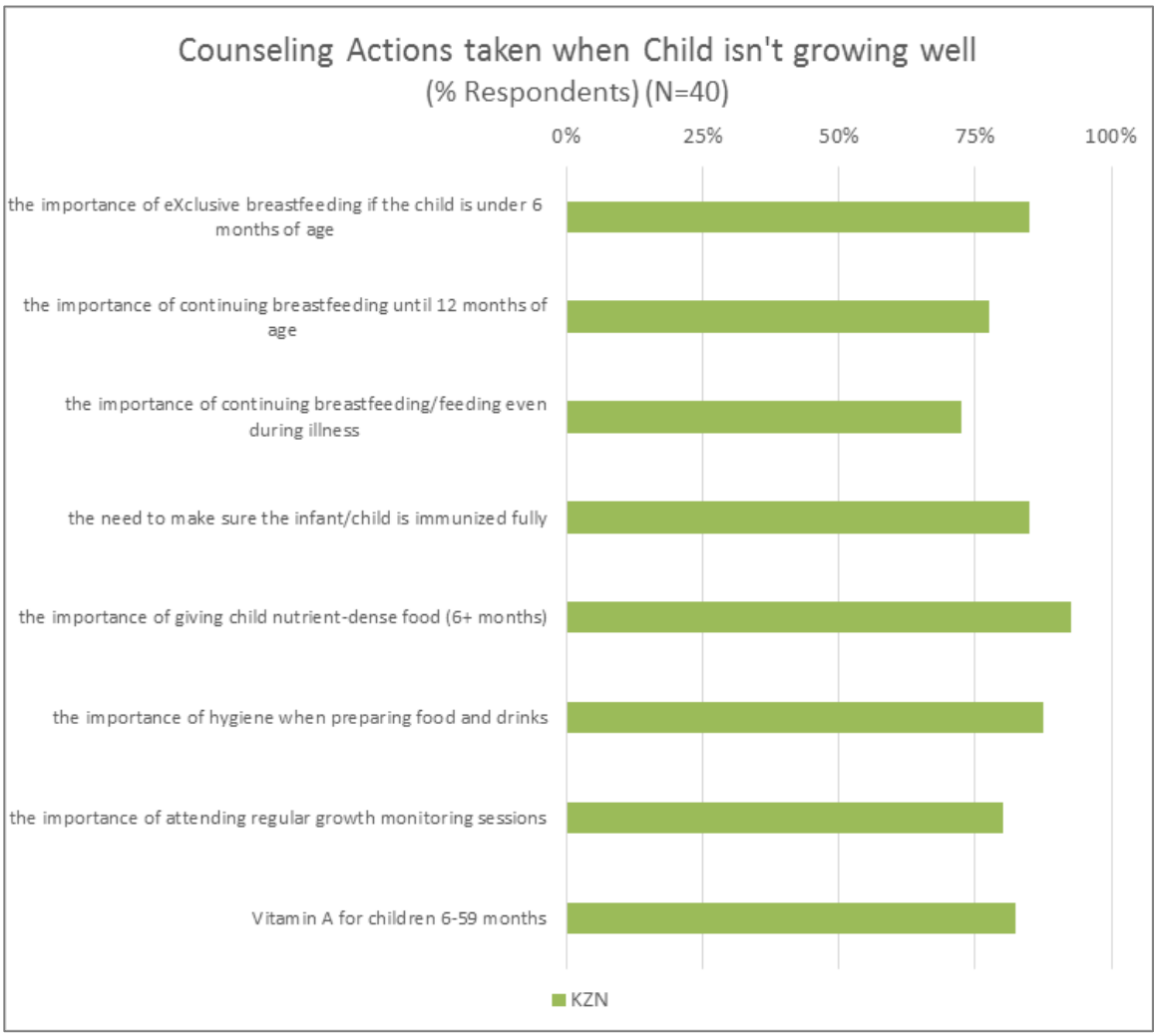


Figure 13: KZN Nurses' Knowledge of the Benefits of Micronutrient Supplementation

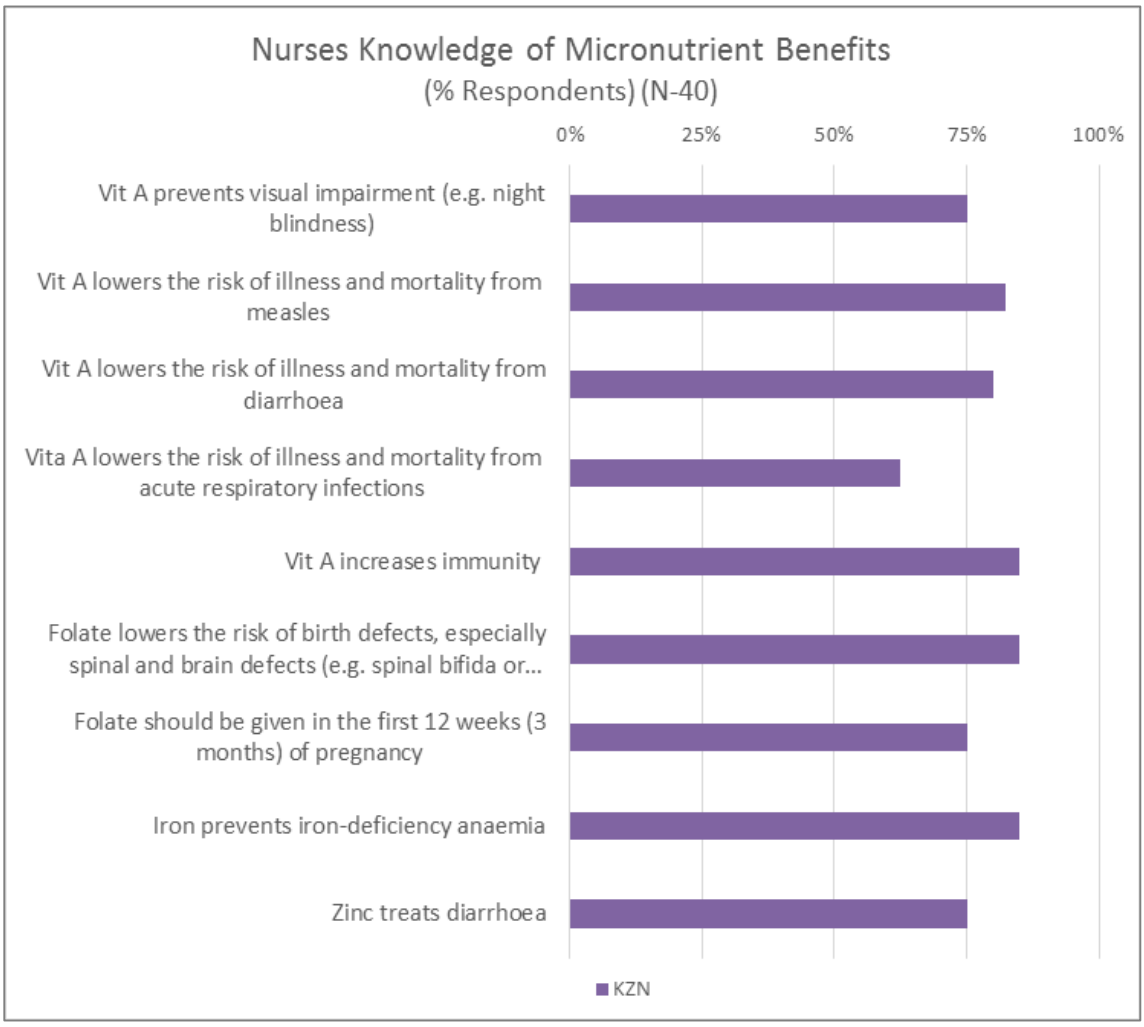


Table 6 presents the status of materials and infrastructure related to the delivery of nutrition interventions in the health facilities assessed. Although the sample is small, it is clear that some of the key nutrition IEC materials were in short supply. Only 18% of facilities reported stock outs of some nutrition products in the 6 months prior to data collection, although no expired stock was found on the shelves at facilities during fieldwork. In addition, counselling space is inadequate in more than half the clinics visited – although with the province's emphasis on community-based programmes, this most likely does not constrain the provinces delivery of nutrition education and counselling.

Table 6: Status of Materials and Infrastructure in KZN Health Facilities (N=12)

Element	% of facilities
Infrastructure	
Sufficient space for counselling	44%
Sufficient no. consultation rooms	44%
Sufficient no. counselling rooms	44%
IEC Materials (Posters or Pamphlets available in the health facility)	
Nutrition During Pregnancy	78%
Promotion of EBF	78%
Healthy Eating/Dietary Guidelines	78%

Element	% of facilities
Hand washing posters at basins	67%
Hand washing posters at toilets	67%
Complementary Feeding	56%
Vitamin A	44%
Breastfeeding in the context of HIV	44%
Management of Severe Malnutrition	33%
Feeding of the Sick Child	22%
Policies, Protocols, Guidelines (available in the health facility)	
IYCF Policy	100%
Nutrition Supplementation Guidelines	100%
PHC Tick Register	100%
Malnutrition Supplementation Register	100%
Vitamin A Supplementation	89%
Management of Severe Malnutrition	89%
HIV and Infant Feeding	89%
Equipment, Drugs, Supplies (available in the health facility)	
Functioning baby weighing scale	100%
Functioning adult weighing scale	100%
Length measuring boards	100%
MUAC Tape	100%
Iron	100%
Folic Acid	100%
NTP/TSF Porridge	100%
Oral Rehydration Salts	89%
Vitamin A Capsules 100,000	89%
Vitamin A Capsules 200,000	89%
Iron-Folic Acid (combined)	89%
Zinc	89%
Road to Health Cards - Boys	67%
Road to Health Cards - Girls	67%
Vitamin A Capsules 50,000	22%
Food Parcels	22%

3.3.2 KZN Department of Social Development

DSD respondents also confirmed that adequate financial resources exist for its food-access interventions. A separate fund for social relief caters for food vouchers and food parcels. SASSA manages social grants which also contributes greatly to food access according to ECD and DSD respondents. However, DSD suffers from a lack of permanent staff. At Head Office, two senior managers in child services oversee food- related activities for ECD sites and HIV/AIDS soup kitchens. However, the position for the senior child services manager is filled by an employee who is seconded from the Ulundi Cluster Office, still living in temporary accommodation, and hasn't been able to permanently establish herself because of the tentative nature of her position. Although the DSD Organogram indicates there are no vacancies in its departments that implement nutrition and food access interventions at any level[11], in the two districts evaluated, both senior ECD managers are in acting capacities, and at ward level, Social Work Coordinators indicated a need for DSD to

[11] DSD Provincial Operational Plan with an Organogram for all programmes for 2012/2013 Financial Year.

create and establish posts for data capturers to ease their workload as data capturing takes much of their time. The Social Work Coordinators also indicated the need for food preparation training for ECD and HCBC practitioners and cooks so that the food prepared for beneficiaries is nutritious and prepared correctly.

3.3.3 KZN Department of Agriculture and Environmental Affairs

Most DAEA respondents believe enough financial resources exist for the food security interventions in general, but there are inadequate human resources for implementation. All respondents, with the exception of the provincial programme manager, reported that the human resources situation is challenged by a lack of vision of and commitment to the Food Security Intervention on the part of senior executive officials in the DAEA[12], as evidenced by the termination of implementation of activities in the operational plan developed by the former senior food security manager (e.g. food preservation interventions), and poor delegation of qualified persons to the food security positions. Moreover, other than the senior food security manager at DAEA provincial office and her 3 deputy managers, no other food security staff are employed full-time on food security activities. Instead, provincial food security facilitators, district food security coordinators, and food security extension officers all work part-time (mostly in acting capacities) on food security whilst working full-time as extension officers. Nevertheless, the senior food security manager confirmed that she is satisfied with the abilities and responsibilities of the food security team and will only upscale one deputy programme manager through various trainings. She also confirmed that all personnel in the food security team have had some exposure to nutrition in their agricultural training which includes home economics and value adding in food preparation.

3.3.4 NGOs

Kheth'Impilo NGO, a PEPFAR-funded health NGO, confirmed that they are only expected to deliver nutritional counselling as part of the HIV/AIDS programme that they run. However, they also confirmed that their nurses and lay counsellors have not received training on nutrition, but some senior nurses who have been in the nursing field for many years have had exposure to nutrition training at some point in the history of their careers.

AWA confirmed that they lack adequate financial and human resources to implement nutritional interventions; hence they render these interventions only on an ad hoc basis if and when there is funding available to do so. Due to limited access to continuous funding, AWA targets the winter season to render ward meals to the needy; they use the bulk of the other seasons to raise funding. They use unpaid volunteers and thus face the constant challenge of high volunteer turnover.

The ECD site indicated that they have somewhat enough human resources, even though they also indicated a need for nutritional training on an on-going basis including food preparation trainings. Their main challenge was accessing funding to deliver on the nutritional intervention. ECD funding is agreed upon in a Service Level Agreement which is supposed to guarantee DSD funding for 3 years. However, even though the allocation of funding is done in advance, accessing the monthly allocation was identified as a major challenge in providing quality meals to children. Respondents indicated that the process to claim for the monthly allocation is stressful and time consuming.

[12] An example was noted of a batch of new tractors that were packed in Hillcrest while extension officers at local municipality level battle with limited tractors for all the community based projects that need them.

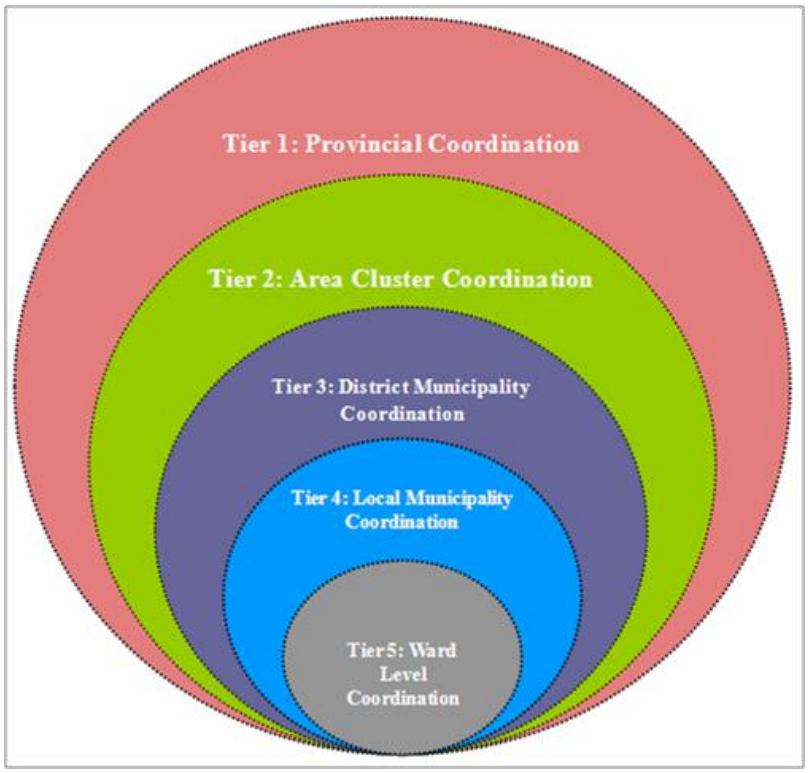
Lastly, the KwaDindi Community Agricultural Project indicated that as much as they generate income to pay staff and produce mushrooms, they still need further financial support from DAEA to continue offering employment to the local people.

3.4 Coordination with other Government Departments

There appear to be 5 tiers of government coordination that ensure that government departments work together and address nutrition challenges in KZN (see Figure 14). These coordination mechanisms are at provincial, area/cluster, district, local municipality, and ward levels.

All inter-governmental coordination for nutrition/ food access is driven and guided by the KZN Operation Sukuma Sakhe (OSS) Implementation Plan. The overall champion for OSS is the Premier of KZN. The premier, MECs, and Heads of Departments have been assigned to each of the 11 districts to champion OSS from a political and administrative perspective[13]. Furthermore, provincial level champions (senior officials) have been appointed as provincial conveners for the districts in the province. Their role is to support the districts in gaining buy-in and support for OSS from all stakeholders and to assist with mobilising resources. For example, a senior food security programme manager in DAEA has been assigned as a district convener for uMgungundlovu district. This allows for a strong relationship between provincial and district levels which is necessary for the effective implementation of INP. However, coordination mechanisms at area/cluster and municipality levels are fairly weak and inconsistent.

Figure 14: Illustration of Tiers for Nutrition Food Coordination in KZN Province



At district level, the district mayor is the political champion and the district task team chair is elected from the task team members. At this level, the OSS district task team is supported by the

[13] Province of KZN (2012) OSS Implementation Model; Guidelines for coordination. KZN. Pietermaritzburg

district executive committee. At local municipality level, the local mayor is the political champion and the task team chair is elected from amongst the local task team members and is supported by the municipal executive council. Finally, at ward level, the ward councillor and local Inkosi are the official champions and the chairperson of the OSS War Room is elected from amongst task team members and is supported by the ward committee[14].

All provincial respondents and 90% of facility respondents reported that provincial and ward OSS task teams appear to be the most effective amongst all tiers of intergovernmental coordination. In both districts evaluated (uMgungundlovu and uMkhanyakude) the ward councillors were said to convene these meetings on a monthly basis. Again, the coordination mechanism at ward level were said to be most effective in facilitating service linkages, referral for pregnant women and children under 5 on nutrition through a local CCG attending the OSS meetings. It further provides a forum for discussing the challenges encountered during household profiling and visits. However, the challenge faced at this level is that even though all government department and government NGO partners are required to be part of the ward OSS task team, not all stakeholders attend regularly. e.g.: uMgungundlovu district DAEA admitted that he does not attend these on a regular basis due to reasons associated with staffing and the minimal role that DAEA plays in OSS meetings at ward level. The uMgungundlovu DAEA respondent believes that most often the cases identified in the community for a collaborated approach require services rendered by either DOH (medical/clinical), DSD (social grants), Home Affairs (birth certificates, ID documents, etc.), SASSA (social grants/social relief), and human settlement government departments and rarely the intervention or support of DAEA.

At district level, in both districts there was no evidence of district-level nutrition/food access/food security attending these coordination mechanisms. Furthermore OSS meetings should also be coordinated at district level according to the OSS implementation framework[15]. However, at provincial level, the task team meets every Wednesday to address issues referred from the ward level OSS War Rooms. Provincial managers confirmed that it was mandatory for all senior managers in the provincial offices to attend the task team meetings and absenteeism was discouraged.

At community or ward level, the CCG does regular visits to the households and profiles them. The profiling reports are tabled at the OSS War Rooms and government departments deliberate on the interventions required as a unit. If a case warrants the attention of the task team, a social worker will be assigned to visit the family and do the formal assessment. The assessment report is discussed and areas for interventions are identified at OSS War Rooms. When fast-tracking the implementation of desired interventions as per the task team recommendation, assigned government departments may conduct their own specific assessment as a way to initiate any required interventions to improve the household's access to food. If matters cannot be immediately addressed, or if the intervention required is above the level of a ward, such matters are referred to the provincial task team.

3.5 Coordination between Government and Private Sector

There appear to be no strong linkages between the government and the private sector organisations in relation to implementing nutrition and food access interventions. In uMgungundlovu District, the DOH involves private health facilities in campaigns (such as Vitamin A

[14] Ibid.
[15] Ibid.

promotion) and collects the campaign statistics. At provincial level, DOH procures RtHB for private health facilities (private sector pays for the RtHB) and invites them to nutrition-related trainings.

There is no evidence that DSD engages with the private sector, this was confirmed by all DSD respondents. DAEA engages with the private sector on other interventions, however, most of the work done by the not-for-profit company, Food Bank, is on facilitating access to markets for community agricultural organisations' excess produce.

On a rather small scale, some facilities and other government departments have had beneficial relationships with food industries, e.g. South African Sugar Association (SASA) has a long-standing association with the KZN Nutrition Directorate. They support training of health workers, but they are prohibited to advertise their products, e.g. Purity has distributed pamphlets and booklets about child feeding to some clinics such as Howick Central Clinic. Some food companies buy produce from agriculture NGOs, such as mushrooms from the KwaDindi Mushroom Project, some food companies have given donations to ECD sites, and Dettol supports hygiene education at community and facility level in uMkhanyakude District.

4 FINDINGS: FOCUS INTERVENTIONS

4.1 Breastfeeding Support

A decade ago, the DOH rolled out a policy of providing free infant formula for all HIV-positive mothers in KZN: the province with the highest HIV prevalence among pregnant women. Now, a major policy shift is underway: instead of formula, all mothers are now being encouraged to exclusively breastfeed for the first six months, and HIV-positive mothers and their infants receive antiretroviral drugs to dramatically reduce the chances of transmission. During data collection, there was no evidence of any resistance or opposition to this shift in policy.

4.1.1 Delivery Channels

Exclusive breastfeeding interventions are delivered by DOH at facility level. DOH promotes exclusive breastfeeding using school health teams, radio advertisements, pamphlets, posters, health education at PHC, CHC and hospitals, CCGs, and healthy baby awards events. Pregnant women and mothers are educated and counselled about the benefits of exclusive breastfeeding for babies from 0-6 months. As part of lobbying and advocating for social buy-in of exclusive breastfeeding, DOH has managed to include the importance of exclusive breastfeeding in the KZN school curriculum for grades 8-10.

The delivery channels of the exclusive breastfeeding intervention are Antenatal Care, Maternity, Routine Post-Natal and Well-Baby clinics. DOH also uses CCGs to educate communities and encourage mothers to exclusively breastfeed at Household and community level. Furthermore, at community level, DOH has worked with M2M through CCGs to establish and supervise breastfeeding support groups (especially for HIV positive women).

With support from the Human Milk Banks Association of South Africa (HMBSA), the KZN provincial DOH Nutrition Directorate has pioneered the establishment of human milk banks designed to support exclusive breastfeeding for neonates and pre-term infants who do not have access to their mother's own milk. This was done with support from several partners including UNICEF, PATH and HMBASA.

At provincial level, DOH has worked very hard to ensure that exclusive breastfeeding intervention is implemented successfully; they have facilitated trainings on IYFC, MBFI, BFHI and RtHB with various

levels of health workers to ensure that quality services are rendered and quality control measures are put in place. DOH, in partnership with UNICEF, also conducted training for CCGs on the framework to accelerate community based maternal, neonatal, child and women health and nutrition initiative. In addition to the trainings, DOH conducted a key provincial evaluation of IYFC policy in KZN (through UKZN Public Health Medicine), with the hope of improving the effectiveness of exclusive breastfeeding interventions.

In order to implement exclusive breastfeeding, DOH works with a range of NGO partners and other DOH departments. Key NGO and donor partners for exclusive breastfeeding are:

- Mothers2Mothers (M2M) implements activities to improve the effectiveness of PMTCT (including infant feeding) in HIV programmes. M2M supports pregnant women, new mothers, and caregivers, all living with HIV and AIDS through facility-based, peer education and psychosocial support programs. M2M also conducts curriculum-based training and education programs for psychosocial support and empowerment services; programs to increase uptake of counselling and testing services; bridges PMTCT treatment and care to antiretroviral treatment (ARV) and other health services; and establishes and supervises community based breastfeeding support groups[16].
- Academy for Educational Development (AED), (now incorporated into FHI360) an international NGO partner, has provided technical assistance to the KZN DOH Nutrition Directorate in collaboration with the Directorates of HIV/AIDS and MCWH to develop women's nutrition guidelines and IYCF guidelines in the context of HIV/AIDS and to integrate these guidelines into clinical and community support services at provincial level in all nine provinces. AED has also assisted the nutrition and MCWH directorates to strengthen and expand implementation of the Baby-Friendly Hospital Initiative (BFHI) in the context of HIV/AIDS to nine provinces to improve IYCF and care and support of mother-infant pairs and families and enhanced public awareness of the importance of improved nutrition for all women, regardless of their HIV status. With a focus on HIV- positive pregnant and lactating women and their infants and young children, AED has supported quality messages, counselling, and services for IYCF in existing BCC interventions, provided technical assistance to local NGOs to strengthen and integrate women's nutrition and IYCF into their health facility and community health services, and provided technical assistance to the national DOH and selected NGOs to monitor and evaluate integrated women's nutrition and IYCF services [17].
- FHI360, an international NGO partner, works to increase rates of exclusive breastfeeding and improved complementary feeding[18].
- UNICEF works to ensure pregnant women and their children gain access to ART and ARVs so that mothers can exclusively breastfeed and to improve counselling and support for pregnant women and their children. UNICEF continues to support the KZN DOH Nutrition Directorate to ensure that infant feeding with ARVs is scaled up in the country[19].

[16] PEPFAR 'Power of Partnerships' Activities in KZN Province for Fiscal Year 2009
[17] AED/LINKAGES/South Africa Final Report for USAID, 2003-2006
[18] Fhi360 website www.fhi360.org
[19] UNICEF website. www.unicef.org *UNICEF welcomes new policy on infant and young child feeding in the context of HIV.*

- The HMBASA has assisted KZN Nutrition Directorate to establish and operate Human Milk Banks in KZN Province.
- Johnson & Johnson Company also partners with DOH in delivering healthy baby awareness.

4.1.2 Guidelines, Protocols, and Policies

To guide the implementation of exclusive breastfeeding interventions, DOH uses various guidelines, protocols, and policies, such as:

- KZN Guidelines for the Establishment and Operation of Human Milk Bank in KZN
- BFHI Protocol
- Integrated Management of Childhood Illnesses (IMCI) Guidelines
- PMTCT Guidelines 2010
- IYFC Feeding Policy
- Tshwane Declaration for 2011
- Draft Regulations for Marketing of Infant Foods
- Health Promoting Schools Guidelines
- International Code of Marketing for Breast-milk Substitutes
- Mother and Child Booklet
- School Health Services Policy

DOH has also developed and implemented an internal communication strategy on IYCF Policy to ensure that communication on this policy is clear, simple and adequate and DOH has worked hard to fast-track the coordination of internal BFHI reassessments and assessments in preparation for national external assessments and reassessments of BFHI facilities.

4.1.3 Human, Material, and Financial Resources

DOH has adequate human and material resources to deliver the exclusive breastfeeding intervention. All nurses interviewed were knowledgeable about the exclusive breastfeeding intervention and how it should be implemented. Nurses do consider the baby's positioning relative to the mother, attachment to the breast, and suckling of the breast. They also look for signs of illness in mothers, and listen and learn from the mothers. During nutritional counselling, nurses discuss and teach mothers the importance of exclusive breastfeeding. It was indicated that in instances where a mother insists on formula feeding, support on exclusive formula feeding is also rendered even though it is not encouraged.

Health facilities in uMgungundlovu and KwaMsane PHC in uMkhanyakude District appeared to have adequate materials to implement the exclusive breastfeeding intervention. In these sites there were pamphlets and posters promoting exclusive breastfeeding even in the context of HIV and AIDS. In rural facilities, there were no IEC materials promoting exclusive breastfeeding; however, it was indicated by all respondents (100%) that in these areas, 'word of mouth' communication works better than IEC materials. But some mothers at the rural Thengane Clinic indicated that the RtHB contains enough information to assisting mothers with feeding their babies successfully and correctly.

4.1.4 M&E Systems

They are collecting the following relevant indicators with regard to exclusive breastfeeding interventions. KZN DOH has 4 key indicators to track the implementation of exclusive breastfeeding interventions:

- The proportion of children who were put to the breast within one hour of birth
- The proportion of HIV infected mothers who exclusively breastfeed when they are discharged from hospital post-delivery
- The percentage of babies who are exclusively breastfed at fourteen weeks
- The number of facilities certified as baby friendly according to the BFHI guidelines

4.1.5 Linkages and Referrals

There were notably strong linkage and referral systems within DOH facilities to support exclusive breastfeeding. ANC, Maternity, Post-Natal and well-baby clinics appear to work in sync to provide continuous support and education promoting exclusive breastfeeding within the facilities.

Linkages with community-based structures are facilitated by CCGs, who were described as heavily involved in establishing breastfeeding support groups. However, it was discovered during the evaluation that breastfeeding support groups were mentioned only in two DOH facilities: Thengane PHC and Maguzu Clinics out of eight facilities visited. Community-based breastfeeding support groups appear not to be established in many other communities serviced by DOH facilities.

4.1.6 Beneficiary Participation and Responsiveness

In interviewing mothers of children under age 5 and pregnant women, almost all have been educated about exclusive breastfeeding. However, they provided various reasons why exclusive breastfeeding does not work for them.

Many mothers in this case study were teenage mothers, who saw their chances of exclusively breastfeeding as limited because they attend school, or because the baby is looked after by the paternal grandmother.

Some mothers indicated that though they have been taught that it is safe to breastfeed, even in the presence of HIV, they feared transmitting HIV to their babies and hence chose not to breastfeed.

A small group of mothers indicated that exclusive breastfeeding (compared to mixed feeding) is strongly associated with an HIV positive status of a mother, so they feared being stigmatised. Lastly, relatives and fathers of babies were noted as having a big influence on the mothers' choice to exclusively breastfeed.

A noted gap in communication with mothers in KZN is information and community education on expressing and storing breast milk. Few, if any, beneficiaries interviewed in this study knew about this.

4.2 Targeted Supplementary Feeding

4.2.1 Delivery Channels

Targeted Supplementary Feeding (TSF) is a DOH clinical programme delivered in health facilities (PHCs, CHCs), by clinical dieticians based in hospitals that initiate and exit eligible patients for nutritional supplementation. These patients then receive their supplements at PHCs or CHCs closer

to where they live. However, some community-based nutrition programmes driven by CCGs also identify patients who might be eligible for food supplementation and refer them to the nearby clinics.

DOH targets TSF where growth faltering and malnutrition are severe. Beneficiaries are mainly children 0-23 months, children 2-14 years, at-risk pregnant women, at-risk lactating women, HIV/AIDS and TB clients, and patients with chronic diseases of lifestyle[20].

When initiating patients into Targeted Supplementary Feeding interventions, DOH staff use the Nutrition Risk Screening Score Tool in association with MUAC scores to identify beneficiaries who are then registered for the Protein Energy Malnutrition (PEM) registers:

Children who exhibit growth faltering over two consecutive visits are enrolled and provided with food supplements. Mothers of these children are also given nutritional counselling.

If suspected to be in need of Targeted Supplementary Feeding, pregnant women and lactating mothers are assessed using the Nutrition Risk Score Tool and provided with nutrition education and counselling. These beneficiaries are assessed with the same tool on a monthly basis.

Patients with TB, HIV/ AIDS or other chronic debilitating illnesses are also screened using the Nutrition Risk Score Tool. If they qualify, they are given food supplements and enrolled in the Targeted Supplementary Feeding programme. As with pregnant and lactating mothers, these patients are assessed on a monthly basis for weight gain.

4.2.2 Guidelines, Protocols, and Policies

To implement this intervention, DOH uses a range of guidelines and protocols, including the World Health Organisation's (WHO) 10 Steps to Management of Severe Acute Malnutrition; Nutrition and HIV guidelines; IMCI guidelines; and guidelines on chronic diseases.

To increase awareness among health personnel, DOH uses Severe and Acute Malnutrition wall charts and classification charts to ensure correct diagnosis and identify those who should benefit from this intervention.

4.2.3 Human, Material, and Financial Resources

KZN appears to have adequate human resources to implement this intervention as is evidenced by the fact that all visited facilities have access to clinical dieticians who diagnose and initiate patients onto this programme. However, there are some concerns raised by respondents in two facilities; Machibini and Oqondweni clinics. Both clinics are in at uMkhanyakude Districts where dieticians were said to be "too controlling (of) the programme" - this was further described as dieticians taking targeted meal supplements with them all the time, not stocking the supplements in pharmacy as expected, and wanting to be the only ones who update the registers.

All DOH facilities had adequate stock of targeted meal supplements on site at the time of this evaluation, however 22% had reported stock outs in the previous 6 months.

4.2.4 M&E Systems

There appear to be adequate M&E processes to track and monitor the implementation of this intervention. The main indicators used by the DOH are:

[20] KZN DOH Implementation Guidelines for Nutrition Interventions at Health Facilities

- The incidence of severe malnutrition for children under 5
- Stunting as a survey indicator
- The number of undernourished children under 5 years of age receiving therapeutic supplements
- The percentage of children under the age of 5 years admitted with severe malnutrition as a secondary factor
- The severe case fatality rate for children under the age of 5 years
- The number of HIV infected patients , who are over the age of 15 years receiving therapeutic supplements
- The number of underweight individuals, 15 years and older with TB receiving therapeutic supplements
- The number of lactating women receiving therapeutic supplements

4.2.5 Linkages and Referrals

There appear to be some limited linkages, referrals, and partnerships to support the implementation of Targeted Supplementary Feeding intervention. Clinical referral within the DOH (i.e. between DOH service delivery points) is managed internally by the responsible dieticians and nurses.

Between DOH and DSD, social workers based at hospitals make regular visits to CCGs at the PHCs and CHCs. In addition, DSD identifies families on social relief who are eligible for Targeted Supplementary Feeding interventions and refers them to DOH. This suggests clear linkages between DOH, DSD and SASSA in cases where applications to social grants and social relief are relevant.

There appear to be few linkages and referrals between DAEA and DOH or DSD, although respondents were aware of the “One Home One Garden” programme implemented by DAEA. Other than the work done in OSS War Rooms, the DAEA role appears to be very limited in all levels.

4.2.6 Beneficiary Participation and Responsiveness

Beside the work done by task teams at OSS meetings and referrals between DOH and DSD, there are few respondents who know about Targeted Supplementary Feeding programmes. This is partly due to the clinical nature of the intervention, as entry into and exit from the programme is determined by dieticians. None of the mothers of children under 5 and pregnant women who were interviewed for this evaluation had knowledge about this intervention, with the exception of one mother in Howick Central Clinic who had been enrolled in the intervention. Even in this case, she did not appear to have a clear understanding of how the intervention works as she appeared to be unhappy because she was taken out of the Targeted Supplementary Feeding programme and she did not understand why. Community members also appeared to have limited knowledge about it, with most associating food supplementation with HIV and TB infection rather than under-nutrition. This is a clear indication of a need for better communication around this intervention even if it is a clinical programme.

4.3 Food Access

4.3.1 Delivery Channels

Food access is an intervention that is implemented by the DSD mainly in partnership with ECD and HCBC sites. Targeted beneficiaries of this intervention are children below the age of 5 years, pregnant women, women, child headed households, and people living with HIV/AIDS and TB. DSD's food access interventions consist of 4 key activities: support to ECD programs, food vouchers, food parcels and soup kitchens.

The first is support to ECD programmes. DSD partners with individual ECD centres and signs 3 year Service Level Agreements with them[21] which provides R15 per eligible child attended per day payable at the beginning of each month based on the previous month's expenditures and quotations submitted. The main conditions for funding are that 50% of the monthly claim shall be spent on food purchases for the site, 30% on staff salaries and 20% on maintenance of the site. Another condition is that the ECD site follows the DOH's 'General Guidelines for Nutrition". Through ECD support, DSD aims to ensure that children enrolled at ECD centres; receive quality education at an early age, have access to safe environments to play, get stimulated to learn, and have access to nutritious meals. The researcher spent two days with two different ECD sites to observe how they function.

DSD has identified several food/nutrition related needs for the ECD support programme: (i) ensuring that ECD centres stick to the daily nutritional diet (developed as a guide by the DOH), (ii) ensuring quality food preparation in ECD centres as most of the ECD cooks have no cooking or food preparation training, and (iii) better linking and integrating of the information systems between the various social security and food access interventions – i.e. mapping out if children enrolled in ECD centres or accessing soup kitchens have further access to food by means of receiving social grants. The DSD Ulundi Cluster Social Work Manager emphasised that no child should be malnourished "if they are fed in ECD centres, and receive afternoon and evening meals at home purchased with social grants money."

The second and third activities under the DSD's food access intervention are rendering food vouchers and food parcels under its Social Relief programme and soup kitchens.

Food vouchers were worth ZAR 1,000 (one thousand rand) and DSD forms partnerships with accessible grocery stores where the food vouchers can be utilised. It was confirmed by the evaluation respondents that DSD has developed a guide on nutritious and sustaining foods that could be purchased with this voucher to limit abuse of this programme.

In the food parcels programme, DSD partners with capable organisations to deliver boxes of uncooked-unperishable food (worth approximately ZAR 450) to identified households including OVC headed households.

Soup Kitchens: DSD partners with capable HCBCs should establish soup kitchens for vulnerable children, youth, and adults affected and infected by HIV/AIDS, and TB. In this programme, HCBC

[21] In wards where there is no ECD site, DSD empowers smaller independent crèches and helps them to get registered with DSD so that they will be eligible for funding. Upon satisfying all legal criteria, the site practitioner receives training on how to operate an ECD centre. This training is also extended to ECD community committees. DSD then refer the newly-developed ECD site to DOH for a Health and Safety Assessment, and once this approval is received, DSD then partners with, and funds, the newly-established ECD site.

practitioners prepare lunches daily in locations accessible to the relevant beneficiaries, as in the ECD Programme.

4.3.2 Human, Material, and Financial Resources

DSD appears to have a clear vision with regards to implementing its various food access interventions. However, human resources for ECD support are reportedly insufficient as is evidenced by the fact that both the provincial senior ECD manager as well as the uMgungundlovu district coordinators are serving in an acting capacity. At ward level, the need to have ECD data capturers was identified to capture all the ECD relevant data which is currently done by the social work coordinators. In addition, there has been no proper training in nutrition for any ECD personnel at any level at DSD.

4.3.3 M&E Systems

To track the implementation of the food access intervention, DSD relies solely on data collected within the District Information System (DIS). Some of the indicators include (i) the number of organisations supported for ECD, (ii) the number of women- and child-headed households, and (iii) the number of HIV/AIDS and TB beneficiaries reached.

4.3.4 Linkages and Referrals

Through its coordination role at provincial, district, municipal, and ward levels, OSS task teams play a prominent role in ensuring proper service linkages, referrals, and partnerships to support the implementation of food access interventions. There are linkages and referrals between DSD and DOH for assisting severe malnutrition cases. All facilities interviewed confirmed links with DSD through a social worker, either visiting the clinic, based at a hospital or the community. Households and individuals diagnosed by DOH as severely malnourished are supposed to be linked up to the local ward social worker who should facilitate the best and feasible food access intervention for them. In addition, during household visits and profiling, CCGs identify eligible beneficiaries and present the cases at OSS War Rooms. In OSS meetings, the ward task team collaboratively determines the best food access intervention for that household. However, when DOH doesn't record information on where the individuals reside or locations that are near to them, DSD experiences difficulty in tracing and finding severe malnutrition cases. For example, at Jozini Clinic several children were diagnosed as severely malnourished, but DSD was unable to assist as insufficient information was recorded about where these children were situated.

The Zero Hunger Initiative was also identified by DSD as another poverty alleviation campaign implemented in partnership with DAEA. The Zero Hunger Initiative is intended to minimise the psycho-social and nutritional impact of HIV/AIDS and eradicate extreme poverty. When implementing its food access interventions, DSD uses Social Relief Guidelines, Social Assistance Act, and ECD Guidelines for Sustainable Livelihoods, Zero Hunger Framework, Children's Act, Children's Protection Act and the South African Constitution.

4.3.5 Beneficiary Participation and Responsiveness

DSD uses community meetings, ECD committees, HCBC committees, OSS task teams, CCGs, radio advertisements, ward counsellors, and ward social workers to raise awareness about its food access initiatives and to reach eligible beneficiaries. However, beneficiaries appeared to only be aware of the ECD programme and social grants. Soup kitchens, food parcels, and food voucher programmes were not widely known by most beneficiaries interviewed in this evaluation, nor have respondents seen IEC materials or radio advertisement about these programmes.

It was made clear to the researcher that DSD should invest more in promoting these programmes to increase awareness among, and access for, potentially eligible beneficiaries.

4.4 Household Food Production and Preservation (Home Gardening)

4.4.1 Delivery Channels

Under the Food Security Intervention, DAEA targets food-insecure households and communities to enhance their food security and to increase their access to markets with a view to selling excess produce, generating income, and for buying other food items to complement the ones they produce. DAEA uses radio advertisements, community events, community meetings, household profiling by CCGs and extension officers as well as the OSS War Room Forum as delivery channels for this intervention.

Respondents noted numerous activities that DAEA should ideally implement under the Food Security Intervention:

Household profiling – a former Flagship programme, household profiling was unfortunately stopped in 2009. In this activity, DAEA focused on fifty seven (57) wards that were targeted for poverty alleviation.

One Home One Garden/One Institution One Garden/One Fruit Tree One Home – this activity is implemented at ward level and targets individual households and institutions. The "one home one garden" programme is said to adequately address nutritional problems by DAEA respondents because it renews families' participation in agriculture for feeding themselves and for selling excess produce to buy other essential needs.

Community garden agricultural projects – community members' work together to provide food for consumption, job creation and opportunities for income generating on excess produce. DAEA works with communities to plough between 9-15 hectares of land for at least 9 families to benefit from, and provides them with training (water harvesting, planting, nurturing for the plants and, food processing and preservation), seeds, and even irrigation systems (DAEA has identified Jojo rain harvesting tanks as being most effective for rain harvesting but also helps to dig boreholes), and fencing.

In partnership with other government departments, DAEA drives the Zero Hunger Campaign which is targeted at total poverty alleviation. DAEA provides tunnels, fencing for the gardens and water tanks in different packs.

To assist in income generation, DAEA works with FoodBank an NGO that facilitates markets for small farmers. FoodBank also works to create food storage networks and facilities, especially in remote areas lacking proper road or market infrastructure. Food storage is crucial for food security particularly for addressing seasonal fluctuations in production (i.e. seasonal supply variations, price hikes and drops, harvest failures, temporary block of supply routes). This is because the efficiency of food distribution systems has a direct effect on food availability and food prices, storage facilities are therefore integral for influencing food availability and pricing at the Household level. In South Africa the current structure of bulk food handling, especially the storage and marketing of grain, is concentrated in a small number of geographically defined co-operatives[22]. Unfortunately, household level distribution systems have eroded over time and the government has provided little

[22] Food Security Policy for South Africa 2012. DAEA

support for household storage facilities. As such, the informal food distribution systems, particularly in rural areas, are a survival operation for most households[23].

To further assist with food security, DAEA aims to promote not only food production but also food preservation and storage, especially in cases of drought. However, respondents report that DAEA has not been actively involved in food preservation projects in the past 2 years.

4.4.2 Guidelines, Protocols, and Policies

To implement Food Security interventions, DAEA participates in task teams the OSS implementation model and guidelines for coordination, the Zero Hunger Framework, and the Food Security Policy for South Africa.

The Food Security Policy addresses nutrition problems at provincial level. It ensures food distribution to all needy and vulnerable groups, centralised food control system and food security risk management. KZN is still adapting the National Food Security Framework to its provincial situation, but in the meantime a presentation on how food security should be implemented was delivered at a provincial Management Meeting. Unfortunately, DAEA has implemented few food security activities so far, other than the distribution of seeds, and even this activity has problems. District Respondents confirmed delays in delivery of seeds (affecting the ability of communities to plant in the correct season); seeds being delivered that are outside the order specification which will not always grow in the soil of that community. Furthermore, no food preservation activities were implemented in this financial year.

4.4.3 Human, Material, and Financial Resources

The KZN DAEA Food Security Programme appears to lack adequate human and material resources. There are insufficient human resources to implement the programme, and the programme is functioning through the efforts of seconded staff who only work part-time (if at all) on food security. There also appears to be an issue with the procurement process which results in frequent shortages of material resources such as mechanisation (e.g. tractors to support farmers) and seeds for distribution. The project manager for the Mushroom Project also confirmed that “getting a tractor is a big problem, there is a long schedule and it may take up to six (6) months before a requested tractor arrives”.

4.4.4 M&E Systems

Even though DAEA struggled to successfully implement the Food Security Programme this financial year, they believe that they have adequate M&E to track the implementation of the intervention when the programme is active. Some nutrition-related indicators used by DAEA include (i) the number of community trainings conducted on gardening, (ii) number of agricultural packs distributed, and (iii) the number of households with backyard gardens.

4.4.5 Linkages and Referrals

Through OSS meetings, DAEA has adequate linkages and partnerships to support the programme implementation. In uMkhanyakude District, the partnerships and linkages were identifiable because the extension officers regularly attend OSS War Rooms. However, at uMgungundlovu such partnerships and linkages were seen as weak, with extension officers in these districts confirmed as

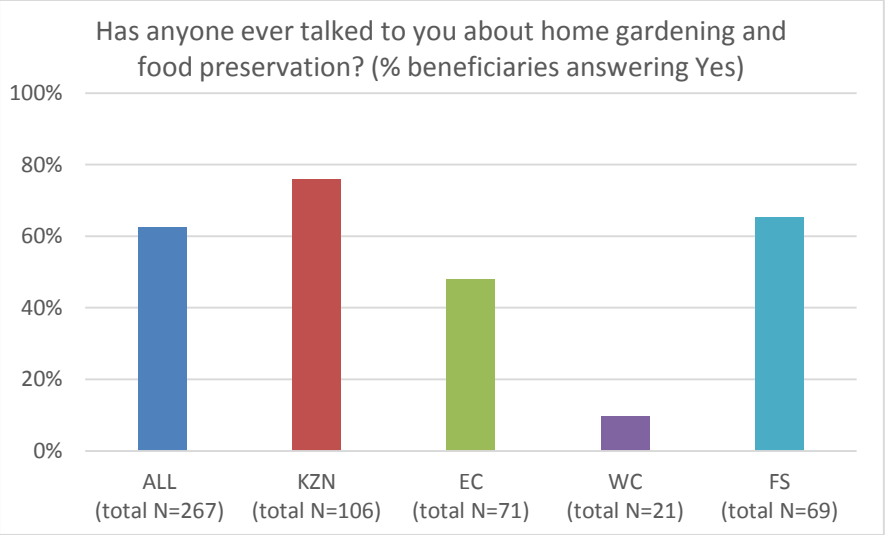
[23] Ibid

not regularly attending the OSS War Rooms. At community level, in addition to extension officers, CCGs were identified as an important structure in linking DAEA with community programmes.

4.4.6 Beneficiary Participation and Responsiveness

Amongst all activities implemented by DAEA under the Food Security Intervention, "One Home One Garden" was the most widely known activity among beneficiaries and other government respondents – nearly 80% of mothers and caregivers of children under 5 and all clinic and NGO staff know about this intervention (Figure 15). In particular, respondents referred to the distribution of seeds by DAEA as a familiar activity. No other DAEA Food Security Interventions were mentioned by beneficiaries or other respondents.

Figure 15: % of Beneficiaries who have been Given Information about Home Gardening



5 FINDINGS: OTHER FOOD AND NUTRITION INTERVENTIONS

Without being prompted, respondents were asked to list the main nutrition interventions that were being implemented in the province. Figure 16 presents the frequency with which nutrition interventions were mentioned. The vast majority of respondents were from the health sector, and so the health-related interventions were the most frequently mentioned. However, it is noteworthy that DSD and DAEA interventions were less likely to be mentioned, further reinforcing the finding that coordination and linkages between the departments' nutrition-related initiatives are relatively weak.

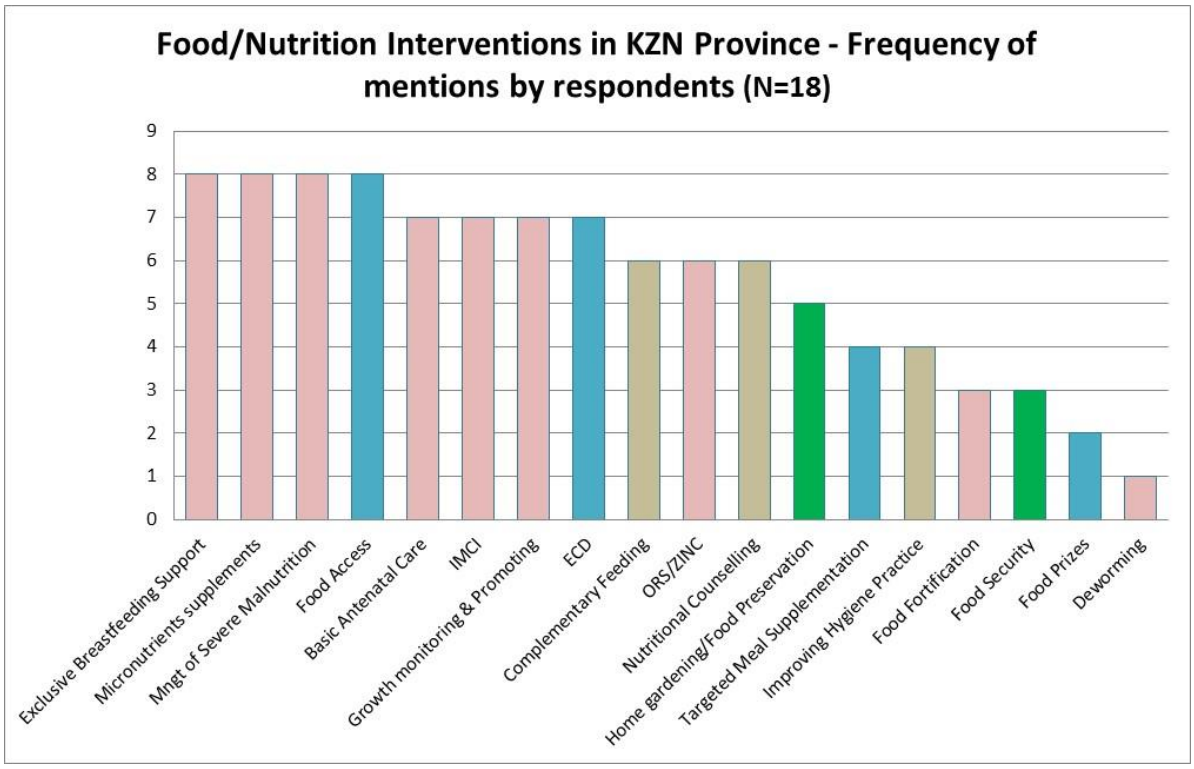
6 FINDINGS: THE FOOD INDUSTRY IN THE PROVINCE

At provincial DOH level, respondents indicated no relationship with food industries, aside from procuring infant foods for those cases where breast milk is not an option. However, it was reported that the South African Sugar Association (SASA) is a long standing partner of the KZN DOH Nutrition Directorate. The most recent event where SASA and the Nutrition Directorate partnered, was the training of health workers on IYFC policy.

At district and facility levels, there was no evidence of food companies' sponsorship except at Howick Central Clinic where there were pamphlets and booklets about child feeding with Purity

branding. This contravenes government regulations for marketing food to children under the age of 5.

Figure 16: Principal Nutrition Interventions in KZN-- Frequency of Mentions



Most respondents reported that they do not engage with food industries and they do not approach them. However, at the ECD site, respondents reported approaching food companies for donations. At the KwaDindi community agricultural project, respondents reported approaching food industries to purchase mushrooms from this project.

No beneficiary reported having received free formula from their nearby clinic or from elsewhere.

7 FINDINGS: RESULTS

Table 8 below summarises the principal strengths and weaknesses of the implementation of nutrition programmes in KZN.

Table 7: Respondents Views' on Implementation of Other Nutrition Services

Nutrition-Related Service	Reported Main Delivery Channel	Reported Guidance / Protocols	Respondent's General Perceptions on Effectiveness of the Service in Addressing Nutrition
Basic Antenatal Care	• Community dialogues initiated by Dramaid organisation • ANC Clinics • Communication Campaigns • School curricula for Grades 10- 12	• RtHB • Various IEC materials for pregnant women • IYFC policy • PMTCT • Dietary and Food Based Guidelines	-It allows for mothers to be educated on a daily basis. However, nutrition is not yet fully integrated in BANC as it should and there is currently no M&E tool that tracks the integration of nutrition into BANC.
Complementary Feeding	• Community Nutrition Programmes including CCGs • Breastfeeding support groups • Family Health Teams • Communication Campaigns • IMCI Nurses • Well-baby clinics	• RtHB • Paediatric Dietary Food Based Guidelines	- It is aggressively promoted at facilities. However, due to high levels of poverty, solid foods are introduced incorrectly. Mothers are not able to provide formula feeding on a continuous basis, so they opt to feed their babies available solid foods.
IMCI	• IMCI nurses and doctors at PHC • CHCs • Hospitals	• IMCI guidelines	- There is a schedule of IMCI trainings for qualifying nurses. However, even though nurses are trained, its takes too long for trained nurses to be assessed for accreditation. Both district nutritionists interviewed believe that all professional nurses must be trained on IMCI. On the other hand, IMCI Guidelines are silent on MUAC tapes and because the IMCI algorithm for nutrition is not comprehensive, there is room to miss malnutrition issues in children. For now the shortage of IMCI nurses remains a big challenge.
ORS/Zinc	• IMCI Nurses • ORS Corners at PHC	• IMCI Guidelines	This intervention is strengthened by the Family Health Teams and CCGs that carry rehydrating solutions when conducting household visits. Space in most PHC remains a challenge in implementing ORS corners (where preparation of the

Nutrition-Related Service	Reported Main Delivery Channel	Reported Guidance / Protocols	Respondent's General Perceptions on Effectiveness of the Service in Addressing Nutrition
	• CHC and Hospitals		ORS solution is demonstrated) as stipulated by the IMCI Guidelines.
Micronutrients Supplements Including Vitamin A	• ANC • Post-natal wards in Hospitals • Routine PHC/CHC visits • Campaigns • ECD Centres	• KZN Nutrition Directorate revised Vitamin Guidelines • Vitamin A Flipchart for CCGs • Booklets for Health Workers	- To address the needs of pregnant mothers and children under the age of 5. This intervention is monitored closely and the KZN Nutrition Directorate has revised the Vitamin A Supplementation Guidelines to eliminate supplementation for prevention purposes in post- partum women and children below the age of 6 months. To strengthen this intervention, a Vitamin A toolkit has been developed and audio visuals aids have been procured to be used at facilities and ECD centres. Most believe this intervention is implemented effectively because there has not been a polio or measles outbreak recently and very few babies are now born with brain defects. DOH reported that even if there are stock outs of micronutrients, these are managed well and disruptions are minimised. Researcher note: Even though this intervention is reportedly implemented adequately, health workers other than professional nurses showed low knowledge levels on the administration of micronutrient supplements.
Growth Monitoring And Promotion	• CCGs • Family Health teams • Well-baby clinics	Road to Health Cards	- To address the needs of pregnant women and children under the age of 5. DOH monitors closely the weighing coverage on an annual basis. To strengthen this intervention, DOH has procured MUAC tapes for adults and children to be used by both health workers and CCGs, and adult digital scales together with length boards for all facilities. DOH encourages mothers of babies below the age of 2 years to bring babies to the clinic on a monthly basis. This intervention is also strengthened by community-based structures that implement this intervention at a community level such as CCGs and Family Health Teams. However, respondents confirmed that mothers do not bring babies less than 2 years of age to the clinic on a monthly basis. In smaller clinics, mothers were encouraged to bring the babies to the clinic only when they are due for immunizations or when they are sick. Researcher note: Some facilities are still using the old Road to Health Card instead of the new RtHB Booklet. In addition, most nurses do not plot the growth curves

Nutrition-Related Service	Reported Main Delivery Channel	Reported Guidance / Protocols	Respondent's General Perceptions on Effectiveness of the Service in Addressing Nutrition
			and therefore, do not interpret them. It was noted that heights are not often measured and gaps in DHIS definition were also mentioned.
Management Of Severe Malnutrition	• IMCI nurses • PHC/CHCs • Districts& Regional Hospitals • CCGs& Family Health teams	• 10 Steps to Management of Severe Acute Malnutrition • Community Based Prevention and Management of Acute Malnutrition Guidelines	DOH closely monitors the implementation of the IMCI Guidelines and conducts Severe Malnutrition Road Shows to raise awareness of the issue. It was mentioned that the implementation of the revised KZN Guidelines will assist in early identification of cases and heightening awareness at community level. DOH holds regular support meetings with hospital dieticians to support and monitor the implementation of PEM registers. However, this intervention is undermined by poor diagnosis and classification of cases at community level. There is also no attention given in the guidelines to cases of stunting (for height below age)
Deworming	• Children health weeks • Routine PHC services • Campaigns together with Vitamin A	IMCI Guidelines	In the past, deworming used to be missed/forgotten by most health workers. However, it is now effectively implemented together with Vitamin A at six (6) month intervals from the age of 6 months.
Nutritional Counselling	• IMCI • ANC • PHC/CHCs • CCGs	• BANC Guidelines • 2007 Guidelines for Maternity • IMCI Guidelines • IYCF Policy • Dietary and Food Based guidelines	This intervention can be improved if history of diet is recorded in a clinical sheet that forms part of the patient file. Researcher note: Again, the knowledge levels of health workers are low, and need to be refreshed.
Improving Hygiene Practice	• Community outreach services • PHCs • CHCs & Hospitals • Communication Campaigns		This intervention is supported by private partners such as Dettol who help out by conducting educational shows. However, most respondents agreed that this intervention is neglected at facility level because of the health workers' high daily workloads. Researcher note: Most health facilities had posters promoting hygiene. But it was also noted that in half of the 8 facilities, patients' toilets were either untidy, not working, locked, or unused due to various reasons including limited running water

Nutrition-Related Service	Reported Main Delivery Channel	Reported Guidance / Protocols	Respondent's General Perceptions on Effectiveness of the Service in Addressing Nutrition
			to run the toilet system.
Food Fortification	• Food Industry	• SA Regulations on Food Fortification • SA regulation on Salt Iodization.	Food Fortification was only known about by a few respondents. Respondents confirmed that Food Fortification and Salt Iodization Regulations guide the implementation of this intervention.

Table 8 Implementation Strengths and Weaknesses in KZN:

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	1. Nutrition is a priority programme in KZN that is mainly driven by the premier's office. 2. Coordination mechanisms such as OSS and Zero Hunger Campaign assist partners to work collaboratively and in a more facilitated and comprehensive manner.	a. Changes in Senior Executive Managers at DAEA have hindered implementation of the Food Security Programme. b. Inconsistent participation in OSS task teams by district staff
Implementation Strategies Used the various implementation strategies () devised for carrying out the policy	3. All government implementers have access to guiding documents that facilitates the implementation of the nutrition intervention programme in KZN. 4. For DOH nutrition interventions, CCGs at community level appear to be a cornerstone for reaching beneficiaries with community-based nutrition services 5. Community based structures such as Family Health Teams, extension officers and social work coordinators appear to adequately facilitate the implementation of nutrition interventions 6. The establishment of OSS in all levels facilitates speedy referrals and linkages and ensures efficient and holistic care to beneficiaries.	c. Irregular supply of equipment and seeds by DAEA. There appears to be no clear plan on what is available, how to distribute it and how big the catchment is. d. OSS has not been successful in ensuring that DAEA fully participates at all levels and it appears that OSS is mostly focused on social workers, Health and Home Affairs.
Participant Responsiveness facilitation processes and interactions that influence participant responsiveness	7. Respondents indicate that beneficiaries generally come to the clinics when they are told to, but mostly come when the child is sick. 8. The KZN cultural and social environment is conducive for successful implementation of nutrition interventions. The Zulu culture generally promotes breastfeeding (though not necessarily exclusive breastfeeding) and subsistence farming (both livestock and gardening) and does not support formula feeding. It was also indicated that most Zulu beneficiaries are obedient, so these make	e. Social and cultural factors that impede successful implementation of breastfeeding and appropriate child feeding include: 1) Beliefs that if young mothers breastfeed their breasts would fall and appear less attractive to men, which was a prevalent rumour amongst young teenage mothers. 2) Although not widespread, some mothers believe that their breasts are being sucked by "tokoloshe" at night and their baby might get sick. 3) The norm from older generations (grandmothers)

Implementation Factor	Implementation Strengths / Enabling Factors	Implementation Weaknesses / Inhibiting Factors
	a conducive environment for the implementation.	that babies need to initiate onto soft solids foods as early as 3 to 4 months so the baby will gain more weight and appear healthy and strong. 4) Self- internalised stigma of mothers who are not exclusively breastfeeding because of the fear of transmitting HIV to their babies. 5) Community attitudes towards exclusive breastfeeding, where this is perceived as an intervention for those mothers infected with HIV. 6) The myth that targeted meal supplements are given to primarily HIV infected and TB patients is a major barrier indicated by beneficiaries.
Capacity to Implement Adequacy of financial, material, and human resources to implement the policy	9. Across the various nutrition interventions in KZN, most respondents believe there is generally adequate allocation of human and financial resources. 10. KZN DOH staff throughout the organisation (from provincial level to the CCGs) are trained and qualified to render nutrition services at their level.	f. DAEA and DSD have no nutrition refresher trainings for officials or community level practitioners g. Staff at NGOs and implementing officers at DSD and DAEA indicated limited training on nutrition. h. DOH plan to implement community-based breastfeeding support groups has not taken off in all areas. i. Due to the amount of work detailed by the DOH district nutrition managers and the reality that they are unable to visit regularly all the sites as expected, there is a need to create positions for sub-district nutrition coordinators to ensure that all facilities are supported regularly. j. There is need for all Professional Nurses (PNs) to be trained on IMCI so that this service could be implemented widely. Many facility level respondents noted that it can take months for the trained IMCI PNs to be assessed and certified as IMCI Nurses. This limits the implementation of IMCI at facility level. k. DSD respondents indicated the desire for training in nutrition and food preparation for ECDs and HCBCs. l. DAEA is viewed as only distributing seeds and not widely

Implementation Factor	Implementation Strengths / Enabling Factors	Implementation Weaknesses / Inhibiting Factors
		implementing any other food security activity. m. DAEA appeared to operate food security interventions using a skeleton staff and staff with other full-time responsibilities such as extension officers thus sending the impression that food security is not a key activity of the department.
Communication	11. Messages about exclusive breastfeeding from 0-6 months are well known by all respondents and beneficiaries. 12. DAEA's 'One Home One Garden' campaign appeared to have reached many beneficiaries.	n. There is need for more communication to new mothers around expressing and storing breast milk.

8 CONCLUSIONS

Leadership for nutrition in KZN appears to be strong. There is political commitment from the highest levels to implement nutrition interventions. Nutrition is considered a key strategy in KZN's "War on Poverty" campaign known as OSS.

The importance given to nutrition within KZN is evident in the existence of effective coordination mechanisms for food/nutrition interventions from the level of the premier down to the ward level. This inter-governmental coordination is driven and guided by a province-wide OSS Implementation Plan.

The fact that high impact nutrition interventions tend to be well resourced both in financial and human terms, is testimony to the priority given to nutrition by OSS. The exception to this appears to be the Food Security Programme which has struggled over the past year with implementing its food/nutrition interventions.

Nutrition is located at the directorate level within the DOH while the ECD Programme of the DSD, the programme directly targeting children under 5 years of age, is headed by a senior manager under the Children Services Directorate. DAEA's Food Security Programme is at the level of a Directorate but has been affected by numerous changes in its senior management.

DOH and DSD have department-wide and directorate-specific operational plans at provincial and district levels which detail their respective nutrition interventions. DAEA has a provincial-level Food Security Plan but similar plans were not identified at lower levels.

High Impact Nutrition Interventions are generally prioritised in KZN province. There is good uptake of exclusive breastfeeding although it is often undermined by culturally and socially accepted mixed feeding practices for children less than 6 months. Other challenges include misconceptions emanating from cultural practices and beliefs. KZN has established Human Milk Banks to support exclusive breastfeeding for babies who cannot be breastfed. Community-based Breastfeeding Support Groups are being established by CCGs but are not yet widely available.

Targeted Supplementary Feeding is a DOH facility-based, clinical nutrition intervention offered to patients who are moderately malnourished. Entry into and exit from this intervention is guided by Clinical Dieticians. Every facility visited reported having adequate access to clinical dieticians as well as adequate stock of the supplements. There also appear to be good linkages between DOH and DSD.

The Food Access Intervention implemented by DSD includes ECD Programme, Food Vouchers, Food Parcels and Soup Kitchens. The ECD Programme, the intervention directly targeted at children under 5 years, has a clear vision. However, it appears to have some challenges with human resources as evidenced by the fact that some of the Key Programme Staff are serving in an acting capacity. And although DSD has prioritised ECD support, nutrition does not appear to be fully integrated into its other Food Access Programmes. Furthermore there is a need for better monitoring of, and direct nutrition-related support to, ECD centres.

Of the four focus interventions reviewed in this evaluation, the one that seems to be struggling is the Household Food Production and Preservation Intervention. Within DAEA, there does not appear to be a clear vision for the Food Security Programme and there is a sense that food security is not taken seriously. Most of the food security positions are acting positions as staff are assigned food security roles in addition to their full time positions. In the current financial year, very few

food security interventions seem to have taken place apart from the distribution of seeds. A possible explanation is that the DAEA Food Security Programme has been negatively affected by a change of leadership and related lack of direction and commitment.

The M&E systems in place for all the focus interventions seem to be functioning well with clear intervention-specific indicators and no problems with data quality issues (e.g. timeliness, accuracy, and data validation takes place at the different levels). Data is used by all three departments for planning, reporting and budgeting purposes.

9 RECOMMENDATIONS

9.1 General Recommendations

1. DOH to fast-track the establishment of Breastfeeding Support Groups.
2. DOH to consider the establishment of sub-district nutrition coordinators so that facility supervision and support can improve.
3. DOH to promote the Targeted Supplementary Feeding Intervention and provide clear communication and education to those enrolled on the programme.
4. DOH to fill in the vacant positions for Nutrition in the new financial year.
5. DOH to fast-track the training and assessment of IMCI Nurses.
6. DOH to educate communities on exclusive breastfeeding and address its association with HIV status as well as community education on the expression of breast milk and its storage for later use as breast milk is not considered 'food' which can be stored in the refrigerator with other 'food' by many respondents and their families.
7. DOH to follow-up timeously on all in-service trainings that are due to take place at facility level after a central training has been done to facilitate knowledge and skills transfer for improved service delivery.
8. DSD to appoint full-time staff in the positions currently held by acting staff.
9. DSD to train its staff on nutrition and food preparation.
10. Through its presence in the communities and support given to NGOs, DSD to use this avenue and foster stronger food access coordination mechanisms.
11. DSD to ensure that ECD centres stick to the daily nutritional diet (developed as a guide by the DOH) and monitor the quality of food preparation in ECD centres.
12. DSD to promote better linking and integrating of the information systems between the various social security and food access interventions.
13. DSD to ensure better communication with beneficiaries on Food Access Interventions.
14. DAEA to create and fund food security posts at all relevant levels and distinguish roles between food security officers and general extension officers as soon as possible.
15. DAEA to train its food security staff on the importance of nutrition.
16. DAEA to adhere to the timelines and activities approved for food security in each financial year. HOD and MEC to ensure that this happens.

9.2 Strategic Level Recommendations

1. Monitor closely the quality of services rendered.
2. Strengthen inter-sectoral collaboration and clarify roles of various stakeholders in the INP.
3. Explore willing community organisations as potential modes of nutrition/food security/ food access support providers as means of extending the reach of key food/nutrition interventions. For e.g., with stable financing, AWA can provide sustainable meals to many poor community members in the Chatsworth area, and Kheth'Impilo can package nutrition information and do community education on nutrition as they have a strong presence in certain communities already, etc.

9.3 KZN Successes

1. The premier-driven OSS has been a success in KZN in terms of mobilising and coordination efforts by various government departments to address the War on Poverty. If other provinces have not implemented this model already then, this good model can easily be replicated by them.

2. In relation to the above success, provincial OSS cascades down to community level where it is called 'War Rooms'. In the War Rooms, KZN has managed to assess household needs using tools designed by DSD administered by social workers in various wards. Assessment reports are discussed in war room meetings and relevant government departments are tasked to render relevant services in each household. Some households will be identified as child headed households, in such instances, Home Affairs and SASSA could be the first service providers to be tasked, etc. The OSS model is working in KZN and can be easily replicated in other provinces outside KZN.

3. KZN DOH has successfully recruited qualifying (Matric) CCGs and sent them for training as nutrition advisors to address nutrition needs at community level. This is another success that other provinces can adopt to improve the presence and nutrition service delivery at community/facility level.

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.

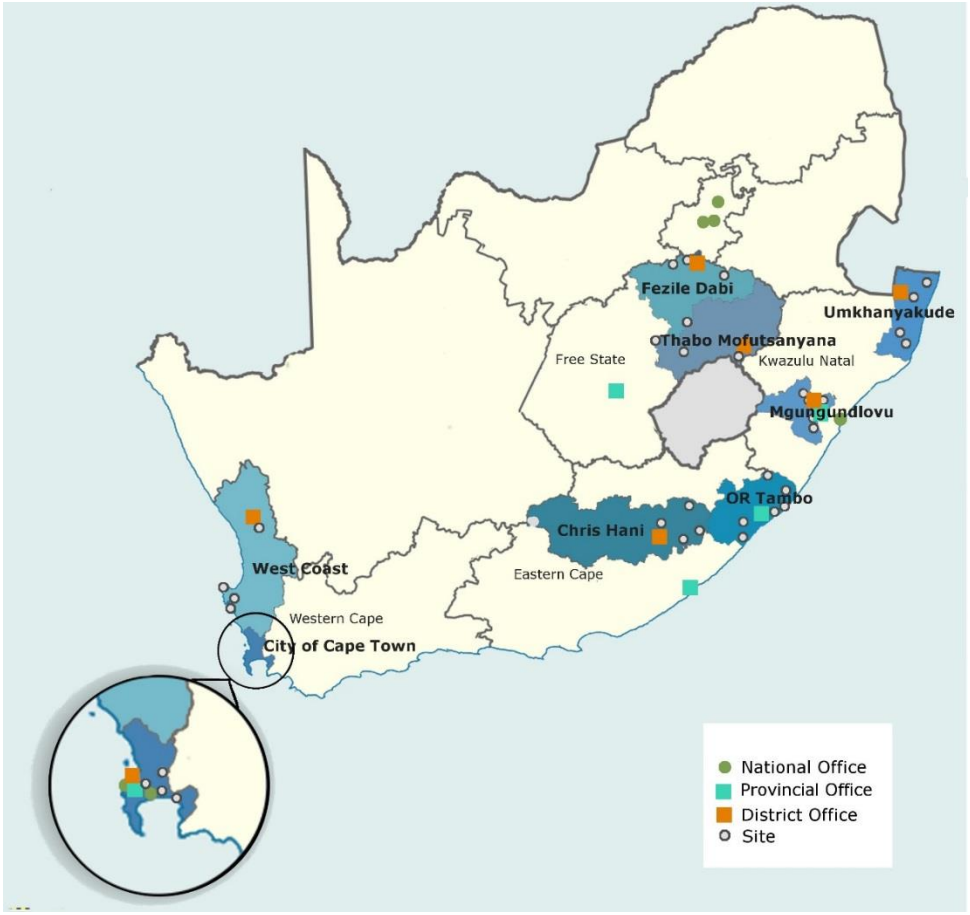
DISTRICTS INCLUDED IN THE SAMPLE

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

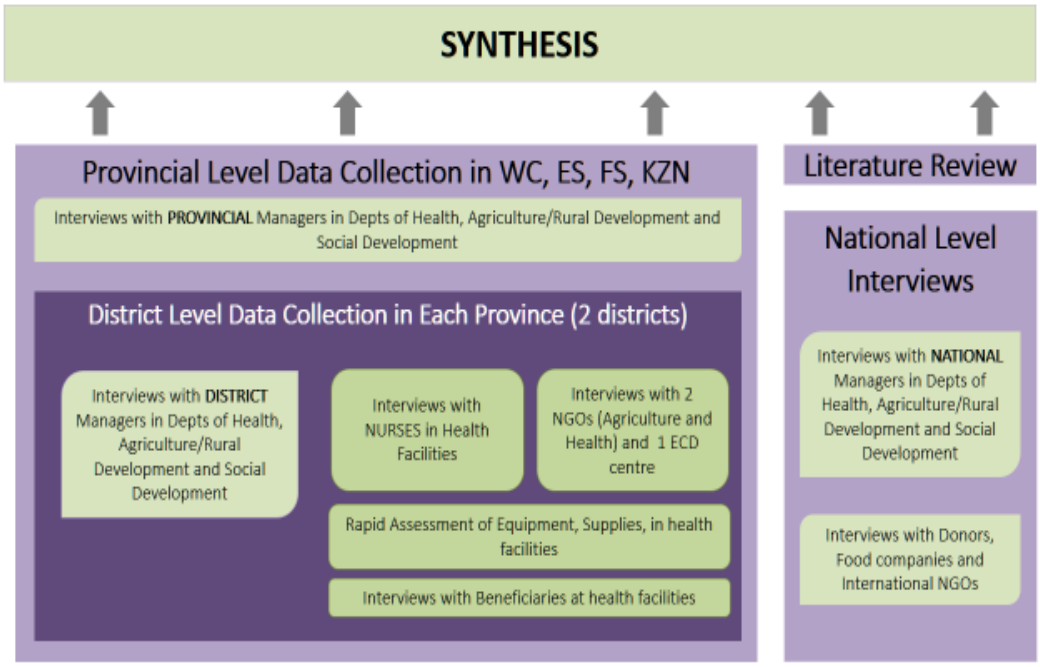
DATA COLLECTION METHODS

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

Method	Target Respondents	Content explored
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		Kwa-Zulu 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

Provincial Respondents:
1. DOH Provincial Nutrition Programme Manager
2. DOH Provincial Nutrition Deputy Programme Manager
3. DSD Provincial Children Services Manager
4. DAEA Provincial Food Security Manager
5. DAEA Provincial Food Security Facilitator
District Respondents:
6. DOH uMkhanyakude District Nutritionist
7. DOH uMgungundlovu District Nutritionist
8. DSD uMgungundlovu Acting ECD Manager
9. DSD uMgungundlovu Acting ECD Coordinator
10. DAEA uMgungundlovu District Manager
11. DAEA uMgungundlovu Local Manager (Camperdown)
12. DAEA uMgungundlovu Local Manager (uMgeni)
13. DAEA uMkhanyakude Food Security Advisor
14. DSD uMkhanyakude Cluster Social Work Manager
15. DSD uMkhanyakude Cluster ECD Manager
16. DSD uMkhanyakude District Service Office Manager
17. DSD uMkhanyakude ECD Social Work Coordinator
Facility Respondents:
18. Eastwood Clinic Operation Manager
19. Eastwood PHC Coordinator
20. Eastwood staff nurse
21. Maguzu Clinic Operational Manager
22. Maguzu Clinic IMCI Nurse
23. Maguzu Clinic MCH Staff Nurse
24. Maguzu Clinic Lay Counsellor for PMTCT
25. Nxamalala Clinic IMCI Nurse
26. Nxamalala Clinic Operational Manager
27. Nxamalala Clinic Professional Nurse
28. Nxamalala Clinic Enrolled Nursing Assistant
29. Howick Central Clinic Operational Manager
30. Howick Central Clinic IMCI Nurse
31. Howick Central Clinic Professional Nurse
32. Howick Central Clinic Professional Nurse
33. Thengane Clinic Operational Manager
34. Thengane Clinic PHC Coordinator
35. Thengane Clinic Professional Nurse
36. Thengane Clinic Auxiliary Nurse
37. Oqondweni Clinic Operational Manager
38. Oqondweni Clinic Professional Nurse
39. Oqondweni Clinic Professional Nurse
40. Oqondweni Clinic Lay Counsellor
41. KwaMsane Clinic Professional Nurse

42. KwaMsane Clinic Professional Nurse
43. KwaMsane Clinic Pharmacist Assistant
44. KwaMsane Nutrition Advisor
45. Machibini Clinic Professional Nurse
46. Machibini Clinic Professional Nurse
47. Machibini Clinic Enrolled Nursing Assistant
48. Machibini Clinic Enrolled Nursing Assistant
NGO Respondents:
49. Founder and chairperson of Active women Association
50. Kheth'Impilo uMgungundlovu District Project Manager
51. Kheth'Impilo uMgungundlovu District Quality Assurance Mentor
52. EastBoom Operational Manager
53. Kheth'Impilo Professional Nurse
54. DAEA Ward 6 Extension Officer
55. KwaDindi Community Agricultural mushroom project, Project Manager
56. KwaDindi Community Agricultural mushroom Project, Farm workers supervisor.
57. Khuzwayo ECD Principal
58. Khuzwayo ECD Teacher
59. Khuzwayo ECD Teacher
60. Khuzwayo ECD Cook
61. Khuzwayo ECD Chair
62. Khuzwayo ECD Treasurer
63. Khuzwayo ECD Vice Secretary.

APPENDIX D DOCUMENTS CONSULTED

- UMgungundlovu District Health Plan 2012/2013
- UMgungundlovu Integrated Nutrition Programme Business Plan 2012/2013
- KZN Job Description for uMgungundlovu District Health Nutrition Programme Manager
- Annual Report of Social Development 2005/6 Financial Year.
- Operation Sukuma Sakhe; Implementation Model, Guidelines for Coordination.
- KwaZulu-Natal Department of Social Development: Annual Performance Plan 2012/2013
- MEMO: KZNDOH HOD to DOH facilities: KZN Guidelines on MBFI Implementation in DOH Healthcare facilities
- DAEA Senior Management Contact Details
- KZN DOH Nutrition Directorate Business Plan 2012-2013 Financial Year. 15 March 2012.
- AED/LINKAGES/SOUTH AFRICA, Final Report for USAID 2003-2006.
- PEPFAR 'Power of Partnerships' Report on activities in KZN Province for Fiscal Year 2009.
- KZN DOH M&E Nutritional indicators.
- KZN DOH Implementation Guidelines for Nutrition Interventions at Health Facilities to Manage and Prevent Malnutrition. June 2010.
- Food Security Policy for South Africa.
- DOH Road to Health Booklets.
- Nutrition Booklets for Mothers and Babies.
- UNICEF website. www.unicef.org
- FHI36O website. www.fhi360.org