Khulisa Management Services (Pty) Ltd

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HOUSEHOLD FOOD PRODUCTION AND PRESERVATION (HOME GARDENS)

Case Study Report

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

South Africa Department of Performance Monitoring and Evaluation (DPME)
Nutrition SLA 12/0287

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
APP	Annual Performance Plan
CASP	The Comprehensive Agriculture Support Programme
CBO	Community Based Organisation
CCG	Community-based Care Givers
COGHSTA	Cooperative Governance, Human Settlements & Traditional Affaires
DAFF	Department of Agriculture, Forestry, and Fisheries (National)
DBE	Department of Basic Education
DDG	Deputy Director General
DHS	Demographic Health Survey
DOA	Department of Agriculture (generic)
DOH	Department of Health
DRDLR	Department of Rural Development and Land Reform
DSD	Department of Social Development
DST	Department of Science and Technology
EC	Eastern Cape
ECD	Early Childhood Development
EC-DRDAR	Eastern Cape Department of Rural Development and Agrarian Reform
FS	Free State
FS-DARD	Free State Department of Agriculture and Rural Development
FSP	Food Security Programme
FSP	Food Security Programme
HIV	Human Immunodeficiency Virus
IEC	Information, Education, and Communication
IFSNP	Integrated Food Security and Nutrition Programme
IFSS	Integrated Food Security Strategy
INP	Integrated Nutrition Programme
INS	Integrated Nutrition Strategy
KZN	KwaZulu-Natal
KZN-DAEA	KwaZulu-Natal Department of Agriculture & Environmental Affairs
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MEC	Member of the Executive Committee
NFES	National Food Emergency Scheme
NGO	Non-Governmental Organisation
OSS	Operation Sukuma Sakhe
SANHANES	South African National Health and Nutrition Examination Survey

SPFS	Special Programme for Food Security Projects
U5	Under 5 (years of age)
WC	Western Cape
WC-DOA	Western Cape Department of Agriculture

GLOSSARY

Ante-natal	Before birth; during or relating to pregnancy
Basic Antenatal Care (BANC)	The regular preventive care recommended for women during pregnancy that benefits both mother and child. Essential interventions include identifying and managing obstetric complications and infections, promoting healthy behaviours such as breastfeeding, giving medical information around biological changes, and giving nutritional counseling and vitamins to prevent maternal anaemia and malnutrition and to enhance a healthy pregnancy outcome. In South Africa, the recommended schedule for BANC is 4 visits during pregnancy starting in the first trimester. Routine BANC plays a part in reducing maternal death rates, miscarriages, birth defects, low birth weight, and other preventable health problems.
Beneficiaries	Beneficiaries in this evaluation included pregnant women and/or caretakers of children 0-5 years of age who were present at health facilities during fieldwork. Beneficiary focus groups were carried out as part of this evaluation.
Breast milk substitute	Any food being marketed or otherwise represented as a partial or total replacement for breast milk whether or not it is suitable for that purpose.
Breastfeeding Protection, Promotion and Support.	In South Africa, Breastfeeding Protection, Promotion and Support consists of 4 main activities: (i) enforcement of the International Code on Marketing of Breast milk substitutes (e.g. responsible advertising about breast-milk substitutes and effective legislation to define and monitor unacceptable marketing), (ii) behavioural change from mothers to exclusively breastfeed (no other liquids or solid foods) for the first six months of life and after introducing solids at 6 months of age, continued breastfeeding for up to 2 years, (iii) promotion of breastfeeding during delivery, and (iv) workplace opportunities to breastfeed. Combined, these actions have been shown to promote more optimal breastfeeding behaviours which in turn reduces diarrhoea, acute respiratory infections, and malnutrition in infancy.
Complementary Feeding	The feeding of solid foods that are readily consumed and digested by the young child and that provide additional nutrition to meet all the growing child's needs. The recommended age range for beginning complementary feeding is from 6 months of age.
ECD food support	Provision of food at Early Childhood Development (ECD) centres is one element contributing to South Africa's Food Security Strategies. DSD subsidises registered ECD centres based on the number of children enrolled. The DSD signs 1-year Service Level Agreements under which the ECD Centre receives ZAR15 per child per day and a portion of this is to be spent on food. The DoH provides guidance on meal plans for ECD centres, and these are meant to guide the centres and DSD in assuring nutritious meals for children.
Exclusive Breastfeeding	Defined as "an infant's consumption of human milk with no supplementation of any type (no water, no juice, no nonhuman milk, and no foods) except for vitamins, minerals, and medications."[1] National and international guidelines recommend that all infants be breastfed exclusively for the first six months of life. Breastfeeding may continue with the addition of appropriate foods for two years or more. Exclusive breastfeeding has dramatically reduced infant deaths by reducing diarrhoea and infectious diseases. It has also been shown to reduce HIV transmission from mother to child, compared to mixed infant feeding.
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 counseling) to increase awareness about child growth; improve caring practices; and serve as the core activity in an integrated child health and nutrition programme. As an intervention, GMP is designed to affect family-level decisions and individual child nutritional outcomes.
Household Food Production and Preservation	Household food production / food preservation is one component of South Africa's Food Security Strategy. DAFF has promoted and supported home gardening as well as school, community, and clinic gardens to complement and supplement the food parcels programme carried out by the Department of Social Development (DSD) as part of its Food Security strategy. DSD now promotes home gardening as part of its Sustainable Livelihoods programme.
IMCI (Integrated Management of Childhood Illnesses)	IMCI is an integrated approach to child health that focuses on the well-being of the whole child and that aims to reduce death, illness and disability and to promote improved growth and development among children under five years of age. IMCI includes both preventive and curative elements that are implemented by families and communities as well as by health facilities. WHO notes that if implemented well, IMCI can reduce under-five mortality and improve nutritional status. In South Africa, IMCI is delivered through health facilities by IMCI-trained nurses as part of the primary health care package of services.
Improved Hygiene Practice	Improved water quality, improved disposal of human excreta, and interventions that promote hand washing have been shown to reduce diarrhoea. Repeated diarrhoea incidence in the first two years of life significantly increases the risks of being stunted by age two years, and some water, sanitation and hygiene interventions may improve height growth in children under five years of age. In South Africa, most hygiene education, improved water quality, and sanitation is delivered through local government/municipalities, although the DoH is also responsible for hygiene education as part of the primary health care package of services.

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

[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

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

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

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

1 INTRODUCTION

Malnutrition in infants and young children typically develops during the period between 6 and 18 months of age and is often associated with 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 the pregnancy 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 even increased risk of disease in adulthood.

1.1 Background to the Nutrition Evaluation

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

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

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

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

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

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

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

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

This qualitative evaluation aims to identify the factors contributing to effective or non-effective implementation of 18 nutrition interventions being delivered by Government, with an emphasis on the first 4 interventions as listed in Table 1 below. The full terms of reference for this evaluation can be found in Appendix 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*	Health
2. Management of moderate malnutrition including Targeted Supplementary Feeding*	Health
3. Household food production and preservation (home gardening)	DAFF
4. Food access (e.g. food parcels, soup kitchens)	DSD
5. Early Childhood Development (ECD) (food in ECD centres)	DSD
6. Complementary feeding*	Health
7. Food fortification (Vitamin A, Iron and Iodine)*	Health
8. Micronutrient including Vitamin A supplementation*	Health
9. Oral Rehydration Salts (ORS) and Zinc*	Health
10. Management of severe malnutrition*	Health
11. Deworming	Health
12. Growth monitoring and promotion including the use of Mid-Upper Arm Circumference (MUAC) measurements	Health
13. Nutrition education and counselling (part of all of these)	Health
14. Improving hygiene practice (including in relation to water and sanitation)	Health
15. BANC (Basic ante-natal care) – education and supplements, timing	Health
16. IMCI (Integrated management of childhood illnesses)	Health
17. Access to (nutritious) food, food prices	DAFF
18. Food security (output 2 of outcome 7 in the National Priority Outcomes)	DRDLR/DAFF

* High impact interventions

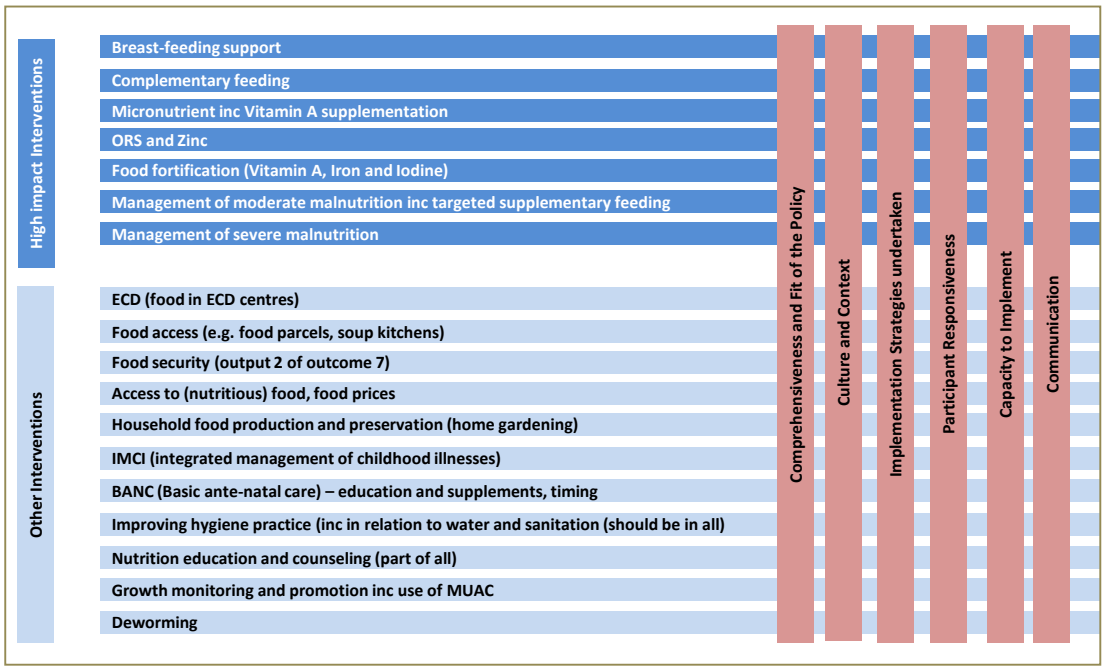
1.3 Approach / Methodology

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, and
6) communication to the general public and within government itself.

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

Figure 1: Conceptual Framework for the Evaluation



1.3.1 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 were held with relevant national government managers as well as with representatives from international NGOs, donor organisations, and private food companies. In each province, key Informant Interviews 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 key informant interviews 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, we also conducted focus group discussions (FGDs) with beneficiaries, rapid assessments of nurses' nutrition knowledge, and rapid assessments of the health facilities' equipment, supplies, and guidelines.

Figure 2: Main Data Collection Components of the Evaluation

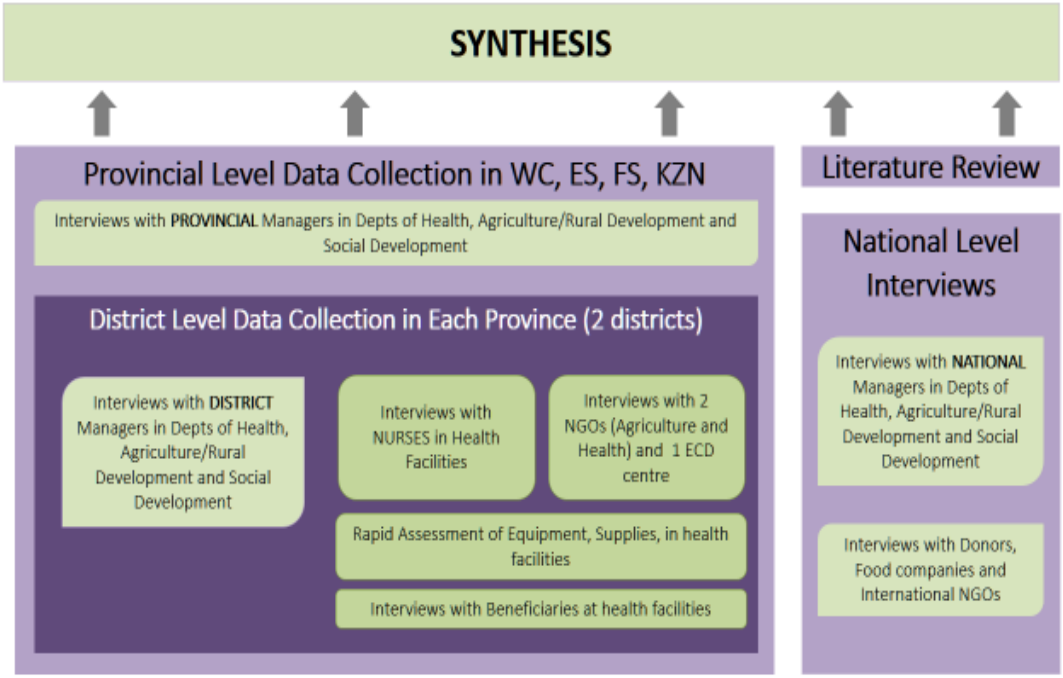


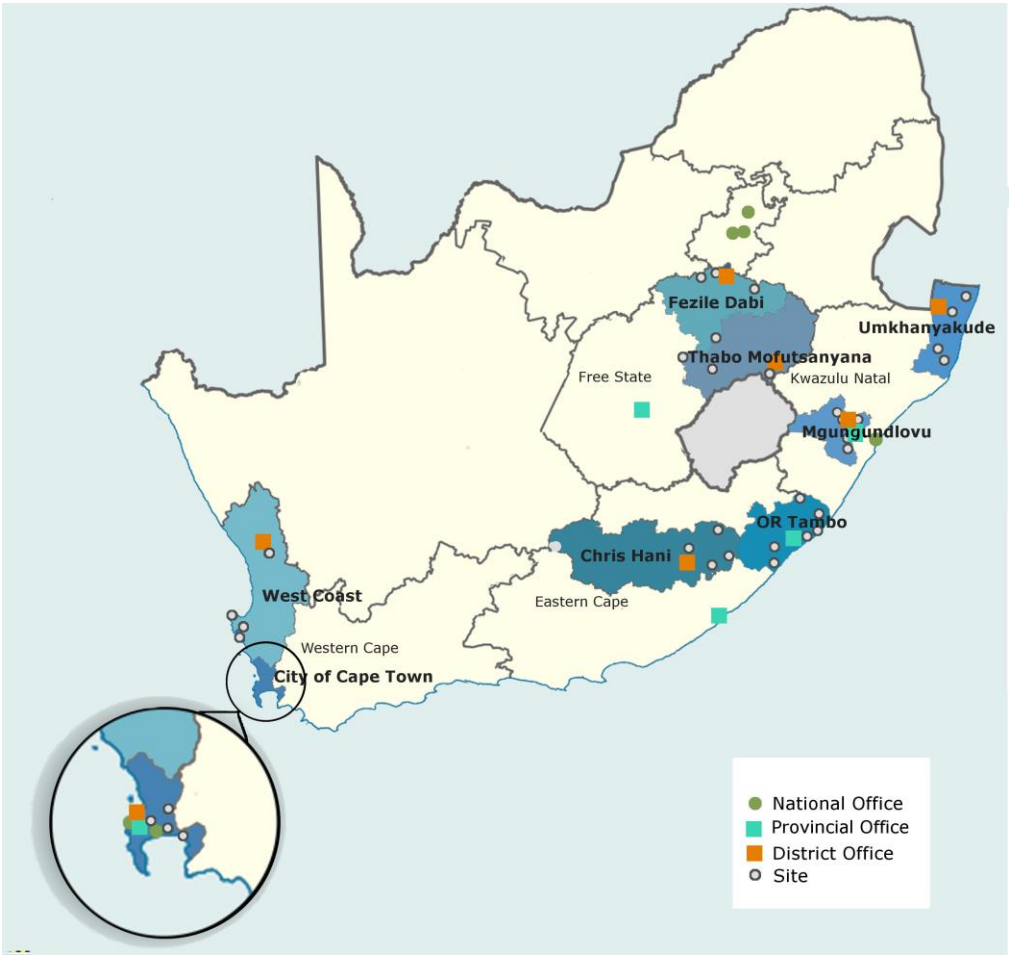
Table 2 presents a summary of planned and actual data collection, and Figure 3 presents a map of data collection sites.

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%
Local NGO	8	8	100%
ECD Centre	4	5	125%
Focus Group Discussions			
Beneficiaries 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 WC. Consequently, many respondents gave only cursory information around the issues that we sought to explore more deeply.

Because 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 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. 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.

2 BACKGROUND

2.1 Nutritional Status of Young Children in South Africa

Presently, more than 20% of children under 5 years of age are stunted in South Africa, and 5% are underweight, although both have declined since 2003. Provincial differences are evident (Figure 4 and Figure 5) and in some provinces (KZN, NW, MP) the prevalence of stunting has actually increased since 2003.

Figure 4: Stunting Prevalence in Children U5 - 2003 and 2012

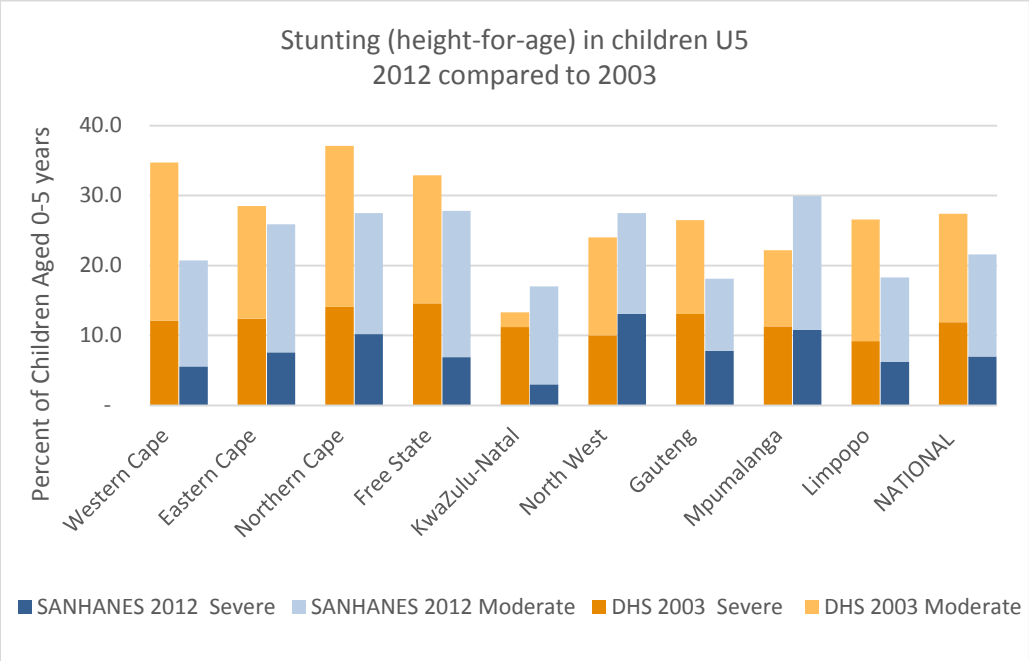
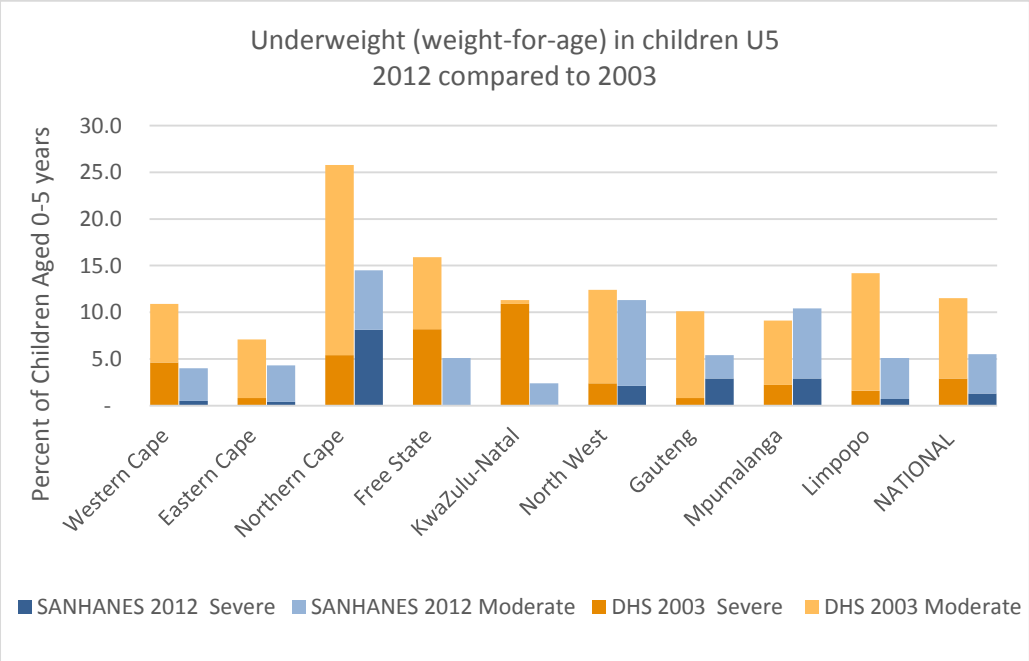
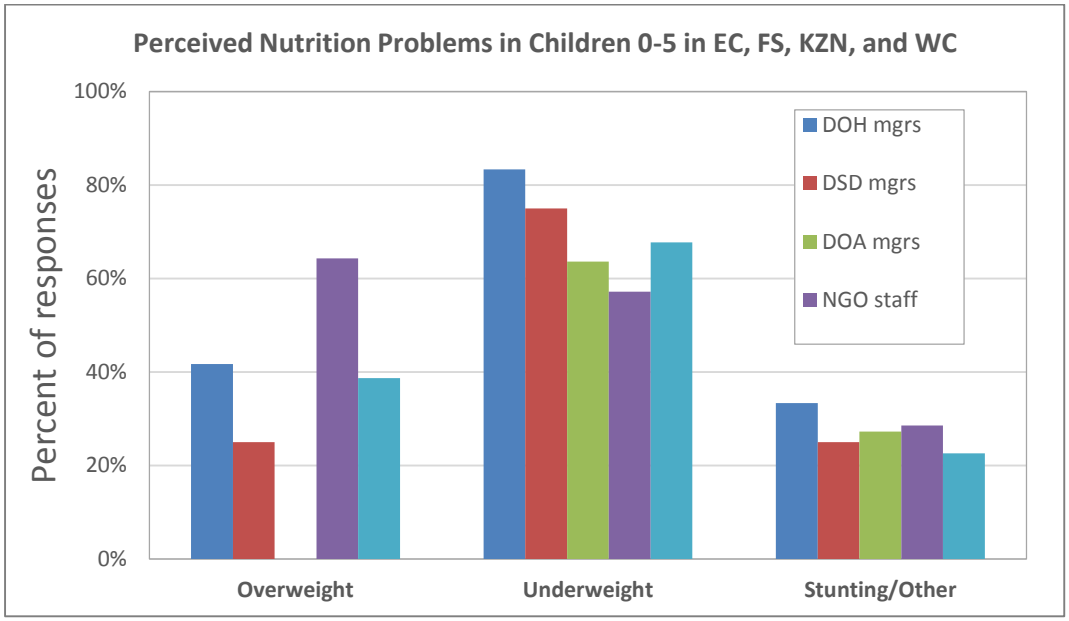


Figure 5: Underweight Prevalence in Children U5 - 2003 and 2012



In contrast to the situation described above, most of the evaluation respondents perceive underweight to be the most common nutrition problem (Figure 6), with only a minority recognising stunting as a widespread nutrition problem, and few recognise overweight as an issue. The lack of awareness of stunting as a broad nutrition issue affects government programming and implementation of nutrition interventions.

Figure 6: Respondents' Perceived Nutrition Problems in Children U5 (N=99)



2.2 Household Food Production in South Africa

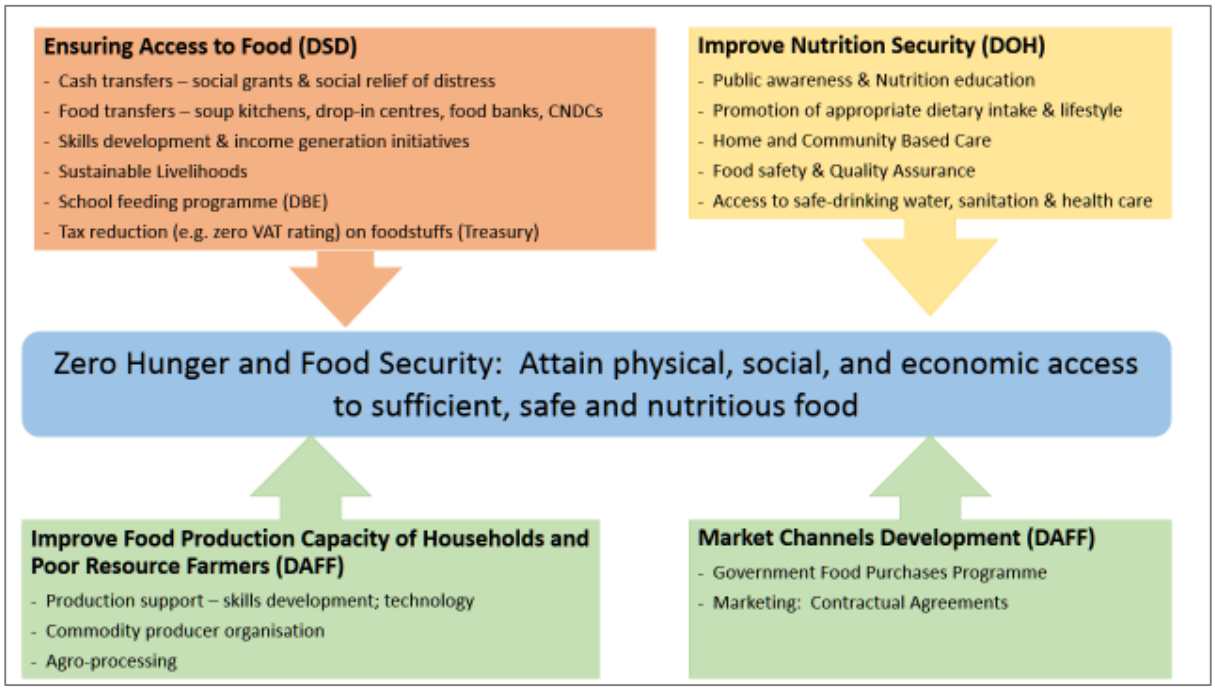
Food security is defined as "…when food systems operate such that all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life[3]."

As a result of poverty and unemployment, ordinary South Africans who struggle to meet their basic household needs are placed in an ever more vulnerable situation[4]. Food security remains a priority for the South African Government in its effort to uphold the constitutional rights of every South African to have access to sufficient food and water, and to realize the Millennium Development Goals (MDGs) to halve poverty by 2015.

"Household Food Production" is one element of South Africa's Zero Hunger Strategy (Figure 7). DAFF's Food Security programme advocates for food production as a means to achieving food security and zero hunger.

DAFF's Household Food Production, Food Security and Starter Packs Project aims to provide interim relief measures to households and beneficiaries severely affected by food insecurity and price escalation of basic food items. These initiatives provide agricultural input and equipment for household food production. In addition, the DAFF Special Programme for Food Security Projects (SPFS) and the National Food Emergency Scheme (NFES) encourage household food production through improvement of crop intensification, diversification, and adoption of simple and affordable technologies, promotes home gardens (backyard mix farming) and where appropriate, school gardens and urban agriculture, using sustainable technologies and encouraging the sustainable utilisation of unused or underutilised resources.

Figure 7: Logic Model for South Africa's Zero Hunger Strategy [5]



At national level, DAFF has promoted and supported household food production as well as school, community, and home 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. However, the recently revised DAFF Strategic Plan (2013/14-2017/18)[6] omits any reference to home gardening, and rather focuses on support to small holder farmers to increase their profitability, with a focus on food production for sale rather than consumption. As a result, the DSD now promotes home gardening as part of its Sustainable Livelihoods programme.

3 HOUSEHOLD GARDENS THEORY OF CHANGE

For small, isolated home gardens projects to be scaled into broad effective programmes, government must provide basic policy support, appropriate research and extension services, and supportive land use regulations, especially in urban areas[7].

Advocates cite evidence that home food production, particularly gardens, can be a sustainable strategy for improving food security and incomes when gardens are well adapted to local agronomic and resource conditions, cultural traditions, and preferences[8]. This type of food production is accessible to the poorest people since it relies on low-cost, low-risk technology and may be adapted to hostile environments (e.g. dry land gardens, flooding gardens). Landless households can also benefit from simple hydroponics, container gardening and community or school gardening.

However, garden projects often fail to achieve significant, cost-effective, sustained and positive changes - in part because of a lack of understanding of, and adaptation to, local conditions, resulting in demonstration gardens, planting materials, management strategies and gardens unsuited for local environmental, social and resource conditions[9]. The effort and costs for these so-called "improved" gardens often outweigh the benefits for households, leading to eventual abandonment of the gardens. When gardens build on the traditional garden practices in the region, many resource constraint problems can be anticipated and avoided.

Although often embraced as a panacea for food insecurity, home gardens have proved unreliable as a steady source of food and income for poor households[7] and some critics claim gardening is only feasible for households with access to land, water, and technical assistance – leaving out many food insecure who lack these resources.

To meet nutritional objectives, home gardening programmes should emphasise the production of micro-nutrient rich fruits and vegetables and not starchy foods that are most likely to be the choice of poor people. Ideally, the focus should be on growing crops that can increase nutrients limited in the diet, such as vitamin A-rich vegetables (e.g. green leafy vegetables, orange sweet potatoes, and carrots). The gardens should also have year round production to ensure daily supply of nutrient rich foods.

However, a major challenge in home garden projects in South Africa is translating increased food production into increased household and individual consumption[10], as production is often not consumed but sold to meet cash needs. This means that Home Gardening interventions must focus on improving a households' access to food in a more holistic and sustained systemic manner. Indeed, some challenges to home gardening projects in South Africa include the following[11]:

- Lack of access to secure water supply for irrigation
- Improper or lack of fencing
- Lack of access to a regular supply of quality seed and seedlings
- Poor access to virus-free plant cuttings
- Lack of funds to buy agricultural supplies

For both DAFF and DSD, Household Food Production is seen as a means to provide a continuous supply of sufficient nutritious food, and to increase consumption of essential micronutrients in the desired quantities.

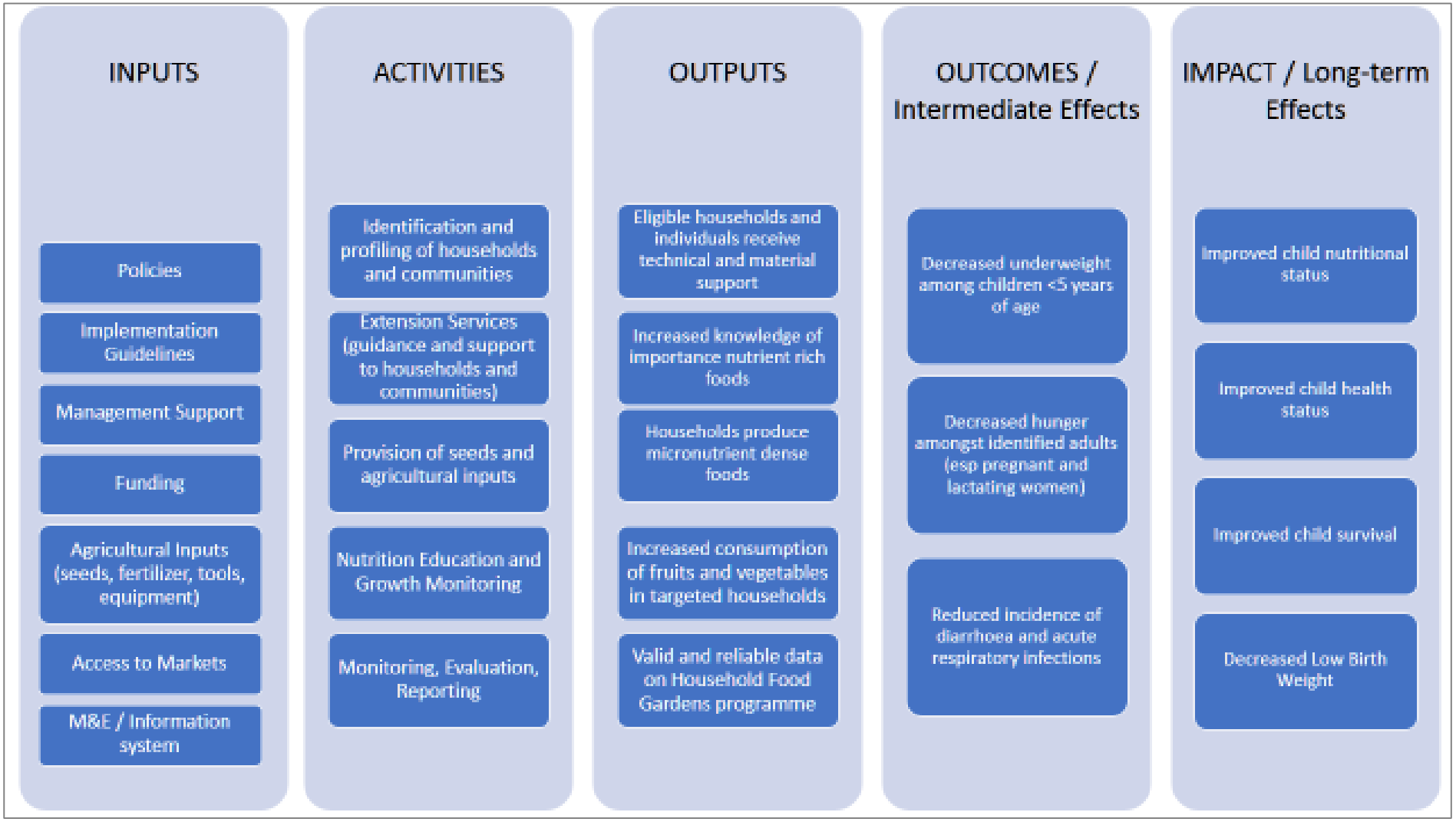
A proposed logic model for the Household Food Production intervention is presented in Figure 8 and discussion of the logic model's elements follow.

Integrated Agricultural Extension, Growth Monitoring, and Nutrition Education

Effective home garden initiatives integrate mutually reinforcing agriculture and nutrition objectives in both design and implementation[12]. Agricultural activities support the production aspects of the project with a focus on the production of foods that provide nutrients missing in the diet. Nutrition components promote behaviour change in terms of increased consumption of nutritionally-rich foods, among other objectives. A key success factor is to link Household Food Production initiatives to growth monitoring activities; this allows large coverage of mothers with children under five years with both agricultural and nutrition education/training[13]. Most successful gardening projects worldwide train their extension workers and village promoters in both gardening techniques and nutrition education.

The agricultural component should promote locally available and acceptable (indigenous) crops, taking into consideration access to land, water and technical assistance, and should be based on low-cost, low-risk technologies. The nutrition component should focus on food preparation, preservation, and cooking methods to ensure optimal consumption of micronutrients.

Figure 8: Logic Model for Household Food Production



The following are the intended behaviour change outcomes of the home garden interventions[14]:

- Increased knowledge of mothers/caregivers of children under five years about the benefits of good nutrition on the growth and health of children
- Increased knowledge and skills amongst mothers/caregivers about how to plant nutrient-rich crops
- Improved food preparation, preservation and cooking methods for optimal consumption of micronutrients.

The impact sought from this intervention is improved health and survival of children under five.

Access to Markets and Transport Infrastructure

Various studies emphasise the importance of access to output markets. Although the focus of Home Gardening is household consumption, gardening takes time from other activities and therefore households should be encouraged to produce a surplus that can be sold for income generation. As a result it is important to have sufficient infrastructure (such as roads and transport) for accessing markets, adequate storage to minimise losses, and access to pricing information.

Gender Specific and HIV/AIDS Support

Gender specific constraints such as access to, and control of, land, finances, markets and women's time should be addressed and support systems provided to enable women make the most out of Home Gardening. In South Africa, the DAFF Integrated Food Security Strategy is aimed at empowering women, youth and the disabled; and supporting their full participation in the agricultural industry. It also aims to ensure that policies and programmes promote women's equal access to, and full participation in, decision-making at all levels and mainstreaming gender perspectives in all policies and strategies.

Effects of HIV/AIDs such as reduced labour, reduced time as households take care of the sick, reduced income as households sell their assets to access medicine and resorting to plant foods that don't require labour but are not necessarily nutritious should be minimised. South Africa has a grant for HIV/AIDs and the private and NGO sectors have Home Based Care Programmes in Communities.

4 POLICY FIT FOR THE LOCAL CONTEXT

In South Africa, agricultural policies have been largely designed to:

- Increase market access, with a particular focus on the emerging and small scale farmers;
- Reduce high costs to market access by poor and small producers.
- Expand public and private investments and partnerships in rural infrastructure, such as building and maintaining rural roads and bridges, small-scale irrigation systems, post-harvest facilities, processing and market facilities and so on.

Some of these policies and legislation relate to home gardening interventions (Table 3). The IFSS in particular provided South Africa with an innovative policy tool to coordinate with a broad range of stakeholders, but many believe the strategy lacks the political clout to make a significant difference in the food-security situation[15].

In the last year, DAFF and DSD developed a new National Food Security Policy in an effort to

strengthen and enhance the effectiveness and impact of the IFSS and IFSNP, and to harmonise and coordinate all food security efforts implemented by various Government departments. The National Policy on Food and Nutrition has set out as its goal to improve South Africa's adequacy and stability to safe and nutritious food at a national and household level, and to "end hunger in SA by 2030"[16].

Table 3: Laws, Policies, and Strategies Relevant to Household Food Production

Year	Responsible Department	Law, Policy, Strategy
Legislation		
1983	DAFF	Agricultural Pests Act, 1983 (Act No. 36 of 1983). This Act provides for measures to prevent the introduction and establishment of pests.
1963	DAFF	Fencing Act, 1963 (Act No.31 of 1963). The Act specifies fencing standards and regulates the relationship between neighbours regarding construction and maintenance of fencing. This legislation has economic impact through minimising risk posed by spread of diseases from one area to the other
1947	DAFF	Fertilisers, Farms Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No.36 of 1947).
Policies		
2013	DAFF / DSD	National Policy on Food and Nutrition (in process)[17] [18]
Strategies		
2002	DAFF	Integrated Food Security Strategy (IFSS)[19]
Special Programmes		
2013	DAFF	Fetsa Tlala ("End Hunger")[17] food production intervention
2009	RDLR	The Comprehensive Rural Development Programme (CRDP)[20]
2008	DAFF	Ilima/Letsema project[21]
2006	DAFF	Integrated Food Security and Nutrition Programme (IFSNP)[22]
2004	DAFF	The Comprehensive Agriculture Support Programme (CASP)
No date	DSD	Sustainable Livelihoods Programme

4.1 Institutional Context and Culture

In its recent annual report, the national DAFF sees its work as contributing to 3 of the Government's 12 key outcomes[23]:

- Outcome 4: Decent employment through inclusive economic growth;
- Outcome 7: Vibrant, equitable and sustainable rural communities contributing towards food security for all; and
- Outcome 10: Protect and enhance our environmental assets and natural resources.

Notably, there is no reference to Outcome 2: A long and Healthy Life for all South Africans, which would link the work of the agriculture sector to better health and nutritional status.

At national and provincial levels, the various Departments of Agriculture support food security and household food production mainly through a sub-programme focused on Farmer Support and/or Food Security. In most of the Annual Performance Plans (APPs), the focus of these sub-programmes is to support small holders to increase their production for eventual marketing, rather than for home consumption.

The DAFF has stewardship over food security for the South African government, but many believe that the Directorate for Food Security is "institutionally weak", with no real ability to compel other DAFF directorates, let alone other government departments, to fall into line with the strategy[15]. Within DAFF, multiple levels are responsible for implementing food security activities, but the linkages between these levels are not clearly delineated, especially for Policy review and oversight (Figure 9).

Other national departments also implement home gardens, including DSD, through its Sustainable Livelihoods Programme, and the Department of Rural Development and Land Reform (RDLR) through its Comprehensive Rural Development Programme (CRDP) which indirectly promotes backyard or household gardens as part of their focus to link recipients of land (through the Land Reform Programme) with DAFF to ensure that household food production is supported where land has been transferred. In addition, the Department of Science and Technology (DST) has a food research unit focused on increasing the profile of nutrition, with an emphasis on indigenisation.

There is no evidence of DAFF and DOH working synergistically in promoting or implementing home gardening for nutrition. All home food production activities under DAFF Food Security focus exclusively on the agricultural aspects of the logic model, and contain no elements of growth monitoring or nutrition education.

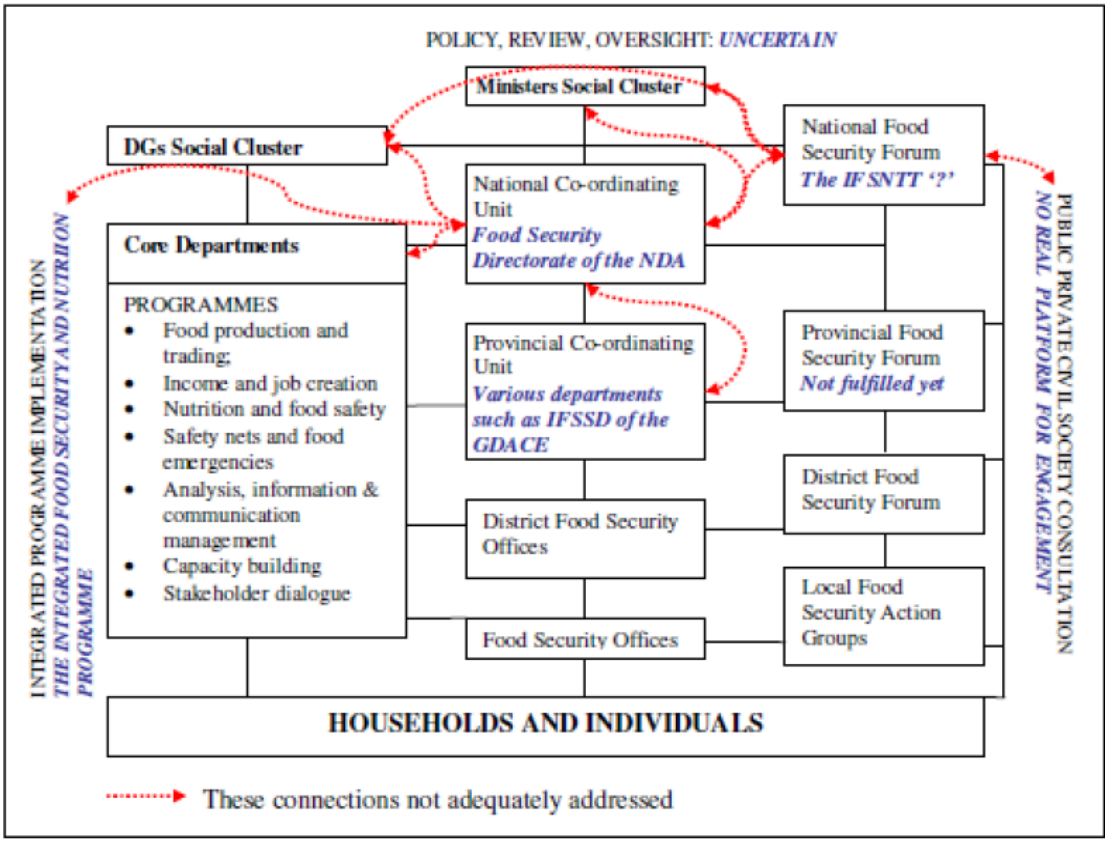
The Integrated Food Security Strategy (IFSS) is the main document to guide and inform Food Security interventions, including home gardens. The vision of IFSS is to attain universal physical, social and economic access to sufficient, safe and nutritious food by all South Africans at all times, but there is limited mention of specific support measures for food security, besides supporting small-scale household agricultural production[15].

At a national level, the DAFF coordinates the Integrated Food Security and Nutrition Task Team which is comprised of representatives from relevant national-level Government departments, i.e. DAFF, DRDRL, DSD, DOH, and DBE. This Task Team is supposed to meet on a quarterly basis, however it is not fully functional, partly due to a lack of indicators that integrate agriculture work with other departments' indicators for measuring the INP-related efforts.

Each of the four provinces have different approaches to promoting household food production:

- In KZN, the Department of Agriculture & Environmental Affairs (KZN-DAEA) has a "One Home One Garden" Campaign. The purpose of the campaign is to promote a culture of household vegetable production in order to enhance food security at a household level. KZN-DAEA partners with the Independent Development Trust provides training on vegetable production, and with the Flanders Government for funding.
- In the Eastern Cape, the Department of Rural Development and Agrarian Reform (EC-DRDAR) implements Food Security programmes at community level under the Siyazondla Homestead Food Production which provides food insecure households with access to small pieces of land for gardening. The main target of Siyazondla are beneficiaries of DSD Food Access interventions (food parcels and soup kitchens), unemployed breadwinners, HIV infected and affected families, households earning less than the accepted minimum social grant level, child-headed households (age 15 years and upwards) and physically challenged people.
- The Western Cape Department of Agriculture's (WC-DOA) Food Security Programme (FSP) uses extension officers, food security officers, Community Agricultural groups, and Community Health Workers to promote home and community gardens. In addition, each year FSP supports 20

Figure 9: Institutional Arrangements for Food Security within the DAFF[24]



historically disadvantaged communities with funding (up to R50, 000 for each community) to start community gardens. Special priority is given to women and youth groups who wish to apply for the funding.

- In the Free State, home gardens are implemented by FS-DARD through extension officers and food security officers. Beneficiaries are identified through community and household profiling.

Changes in leadership are cited as major barriers to implementation, particularly in KZN and EC. In KZN, staffing in the Food Security Directorate has been unstable for the past two years, this has greatly affected implementation. At the time of the interviews in late 2012, the KZN Food Security Directorate was working on a catch-up plan to try and achieve at least the training goals included in its 2012/2013 Business Plan, so that it could report some progress in its Annual Departmental Report.

In the Eastern Cape, respondents noted that food security policies change each time a new Member of the Executive Committee (MEC) is appointed, and plans change regularly as a result – in the past 6 years, the Food Security Programme has changed three times.

The Western Cape on the other hand has more stable leadership in its Food Security Directorate headed by a Director who works closely with district level Food Security Coordinators, Food Security Officers, and Extension Officers who work directly in allocated communities. Community and home gardens are a major activity in the WC.

Most respondents at provincial and national level perceive political turf battles and non-transparent reporting, especially between provincial and national departments, as major blockages to effective

implementation.

4.2 Resource Allocation – Financial and HR

National DAFF believes there are adequate human and financial resources allocated to household food production (home gardening) activities in the country, but because provinces interpret national policies and guidelines differently, the budget allocations and subsequent expenditures for food security and household food production do not follow recommendations. Indeed, 3 of 4 provinces where fieldwork occurred for this evaluation, respondents reported insufficient leadership, human resources, technological resources, and management to effectively implement Food Security and Household Food Production interventions.

Many consider the primary constraint in food security not to be money, but human capacity[15]. The evaluation confirms that most Provincial Agriculture Departments have many vacant food security posts that inhibit implementation. In addition, poor management and leadership of the Food Security programmes have also been noted[15] by analysts and evaluation respondents alike.

The FS-DARD reports that household food production does not get serious attention, and that budget changes and budget cuts have diminished financial resources available for the intervention. The province also needs additional extension assistants, specialised subject matter specialists to support extension officers, and subsidised vehicles for outreach into communities.

In KZN, respondents report ineffective implementation of the Household Food Production Programme because of lack of clear vision on senior management and widespread vacancies in the Food Security Programme. As part of the KZN's anti-poverty programme – entitled Operation Sukuma Sakhe (OSS) – OSS "war rooms" at ward level play a large role in implementing a coordinated food and security response to vulnerable households based on the household profiling done by Community based Care Givers (CCGs). However, food security personnel in the province were cited as not fully participating in the "war room" process, thereby constraining opportunities for including home gardens as part of the integrated case management response. The Provincial Food Security Coordinator and deputies are the only staff employed full time for food security– all other staff (e.g. 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 also working full-time as Extension Officers.

In the Eastern Cape, EC-DRDAR respondents argue that although they have adequate human resources for field level work (with 600 Extension Officers) they are not used effectively. Lack of skills combined with insufficient financial resources limits their ability to address the needs at scale. EC-DRDAR also noted the lack of a well-trained management team at provincial level, as well as a shortage of material resources such as tractors, storage facilities, and infrastructure (such as irrigation schemes). Field-level extension officers also need skills training to effectively implement Food Security interventions. Home gardening is also promoted by the EC-DSD Sustainable Livelihoods programme, whose respondents report a shortage of Community Development Officers to effectively monitor this intervention and a shortages of vehicles for field work. Both the EC-DRDAR Food Security Programme and the EC-DSD Sustainable Livelihoods report diminishing budgets over the last several years.

The WC-DOA reportedly has adequately trained staff to implement agricultural projects and Food Security interventions.

5 FINDINGS: IMPLEMENTATION MODEL /STRATEGY

5.1 Coverage of the Intervention

Little information is available on the current coverage of home gardens supported by the various government departments (DAFF, DSD, or DRDLR), although anecdotally DOA and DSD managers at district and provincial levels report good uptake. The most recent data that could be found is from May 2008 when the Household Food Production Programme (which is not part of CASP, but a separate programme under DAFF) had distributed 15,765 food-production packages and established 6,390 vegetable gardens[15].

DAFF mentioned a variety of factors that limit implementation of gardening interventions, including the poor utilisation of South Africa's indigenous foods/knowledge systems; general lack of gardening experience ("people would rather sell their labour than produce their own food"), and widespread access to social protection (i.e. social grants) that substitute for household agricultural production.

Evidence from the four provinces indicates that the Household Food Production intervention does not directly target households with children below 5 years for nutrition promotion, nor is a comprehensive package (household profiling, seed and implement distribution, and following technical support) being delivered at household and community level. In many cases, oversight and support after seed distribution appears limited due to cost containment measures that constrain travel to communities.

5.2 Standards/ Norms / Guidelines / Protocols

National DAFF does not prescribe implementation models for Household Food Production interventions, and decisions on how to deliver the intervention are made at local level, with each province having leeway to implement as appropriate. Each province mentioned a variety of documents to guide implementation, but most of these are policy level documents, and few appear to guide operations on the ground, with the exception of the Free State documents.

The standards for the agricultural starter packs were not obtainable during the evaluation, but a recent news article[25] described garden starter packs for Gauteng-based beneficiaries as containing fertiliser (i.e. compost), seeds (tomato, beetroot, onion, spinach, beans and carrots), as well as garden implements (spade, fork, rake, hoe, and a watering can).

Table 4: Documents mentioned to guide implementation

KZN	Operation Sukuma Sakhe (OSS) implementation model The Zero Hunger Framework Food Security Policy for South Africa
Western Cape	Integrated Food and Nutrition Strategy Food Security Strategy
Eastern Cape	Provincial Food Security Policy (under review)
Free State	Ilima/Letsema tools for Profiling households Annual Performance Plan Provincial strategic plan Districts Annual Performance Plan

5.3 M&E Systems in Place

At national level, data on individual or household dietary diversity comes mainly from income and expenditure surveys, but reportedly there are issues with the accuracy and reliability of these data over time, and the data is insufficient for DAFF to track what households produce and what they consume vs. sell.

Notably, there is an absence of standardised measures of food security in South Africa, and regularised ways of collecting and reporting them at provincial, district, and local levels[26]. Table 5 shows the various M&E indicators contained in provincial Agriculture APPs for tracking support to household food production and the establishment of gardens. Notably, there are no indicators to track food preservation activities or the intervention's effects in terms of food consumption or nutritional status.

Despite the establishment of these indicators, data only exists for EC and FS. WC has established targets for its indicators to be reported in future years. The KZN APP only presents the definitions of the indicators and does not report any data.

Across the four provinces and at national level, there is an absence of indicators disaggregated by the key demographic target group – i.e. pregnant women and children under 5.

These gaps restrict the ability of policy makers to address food insecurity, and constrains their ability to identify interventions appropriate to different situations and needs.

Table 5: Indicators for Household Food Production by 4 Provinces as presented in APPs

Indicator	WC	KZN	FS	EC
No. of verified food insecure households supported	X	X	X	X
No. of food security status reports compiled	X	X	X	X
Projects supported / established				
No. of community food security projects supported	X			
No. of school food gardens supported	X			
No. of public/community institutions (schools, churches, clinic) gardens established			X	
No. of community gardens established		X		
No. of households gardens established		X		
No. of tunnels established		X		
No. of institutional gardens established		X		
No. of hectares planted to field crops towards the attainment of 300,000 ha established to produce food in order to support poor house-holds & smallholder farmers				X
People Reached				
No. of participants in school food gardens	X			
No. of participants in community food security projects	X			
Mobilisation				
No. of food security awareness campaigns held	X			
No. of provincial food security forum meetings			X	
Staffing				
No. of people trained within the Food Security Programme		X		

Provincial-level respondents provided additional information on the M&E systems used in their provinces for household food production:

- In FS, M&E focuses on the profitability of projects with small farmers, though again respondents do not consider reports to be adequate. Respondents argue that there is not enough time to

give attention to data collection and data is not verified. Thabo Mofutsanyane district DOH is in the process of designing M&E tools for tracking nutrition in the district; currently they use MAUC tapes to monitor progress at community level.

- Although the KZN-DAEA struggled to implement the Food Security Programme successfully in 2012/13, they have indicators to track implementation, including (i) the number of community trainings conducted on gardening, (ii) number of agricultural packs distributed, and (iii) the number of households with backyard gardens. However, there is no monitoring of actual household food production, nor is feedback collected from beneficiaries.
- The EC-DRDAR uses 4 indicators to monitor the home food production intervention: (i) number of beneficiaries trained, (ii) number of verified food insecure households, (iii) the beneficiary group size of women, youth and disabled people, and (iv) number of homes supported. In addition, each month the DOH reports to EC-DRDAR on the number of vegetable gardens started at hospitals and clinics.

5.4 Institutional Capacity for Implementation

In South Africa, home garden initiatives are meant to target vulnerable food insecure households comprised of women, children and the elderly in rural and urban settings. Ideally, households with children under five years along with other nutritionally at-risk individuals (HIV positive and malnourished individuals) should be the main target in both rural and urban settings.

However, the practice on the ground is to target subsistence farmers as part of household profiling exercises[27], who then get seeds (concentrated on getting vegetable seeds) and production technology and equipment to intensify their production, based on loosely defined poverty criteria. There is no evidence of any province prioritising households with young children as part of the programme.

At local levels, both Agriculture and DSD profile and target households and communities for gardening support. But few respondents mentioned any coordination between the two departments, and in some communities in the EC there were reports of both departments profiling and supporting the same communities.

Problems with seed distribution were mentioned by a few respondents. In FS, limited seed supplies were reported; at the time of the interview one district had no seeds available to distribute. In other provinces, respondents indicated that seeds are sometimes delivered out of the season to be planted.

The FS-DARD distributes agricultural starter packs (seeds and home gardening tools) to households that are “red-flagged” during profiling. There doesn’t appear to be any exit criteria for the programme, and as a result, once a household is identified, seeds and gardening implements are provided year-in and year out. In addition, some FS managers indicated that seeds that they had distributed were eventually sold rather than used for gardens, suggesting poor household targeting or follow-up support on the part of FS-DARD.

The KZN “One home One garden” initiative aims to revive family participation in agrarian reform where they feed themselves and sell the excess produce to buy other essential needs. However, district respondents confirmed delays in delivering seeds which adversely affected the ability of communities to plant in the correct season, in some instances, seeds delivered are outside the order specification for seeds that thrive in that environment.

In the EC, the researcher observed many gardens in rural areas in communities and at clinics; however, maize seems to be the most commonly grown plant (not vegetables). One exception was the Umzimvubu Home Gardening Project where beneficiaries grow a variety of foods and vegetables. The evaluation found little observable evidence of home gardening in urban or peri-urban areas visited across the 4 provinces.

National DAFF notes an insufficiency of field research on low-cost but high-value production technologies (e.g. permaculture and organic) especially in resource-poor environments (e.g. low water resources in the Northern Cape).

Poor commitment of Extension Officers was also highlighted by FS respondents as an impediment to successful implementation of Household Food Production initiatives.

One interesting finding comes from district and local KZN-DAEA officers, who pointed out that because they are originally farmers, they don't fully understand their role in food security. This points to the need for more emphasis on building the capacity of Agriculture staff in both food security and nutrition, and not just production.

5.5 Coordination, Referrals, Linkages, and Partnerships

The successful implementation of a comprehensive "package" of nutrition interventions to targeted populations hinges on 3 implementation principles:

- strong strategic coordination between government departments,
- strong referrals between government departments at implementation level, and
- strong linkages and partnerships with community-based organisations or other institutions to extend the reach directly to households.

Each of these are further explored below.

5.5.1 Government Coordination

At all levels, Agriculture, Rural Development and DSD all promote household gardens, but there is a general lack of well-defined coordination structures to maximize each departments' investments.

At national level, there is little coordination between DAFF, DSD, and Rural Development government departments around food security, nutrition, or household food production. As mentioned earlier, DAFF historically promoted gardens as a key strategy under its Food Security Programme, but its new strategy has no mention of gardens and language around food security is focused by and large on increasing the profitability of household food production for sale. DSD, through its Sustainable Livelihoods programme, presumably is filling this gap, but there is no formal strategy in this regard.

Communication between the national departments around this and other food/nutrition interventions is weak. One respondent felt that because nutrition programme managers are only accountable to their department, this contributes to a lack of coordination between departments at national and provincial level. According to a DAFF respondent, an example of poor coordination is the disconnect between DSD's and DOH's (more conventional) nutrition messages (that exclude reference to indigenous foods like goat meat, goat milk or goats cheese) and DAFF's emphasis on promoting indigenous food production.

Some provinces have coordination structures where home gardens and other food interventions should be coordinated.

- The FS-DARD reports that it coordinates with provincial DSD, DOH, Cooperative Governance, Human Settlements and Traditional Affaires (COGHSTA); and Mangaung Metropolitan Municipality. DARD assesses school ECD and women's project and nominates them for prizes. In addition, it also creates implementation forums at district level with relevant stakeholders and the DRDLR to avoid duplication of effort.
- The KZN-DAEA has linkages with other government departments through its OSS "war room" meetings at district and community level. Linkages in uMkhanyakude district are stronger when compared to uMgungundlovu because district Extension Officers regularly attend the war room meetings.
- The various WC departments appear to have strong links at provincial level; however several respondents believe coordination at district and community level can be improved particularly between the DOH, DSD and FS-DARD services to ensure linkages in under-nutrition and food insecurity cases.
- In the Eastern Cape, the EC-DRDAR assists the DOH in establishing vegetable gardens at clinics and hospitals. EC-DRDAR also provides training to beneficiaries of DSD Sustainable Livelihoods programmes and supports ECD centres to establish vegetable gardens. The newly launched Provincial Integrated Anti-Poverty Strategy (PIAPS)[28] will further support coordination of food and nutrition activities across government departments, including home gardens and household food production.

At implementation level, there is some evidence of linkages between government departments, such as the provincial/district agriculture departments supplying seeds to DOH and DSD for clinic or ECD gardens, as well some beneficiaries supplying their vegetables to DSD soup kitchens and the FoodBank. But there are a few examples where there has been duplication of effort between the food security work of DSD and DOA, as well as some municipalities who also co-finance irrigation schemes and buy tractors for communities.

5.5.2 Referrals

Few referrals were identified in relation to home gardening specifically; rather most are for general agricultural support to vulnerable households.

In the EC, DSD and local government refer food insecure communities and households to EC-DRDAR for assistance with food production.

In FS, DARD's referral system works through the district Food Security Officers and Coordinators/Extension Officers who work closely with other departments to identify food insecure and malnourished households. The referral system is reportedly effective because the war room process facilitates integration with other departments.

In KZN, Community-based Care Givers (CCGs) identify vulnerable households and report these to the OSS war rooms. Government services are then deployed to the households. Alternatively, children are identified in health facilities and linked to a social worker and CCGs who then link with Agriculture for support at the household level.

5.5.3 Linkages with NGOs, Civil Society, and Private Sector

Linkages with NGOs for implementing home gardens were not commonly mentioned by respondents in the four provinces. This is a gap that needs attention for expanded and sustained implementation.

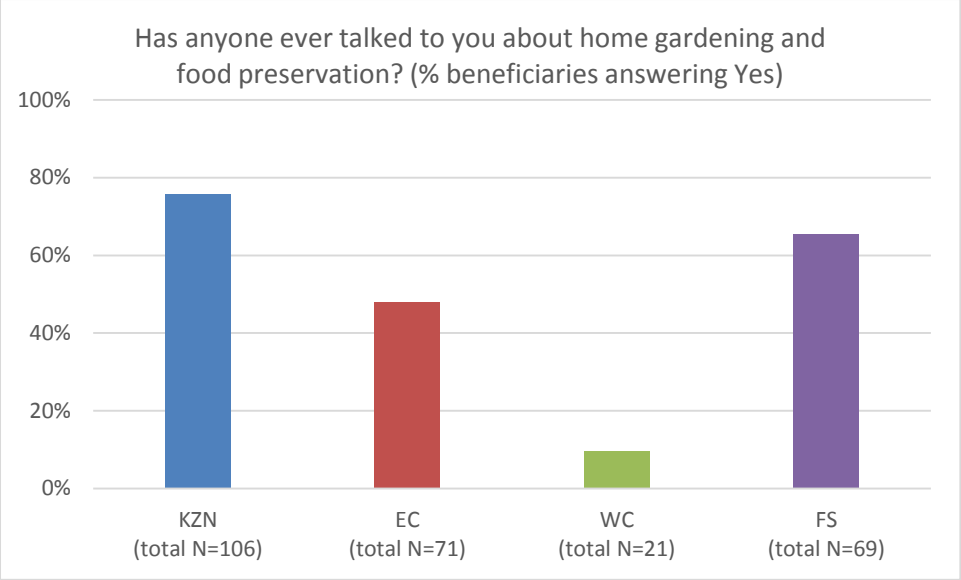
Respondents mentioned a wide range of organisations that support household food production in South Africa, but only a few are listed below.

- ABSA supports the EC-DSD for the Orange Flesh Sweet Potato project in the EC, an initiative that empowers communities, especially women producers, to achieve economic independence and food security.
- AFRA (the Association for Rural Advancement) is an NGO working on land rights and agrarian reform in KZN.
- Anglo-American funded the purchase and installation of Jojo water tanks for home gardens through Mzimvubu Nurseries
- CARE SA's flagship programme, Integrated Access to Care and Treatment (iACT), advocates for PLWHA to start support groups for home and community based gardens to supplement the food parcels they receive.
- Catholic Communities Service supplement resources and strengthen profiling of households that are food insecure in the FS.
- Food and Trees for Africa runs a programme called Food Gardens for Africa which supports communities and schools to develop Permaculture (natural) food gardens. FTFA provides funding, training, and other resources such as Permaculture Starter Packs. Support is offered over a 3-year period.
- KwaDindi Agricultural Project in KZN supports the development of mushroom farms for vulnerable households and communities.
- Lebone Village, an NGO in the FS, supports OVCs by providing a safe home environment that will positively contribute to the children's upbringing. Their nutrition and food programmes include vegetable garden tunnels, a chicken farm and food parcels issued through the local health facility.
- Masiphile Food Garden Project, is a community garden project in Khayelitsha, WC.
- Mzimvubu Nurseries, an agriculture home gardening project in EC, promotes and supports home vegetable gardens in villages around Port St Johns and Lusikisiki. Project assistance is targeted to pregnant women, mothers of children under 5 only when households are referred by the DOH.
- Nestle funds prizes for best performing community farming enterprises in the FS.
- Save the Children supplement resources and strengthen profiling of households that are food insecure in the FS.
- Small Projects Foundation support health facilities in the EC with: (i) seedlings and training to start clinic vegetable gardens, and (ii) training NGO community health workers (CHWs) on nutrition.
- Umcunube NGO establishes clinic gardens and community gardens in the community of King Sabatha Dali ndyebo (KSD), in the EC.
- World Vision, an international NGO, provides garden implements for ECD gardens in the EC, and agricultural inputs in the FS.

5.6 Beneficiary Engagement

Beneficiary focus groups show that Information about Household Food Production / Home Gardening Programme is inconsistent across the provinces.

Figure 10: % of Beneficiaries who have been given Information about Home Gardening



In KZN, most respondents knew about home gardens and that the government would provide them with free seeds. A few respondents indicated that they already had gardens, or that they would only focus on the cultivating gardens after their babies were born. Others were of the view that community attitudes have changed over time, and most people prefer social grants to farming or gardening.

In FS, awareness levels were also high, but particularly in Fezile Dabi district, where more FGD participants mentioned that they had gardens.

In EC, fewer beneficiaries reported receiving information around gardens, but that is most likely because most reported already having home gardens, and indicated their usefulness for supplying food when there was a lack of money. However, photos of gardens taken by the EC researcher show that many are planted with maize rather than micro-nutrient rich vegetables.

Few WC beneficiaries (only 10%) mentioned that they had been educated on the importance of household food production, but this data is largely incomplete. One focus group in WC indicated that gardens were for others who could provide the necessary attention to nurturing the gardens.

Beneficiaries in EC and KZN report receiving more information from health facilities about the benefits of gardening compared to beneficiaries in WC and FS. Beneficiaries who live in informal settlements or urban areas generally do not have space to grow gardens, and therefore miss out on the opportunity to establish a garden even if they are food insecure[29].

Sometimes efforts to promote crops are not fully aligned with community needs. For example, respondents from one ECD centre in KZN reported attending a meeting held by Agriculture Extension Officers where they were taught about preserving peaches and given free peach seeds; however, these respondents didn't find the meeting beneficial as they don't plant peaches in their community.

5.7 Communication about the Intervention to the General Public and within Government itself.

According to one national-level respondent, there is generally poor communication within all government departments around new policies or revised policies and initiatives, and this adversely affects implementation of all interventions.

In addition, there is a recognised need to improve communication between government and NGOs around food security, especially for greater engagement and coordination, and information sharing, and for the government to provide more detailed programme information to the public.

> *"There have been cases where there is no information available about how, where, when and by whom a Food Security Programme, for instance, is going to be implemented. There is a call for government to provide useful information concerning food security interventions such as community-driven food security enterprises that can stimulate economic growth, funding for food security proposals and providing practical manuals to guide people in food gardening, livestock keeping and accessing grants or markets. It is of no use to provide seed and fertilizer starter packs to someone that does not know how to grow seeds and how to utilise the harvest to ensure food security"*[30].

Respondents mentioned a variety of communication strategies and channels used for communication with the general public – community profiling events, stakeholder engagement forums and through Field Officers. In KZN, programmes are promoted at provincial events and through local radio stations. Most respondents believe that the communication is clear, credible, simple, in local language, and adequately addresses local knowledge and beliefs. In FS, ECD centres and clinics were educated about gardens, and clinics were then requested to educate pregnant women and mothers of children when they visited health facilities. Implementation is also facilitated through awareness campaigns and workshops for communities.

However, this communication has not always resulted in successful implementation of food security and home garden programmes. Respondents in EC, FS, and WC all indicated difficulty in convincing communities to produce their own food. A further complicating factor for communication to the general public is the strong influence of commercial food sector's intensive advertising on consumer perceptions, which can counter the messages around food and nutrition given by the Government.

6 RESULTS

There is little evidence that the home garden interventions are nutrition-sensitive or targeted at households with pregnant women or children under 5. DAFF staff have little to no knowledge of nutrition, and there is an absence of activities specifically aimed at increasing nutritional status (e.g. nutrition education or growth monitoring). While the programme aims to address food security, the focus is on growing more food for either consumption or marketing, rather than improving the quality and diversity of the diet and increasing consumption for improved nutritional status.

Targeting criteria used are based on poverty, food security, HIV, or other demographic (child headed households) variables that are associated with poverty and food insecurity. There are no nutrition-specific criteria used to identify potential beneficiaries of the intervention. There is no specific targeting of pregnant women or households with children under 5.

Institutional Context

The DAFF Directorate for Food Security is "institutionally weak" with little ability to compel other DAFF directorates, let alone other government departments, to fall into line with the Food Security Strategy. Political differences between provincial agricultural departments and national DAFF are manifested in inconsistent management and oversight, and frequent and sudden changes in food security and implementation strategies. In addition, staff shortages and budget cuts at provincial level have limited the provincial agricultural departments' ability to provide a comprehensive package of home gardening services to beneficiaries, and the focus appears to be on providing seeds and implements only and not emphasising follow-on support in home gardening efforts. Procurement issues have also contributed to stock outs of seeds along with poor timing of distribution (i.e. seeds outside the planting season) in some cases. Photos of home gardens in the EC demonstrate that many gardens are dominated by maize, rather than micro-nutrient rich vegetables. Combined, these factors explain the limited extent of implementation that appears to have occurred.

Coordination between Government Departments

Inter-department linkages between the home gardens programme and other nutrition interventions are weak at national, provincial, and district levels. In KZN, however, there are established linkages at local (i.e. ward) level through the OSS war rooms, but KZN-DAEA staff do not regularly attend these meetings, thereby weakening the coordinated case management response.

One area where simple coordination could occur is modifying DOH's and DSD's nutrition messages to include indigenous food products that are being promoted by DAFF.

M&E systems

M&E is a weakness for this project. There are no standardised data reported for the coverage of implementation or for implementation effects. Moreover, the profiling tools used to determine eligibility do not capture information around the pregnancy status of women in the household, or the age profiles of the children, thereby precluding any targeting of pregnant women and young children.

Beneficiary Engagement

Reportedly there is good uptake of household food production, especially in the Eastern Cape compared to other provinces. Awareness of the seed distribution programme is high, but those who live in informal settlements report that they do not have space to grow gardens.

Many respondents pointed to beneficiaries' reluctance to garden due to changing cultural and social factors in the country. This may be partly explained by the fact that many South African households use subsistence farming as a fall-back activity from which they can seek benefit when it suits them and when they are able to; but when it is unnecessary or inconvenient, households reportedly readily abandon farming[31]. For many in South Africa, farming as a main source of food is a sign of extreme poverty[32].

7 CONCLUSIONS

At national level, the South African government has clearly set strategic objectives to reduce poverty and malnutrition in the country. However there is little evidence to suggest that the various activities of the Food Security Programme, including household food production/preservation, have

been successfully implemented or have achieved their intended outcomes.

Promotion of household food production is weak in South Africa. There is an absence of leadership, vision clarity, and programme management for food security, with many respondents believing that the intervention is not prioritised. Both diminishing budgets and staff shortages for the Food Security Programme have negatively affected implementation.

Moreover, there is little to no "nutrition sensitivity" in the delivery of the Household Food Production/Home Gardens Programme. The most vulnerable groups for malnutrition – pregnant women and young children – are not specifically targeted, and there is little to no evidence that the production of micro-nutrient rich vegetables and fruits are prioritised. In fact, photos taken during the evaluation show many gardens growing maize rather than vegetables. There are no complementary nutrition activities (such as growth monitoring or nutrition education) included in the intervention. And because not one respondent mentioned any activities related to food preservation, it can only be concluded that no support is being provided to families in this regard.

Many beneficiaries know that the government supports household food production, including home gardening, and there is some face-to-face communication around the benefits of home gardening. However, uptake of the intervention is weak due to a variety of factors – poor follow-on support from Food Security Officers once seeds have been distributed, cultural shifts away from farming (for various social and economic reasons), and a strong influence of marketing from food companies.

8 RECOMMENDATIONS

1. Emphasise "nutrition-led agriculture" in its new Food Security Policy with a focus on (i) incorporating nutrition objectives for agricultural activities and (ii) targeting pregnant women and households with young children (under 5) for all household food production activities.
2. Strengthen the nutritional composition of seed packs to ensure that they are meeting micro-nutrient objectives.
3. Add growth monitoring and nutrition education activities to the Home Gardening Programme.
4. Strengthen inter-departmental coordination at all levels to encourage better leveraging of resources across government departments.
5. Adapt DOH and DSD nutrition messages to include traditional foods promoted by DAFF.
6. Ensure that all malnutrition cases identified in health facilities are linked to gardening interventions, and all vulnerable populations identified by agriculture or social welfare for home food production are linked to DOH and DSD nutrition services.
7. Create stronger linkages with NGOs, CBOs and the private sector to better provide follow-up support of gardening projects at household level.
8. Fill vacant food security posts at all relevant levels.
9. Create a robust M&E system to better track food security and household food production implementation at activity, output, and outcome levels. Indicators should be able to be disaggregated by the key target groups (women and children under 5).
10. Strengthen support to families and communities around food preservation.

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.

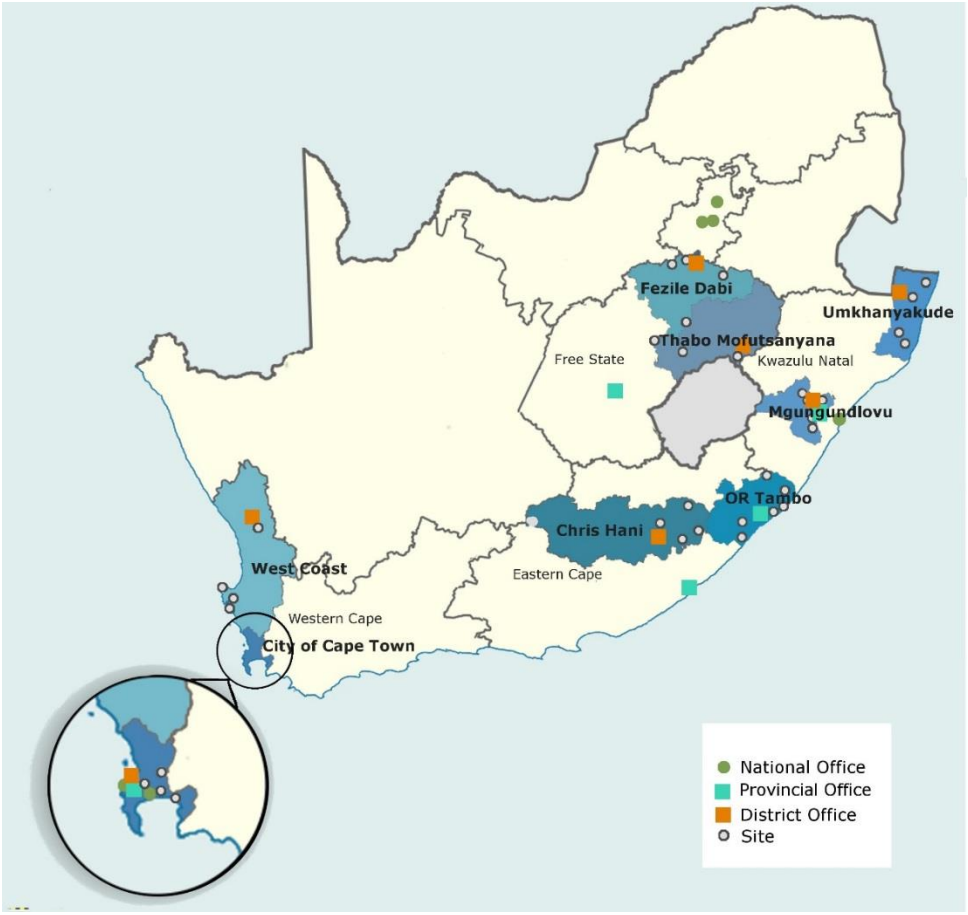
DISTRICTS INCLUDED IN THE SAMPLE

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

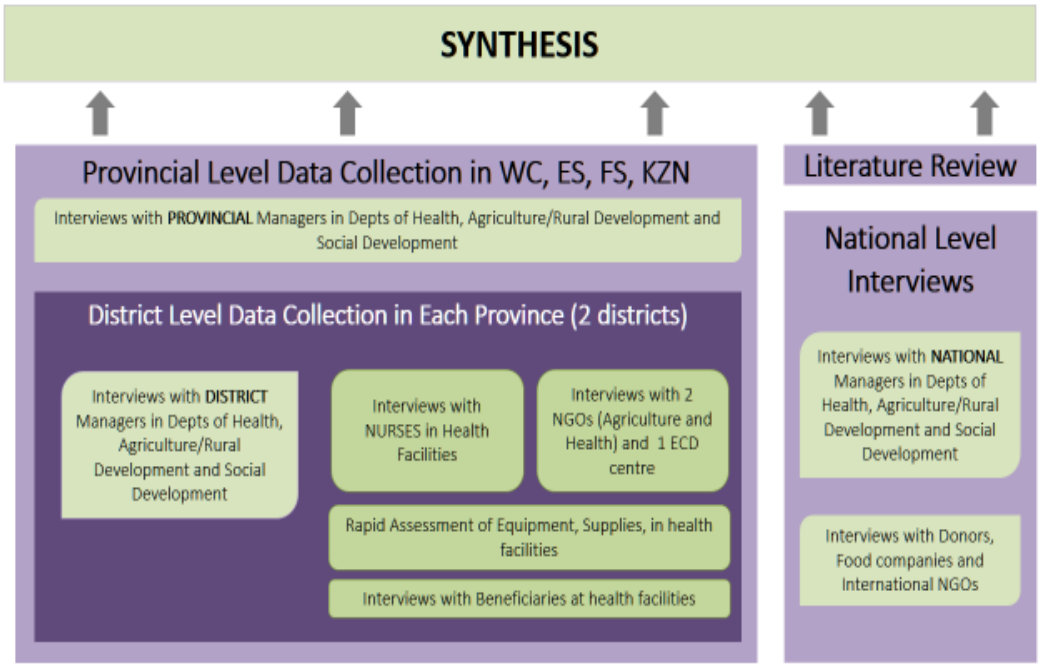
DATA COLLECTION METHODS

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.

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