TACKLING UNDERNUTRITION IN ZAMBIA

Nutrition Audit of DFID Zambia Programmes

SEPTEMBER 2012

ZAMBIA NUTRITION AUDIT FOR THE DFID
Report from the Maximising the Quality of Scaling up Nutrition Programmes (MQSUN)

About Maximising the Quality of Scaling up Nutrition Programmes (MQSUN)

MQSUN aims to provide the Department for International Development (DFID) with technical services to improve the quality of nutrition-specific and nutrition-sensitive programmes. The project is resourced by a consortium of eight leading non-state organisations working on nutrition. The consortium is led by PATH.

The group is committed to:

- Expanding the evidence base on the causes of undernutrition
- Enhancing skills and capacity to support scaling up of nutrition-specific and nutrition-sensitive programmes
- Providing the best guidance available to support programme design, implementation, monitoring and evaluation
- Increasing innovation in nutrition programmes
- Knowledge-sharing to ensure lessons are learnt across DFID and beyond.

MQSUN partners are:

- Aga Khan University
- Agribusiness Systems International
- ICF International
- Institute for Development Studies
- International Food Policy Research Institute
- Health Partners International, Inc.
- PATH
- Save the Children UK

Contact

PATH, 455 Massachusetts Avenue NW, Suite 1000
Washington, DC 20001 USA
Tel: (202) 822-0033
Fax: (202) 457-1466

About this publication

This report was produced by ICF International, to undertake a Nutrition Audit for the Department for International Development (DFID) Zambia, through the Department for International Development (DFID)-funded Maximising the Quality of Scaling up Nutrition Programmes (MQSUN) project.

This document was produced through support provided by UKaid from the Department for International Development. The opinions herein are those of the author(s) and do not necessarily reflect the views of the Department for International Development.
# Table of Contents

List of Acronyms ........................................................................................................ iv

Executive Summary ..................................................................................................... vi

1. Background .............................................................................................................. 1

2. Implications of malnutrition .................................................................................... 0

   2.1 Addressing malnutrition in Zambia ................................................................. 0

       2.1.1 Policy context ....................................................................................... 0

       2.1.2 Increased focus on nutrition ................................................................. 1

       2.1.3 Rationale for nutrition audit ............................................................... 2

3. Approach ............................................................................................................... 0

   3.1 Methodology .................................................................................................... 0

4. Assessment of opportunities for integrating nutrition across DFID Zambia programmes ...... 0

   4.1 DFID mandates in Zambia ............................................................................ 0

   4.2 Cross cutting programmes ............................................................................ 0

       4.2.1 Growth & poverty reduction grant - budget support (£58m 2012-2014) .... 0

       4.2.1.1 Opportunities for integrating nutrition ............................................. 3

       4.2.2 Education sector support programme (new) ........................................ 3

       4.2.2.1 Feasibility for inclusion ................................................................ 3

       4.2.2.2 How to implement the suggested indicators .................................... 3

   4.3 Governance ...................................................................................................... 4

       4.3.1 Democratic accountability and representation ...................................... 4

       4.3.1.1 Opportunities for integrating nutrition ............................................ 4

       4.3.1.2 Feasibility for inclusion .................................................................. 5

       4.3.1.3 How to implement .......................................................................... 5

       4.3.2 Economic advocacy programme ......................................................... 5

       4.3.2.1 Opportunities for integrating nutrition ............................................. 6

       4.3.2.2 Feasibility for inclusion .................................................................. 7

       4.3.2.3 How to implement .......................................................................... 7

   4.4 Human development ....................................................................................... 8

       4.4.1 Social cash transfer expansion programme .......................................... 8

       4.4.1.1 Opportunities for integrating nutrition ............................................ 9

       4.4.1.2 How to implement .......................................................................... 9

       4.4.2 Nutrition programme (£17m 2011-2016) ............................................. 9

       4.4.2.1 Opportunities for integrating nutrition ............................................ 9

       4.4.2.2 Feasibility for inclusion .................................................................. 10

       4.4.2.3 How to implement .......................................................................... 10

       4.4.3 Scaling up family planning programme (new programme, £10 m, 2012-2016) .... 10

       4.4.3.1 Opportunities for integrating nutrition ............................................ 11

       4.4.3.2 Feasibility for inclusion .................................................................. 11

       4.4.3.3 How to implement .......................................................................... 12

       4.4.4 Adolescent girls empowerment programme ....................................... 12

       4.4.4.1 Opportunities for integrating nutrition ............................................ 13

       4.4.4.2 Feasibility for inclusion .................................................................. 14

       4.4.4.3 How to implement .......................................................................... 14

       4.4.5 Human resource for health programme (Not yet approved) .................. 14

       4.4.5.1 Opportunities for integrating nutrition ............................................ 15
4.4.5.2 Feasibility for inclusion........................................................................................................15
4.4.5.3 How to implement..............................................................................................................15

4.4.6 Malaria and child health programme ..................................................................................16
4.4.6.1 Feasibility for inclusion.......................................................................................................17
4.4.6.2 How to Implement .............................................................................................................17

4.4.7 Wealth creation – rural markets .........................................................................................17
4.4.7.1 Opportunities for integrating nutrition ..............................................................................18
4.4.7.2 Feasibility for inclusion.......................................................................................................18
4.4.7.3 How to implement.............................................................................................................18
4.4.8 Costs for implementation and coverage .............................................................................19

5. Barriers preventing nutrition integration into on-going programmes ......................................20
  5.1 Capacity, knowledge and awareness ......................................................................................20
  5.2 Data base for nutrition ...........................................................................................................20
  5.3 Limited availability of trained nutritionist at different levels ................................................20
  5.4 Commodities for child feeding .............................................................................................21
  5.5 Collaboration and advocacy linkages for nutrition .................................................................21

6. Key literature .............................................................................................................................22

Annex 1 List of people met ............................................................................................................24
Annex 2: DFID Partners .................................................................................................................26
Annex 3: Indicators Proposed for Inclusion in Programme Logframes ........................................27
**List of Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT/ZISSP</td>
<td>Abt Associates Zambia Integrated Systems Strengthening Project</td>
</tr>
<tr>
<td>CHW</td>
<td>Community Health Workers</td>
</tr>
<tr>
<td>CSO</td>
<td>Central Statistics Office</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil Society Organization</td>
</tr>
<tr>
<td>CSPR</td>
<td>Civil Society for Poverty Reduction</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>EAP</td>
<td>Economic Advocacy Programme</td>
</tr>
<tr>
<td>EAZ</td>
<td>Economic Association of Zambia</td>
</tr>
<tr>
<td>EMLIP</td>
<td>Essential Medicines Logistic Improvement Programme</td>
</tr>
<tr>
<td>EPR</td>
<td>Epidemic Preparedness and Responsiveness</td>
</tr>
<tr>
<td>GRZ</td>
<td>Government of the Republic of Zambia</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>HRIS</td>
<td>Health Resources Information System</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, Education and Communication</td>
</tr>
<tr>
<td>IYCF</td>
<td>Infant and Young Child Feeding</td>
</tr>
<tr>
<td>JCTR</td>
<td>Jesuits Centre for Theological Reflection</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td>MESVTEE</td>
<td>Ministry of Education, Science, Vocational, Technical Early Education</td>
</tr>
<tr>
<td>MOCDMCH</td>
<td>Ministry of Community Development Mother and Child Health</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>MOFNP</td>
<td>Ministry of Finance and National Planning</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MP</td>
<td>Member of Parliament</td>
</tr>
<tr>
<td>NFNC</td>
<td>National Food and Nutrition Commission</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organization</td>
</tr>
<tr>
<td>NHSP</td>
<td>National Health Strategic Plan</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>PMEC</td>
<td>Payroll Management and Establishment Control</td>
</tr>
<tr>
<td>PMECP</td>
<td>Payroll Management and Establishment Control Project</td>
</tr>
<tr>
<td>PSCAP</td>
<td>Public Service Capacity Building Programme</td>
</tr>
<tr>
<td>RDT</td>
<td>Rapid Diagnostic Test</td>
</tr>
<tr>
<td>SNDP</td>
<td>Sixth National Development Plan</td>
</tr>
<tr>
<td>SUN</td>
<td>Scaling Up Nutrition</td>
</tr>
<tr>
<td>TA</td>
<td>Technical Assistance</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>UNZA</td>
<td>University of Zambia</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>ZGF</td>
<td>Zambia Governance Foundation</td>
</tr>
</tbody>
</table>
Executive Summary

This report presents the findings from the Nutrition Audit undertaken from June-July 2012 for the Department for International Development (DFID) Zambia. The objectives for the audit were:

1. To assess and identify the extent to which DFID Zambia’s current activities and programmes already make a contribution to reduce under-nutrition in Zambia (policy and operations) – i.e. to have a specific nutrition objective or indicator, which may be nutrition specific or nutrition sensitive
2. To assess the potential for scaling up DFID Zambia’s existing programmes to make a contribution to reduce under-nutrition in Zambia through revisions to design and to make practical and costed recommendations of how to incorporate potential scaling-up opportunities
3. To assess the geographical spread of DFID Zambia's programmes which have existing or future potential to reduce under-nutrition and to determine the extent to which synergistic effects of programmes can be achieved
4. To assess the feasibility (and estimate the cost/benefit in nutritional terms) of integrating nutrition outcomes into the design of new DFID Zambia programmes
5. To identify appropriate nutrition indicators (and the source of baseline/monitoring data) that can usefully be integrated into existing programmes
6. To build the capacity of different teams in the office on nutrition by raising awareness about the need for a multi-sectoral approach, short- and long-term, to tackle under-nutrition

The report makes recommendations for the inclusion of nutrition-sensitive activities in all of DFID Zambia’s programmes including governance, human development and cross-cutting programmes. It provides details on the opportunities, feasibility and “how to” for inclusion for each of these programmes. For each recommendation, a timeline and cost estimate is provided. In addition, indicators are proposed to measure nutrition outcomes achieved through the integration of these recommendations. On the following page, Table 1 provides a summary table of the opportunities identified through the audit.
Table 1: Programmes and areas for nutrition integration

<table>
<thead>
<tr>
<th>Programme</th>
<th>Opportunities to extend nutritional impact</th>
<th>Feasibility*</th>
<th>Cost</th>
<th>Impact*</th>
<th>Focus**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-Cutting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty Reduction Budget Support (PRBS)</td>
<td>• None</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Sector Support Programme</td>
<td>• Implement nutritional screening of pre-school children (up to 6 years of age)</td>
<td>M</td>
<td>$36,000 (nutrition education curriculum costing only – other costing data not available)</td>
<td>H</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>• Improving sector dialogue and coordination at national level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Incorporate nutrition education into domestic science curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic Accountability and Representation Programme (DARP)</td>
<td>• Build awareness of nutrition issues and policy implications for MPs</td>
<td>M</td>
<td>$170,747</td>
<td>M</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Advocacy Programme (EAP)</td>
<td>• Promote livelihood strategies and food diversification as opposed to maize cropping, through workshops with think tanks</td>
<td>L/M</td>
<td>$190,100</td>
<td>M</td>
<td>N</td>
</tr>
<tr>
<td>Human Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Cash Transfer (SCT)</td>
<td>• Display nutrition awareness messages (from the 1000 days programme) at points of cash transfer collection/voucher redemption</td>
<td>H</td>
<td>$195,856</td>
<td>M</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>• Organize nutrition awareness “melas” with a focus on BF and complementary feeding, including cooking demonstrations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Display nutrition awareness messages (from the 1000 days programme) at points of cash transfer collection/voucher redemption</td>
<td>H</td>
<td>$195,856</td>
<td>M</td>
<td>Y</td>
</tr>
<tr>
<td>Nutrition</td>
<td>• Promote availability of complementary food in the country</td>
<td>H</td>
<td>Within existing budget</td>
<td>H</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>• Promote fortification as public health intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Build capacity for policy support and programme implementation for nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scaling Up Family Planning</td>
<td>• Link post-partum family planning with information on infant feeding practices</td>
<td>H</td>
<td>$85,188</td>
<td>M</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>• Add a counselling module about child feeding practices or provision of “sprinkles” to FP clients with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme</td>
<td>Opportunities to extend nutritional impact</td>
<td>Feasibility*</td>
<td>Cost</td>
<td>Impact*</td>
<td>Focus**</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------------------------------------</td>
<td>--------------</td>
<td>-----------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
</tbody>
</table>
| **Adolescent Girls Empowerment Programme (AGEP)** | • Develop nutrition module for mentors; train mentors  
• Measure the Hb, Vit A and Iodine levels to determine micronutrient deficiencies in adolescents | M            | Only partial costing available | H       | TBD (once costing data is available) |
| **Human Resources for Health (HRH)**           | • Disseminate 1,000 Day Programme messages through CHAs  
• Ensure key nutritional supplies are in place for CHAs | H            | $49,125               | H       | Y       |
| **Malaria and Child Health**                   | • Include nutritionist on multi-sectoral committee for commodity procurements  
• Advocate for the inclusion of nutritional supplements in the Essential Medicines Logistic Improvement Programme (EMLIP) | L            | Within existing budget  | L       | N       |
| **Wealth Creation – Rural Markets**            | • Link Musika networks to relevant initiatives as channels for nutrition behaviour change programming  
• Conduct a mini case/rapid impact study of potential nutrition impacts of increased milk supply in non-traditional areas | M            | Costing data not available  | L       | N       |

*Low (L); Medium (M); High (H). High impact has direct nutritional benefit to beneficiaries (i.e. providing nutrition supplements or monitoring nutritional status). Medium impact has indirect benefit to beneficiaries (i.e. through counselling or communications efforts). Low impact has a much longer and less direct causal pathway to nutrition outcomes (i.e. through advocacy or policy activities).

** Yes (Y); No (N); TBD (To be determined)
DFID Nutrition Audit for Zambia

1. Background

Globally, malnutrition is a major public health concern, with significant negative impacts on maternal and child health. Maternal and child under-nutrition accounts for over one-third of deaths in childhood (WHO 2010). In Zambia, malnutrition prevalence has decreased slightly in the past decade due to an intensified focus on health and nutrition interventions for children. Between 2002 and 2006, stunting reduced from 53 to 45.4 per cent and underweight from 23 to 14.6 per cent. However, severe malnutrition remained static at 5 per cent among children below the age of five years. In the same age group, 46 per cent of Zambian children experience iron deficiency and 53 per cent suffer from vitamin A deficiency (NFNC 2003). One in ten (9.6 per cent) women of reproductive age is underweight, as determined by body mass index below 18.5 (CSO 2009).

Malnutrition is a manifestation of multiple causes such as inadequate food intake, inadequate child feeding practices, poverty, and poor access to education, health and social services. Due to inequalities in access to socio-economic services, 68 per cent of the Zambian population lives below the national poverty line. Under-nutrition is intrinsically linked to poverty and is more pronounced in rural than urban communities. While it is estimated that 51 per cent of people nation-wide live in extreme poverty, the situation is worse in remote rural areas (78 per cent), where people have poor access to social services, markets and infrastructure (CSO 2010).
2. Implications of malnutrition

The high prevalence of malnutrition in early life manifested as stunting (45 per cent of children) below the age of five years means that childhood growth and development are compromised for many Zambians. Malnutrition increases health care costs and mortality. Severely malnourished children have a much higher risk of dying (5 to 20 times) than their well-nourished counterparts. Such children also have a 50 per cent likelihood of dying if admitted into hospital (WHO 2003). In 2007, the under-five mortality rate was 119 per 1,000 live births. Under-nutrition accounts for up to 52 per cent of under-five deaths in Zambia (UNICEF 2008). Children stunted by the age of two years do not meet their full potential of physical and mental development. Under-nutrition also results in poor maternal outcomes, including low birth weight babies (9.3 per cent) and maternal deaths. Maternal mortality in Zambia is estimated at 591/100,000 (CSO 2009).

Childhood malnutrition results in short stature in adulthood and undermines individual economic potential. Evidence suggests that 1 per cent loss in height due to malnutrition in childhood corresponds to 1.4 per cent reduction in productivity. As malnutrition leads to poor cognitive development and poor school performance (World Bank 2006), a vicious cycle of poverty and ill health originates in early childhood.

Nutrition profiles conducted in Zambia indicate that the elimination of iodine deficiency, reduction in stunting by 1 per cent per year and reduction of maternal anaemia by one-third (all very achievable) would increase Zambia’s productivity by £955,000,000 ($1.5 billion) over the next 10 years (NFNC 2011). Despite a law specifying that only iodated salt is to be sold in Zambia, monitoring consumption levels of iodated salt is a challenge. It is also unclear if remote communities producing their own salt are iodating it.

2.1 Addressing malnutrition in Zambia

2.1.1 Policy context

The Zambia Sixth National Development Plan (SNDP) 2011-2015 acknowledges nutrition as an important factor that underpins progress towards achieving the millennium development goals (MDGs) and improving productivity and national development. The SNDP outlined several key areas of focus as important entry points for improving nutritional status: agriculture, livestock and fisheries, health, education and skills and commerce, trade and industry. The SNDP also recognises that the National Food and Nutrition Commission (NFNC) Act No. 41 of 1967 needs amendment. Amending the Act would strengthen the mandate of the National Food and Nutrition Commission for more effective coordination of the nutrition sector (MOFNP 2011).
In line with the international focus, the National Health Strategic Plan (NHSP) 2011-2015 puts emphasis on “the nutritional status of the population and disease prevention with particular attention to food safety, children, adolescents and women in their reproductive age” (MOH 2009). While the NHSP has a limited focus with regard to nutrition improvements, the Food and Nutrition Policy identifies malnutrition as a major challenge to development and outlines key areas for implementing nutrition interventions (MOH 2006). In keeping with the policy, the implementation plan developed by the NFNC provides guidelines on addressing malnutrition both at the national and community levels. The NFNC has also developed a multi-sectoral National Food and Nutrition Strategic Plan for 2011-2015. The strategic plan emphasises the need to focus on:

1. 1,000 most critical days: prevention of stunting in children under two years of age;
2. Increasing micronutrient and macronutrient availability, accessibility and utilization by improving food and nutrition security;
3. Early identification, treatment and follow-up of acute malnutrition;
4. Nutrition education and nutritious feeding through schools;
5. Increasing linkages among hygiene, sanitation, infection control and nutrition;
6. Food and nutrition to mitigate effects of HIV and AIDS;
7. Improving food and nutrition to prevent and control non-communicable diseases; and
8. Food and nutrition preparedness and response to emergencies (NFNC 2010).

2.1.2 Increased focus on nutrition

Zambia is one of the signatories to improving national nutritional status by scaling up nutrition interventions, with emphasis on the first 1000 days (from conception up to two years of life). This is in line with the Scaling Up Nutrition (SUN) campaign, which recommends the implementation of 13 high impact interventions for reducing malnutrition. The 13 interventions are: (1) exclusive breastfeeding for the first six months, (2) complementary feeding starting at six months, (3) vitamin A supplementation, (4) hygiene, (5) zinc supplementation, (6) multi-micronutrient fortification, (7) deworming, (8) iron supplementation, (9) iodized oil utilisation, (10) salt iodisation, (11) staple fortification, (12) prevention and treatment of moderate under-nutrition, and (13) treatment of severe under-nutrition without complications with ready to use therapeutic foods (United Nations General Assembly 2011).

These interventions are supported by evidence which demonstrates positive outcomes with regard to addressing early malnutrition in childhood (Maluccio, Hoddinott, Behrman, Martorell, Quisumbing,

2.1.3 Rationale for nutrition audit

Available evidence demonstrates that malnutrition impacts negatively on health, economic productivity and development. In Zambia, however, limited attention has been paid to translating policy into actions or integrating nutrition concerns into activities that have tangible impacts on overall nutritional outcomes in the country. Given the evidence, addressing stunting requires a mix of direct and nutrition-sensitive interventions; therefore, the audit was undertaken to support DFID Zambia to mainstream nutrition across some of its current and planned programme portfolios. Priority actions identified during the audit will complement DFID Zambia’s nutrition programme which includes support to the implementation of an ambitious 1,000 Days Programme, pilot innovative, direct nutrition interventions for children and women, and strengthen capacity and accountability within government.
3. Approach

The objectives of the nutrition audit were:

1. To assess and identify the extent to which DFID Zambia’s current activities and programmes already make a contribution to reduce under-nutrition in Zambia (policy and operations) – i.e. to have a specific nutrition objective or indicator, which may be nutrition specific or nutrition sensitive

2. To assess the potential for scaling up DFID Zambia’s existing programmes to make a contribution to reduce under-nutrition in Zambia through revisions to design and to make practical and costed recommendations of how to incorporate potential scaling-up opportunities

3. To assess the geographical spread of DFID Zambia's programmes which have existing or future potential to reduce under-nutrition and to determine the extent to which synergistic effects of programmes can be achieved

4. To assess the feasibility (and estimate the cost/benefit in nutritional terms) of integrating nutrition outcomes into the design of new DFID Zambia’s programmes

5. To identify appropriate nutrition indicators (and the source of baseline/monitoring data) that can usefully be integrated into existing programmes

6. To build the capacity of different teams in the office on nutrition by raising awareness about the need for a multi-sectoral approach, short- and long-term, to tackle under-nutrition

3.1 Methodology

The team undertook a literature review of DFID programme documentation, interviewed key informants and met with DFID programme teams. Discussions with programme teams centred on the following steps:

1. Overview discussions of the programme, key activities and objectives

2. Detailed dialogue for:
   - Identification of opportunities for inclusion of nutrition-related activities
   - Suggestions of what could be included in the project and an estimation of the extra work required
   - Feasibility of inclusion of proposed activities

3. Follow-up meetings with each team to discuss recommendations.

4. Shared assessment of opportunities for integrating nutrition across DFID Zambia programmes
4. Assessment of opportunities for integrating nutrition across DFID Zambia programmes

4.1 DFID mandates in Zambia

DFID provides support to the Republic of Zambia based on national development plans and United Kingdom priorities with regard to poverty reduction, wealth creation, governance, women’s empowerment, reproductive health, maternal and new-born health, as well as human resource capacity and nutrition. By supporting government efforts, DFID programmes contribute to meeting the MDGs. DFID has been advocating internationally for a multi-sectoral response to under-nutrition, including launching a nutrition position paper at the UN General Assembly in September 2011. DFID is a major supporter of the SUN movement internationally and co-convener of the SUN Cooperating Partner group in Zambia.

The assessment shows that many opportunities for integrating nutrition in DFID programmes exist. These can be broken down as (1) introducing nutrition training or awareness raising in a number of programmes, (2) adding nutrition-specific activities to existing programs to influence policy and programme impact and (3) advocating for nutrition-sensitive policies and increased attention to nutrition at national level.

4.2 Cross cutting programmes

4.2.1 Growth & poverty reduction grant - budget support (£58m 2012-2014)

The Poverty Reduction Budget Support (PRBS) programme offers untied general budget support to the government of Zambia. This is a high level intervention which provides DFID an entry point for engagement on the SNDP and other national priorities. Good nutrition underpins progress and will contribute towards achieving most of the MDGs and the Vision 2030. Good nutrition also leads to enhanced education and health outcomes that consequently contribute to improved productivity and overall national socio-economic development. In order to streamline nutrition, the SNDP proposed specific objectives and strategies (see Table 4.1 below).
Table 4.1: Objective, Strategies and Programmes for the Nutrition Sector for SNDP 2011-2015

<table>
<thead>
<tr>
<th>Objective</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve the nutritional status of the Zambian population through</td>
<td>a) Amend the National Food and Nutrition Commission Act No. 41 of 1967;</td>
</tr>
<tr>
<td>the provision of quality nutrition services and increased availability,</td>
<td>b) Expand proven high impact and cost effective food and nutrition interventions focusing on under-served areas and vulnerable population groups;</td>
</tr>
<tr>
<td>as well as the access and utilization of quality and safe foods</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Advocate for the promotion of nutritious diet through crop diversification, adequate food processing, storage and utilization;</td>
</tr>
<tr>
<td></td>
<td>d) Ensure adequate quality and safety of local and imported food and food products;</td>
</tr>
<tr>
<td></td>
<td>e) Enhance effective utilization of food by advocating for control, prevention and treatment of diseases that have an impact on nutrition and specifically community-based interventions; and</td>
</tr>
<tr>
<td></td>
<td>f) Support expansion of the school feeding programme and other school nutrition services.</td>
</tr>
</tbody>
</table>


The SNDP also outlines a matrix and key performance indicators for monitoring and evaluating the implementation of sector programmes (Table 4.2).
### Table 4.2: Output Matrix and Key Performance Indicators

<table>
<thead>
<tr>
<th>Key Performance Indicators</th>
<th>Indicator Definition</th>
<th>Baseline 2009</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of underweight</td>
<td>Percentage of under five children with weight-for-age below -2SD * (WHO guidelines)</td>
<td>15%*</td>
<td>14%</td>
<td>13%</td>
<td>12%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Prevalence of stunting</td>
<td>Percentage of under five children with height-for-age below -2SD (WHO guidelines)</td>
<td>45%*</td>
<td>42%</td>
<td>39%</td>
<td>36%</td>
<td>33%</td>
<td>30%</td>
</tr>
<tr>
<td>Coverage of adequately iodised salt</td>
<td>Percentage of households using salt iodised with 20-40 ppm**</td>
<td>-</td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
<td>&gt;</td>
</tr>
</tbody>
</table>


*standard deviation  
**parts per million
4.2.1.1 Opportunities for integrating nutrition

By providing untied support to the government of Zambia, PRBS already supports direct nutrition and nutrition-sensitive investments by the government as detailed above. In discussions with DFID staff, additional opportunities for integrating nutrition were counter to other programme objectives. For example, the possibility of including nutrition during the formal review of the grant (PRSP dialogue) was explored. However, this possibility conflicted with current efforts to streamline and focus the dialogue.

In discussions with stakeholders, PRBS was determined not to be a strong candidate for additional nutrition-sensitive interventions.

4.2.2 Education sector support programme (new)

This is a new programme under development which supports priorities in the Education sector. It is envisaged that the programme will lead to improved learning outcomes for Zambian children. Critical to this achievement is a context within which they are able to concentrate effectively and have the energy to learn effectively. Nutrition is an element that is not prioritised in this sector, however its impact could be felt with little financial inputs but better coordination, focus and incorporation into the existing curriculum at primary and secondary levels. DFID’s Education Sector Support Programme operates in the context of complementary school-focused feeding programmes by the Ministry of Education, Science, Vocational, Technical Early Education (MESVTEE) and the World Food Programme (WFP).

4.2.2.1 Feasibility for inclusion

There are three opportunities for attending to nutrition: (a) the programme could use schools implement semi-annual nutritional screening of preschool children (up to 6 years of age); (b) improving sector dialogue and coordination around nutrition issues at national level through coordination with school-feeding programmes; and (c) nutrition education could be incorporated into the schools’ domestic science curriculum.

4.2.2.2 How to implement the suggested indicators

Output 1: Semi-annual nutritional screening of preschool children implemented
- Train teachers to screen children using mid upper arm circumference tools (MUAC tapes)
- Institute semi-annual periods for data collection

Output 2: Coordinated education/nutrition sector established at national level
- Establish regular meetings with the World Food Programme and MESVTEE to discuss the integration of nutrition into education programmes, particularly in the context of increased funding for school feeding programs.

Page 3 of 48
Output 3: 
Nutrition education curriculum formally adopted by the MoE

- Provide technical assistance (TA) to the Ministry of Education to review the Home Economics syllabus incorporating nutrition elements

4.3 Governance

4.3.1 Democratic accountability and representation

This is a new programme that builds on previous governance programmes and aims to build the capacity of civil society to conduct research, raise awareness on economic policy and increase government’s accountability.

It is envisaged that the programme will lead to (1) the identification of technically respected institutions, which the government can consult for policy advice; (2) the strengthening of a civil society capable of significantly improving the quality of public debate; and (3) the consolidation of the Zambia Governance Foundation (ZGF) as an avenue for reaching CSOs that could provide a forum for public debate on economic and human development issues. As a consequence of their improved capacity, it is expected that over the medium term:

- NGOs affiliated with ZGF will publish and effectively disseminate high quality development policy research, analysis and opinion.
- The media will carry significantly more economic and human development research, analysis and opinion.

The resulting improvement, in both government and public understanding of the key constraints to growth and poverty reduction, is expected to improve the general prospects for policy reform.

4.3.1.1 Opportunities for integrating nutrition

Discussions with stakeholders identified a single opportunity for integration of nutrition into DARP: Awareness building on the severity and consequences of under-nutrition for Members of Parliament (MPs), including the production of briefs for MPs on nutrition matters with a focus on negative economic, social and health impacts of under-nutrition in Zambia. Advocacy work with MPs recognizes that nutrition programmes operate most effectively within an appropriate enabling environment, particularly regarding policy decisions and resource allocations.
4.3.1.2 Feasibility for inclusion

Prospects for integrating nutrition in this programme are very good, provided consideration is given to the critical role nutrition plays in the economic development of the country and the eradication of malnutrition. A newly formed organization, the Scaling Up Nutrition Civil Society Alliance, has been established to support government efforts to implement SUN activities, as well as monitor commitments and accountability. The Nutrition Alliance offers a platform for raising awareness on matters of nutrition and development for NGOs and CSOs. Complementarities between this new programme and the Democratic Accountability Programme should be explored.

4.3.1.3 How to implement

1. Raise awareness on the severity of 45% stunting and the implications on health and national development;
2. Prepare nutrition briefs for MPs to enable them to make meaningful contributions to debates on nutrition and national development;

Suggested indicators

Outcome: Increased awareness among MPs and key stakeholders on the severity and development implications of stunting

- Percentage of MPs and other key stakeholders who can cite the development implications of current stunting rates (disaggregated by gender)

4.3.2 Economic advocacy programme

The Economic Advocacy programme (EAP) focuses on addressing policy for better growth and poverty reduction. In the long term, the expectation is to achieve efficient and effective allocation of public expenditure, particularly in agriculture and infrastructure; sustainable cost reductions (e.g. fuel); and ultimately faster growth and poverty reduction.

The programme will (1) establish a new public sector think tank, Zambia Institute for Policy and Advocacy and Research, as a technically respected institution, which the government looks to for policy advice; (2) strengthen up to five civil society think tanks capable of significantly improving the quality of economic public debate; and (3) consolidate the Economic Association of Zambia (EAZ) as a forum for public debate on economic issues.

As a consequence of improved capacity to produce and effectively communicate high quality economic research, analysis and opinion, as well as strengthened opportunities for public economic policy debate, it is expected that:
• Think tanks and the EAZ will publish and effectively disseminate high quality economic policy research, analysis and opinion.

• The media will publish significantly more economic and business research, analysis and opinion.

These improvements are expected to increase the general prospects for policy reform. In particular, the government hopes to build sufficient political support to overcome resistance to reforms and to raise awareness of damaging policies that hinder growth and poverty reduction.

4.3.2.1 Opportunities for integrating nutrition

Similarly with the Democratic Accountability Programme, inclusion of nutrition considerations would increase awareness and facilitate the incorporation of evidence-based nutrition information to be disseminated by think tanks and the media.

From discussions, it appears that policy advice is pursued with little consideration to nutrition and its impact on development. For instance, the debate on the maize policy focuses on removal of the subsidy, while little attention is paid to the negative nutrition outcomes of high maize consumption (75% Kcal.). In Zambia, there is a heavy reliance on staple consumption at the expense of vegetables, protein and fat intake. To reduce the stunting rate in Zambia, a specific policy that supports livestock and legume production to allow for increased per capita protein intake is necessary. To achieve this, government policies need to incorporate incentives for livestock production and food diversification.

In addition to influencing policy, the programme also has an opportunity to highlight how gender responsive agricultural policies could bring greater pro-poor growth.

Opportunities have been identified in three areas:

1. Promote livelihood strategies and food diversification as opposed to maize cropping:

   a) Think tanks could make the case that maize cropping is but one strategy contributing to a community’s livelihood. Understanding the role of good nutrition on human development should enable think tanks to highlight the importance of livestock production for improving the diet of Zambians. The “maize elephant” could be used to build infrastructure that can support delivery of more balanced development and poverty reduction options.
b) Engage nutritionists in the think tanks to increase understanding about nutrition, UNICEF’s conceptual framework and the 13 key interventions. This would enable better nutrition-informed development of economic policies.

4.3.2.2 Feasibility for inclusion

Prospects for integrating nutrition in this programme are also high, provided that the role malnutrition plays in economic development is recognised. The expectation that this programme will lead to improvement in Government and public understanding of the key constraints to growth and poverty reduction could be used to highlight key constraints to reducing malnutrition levels. Emphasis should be put on reducing malnutrition and its detrimental inter-generational impact on development. Current evidence suggests that children who are undernourished (in resource-poor settings) have a higher chance of developing non-communicable diseases later in adulthood (diabetes and other overweight-related conditions). The ramifications of childhood under-nutrition may perhaps be the best entry point for understanding the impacts of nutrition as it affects the elite, which is apparently oblivious to the 45% stunting rate in the country.

4.3.2.3 How to implement

- Engage nutritionists to provide support to think tanks;
- Support workshops for sensitising think tanks on nutrition issues;
- Support research on government policies that can have a significant impact on nutrition;
- Include in the objectives of the think tanks the improvement of Government and public understanding of the key constraints to reducing malnutrition levels;
- Promote livelihood improvements, as opposed to maize cropping; and
- Examine the pros of the current policy on maize and take advantage of these. For example, through the electronic voucher system of distributing inputs for maize, the private agro-dealer could develop a system to reach more remote rural areas. Such a network can then be used to distribute supplementary foods.

Outcome 1: Increased policy briefs from EAP-funded think tanks addressing nutrition issues.

Outcome 2: Increased awareness about nutrition issues and policy implications among EAP-funded think tanks’ staff

Although a new programme on governance is yet to be designed, it is important that consideration is given to supporting human resource development for nutritionists in government departments. Increased nutrition capacity in key Ministries is needed for supporting and implementing nutrition-
sensitive policy and programmes. For effective influence at policy level discussion, there will be need for dialogue between nutritionists and representatives attending such forums.

4.4 Human development

4.4.1 Social cash transfer expansion programme

The objective of the social cash transfer is to improve nutrition outcomes and allow poor households to invest in their children’s health and education through provision of grants to households with children below five years of age.

The stagnation of rural poverty levels, combined with slow progress in areas which are critical to rural poverty reduction in the Poverty Reduction Budget Support performance framework, has created a need for donors to focus more strongly on targeted programmes and ensure a more equitable resource allocation. Programmes, such as the Fertilizer and Inputs Support Programme, the Public Welfare Assistance Scheme or the Food Security Pack have not had the desired impact on chronic poverty. Reviews of the current social cash transfer pilots suggest that the small amounts of cash (between ZK 50,000 to 60,000, or GBP 6.14 to 7.37) delivered regularly to households have had a significant impact in reducing poverty.

This programme contributes to achieving MDG1 and meeting MDG targets for education and health in selected communities. It will also complement the DFID Z Poverty Reduction Budget Support programme with a more targeted intervention for the poorest and most vulnerable in rural areas (where 78% of the population live in extreme poverty), where access to markets and infrastructure is hindered. Providing regular cash transfers to “incapacitated households” should also help address the recurrent food insecurity problems and chronic under-nutrition in the selected districts. These incapacitated households are among those most vulnerable to shocks and are often provided humanitarian food aid in the aftermath of disasters.

Efforts in other communities have already demonstrated that providing cash on a regular to households allows people to eat better (more frequent and varied meals). Thus, the focus on child grants in districts with high levels of child mortality is expected to yield improvements in nutrition among children below five years old.

Since the programme provides the extra cash, poor people in need of transport to and from health centres to buy medicine or to stores to buy school books or uniforms will have an enhanced general well-being: ‘It should allow poor families to invest in their children’s health and education, and should help break the inter-generational transmission of poverty.’
4.4.1.1 Opportunities for integrating nutrition

1. Display nutrition awareness messages (from the 1,000 Days Programme) at points of cash transfer collection/voucher redemption;
2. Organise nutrition awareness “meals” with a focus on breastfeeding and complementary feeding, including cooking demonstrations.

4.4.1.2 How to implement

- Design messages appropriate to the target households;
- Train CWACS in key nutrition messages. Consider including Cashpoint Manager training, as appropriate.
- Choose appropriate communication channels, including exploring electronic messaging once SCTs are delivered electronically.

Output 1: Nutrition awareness messages from the 1,000 Days Programme communicated to participating households at contact points, such as clinics and points for voucher redemption.

4.4.2 Nutrition programme (£17m 2011-2016)

The nutrition programme focuses on the reduction of chronic malnutrition through different initiatives, including:

- Expanding coverage of direct nutrition interventions for children through the primary health care system;
- Testing innovative evidence-based approaches for delivering nutrition interventions;
- Providing capacity building to deliver the first nutrition BSc and MSc courses at the University of Zambia (UNZA); and
- Designing a multi-sectoral programme (involving key Government departments and partners) to tackle under-nutrition in Zambia, which will include a capacity building component to support the new National Food and Nutrition Strategy and key line Ministries, focused on the first 1,000 critical days.

4.4.2.1 Opportunities for integrating nutrition

Experience shows that countries which have managed to reduce widespread malnutrition problems have given considerable attention to human resources. There is a critical shortage of higher degree holding nutritionists working at policy and programme levels across key sectors. Increasing the numbers of qualified nutritionists as well as strengthening human resource for supporting nutrition interventions in Zambia will be needed to successfully address malnutrition. DFID is already
supporting the training of nutritionists through at UNZA. Additional components for this programme should include:

- Expanding activities to cover districts where other DFID programmes are operating
- Making the case for increasing the number of nutritionists in the country

4.4.2.2 Feasibility for inclusion

The focus of the programme is on nutrition. Emphasis needs to be placed on interventions and innovations that will make a difference in addressing malnutrition in early life. For instance, it is perceived that the lack of locally-available commercial products for complementary feeding has limited food choices for children. The programme could explore possibilities of expanding food choices for complementary feeding to include locally available, manufactured products.

4.4.2.3 How to implement

- Initiate the manufacture of commercial local complementary food (targeting children less than two years of age).
- Support the provision and storage of supplements for under-five year olds.
- Explore the possibility of a local company manufacturing a commercial product for complementary feeding.
- Promote fortification as a public nutrition intervention to reduce malnutrition.
- Lobby for formulation and adoption of policy on staple fortification.
- Discuss possibilities of drawing attention to the importance of folic acid provision to women of child-bearing age.
- Examine the possibilities of supplying micronutrient packs.
- Support access to iodine for communities producing their own salt.
- Support periodic studies to measure iodine levels in the population.
- Sponsor students at the University of Zambia to study human nutrition at MSc. and BSc. levels.
- Support infrastructure at the University of Zambia for effective teaching of human nutrition.

4.3.4 Scaling up family planning programme (new programme, £10 m, 2012-2016)

Zambian women initiate childbearing early (27.9% of teenagers have begun childbearing) and the Total Fertility Rate is stagnant at 6.2. Zambian women experience a high nutritional demand on their bodies across the reproductive years, increasing their risk of complications from childbirth. Malaria, helminthes and poor diet contribute to anaemia. Many women have short stature as a result of their
own poor foetal and early child growth, and more than half of births take place without a trained health professional.

Many low-cost, effective interventions are known to reduce the risks of morbidity and mortality attributable to maternal and child under-nutrition. A package of simple, low-cost interventions has been shown to dramatically reduce stunting and mortality before 36 months while increasing women’s nutritional status at term. The target audience for these interventions closely matches the target audience for Scaling Up Family Planning in Zambia (SUFP): women of reproductive age, their partners, their young children and the community and religious leaders who are able to influence behavioural norms. SUFP will target communities in underserved, hard-to-reach districts with poor uptake of modern contraception. With the inverse relationship between socio-economic status and nutritional status in Zambia, many of these communities are likely to have very low penetration of nutrition interventions.

The programme is in its early stages of initiating activities to promote family planning. As the programme will meet women prior to their pregnancy, this is an opportune time for the programme to influence optimal maternal outcomes. Folic acid is essential for utero development of the foetus. The programme provides a platform for disseminating such information to would-be mothers for optimal nutrition outcomes.

4.4.3.1 Opportunities for integrating nutrition

Integrating nutrition messages into a family planning project is a cost-effective approach to increasing the uptake of simple, life-saving behaviours that will allow more Zambians to achieve their dream of a healthy family, able to contribute to the country’s development.

4.4.3.2 Feasibility for inclusion

As the programme is evolving, further discussions are encouraged to determine the envisaged strategies for women’s health promotion. Birth weights may need to serve as a proxy indicator for health promotion among these women. The programme could also consider the inclusion of the following activities:

- Linking post-partum family planning with information on infant feeding practices and household hygiene, preferably through outreach in the community rather than from facilities.
- Adding a counselling module about child feeding practices or provision of ‘sprinkles’ to FP clients who have young children at home.
- Supporting women who discontinue family planning by providing them with iron folate as well as counselling about nutrition during pregnancy and early initiation of ante-natal care.
4.4.3.3 How to implement

- Design health and nutrition messages for targeted populations, leveraging existing materials as available, particularly those developed under complementary DFID programmes, such as the Zambia Integrated Systems Strengthening Project (ABT/ZISSP) related to infant and young child feeding (IYCF). Ensure through piloting of messages that health/nutrition messages are complementary, rather than conflicting, with other communications regarding family planning.
- Procure sprinkles for young children.
- Organise dissemination sessions for caregivers to learn about IYCF and provide caregivers with sprinkles.
- Provide folic acid to women.
- Prepare information, education and communication (IEC) materials on the importance of folic acid.
- Educate women of reproductive age about the importance of folic acid.
- Supply folic acid to women of reproductive age.

4.4.4 Adolescent girls empowerment programme

Adolescent girls in Zambia face widespread discrimination because of their sex, undermining their future prospects and health. Girls aged 15-19 are twice as likely to be out of school as boys (44.3% compared with 22.2%, respectively). These factors increase the poverty rates and vulnerability of girls and young women, contributing to high rates of early sexual debut, early pregnancy, unsafe abortion and sexually transmitted diseases. Compared to older women, adolescent girls are unlikely to choose whether and when to have a child. They also have a much higher unmet need for family planning. Girls aged 15-19 are twice as likely as older women to die in pregnancy and childbirth. Children born to adolescent girls are at greater risk of malnutrition and dying before the age of five years.

This intervention, referred to as ‘Safe Spaces,’ is an innovative approach to the empowerment of 10,000 girls aged 10-19. It will provide girls with social, economic and health assets through building social networks; imparting education about financial planning and management; increasing access to financial services; and providing information about sexual and reproductive health with improved access to health services. The outcome of the intervention will be girls empowered through the acquisition of social, economic and health assets. Specifically, 10,000 girls aged 10-19 years in urban and rural Zambia will have:

- Increased knowledge of sexual and reproductive health.
- Increased access to sexual and reproductive health services.
- Increased financial literacy and money management skills.
- Increased access to savings accounts.
- Increased social networks.

Mentors undergo some training to equip them with the knowledge and skills needed for mentoring adolescents. The curriculum can be reviewed to incorporate key nutrition messages suitable for adolescents. As adolescence is the stage when girls may experience anaemia arising from menstruation, mentors can be exposed to key nutrition messages for the nutritional wellbeing of girls.

4.4.4.1 Opportunities for integrating nutrition

There is limited baseline information on anaemia during adolescence. As the research involves taking blood samples at various points during the project life-time, analysis can be extended to assessing iron deficiency anaemia (haemoglobin levels) in adolescents. Determining iodine and vitamin A levels are other parameters that could be considered.

Building safe spaces is expected to enable girls to take greater control of their lives and to contribute to improvements in their sexual and reproductive health. The impact of the intervention will be improved sexual and reproductive health for poor and vulnerable adolescent girls in Zambia. The intervention is expected to result in:

- Delayed sexual debut.
- Fewer early unintended pregnancies.
- Reduced early marriage.
- Lower rates of HIV and other sexually transmitted infections.
- Fewer school drop outs.
- Reduced gender-based violence.

Health vouchers for ten commodities and services should also include nutrition counselling, with particular reference to the importance of iron intake, as menstruation is associated with depletion of iron and iron requirements in adolescence are known to be higher. In this programme, consideration should be given to:

1. Training mentors in nutrition to enable them to impart nutrition knowledge during weekly mentoring sessions.
2. Conduct additional research: include measurement of Haemoglobin, Vitamin A and Iodine levels (proxies for assessing nutrition status) in blood samples.
3. Register the birth weights of babies born to adolescents participating in the programme in addition to assessing unintended pregnancy rates.

4.4.4.2 Feasibility for inclusion
Prospects for inclusion are mixed. Additional research will entail considerable effort, but adding a nutrition module should be relatively straightforward. However, during key informant interviews, it was discussed that a separate research module to assess adolescent girls’ health changes could be developed. Additional staff to develop the module for capturing the baseline nutritional status of adolescents (from literature) will probably be needed. Contracted personnel could also provide a test to assess the nutritional status of the adolescent girls at the same time that bio-markers are obtained for determining the influence of the programme on the adolescents’ behaviour. In any case, it is important to avoid taking repeated blood samples from the girls.

4.4.4.3 How to implement

1. The vouchers could include nutrition services, while the curriculum for the mentors may include matters related to improving the nutrition of adolescents. Such topics should then be linked with nutrition services that could be accessed through the vouchers.

2. The mentors receive training in basic nutrition for adolescents.

3. For the research component, a laboratory such as the Tropical Disease Research Centre would need to be contracted to develop and carry out the module. Population Council is ready to use the sample design developed for the entire study. (Hence, they are reluctant to take on other tasks that may expand what they have on their plate.)

The programme is focused on reducing unwanted pregnancies and providing information for girls about family planning and safe abortion services. When measuring unintended pregnancy and pregnancy rates, the study should also measure the birth weights of babies born in the programme to assess the impact of the nutrition intervention/s. The data is obtainable from the local clinics where adolescents would have registered if sick or pregnant. In fact, adolescents’ registration rates at health centres should indicate the extent to which life skills have been adopted.

4.4.5 Human resource for health programme (Not yet approved)
Zambia’s acute shortage of trained health workers is seriously undermining its ability to provide effective health services, especially in rural areas. Progress is being made towards meeting the health MDGs but a serious lack of health workers and their inequitable distribution in Zambia remain key obstacles to achieving better outcomes. Recognising the shortage of trained health staff at the community level, the Ministry of Health (MOH) created a national program that addresses the challenges encountered by community health workers in the delivery of services (MOH 2010).
The purpose of the project is to improve the management and distribution of health sector human resources through (the adoption by GRZ, cooperating partners, professional bodies and health unions of a harmonized approach to the use, training and remuneration of community health workers (CHWs).

The investment will build on DFID’s previous support to the Payroll Management and Establishment Control (PMEC) system and enable the MOH to utilize its Structure Adjustment Programme modules to manage Zambia’s health workforce. The project will establish 3100 community health assistants over five years to improve health service delivery at the community level. The project will finalise and pilot the MOH’s new CHW strategy. The CHW strategy is aimed at recruiting and training a low cost cadre of local workers to deliver basic health services at the community level.

4.4.5.1 Opportunities for integrating nutrition

It is possible to improve health indicators through the deployment of CHWs at the community level. A recent review of experiences with CHWs in Malawi, Uganda and Ethiopia concluded that ‘community-based health extension services are essential for antiretroviral therapy scale-up and for providing comprehensive primary health care.’ The review indicated that adequate remuneration of community health workers was critical to retention in the long-term and that ‘attention to quality supervision and continuous training was equally important.’ A focus on nutrition in CHW training and duties can provide a strong pathway for nutrition into community health.

4.4.5.2 Feasibility for inclusion

If the programme is approved, prospects are very good. The training of health assistants presents an excellent entry point for developing cadres that will go into communities with well-informed key nutrition messages and skills. Improving delivery of community interventions, particularly in the light of the scaling up nutrition initiative, will require training for preventing, identifying and treating under-nutrition without complications at the community level. Health assistants will also be an important conduit for scaling up nutrition (1,000 days).

4.4.5.3 How to implement

Nutrition integration for this programme requires reviewing the curriculum for health assistants:

- Revise curriculum for health assistants.
- Train community health assistants.
- Disseminate nutrition key messages at community level.
- Liaise with the 1,000 days campaign on key massages for promotion in communities.
- Select key messages for dissemination in the communities.
4.4.6 Malaria and child health programme

The project aims to halve malaria parasiteaemia from 16 per cent to 8 per cent and lower severe to avert 11,000 deaths of children under five. This will contribute to the halving of childhood mortality from current levels of 119/1,000 (2007) to 56/100,000 by 2015.

Malaria is endemic in all 9 provinces and 72 districts of Zambia and accounts for one-fifth of all maternal and childhood deaths. In addition, malaria’s high morbidity decreases productivity through absenteeism creating a significant economic impact.

The programme focuses on effective procurement and delivery of essential medicines as a critical element in achieving child health and malaria outcomes. Supplies of essential medicines in health facilities are erratic. This hampers the effective treatment of childhood illnesses and contributes to high child morbidity and mortality rates. In response, the MOH has launched the Essential Medicines Logistic Improvement Programme (EMLIP) to strengthen its drug supply system. An early pilot showed the potential of EMLIP to double the availability of essential medicines, and if rolled out nationally, it could contribute to a decline in child mortality. The roll out is currently stalled due to a lack of adequate drug stocks and the need for further information on costs and storage/transportation requirements.

During discussions, it was brought to the Audit Team’s attention that the bulky nature of nutrition commodities and their propensity to attract rats, which may damage vital drugs stored in the same premises, could impede inclusion of nutrition commodities on the EMLIP list. Another reason cited for impediment is the invisibility of nutritionists on committees and other gatherings that decide on what is essential for procurement and distribution.

This investment will procure commodities for malaria control such as Long Lasting Insecticide Treated Nets (LLITNs), Rapid Diagnostic Test kits (RDTs), Artemisinin-Based Combination Therapies and other essential medicines for the prevention and treatment of childhood illnesses. In addition, TA will be provided to the MOH to strengthen the drug supply chain and Epidemic Preparedness and Responsiveness (EPR). An operational fund will be established to enable the speedy and effective response to epidemics so that morbidity and mortality from communicable disease outbreaks are minimized.

These will be achieved by:

- Procuring and distributing 1.4 million free LLITNs to households with pregnant women and children under 5.
- Procuring three million doses of ACT to fill the forecasted gap.
- Procuring six million RDTs for health facilities.
• Strengthening the government drug supply chain by procuring essential medicines and providing TA to scale up EMLIP; and
• Supporting the MOH to strengthen district’s EPR plans by providing TA and creating an operational fund to enable speedy responses to epidemics.

The programme already targets the under-fives and has a beneficial impact on anaemia. Controlling malaria infection in these population groups will lead to improved maternal outcomes and contribute to reducing under-nutrition among children. Despite all the good efforts in malaria prevention and treatment, there are still high cases of malaria-related morbidity. To reduce morbidity, nutrition supplements could be provided. This may require advocating for inclusion of nutrition supplements to be part of the EMLIP.

**4.4.6.1 Feasibility for inclusion**

The prospects for inclusion are mixed. The apparent barriers are the bulky nature of food supplements and their propensity to attract rats, which may damage vital drugs. Another reason is the invisibility of nutritionists on committees and other gatherings. There is need to explore possibilities of having a nutritionist on the EMLIP committee.

**4.4.6.2 How to Implement**

• Lobby for inclusion of nutritionists on the multi-sectoral committee for commodity procurements.
• Nutritionists raise issues on essential commodities, such as nutrition supplements including F75, F100, and multi-vitamins that need to be included on the essential drugs list.

Output 1: Nutritionists participate in the multi-sectoral teams that decide on commodities for procurement and distribution at the national level

**4.4.7 Wealth creation – rural markets**

The programme supports a rural market development programme to increase access to sustainable input, service and output markets for smallholder farmers. It aims to bring about systemic change in the supply of farm inputs, services and output markets. It would achieve this by supporting Musika, the only local non-profit organization that has fully adopted an M4P approach, which supports services to reach remote communities and works specifically in these sub-sectors.

The focus of the programme is to reduce rural poverty (as measured by the number of people above the national poverty line) through integrating farming households in well-functioning agricultural markets. Economic growth in urban areas has stimulated domestic demand and so opportunities exist for smallholders to supply the domestic market with a broader array of agricultural produce (such as beef, milk, poultry, soya beans, cassava and sunflower seed). With the right policies, seasonal
opportunities for Zambian commercial and (with support) emergent smallholder farmers could supply regional and overseas export markets.

**4.4.7.1 Opportunities for integrating nutrition**

The program provides opportunities to link up Musika networks to relevant initiatives as channels for nutrition behaviour change programming including the dissemination of communication materials such as posters, leaflets. The qualitative M&E of the programme could also include a mini case/rapid impact study of potential nutrition impacts of increased milk supply in non-traditional areas - a baseline could be conducted before the study.

Specific channels for dissemination of nutrition messages and collection of M&E Data in the Rural Markets programme include:

1. Input markets: Information exchange at the agro-dealer shop in the form of posters, for example, may be avenues for information dissemination.
2. Services: Service providers could be conduits of information on nutrition to remote areas that they serve. For example, small businesses such as spray service providers could serve as channels for dissemination of behaviour change communication materials as an optional add-on 'service' within their communities
3. Output markets: Musika could be assigned to collect data on the impact of the introduction of dairy into a farm business on milk consumed in the home. Baseline data may be collected from processing companies who are going to benefit from the upcoming DFID support for milk supply in non-traditional dairy areas. The indicators may include:
   - What is the per capita milk consumption at household levels?
   - What is the total milk produced per farm and sold?

**4.4.7.2 Feasibility for inclusion**

Musika is largely about enhancing productivity centred on developing a commercial relationship between the smallholders and the large companies in Lusaka. It is about improving smallholder access to input and output markets, along with access to other services, such as tractor ploughing. Adding nutrition messages may be an additional burden not welcome by some of the main stakeholders. However, we need to find ways of turning what might be seen as a “burden” into a business opportunity.

**4.4.7.3 How to implement**

During research and programme implementation:

1. Encourage and facilitate nutrition information messages at the agro-dealer shops in form of posters, brochures or leaflets.
2. Establish the per capita milk consumption at household levels in locations where milk is produced

4.4.8 Costs for implementation and coverage

In order for DFID Zambia to undertake selected additional activities presented above, there will be some costs incurred. An estimate of the required resources is included under separate cover. The programmes to be implemented will be a valuable investment into reducing malnutrition in children below the age of five years. The DFID support is also expected to benefit 2,150,000 children below the age of five years by the end of 2015.
5. Barriers preventing nutrition integration into on-going programmes

5.1 Capacity, knowledge and awareness

Many policy makers and managers have limited knowledge and awareness to relate their activities to nutrition outcomes. For instance, projects focusing on reproductive health do not capture birth weight. Birth weight is an important indicator for maternal outcomes (maternal health and nutrition of the mother).

The dissemination discussions revealed that there was need for continuous dialogue to enable policy advisors to be aware of certain nutrition issues that could be articulated during policy review meetings. Due to limited knowledge about what constitutes nutrition at different levels (policy, management, and implementation), it is important that available platforms for advocating nutrition are available.

5.2 Data base for nutrition

Current health information systems do not capture relevant nutrition data for evidence-based nutrition programming. Absence of a comprehensive database for nutrition has led to calls by the MOH Nutrition Unit for a parallel database for nutrition. However, managing such a database and ensuring that information is current will require certain skills not inherent in the Ministry of Health’s Nutrition Unit at the moment.

5.3 Limited availability of trained nutritionist at different levels

There is a high demand for qualified nutritionists in the country. Inadequate availability of trained nutritionists undermines policy formulation and programme management. The problem is epitomized in the following:

- Only one nutritionist is employed at the central level in the Ministry of Health. Thus, it is a challenge for one person to contribute to policy making, as well as oversee nutrition programmes.

- Absence of trained nutritionists at many health facilities and in districts makes it difficult to supervise cadres involved in nutrition activities.

- Inadequately trained nutrition workers at community levels contribute to misinterpretation of nutrition indicators and provision of evidence-based nutrition education.
5.4 Commodities for child feeding

Complementary feeding, which starts at six months until the child is accustomed to the family diet, requires that the right food is available in the right quantities. In Zambia, locally and commercially produced complementary foods are not available. The lack of local supplementary food implies that products for preventing under-nutrition and treatment of under-nutrition have to be externally procured. Provision of such commodities is unsustainable and frequently results in vulnerable children not getting the right food at the right time.

5.5 Collaboration and advocacy linkages for nutrition

The limited attention paid to nutrition has contributed to the inadequate translation of policy into tangible action plans and budgets. The scaling up of nutrition interventions provides an opportunity for building momentum and linkages for advocating nutrition on different platforms. Considering the scarcity of resources, the intensified campaigns should also address investments in the 13 interventions, particularly with regard to human resources, job aides, materials and commodities for preventing and treating malnutrition.
6. Key literature


7. Tropical Health Education Fund (2011) *Strengthening Training and Education of Health Workers in Zambia*


23. Zambia, DFID (September 2011) Business Case for the Adolescent Girls Empowerment Programme
## Annex 1 List of people met

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Responsibility</th>
<th>Focus of discussions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silke Seco-Grutz</td>
<td>DFID</td>
<td>Health and nutrition</td>
<td>Nutrition interventions and the spearheading of the 1,000 days programme</td>
</tr>
<tr>
<td>Gregory Chikwanka</td>
<td>DFID</td>
<td>Economic Advocacy programme</td>
<td>Promotion of livelihoods not only maize cropping &gt;research key issues on how government policy can support the key interventions for the 1,000 days &gt;Nutrition awareness for Think Tanks to be able to develop policies that address nutrition concerns in the country (Need to engage nutritionist in the think tanks)</td>
</tr>
<tr>
<td>Alistair Moir</td>
<td>DFID</td>
<td>Governance</td>
<td>Overall discussion on governance and accountability</td>
</tr>
<tr>
<td>Mulima Akapelwa</td>
<td>DFID</td>
<td>Accountability and Governance</td>
<td>Provide guidance to CSOs to address matters of nutrition. Produce briefs for members of parliament to allow them to speak confidently on nutrition. Include nutritionists in identifying issues and exploring different platforms for advocacy</td>
</tr>
<tr>
<td>Sam Waldock</td>
<td>DFI</td>
<td>Governance Programme</td>
<td>Human resource and civil service reform, anticorruption, democratic governance, climate change</td>
</tr>
<tr>
<td>Kelly Toole</td>
<td>DFID</td>
<td>Social Protection – Cash transfers</td>
<td>Promoting household welfare and general wellbeing. Birth weights may be included for capturing maternal outcomes.</td>
</tr>
<tr>
<td>Meena Gandhi</td>
<td>DFID</td>
<td>Malaria, Human Resources for Health and Family Planning</td>
<td>Training of community health assistants could include nutrition awareness.</td>
</tr>
<tr>
<td>Suzanne Parkin</td>
<td>DFID</td>
<td>Rural markets</td>
<td>The main focus of MUSIKA is to link big business with small scale farmers (not subsistence farmers). Nutrition concerns can be addressed through promotion of crops that meet twin goals of household incomes and nutrition, e.g. “women’s crops.”</td>
</tr>
<tr>
<td>Clare Harris</td>
<td>DFID</td>
<td>General Budget Support and Education Sector</td>
<td>The content of the official dialogue with government is based on the SNDP indicators. SNDP does include objectives and guidelines for improving nutrition. Due to limited knowledge and awareness, nutrition is not taken into account during policy dialogue.</td>
</tr>
<tr>
<td>Agness Aongola</td>
<td>MOH</td>
<td>Nutrition Advisor</td>
<td>Barriers preventing integration of nutrition into policy, and the need for a comprehensive monitoring and evaluation system tailored to nutrition as the current Health Management Information System does not capture relevant indicators</td>
</tr>
<tr>
<td>Name</td>
<td>Organization</td>
<td>Role/Program</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------</td>
<td>-------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Walter Proper</td>
<td>John Snow</td>
<td>EMLIP (logistics and distribution of essential drugs)</td>
<td>The EMLIP relies on decisions made by a multi-sectoral committee that decides on what is to be procured and distributed nationally. The inclusion of food supplements is problematic because they are bulky and attract rats in storage. Inclusion of nutrition commodities requires being present on the committee to influence decisions.</td>
</tr>
<tr>
<td>Gameriel J. Simpungwe</td>
<td>John Snow</td>
<td>EMLIP (logistics and distribution of essential drugs)</td>
<td></td>
</tr>
<tr>
<td>Bwalya Mulumbi</td>
<td>CSPR</td>
<td>Social/Economic policy monitoring</td>
<td>The CSPR focuses on poverty reduction programmes listed in the yellow book. As there is little awareness on what constitutes nutrition related services, CSPR is unable to recognize these services. It is perceived that nutrition services are too detailed.</td>
</tr>
<tr>
<td>Natalie Jackson</td>
<td>Population council</td>
<td>Adolescent Girls Programme</td>
<td>A separate module to be developed that will ride on the sampling frame developed by the population council. Nutrition may be included in the curriculum for mentors. The inclusion of nutrition services on the voucher is a possibility.</td>
</tr>
<tr>
<td>Paul Hewitt</td>
<td>Population Council</td>
<td>Research on adolescents for Empowerment</td>
<td></td>
</tr>
<tr>
<td>Valerie Roberts</td>
<td>DFID</td>
<td>Adolescent Girls Programme</td>
<td></td>
</tr>
<tr>
<td>Ruth Siyandi</td>
<td>UNICEF</td>
<td>Nutrition Programmes</td>
<td>Nutrition programmes, procurement of essential food supplements and generally involved in various nutrition interventions in the country including the 1,000 days.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sanitation/Hygiene</td>
<td>Hand washing is important even for the mother before she suckles or the baby before it touches the nipples. Open defecation can be eliminated.</td>
</tr>
<tr>
<td>Reuben Banda</td>
<td>Musika</td>
<td>Agriculture Support</td>
<td>Commercialization of agriculture input market; service market, rural finance and output market, with emphasis on rural participation to broaden market access.</td>
</tr>
</tbody>
</table>
## Annex 2: DFID Partners

<table>
<thead>
<tr>
<th>Government Ministries/Departments</th>
<th>Multilateral Organizations</th>
<th>Bilateral</th>
<th>Civil society</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Ministry of Local Government</td>
<td></td>
<td></td>
<td>7. Civil Society for Poverty Reduction</td>
</tr>
<tr>
<td>8. Ministry Community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. National Food and Nutrition Council</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Zambia Institute of Policy Analysis and Research</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex 3: Indicators Proposed for Inclusion in Programme Logframes

Cross-Cutting

Poverty Reduction Budget Support

None

Education Sector Support Programme

<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 1:</strong> Nutrition education curriculum formally adopted</td>
<td>Nutrition education curriculum formally adopted by the Ministry of Education</td>
</tr>
<tr>
<td><strong>Output 1:</strong> Educational materials developed for nutrition education curriculum</td>
<td>Annual and cumulative # of nutrition education materials developed (disaggregated by topic area)</td>
</tr>
<tr>
<td><strong>Output 2:</strong> Review of Home Economics syllabus conducted</td>
<td>Assessment report on Home Economics syllabus released</td>
</tr>
</tbody>
</table>

Governance

Democratic Accountability and Representation

<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 1:</strong> Awareness raised with MPs and other key stakeholders on the severity of 45% stunting and development implications</td>
<td>% of MPs and other key stakeholders who can cite the development implications of current stunting rate (disaggregated by gender)</td>
</tr>
<tr>
<td><strong>Output 1:</strong> Nutrition briefs prepared for MPs to enable them to make meaningful debates on nutrition and development</td>
<td>Annual and cumulative # of nutrition briefs developed (disaggregated by topic area)</td>
</tr>
</tbody>
</table>

Economic Advocacy Programme (EAP)

<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 1:</strong> Increased policy briefs from EAP-funded think tanks addressing nutrition issues</td>
<td>% of policy briefs from EAP think tanks addressing nutrition issues</td>
</tr>
<tr>
<td><strong>Outcome 2:</strong> Increased awareness about nutrition issues and policy implications among EAP-funded think tank staff</td>
<td>% of targeted think tank staff who can cite key nutrition issues and policy implications</td>
</tr>
<tr>
<td><strong>Output 2:</strong> Nutritionists engaged to inform think tank policy briefs</td>
<td>% of EAP-funded think tanks receiving technical assistance from nutritionists</td>
</tr>
<tr>
<td><strong>Output 1:</strong> Nutrition-focused workshops conducted in think tanks</td>
<td># of nutrition-focused workshops conducted for EAP-funded think tanks</td>
</tr>
</tbody>
</table>
Human Development

Social Cash Transfer

<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 1:</strong> Reduction in low birth weights for participating households</td>
<td>% of low birth weight babies in participating households</td>
</tr>
<tr>
<td><strong>Outcome 2:</strong> Increased nutrition awareness in participating households</td>
<td>% of participating households in which surveyed adult demonstrates ‘adequate’ nutrition knowledge (disaggregated by gender, age, and parenthood status of surveyed adult)</td>
</tr>
<tr>
<td><strong>Output 2:</strong> Nutrition awareness messages distributed to participating families at key contact points (i.e. points of voucher redemption; clinics)</td>
<td>% of participating households that have received at least one nutrition awareness message</td>
</tr>
</tbody>
</table>

Nutrition

No new indicators suggested.

Scaling Up Family Planning

<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators</th>
</tr>
</thead>
</table>
| **Outcome 1:** Integration of key nutrition services in family planning sites | % of family planning sites which provide the following key services:  
  - Folic-iron tablets for pregnant women  
  - Counseling on the importance of folate and ANC  
  - Counseling on IYCF for women with young children |
| **Output 1:** Health assistants trained on counseling women on infant and young child feeding | # of health assistants trained on IYCF  
# of women counseled on IYCF at FP sites |
| **Output 2:** Health assistants trained to counsel women on folic acid supplementation | # of health assistants trained on folic acid supplementation  
# of women counseled on folic acid supplementation at FP sites |

Adolescent Empowerment Programme

<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 1:</strong> Micronutrient deficiencies identified in programme participants</td>
<td>% of adolescent empowerment programme participants with Hb, Vit A or Iodine levels below the established level of non-deficiency disaggregated by gender; number of micronutrient deficiencies</td>
</tr>
<tr>
<td><strong>Output 1:</strong> Bio-marker collection protocol</td>
<td># and % of bio-marker collection sites with</td>
</tr>
<tr>
<td>Results</td>
<td>Indicators</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>Output 2: Nutrition mentors trained on conveying nutrition information during weekly mentoring session</td>
<td># of nutrition mentors trained (disaggregated by gender)</td>
</tr>
<tr>
<td># of adolescent empowerment programme participants receiving nutrition information through weekly mentoring session</td>
<td></td>
</tr>
</tbody>
</table>

**Human Resources for Health**

<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output 1: Community health assistants trained in community nutrition interventions</td>
<td># of community health assistants trained in nutrition interventions (disaggregated by gender)</td>
</tr>
</tbody>
</table>

*The logframe for this programme already includes the MDG4 indicator: Reduction in under-five mortality.

**Malaria and Child Health Programme**

<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output 1: Nutrition supplements included on essential drugs list of Essential Medicines Logistical Improvement Programme (EMLIP)</td>
<td>Nutrition supplements included on essential drugs list of Essential Medicines Logistical Improvement Programme (EMLIP)</td>
</tr>
<tr>
<td>Output 1: EMLIP commodities committee received nutrition expertise</td>
<td># of nutritionists serving on the EMLIP commodities committee</td>
</tr>
</tbody>
</table>