Comprehensive Africa Agriculture Development Programme (CAADP)

CAADP Nutrition Capacity Development Workshop for the Southern Africa Region

Nutrition Country Paper – ZAMBIA

DRAFT – English version

September 2013

This synthesis has been elaborated in preparation for the CAADP workshop on the integration of nutrition in National Agricultural and Food Security Investment Plan, to be held in Gaborone, Botswana, from the 9th to the 13th September 2013.

The purpose of this Nutrition Country Paper is to provide a framework for synthetizing all key data and information required to improve nutrition in participating countries and scale up nutrition in agricultural strategies and programs. It presents key elements on the current nutritional situation as well as the role of nutrition within the country context of food security and agriculture, including strategy, policies and main programs. The NCPs should help country teams to have a shared and up-to-date vision of the current in-country nutritional situation, the main achievements and challenges faced both at operational and policy levels.

General sources used to produce this document

The tableau below suggests a list of sources to consult when completing the NCP. This list needs to be completed with all country-specific documents (e.g. national policies, strategic plans) that are available in your country.

Sources	Information	Lien internet
CAADP	Signed Compact / Investment plans / Stocktaking documents / Technical Review reports if available	http://www.nepad-caadp.net/library-country-status-updates.php
DHS	DHS Indicators	http://www.measuredhs.com/Where-We-Work/Country-List.cfm
FANTA	Food and Nutrition technical assistance / select focus countries	http://www.fantaproject.org/
FAO	Nutrition Country Profiles	http://www.fao.org/ag/agn/nutrition/profiles_by_country_en.stm
	FAO Country profiles	http://www.fao.org/countries/
	FAO STAT country profiles	http://faostat.fao.org/site/666/default.aspx
	FAPDA – Food and Agriculture Policy Decision Analysis Tool	http://www.fao.org/tc/fapda-tool/Main.html
	MAFAP – Monitoring African Food and Agricultural Policies	http://www.fao.org/mafap/mafap-partner-countries/en/
OMS	Nutrition Landscape information system (NILS)	http://apps.who.int/nutrition/landscape/report.aspx
REACH	REACH multi-sectoral review of existing data on the nutrition situation, programmes, policies	*When available*
ReSAKKS	Regional Strategic Analysis and Knowledge Support System	http://www.resakss.org/
SUN	Progress Report from countries and their partners in the Movement to Scale Up Nutrition	http://scalingupnutrition.org/resources-archive/progress-in-the-sun-movement
UNICEF	Nutrition Country Profiles	http://www.childinfo.org/profiles_974.htm
	MICS: Multiple Indicators Cluster Surveys	http://www.childinfo.org/mics_available.html
WFP	Food security reports	http://www.wfp.org/food-security/reports/search
World Bank	Economic reports	http://data.worldbank.org/indicator
UNDP	Development report	http://hdr.undp.org/en/data/profiles/
National Sources	**Strategic framework** Revised-Sixth National Development plan National Vision 2030 **Agriculture** The National Agriculture policy National Medium Term Priority Frame Work (NMTPF) **Food security** The Comprehensive Africa Agricultural Development Programme (CAADP) pillar III **Nutrition** The National Food and Nutrition Policy National Food and Nutrition Sector Strategic Plan Zambia National Strategy and plan of Action for the prevention and control of Vitamin A deficiency and Anemia The First 1000 most critical days, based on strategic direction one in the NFNSP **Health and social protection** Nutrition Guidelines for care and support of people living with HIV and AIDS National School Health and Nutrition Policy Cash Transfer Schemes under the Social Protection Policy	Hard and soft copies available

I. Context –Food and nutrition situation

General Indicators		*Sources/Year*
Population below international poverty line of US$1.25 per day	64%	UNICEF 2004-05
Under-five mortality rate (per 1,000 live births)	↘118	DHS 2007
Infant mortality rate (per 1,000 live births)	↘70	DHS 2007
Primary causes of under-five deaths (list the 3 main causes): -Pneumonia-	19%	WHO 2008
Maternal mortality rate /100 000 lively births	470	UNICEF 2008
Primary school net enrolment or attendance ratio	80%	UNICEF 2005-09
Primary school net enrolment -ratio of females/males	0.98	UNICEF 2009
HIV/AIDs prevalence between adults 15-49 years	12.5%	UNAIDS, WHO 2011
Percentage of population living in rural areas	64.3%	World Bank 2010
Access to improved drinking water in rural areas	46%	2008 UNICEF
Access to improved sanitation in rural areas	43%	2008 UNICEF
Agro-nutrition indicators		*Sources/Year*
Land area (1000 ha)	74339	FAOSTAT 2011
Agricultural area (1000 ha)	23435	FAOSTAT 2011
Food Availability and consumption		
Average dietary energy requirement (ADER)	2140	FAO 2006-08
Dietary energy supply (DES)	1880	FAO 2006-08
Total protein share in DES	10%	FAO 2006-08
Fat share in DES	17%	FAO 2006-08
Average daily fruit consumption (excluding wine) (g)	N/A	
Average daily vegetable consumption (g)	N/A	

Geography, population & human development

Zambia, a landlocked country, has a mild tropical climate. It is sparsely populated compared to some of the neighboring countries and the population is young (46% < 15 years old) and predominantly rural. Zambia was once classified as a middle-income country. Presently three out of four Zambians live in poverty and more than half of them are extremely poor and unable to meet their minimum nutritional needs. The country ranked 163 out of 187 in 2012 (within the low human development countries, UNDP Human Development Report 2013). Only 26% of adult women have a secondary or higher level of education compared to 44% of adult males. Economic decline has made it impossible for the government to maintain previous levels of public services.

Economic Development

Zambia has turned around its image from a country performing considerably below its potential, to a country with good economic management and several years of strong economic growth. Strong macro-economic performance, coupled with fast pace growth in mining, construction, telecommunications and tourism, helped spur GDP growth of 5.6 percent on average in 2001-2010, which peaked at 7.6 percent in 2010. The contribution of the agricultural sector to GDP has steadily increased and Zambia has a huge agricultural potential that is still largely untapped. Despite economic growth, poverty remains widespread and per capita GNP has shown a downward trend over the years since independence. The challenges of HIV/AIDs, environmental degradation and governance impede the country's capacity to translate economic growth into poverty reduction with 59 percent of the population living below the poverty line and 37 percent considered in extreme poverty. The majority of the population is engaged in rain-fed subsistence farming.

Agriculture (cultivable area, main cash and food crops, livestock production ….)

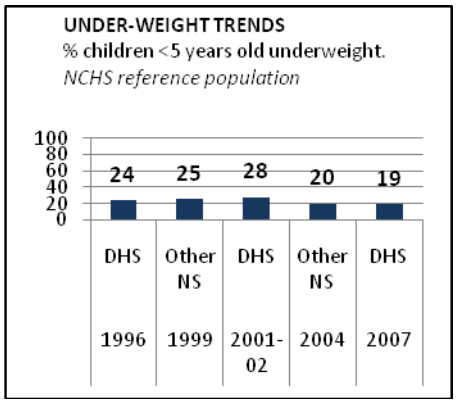
Agricultural land in Zambia is less than 32% of the land area. Only 4.5% of the land are arable and 0.05% under permanent crops. Despite its high potential, the performance of agriculture sector in Zambia is low. Staple food crops include maize, cassava and wheat. Livestock productivity is low. The ruminant livestock sub-sector, which consists of cattle, estimated at 2.5 million head in 2001 (2.6 million in 2006 according to FAOSTAT), sheep and goats, comprises traditional and commercial activities. Fisheries is not well-developed in the country due to its geographic situation and poor investments. Fishing is almost traditional, mainly for local consumption.

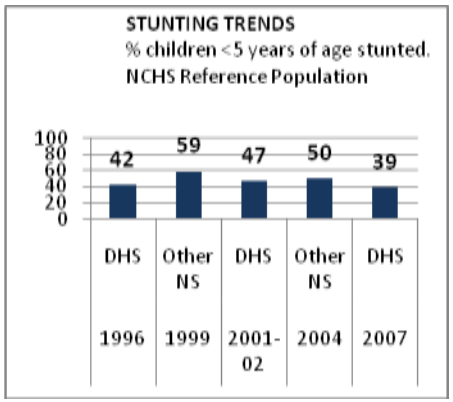
Food Security (food availability, access, utilization, diet, coping mechanisms)

The Zambian diet is mainly composed of cereals, predominantly maize, starchy roots and, to a lesser extent, fruit and vegetables. Cereals provide almost two-thirds of the dietary energy supply. Although other food crops are becoming increasingly important, such as cassava, Zambia's dependence on maize remains very high which contributes to making it vulnerable to climatic shocks. In urban areas food consumption patterns are changing: rice and sweet potatoes are gaining importance. Reduced state support in the 1990s led to a shift in crop production from maize, to other crops (cassava and cash crops). While maize is still largely predominant, production has consistently declined over the years. Inadequate production of alternative staple crops, climatic constraints, and poverty contribute to widespread food insecurity. The dietary energy supply is not sufficient to meet population energy requirements. Quantitatively insufficient, food supplies also lack diversity and are poor in essential micronutrients.

Main causes of malnutrition related to economic vulnerability and food security
Health causes: high rates of infectious diseases (TB, Malaria, HIV/AIDS, etc.)
High level of poverty
Low production and productivity in agriculture due to lack of public and private investments

Agro-Nutrition Indicators (continued)		*Sources/Year*
Nutritional Anthropometry (WHO Child Growth Standards)		
Prevalence of stunting in children < 5 years of age	45%	NDHS 2006-07
Prevalence of wasting in children < 5 years of age	5%	NDHS 2006-07
Prevalence of underweight children < 5 years of age	15%	NDHS 2006-07
% of underweight Women (15-49 years) (BMI < 18.5 kg/m²)	10%	NDHS 2006-07
% of overweight Women (15-49 years) (BMI ≥ 25. kg/m²)	19.2%	NDHS 2006-07
Prevalence of obesity - Children under 5 years old - Women of reproductive age (BMI > 30 kg/m^2)	5.4%	NDHS 2006-07





Indicator (WHO Standards) Source: DHS 2008	*Gender*			*Residence*			*Wealth quintile*					
	Male	*Female*	*Ratio m/f*	*Urban*	*Rural*	*Ratio u/r*	*1 +Poor*	*2*	*3*	*4*	*5 +Rich*	*Ratio r/p*
Stunting prevalence	*48*	*42*	*1.1*	*39*	*48*	*0.8*	*48*	*51*	*47*	*42*	*33*	*0.7*
Underweight prevalence	*17*	*13*	*1.3*	*13*	*15*	*0.9*	*16*	*16*	*16*	*13*	*11*	*0.5*

Nutritional Situation[i]

The long terms effects of malnutrition are widespread in Zambia. Nationally, 45% of children < 5 years are stunted with 21% severely stunted. Moreover, 18% of infants < 6 months old are stunted. For children between the ages of 18-23 months the rate is 59%, or almost two thirds of the children in that age group. Overall, boys have a slightly higher rate of stunting that do girls. Wasting peaks at 9-11 months (12%) when breast milk alone is no longer sufficient to promote adequate growth, pointing to inadequate feeding practices for young children. The prevalence of underweight children is 15%, with boys more likely (17%) to be underweight than girls (13%). There is a big regional difference, with the rates of underweight for children from the North-Western province twice as high (20%) than of children in Lusaka (10%). Another trend that needs to be monitored is that 8% of children <5 years of age are overweight in Zambia.

The percentage of overweight women is also high at 19%, whereas 10% were underweight. Almost 6% of women of bearing age were obese (DHS 2006-2007).

Agro-nutrition indicators (continued)		*Sources/Year*
Infant feeding by age		
Children (0-6 months) who are exclusively breastfed	61%	UNICEF 2005-09
Children (6-9 months) who are breastfed with complementary food	93%	UNICEF 2005-09
Children (9-11 months) who are using a bottle with a nipple	2.4%	DHS 2007
Children (20-23 months) who are still breastfeeding	42%	UNICEF 2003-2008
Prevalence of micronutrient deficiencies		
Prevalence of vitamin A deficiency among pre-school children (serum retinol < 0.70 µmol/l)	54.1%	WHO 2003
Prevalence of vitamin A deficiency among pregnant women (serum retinol < 0.70 µmol/l)	14%	WHO*
Prevalence of anemia among pre-school children (Hb<110 g/l)	54%	2009 UNICEF
Prevalence of anemia among pregnant women (Hb<120 g/l)	30%	2009 UNICEF
Prevalence of iodine deficiency among school-aged children (urinary iodine < 100 µg/L)	N/A	
Coverage rates for micronutrient-rich foods and supplements intake		
% Households consuming adequately iodized salt (≥ 15ppm)	53%	NFNC 2012
Vitamin A supplementation coverage rate (6-59 months)	60%	DHS 2007
Vitamin A supplementation coverage rate (≤2 months postpartum)	45%	DHS 2007
Iron supplementation coverage among pregnant women		

***** No year of survey found. The data is from "WHO. 2009. Global Prevalence of Vitamin A Deficiency in Populations at Risk 1995–2005."

Infant feeding

Breastfeeding in more practised in Zambia than other countries within the same region.Yet, Survey data show that only 61% of children are exclusively breastfed the first six months whereas 86% of infants under two months of age are exclusively breastfed (DHS 2007). Recommended feeding practices for infants and young children (IYCF) require the introduction of a variety of foods with a minimum frequency during the day along with continued breast feeding. Only 37% of children living with their mother are fed in accordance with IYCF practices.

Micronutrients

In the early 1990s, iodine deficiency was a severe public health problem in the country. Since the enforcement of legislation on salt iodization in 1996, the percentage of children with low urinary iodine level has decreased considerably. The most recent estimates of the level of urinary iodine are indicative of more than adequate iodine intake among the population. Thanks especially to the up-scaling of vitamin A supplementation coverage, prevalence of sub-clinical vitamin A deficiency has decreased among women. Nevertheless only about half of mothers receive vitamin A supplements during the post-partum period. Among children, prevalence of sub-clinical vitamin A deficiency is decreasing but is still at a very high level despite the coverage by supplementation of almost two thirds of the children. In recent years, coverage seems to have declined slightly. Supplementation needs to be expanded for both mothers and children. Anemia affects more than half of preschool children and almost a third of non-pregnant women. Iron supplementation coverage among pregnant women is very wide but compliance has not been assessed. Various public health programs are implemented to reduce the high incidence of malaria and of some parasitic infections which contribute to the high prevalence of anemia.

Care practices and sociocultural issues (incl. gender issues; cultural habits/norms)

National food security and nutrition information system

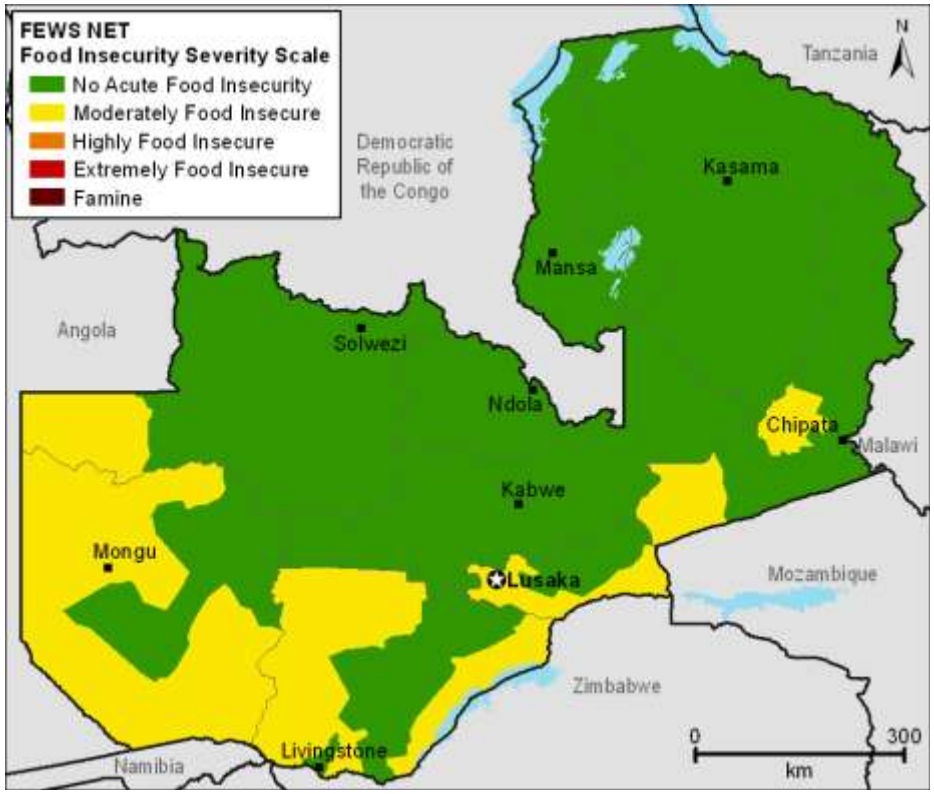
Main linkages between malnutrition and disease (incl. HIV/AIDS)

Zambia has very high HIV/AIDS infection prevalence, leading and aggravating malnutrition in country

Main causes of malnutrition related to care and infant feeding practices, sociocultural barriers (incl. gender issues)

-Exclusive breastfeeding rate, even better than some countries, is still suboptimal
- Complementary feeding practices not optimal

Malnutrition and Food insecurity levels by region



Most likely food security scenario, April- June, 2011

Source: FEWS NET Zambia and ZVAC

II. Current strategy and policy framework for improving food security and nutrition

Specific strategies, policies and programs currently in place to improve nutrition

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
STRATEGIC FRAMEWORK						
Sixth National Development Plan (SNDP)	2011 – 2015	The main objectives of the SNDP (Poverty Reduction Strategy Paper) are sustained economic growth and poverty reduction. The SNDP will accelerate infrastructure development; economic growth and diversifation; rural investment and poverty reduction and enhance human development.	The GRZ and Cooperating Partners will mobilize funding from domestic and external sources to continue implementation of the Vision 2030, NAP, NDPs components that are ready or ongoing and need scaling up. Barclays Bank and the Zambia National Commercial Bank (ZANACO)	GRZ Development partners Private Sector	The strategic focus of the SNDP is to address the constraints of infrastructure and human development. In order to reduce the high poverty, focus will be on stimulating agriculture productivity and promotion of agro-businesses, improving the provision of basic services such as water and sanitation, health, education and skills development. In addition, investments in key economic infrastructure such as feeder roads, water canals, tourist access roads and electricity access will be undertaken. The SNDP will also entrench cross-cutting issues of Governance, HIV and AIDS, Gender, Disability, Nutrition, Environment and Disaster Risk Management The SNDP will be consistent with investment program under the ZCC, meeting the MDGs and in particular, the MDG goal of reducing extreme poverty and hunger by half by 2015.	

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
National Vision 2030	2006-2030	The National Vision 2030 is organized around the theme of broad-based wealth and job creation through citizenry participation and technological advancement and focuses on economic infrastructure and human resources development.The main objectives identified: a) Reaching middle-income status ; b) Significantly reducing hunger and poverty ; and c) Fostering a competitive and outward-oriented economy. The socio-economic development objectives are: to attain and sustain annual real growth of 6 percent (2006-2010), 8 percent (2011-2015), 9 percent (2016-2020), and 10 percent between 2021 and 2030; to attain and maintain a moderate inflation rate of 5 percent; to reduce national poverty head count to less than 20 percent of the population; to reduce income inequalities measured by a Gini coefficient of less than 40; to provide secure access to safe potable water sources and improved sanitation facilities to 100 percent of the population in both urban and rural areas; to attain education for all; and, to provide equitable access to quality health care to all by 2030		GRZ		
AGRICULTURE						
The National Agricultural Policy (NAP)	2004-2010	The NAP main objectives are to ensure the liberalization, commercialization, and promotion of public and private sector partnerships and the provision of effective services that ensure sustainable agricultural growth and national and household food and nutrition security.	*Government commits itself to allocating and spending at least 10% of*	GRZ MoAWF	The main objectives of the policy are in line with Government's desire to alleviate poverty, ensure food security and to facilitate economic growth through the commercialisation and development of the agricultural	

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
		The policy seeks to - ensure dependable annual production of basic foodstuffs on a competitive basis. - improve the agricultural resource base -exploit available water resources to contribute to the successful performance of the agricultural sector - undertake land reform - increase public investment in rural development.	*the national budget to the agricultural sector from 2013. This will contribute towards meeting the investments required to realize the outcomes in the Vision 2030 and NAP using NDPs.*		sector.	
National Medium Term Priority Frame Work (NMTPF)	2009-2013	The NMTPF is based on key government policies, strategies and priorities in the areas of agriculture, fisheries, environment and natural resources. The NMTPF provides for : -The provision of extension services to vulnerable groups which are women and youth groups. -Dissemination of nutrition information by promoting storage, utilization and consumption of crop, livestock and fish products -Provision of subsidized agricultural inputs to small scale farmers through the Farmer Input Support Program. Farmers are also linked to organizations which provide affordable inputs.		GRZ MoAWF		

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
FOOD SECURITY						
The Comprehensive Africa Agricultural Development Programme (CAADP) pillar III	2011 ongoing	Four Major Sub-Programs: 1-Commodity Commercialization; 2-Agriculture Infrastructure Development; 3-Private Sector Promotion; 4-Sector Coordination and Management. Ministry of Agriculture and Livestock is supporting the following FSN activities in relation to pillar III: -Social Protection and Safety Nets -Investigate and implement alternate delivery mechanisms that crowd in the private sector -Food Security Pack -Early Warning -Agricultural Information and Statistics -Nutrition Research and Education -Livestock -Fisheries	In aligning with CAADP, countries adopt common commitment to achieve an annual growth rate of 6 percent in agriculture, the Maputo Declaration (in 2003 by African Heads of State) of allocating at least 10 percent of national budget to the sector.	GRZ line ministries Development Partners Farmer Associations NGOs Other agricultural sector partners	The CAADP aims to support approximately 30% of food insecure households (and other vulnerable groups) to meet their basic food security and nutritional needs through a package of social protection safety net interventions.	
NUTRITION						
The National Food and Nutrition Policy	2008	The NFNP guides the implementation of nutrition activities including Training and capacity Research and surveillance Emergency preparedness and mitigation Institutional feeding Behaviour change and communication Institutional Framework Legal Framework Financing Monitoring and Evaluation The main objectives are to achieve sustainable		GMZ line ministries	Key activities: a) Amend the National Food and Nutrition Commission Act of 1967; b) Expand proven high impact and cost effective food and nutrition interventions focusing on under-served areas and vulnerable population groups; c) Advocate for the promotion of nutritious diet through crop	

Strategy / Policy	Reference Period	Objectives and main components	Budget / Donor	Stakeholders	Key points	Integration of Nutrition
		food and nutrition security and to eliminate all forms of malnutrition in order to have a well – nourished and healthy population which can effectively contribute to national development.			diversification, adequate food processing, storage and utilization; d) Ensure adequate quality and safety of local and imported food and food products; e) Enhance effective utilization of food by advocating for control, prevention and treatment of diseases having an impact on nutrition and specifically community-based interventions; f) Support expansion of the school feeding programme and other school nutrition service	
Infant and Young Child Feeding	On-going			Government of Zambia MoH UNICEF WHO		
Essential Nutrition Package of Care	On-going			Government of Zambia MoH UNICEF WHO		
Micronutrients Operational Strategy	On-going	Vitamin A supplementation		Government of Zambia MoH UNICEF WHO	Targeted population	
National Food and Nutrition Sector Strategic Plan	2011	Is a document that has an outlined framework that guides the partners to co-ordinate their efforts and actions Aims at achieving sustainable food and nutrition security and to eliminate all forms of malnutrition Has specific strategic directions that guides		Government of Zambia MoH UNICEF WHO	• Prevention of stunting in children <2 years of age: first 1000 most critical days • Increasing micronutrient and macronutrient availability, accessibility and utilization through improving improving	

Strategy / Policy	Reference Period	Objectives and main components	Budget / Donor	Stakeholders	Key points	Integration of Nutrition
		implementation			food and nutrition security • Early identification, treatment and followup of severe acute malnutrition • Improving Nutrition education and nutritious feeding through school • Increase linkages among Hygiene, Sanitation, Infection control and Nutrition • Food and nutrition to mitigate HIV and AIDS • Nutrition related control and prevention measure of diet related Non Communicable diseases • Food and Nutrition preparedness and response to Emergencies • Strengthening Governance, capacity building and partnerships in support of food and Nutrition interventions at all levels • Monitoring and evaluating food and nutrition situation, interventions and research to support their improvement and expansion • Expanding and developing communication and advocacy support for food and nutrition interventions at various levels	
HEALTH & SOCIAL PROTECTION						
National Health Strategic Plan	2006-2011					
Scale-up plan for the elimination of MTCT	2011-2015	Preventing MTCT of HIV Providing pediatric treatment Preventing infection among adolescents and young people Protecting and supporting children affected by HIV and AIDS	Government of Zambia MoH UNICEF WHO		Aims to provide integrated and effective PMTCT and Paediatric HIV services to at least 80% of pregnant women and their infants.	

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
School Health and Nutrition Policy	2006 ongoing				Based on the National Education Policy, ”Educating our future,” which partly states that one of the aims of education is to foster healthy living, physical coordination and growth of the child.	
Cash Transfer Schemes under the Social Protection Policy	2011	Aims to improve the standard of living in the impoverished households,.			Program is being scaled up and is reaching 21,000 households. Households receive universal child grants in the districts of greatest poverty and under-five mortality.	

III. Country nutritional programs & initiatives currently implemented and/or planned

Main programmes and interventions being implemented to improve nutrition in the different sectors (health, agriculture, food security...)

Agricultural Sector activities:

CAADP :

- Promotion of agricultural diversification
- Promotion of fish and small livestock production to enhance diversified diets.
- Promotion of bio-fortification of foods (e.g. yellow maize, yellow fleshed sweet potatoes, high protein beans
- Farming systems(Conservation agriculture, crop diversification for diversified diets, bee keeping)
- Promotion of complementary feeding through local production of nutritious foods(collaboration between Ministry of Agricultural and Ministry of Health)
- National food processing and nutrition center being established this year for demonstration of proven technologies to staff and farmers. Processing, preservation and storage of legumes, cereals, root tubers, fruits and vegetables promoted to enhance food and nutrition security .
- Farmer Input Support Programme (FISP Government Subsidized inputs through the) to increase production and enhance food security
- Furthermore, the Department of Agriculture is in the process of reviewing the operations of the Food and Nutrition section by developing guidelines for use by staff in their implementation process. The guidelines have a proposed monitoring and evaluation framework which intends to collect some of the following indicators:

Health Sector**:**

Education: Promotion of the School Health and Nutrition Programme (School milk project, Home grown school feeding, school gardens and orchards for micronutrients and micro nutrient supplementation) This is a joint programme between Ministry of Health, Ministry of Education, Ministry of Agriculture and Livestock and private partners

Consideration of nutritional goals into programs / activities related to agriculture and food

Main population groups targeted & localisation

Funding opportunities

Monitoring & Evaluation mechanisms

ZDHS: Health and Nutrition Indicators
MICS:
Food Security and Nutrition Indicators:

IV. Stakeholders, coordination mechanisms and national capacities for implementing food and nutrition security framework

Main national entities in charge of designing and implementing the food and nutrition policy framework

The Department of Agriculture of the Ministry of Agriculture and Livestock has been mandated with the role of increasing agricultural production and productivity in order to improve household food and nutrition security. The overall coordination and oversight is provided by the Agricultural Sector Advisory Group (AgSAG) composed of all key stakeholders in the agricultural sector.

Within the structure of the Department of Agriculture is the Food and Nutrition Section with food and nutrition extension officers who exist at district, province and national level. These implement food and nutrition activities in collaboration with the agricultural field extension officers, line government ministries, NGO's and other development partners.

The key line government ministries include Ministry of Health which plays a curative role of nutrition among farming communities and Ministry of Community Development, Mother and Child which is key in community mobilization during nutrition programming.

Main management and technical capacities at the institutional level

- Zambia's long-term trend of declining public agricultural R&D investments continued from 2001–08 due to weakened government and donor support and, in 2005, spending fell to an historic low.
- Research staff numbers and qualification levels deteriorated from 2001–06 largely due to a government hiring freeze and limited training. In 2006, staff numbers began to rise, but mainly at the junior level.
- The government is the main funder of agricultural R&D—supplemented by limited support from foreign donors and development banks—but spending is largely allocated to salaries and overhead.
- Despite some recent positive developments, years of underinvestment in agricultural R&D have taken their toll on Zambia's agencies, such as the Zambia Agricultural Research Institute (ZARI), and they continue to struggle with funding issues that hinder their performance.

Disaster prevention/management structures

Monitoring and Evaluation capacities

Main technical and financial partners

The main multi-lateral partners are; World Bank, European Union and UN Agencies, especially FAO, WHO, UNICEF.

The main bilateral partners are United Kingdom (DFID), The Netherlands, Sweden (SIDA), Japan (JICA), USA (USAID), Denmark (DANIDA) and Ireland. Many of these partners have interest in supporting specific areas.

The MoH has developed a *Memorandum of Understanding* that defines the expectations of the Ministry of Health and those of the partners for improved harmonization. The Government-led mechanism facilitates the exchange of information and policy dialogue between the Cooperating Partners and the Government on all matters related to the health sector.

The United Nations Development Assistance Framework (UNDAF), an umbrella programming mechanism of the UN Country Team, works in close cooperation with and has aligned its priorities to that of the Government. The current UNDAF, which reaffirms the commitment of UN Country Team to supporting the efforts of the Government and toward realizing the long-term national Vision 2015 goals, covers the period 2007-2010. The framework is also used for monitoring progress made by Government towards achieving MDG targets by 2015.

Main coordination mechanisms (Task force, core group, cluster...)

The national Food and nutrition commission is the lead agency to coordinate and support nutrition programs and projects. The NFNC serves as secretariat to a multi-sectoral committee that provides technical and policy direction. Key ministries for implementing food and nutrition programs are Ministries of Health, Education and Agriculture and Cooperatives.

NEPAD/CAADP, as a framework of the AU, emanates from and is fully owned and led by African governments. The Common Market for Eastern and Southern Africa (COMESA) has been mandated to coordinate and harmonize implementation in its region as a partner with national authorities, Cooperating Partners (CPs), the private sector, Civil Society Organizations (CSOs) and the Southern African Development Community (SADC) as a part of the NEPAD Initiative, fully reflecting the broader principles of mutual review and dialogue, accountability, and partnership.

The African Union through NEPAD, SADC, COMESA and its regional partners are committed through the Maputo Declaration, to support Zambia in its endeavors to define priority programmes that would allow the country to meet the objectives of CAADP and be on the road to attaining MDG1. In this regard the African Union, COMESA and other regional partners will support Zambia's CAADP Compact as defined in the NDPs as strategies towards the achievement of the NAP and Vision 2030 aspirations through mobilizing of financial and technical support.

Adherence to global / regional initiatives linked to nutrition (e.g. SUN, REACH, CAADP...)

-The Comprehensive Africa Agriculture Development Programme (CAADP)
-Baby Friendly Hospital InitiativeFHI
-Infant and Young Child Feeding Initiative
-Global Strategy for Women's and Children's Health
-Global Code of Practice on the International Recruitment of Health Personnel
-International Code of Marketing of Breast-milk Substitutes
-Millennium Development Goals
-GAVI Global Alliance for Vaccines initiative
-Roll Back Malaria Initiative (RBM)
-Global Strategy for Women's and Children's Health

Main issues at stake to improve the mainstreaming and scaling-up of nutrition at the country level and regional / international level, taking into account sustainability

The Country needs to:

Develop an integrated approach for tackling nutrition
Develop a comprehensive monitoring and evaluation framework for the country
Develop Capacity and human resource both in numbers and technical capabilities to deliver nutrition
Increase financial support to the sector
Enhance food based approaches to addressing malnutrition
Increase investment in nutrition research
Strengthen nutrition education and nutrition campaigns
Develop Advocacy and lobbying for increased nutrition support
Scale up successful projects or success stories
Address gender disparities in order to enhance women participation in food and nutrition programmes

Definitions

Acute hunger	Acute hunger is when the lack of food is short term, and is often caused when shocks such as drought or war affect vulnerable populations.
Chronic hunger	Chronic hunger is a constant or recurrent lack of food and results in underweight and stunted children, and high infant mortality. "Hidden hunger" is a lack of essential micronutrients in diets.
Direct nutrition interventions and nutrition-sensitive strategies	Pursuing multi-sectoral strategies that combine direct nutrition interventions and nutrition-sensitive strategies. Direct interventions include those which empower households (especially women) for nutritional security, improve year-round access to nutritious diets, and contribute to improved nutritional status of those most at risk (women, young children, disabled people, and those who are chronically ill).
Food Diversification	Maximize the number of foods or food groups consumed by an individual, especially above and beyond starchy grains and cereals, considered to be staple foods typically found in the diet. The more diverse the diet, the greater the likelihood of consuming both macro and micronutrients in the diet. *Source : FAO*
Food security	When all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.
Hunger	Hunger is often used to refer in general terms to MDG1 and food insecurity. Hunger is the body's way of signaling that it is running short of food and needs to eat something. Hunger can lead to malnutrition.
Iron deficiency anemia	A condition in which the blood lacks adequate healthy red blood cells that carry oxygen to the body's tissues. Without iron, the body can't produce enough hemoglobin, found in red blood cells, to carry oxygen. It has negative effects on work capacity and motor and mental development. In newborns and pregnant women it might cause low birth weight and preterm deliveries.
Malnutrition	An abnormal physiological condition caused by inadequate, excessive, or imbalanced absorption of macronutrients (carbohydrates, protein, fats) water, and micronutrients.
Millennium Development Goal 1 (MDG 1)	Eradicate extreme poverty and hunger, which has two associated indicators: 1) Prevalence of underweight among children under five years of age, which measures under-nutrition at an individual level; and, 2-Proportion of the population below a minimum level of dietary energy consumption, that measures hunger and food security, and it is measured only at a national level (not an individual level). *Source : SUN Progress report 2011*
Multi-stakeholder approaches	Working together, stakeholders can draw upon their comparative advantages, catalyze effective country-led actions and harmonize collective support for national efforts to reduce hunger and under-nutrition. Stakeholders come from national authorities, donor agencies, the UN system including the World Bank, civil society and NGOs, the private sector, and research institutions.
Nutritional Security	Achieved when secure access to an appropriately nutritious diet is coupled with a sanitary environment, adequate health services and care, to ensure a healthy and active life for all household members.
Severe Acute Malnutrition (SAM)	A weight-for-height measurement of 70% or less below the median, or three standard deviations (3 SD) or more below the mean international reference values, the presence of bilateral pitting edema, or a mid-upper arm circumference of less than 115 mm in children 6-60 months old.
Stunting (Chronic malnutrition)	Reflects shortness-for-age; an indicator of chronic malnutrition and it is calculated by comparing the height-for-age of a child with a reference population of well-nourished and healthy children.
Underweight	Measured by comparing the weight-for-age of a child with a reference population of well-nourished and healthy children.
Wasting	Reflects a recent and severe process that has led to substantial weight loss, usually associated with starvation and/or disease. Wasting is calculated by comparing weight-for-height of a child with a reference population of well-nourished and healthy children. Often used to assess the severity of emergencies because it is strongly related to mortality. *Source : SUN Progress report 2011*

Acronyms

AUC	African Union Commission
BMI	Body Mass Index
CAADP	Comprehensive Africa Agriculture Development Program
CIP	Country Investment Plan
CFSAM	Crop and Food Security Assessment Mission
CFSVA	Comprehensive Food Security and Vulnerability Analysis
COMESA	Common Market for Eastern and Southern Africa
DHS	Demographic and Health Survey
ECCAS	Economic Community of Central African States
EFSA	Emergency Food Security Assessment
FAFS	Framework for African Food Security
FAO	Food and Agriculture Organization
FNS	Food and Nutrition Security
FSMS	Food Security Monitoring System
GAM	Global Acute Malnutrition
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
NAFSIP	National Agriculture and Food Security Investment Planning
NCHS	National Center for Health Statistics, Centers for Disease Control & Prevention
NEPAD	New Partnership for Africa's Development
NPCA	National Planning and Coordinating Agency
PRS	Poverty Reduction Strategy
REACH	Renewed Efforts Against Child Hunger
REC	Regional Economic Community
SADC	Southern African Development Community
SAM	Severe Acute Malnutrition
SUN	Scaling-Up Nutrition
UNDP	United Nations Development Program
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WFP	World Food Program
WHO	World Health Organization

[i] In 2006, reference norms for anthropometric measures have been modified: from NCHS references to WHO references. To compare data measured before and after 2006, we usually use NCHS references.