African Union

NEPAD Planning and Coordinating Agency (NPCA)

Comprehensive Africa Agriculture Development Programme (CAADP)

CAADP Nutrition Capacity Development Workshop for the Southern Africa Region

Nutrition Country Paper – Botswana

DRAFT - English version

September 2013

This paper has been prepared was prepared by a team of representatives from various governmental, nongovernmental and UN organizations with food security and nutrition mandates (see annex 1), 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 team initiated the preparation of the draft country profile using primarily and secondary data sources as illustrated (annex 2).

The purpose of this Nutrition Country Paper is to provide a framework for synthesizing 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.

This work document will be further updated by the country team during the workshop.

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Table I: Key Indicators – Botswana Profile

	Current Value	Source / Year	Value in ±2000	Source / Year	Value in ±1990	Source / Year
General Indicators						
Total Population	2 024 904	Stats Botswana 2011 Population & Housing Census, 2012	1,680,863	www.cso.gov.bw	1,326,796	www.cso.gov.bw
HIV Prevalence	17.6%	2008 BAIS III, CSO (2009)	17.1%	2004 BAIS II, CSO (2005)	33.4% (1995)	Sentinel survey
Life Expectancy	53 years in 2011 Botswana Census CSO (2012)	MICS: Multi Indicators Cluster Surveys, 2012	67.5 years in 1999	MICS: Multi Indicators Cluster Surveys, 2012 Botswana Census 2001 CSO	65.3 years in 1991	MICS: Multi Indicators Cluster Surveys, 2012
HDI Rank	119	UNDP HDI 2012 Report	122	UNDP HDI 2000 Report	58	UNDP HDI 1990 Report
Population below international poverty line of US$1.00 per day	6.5%	BCWIS (2011)	23.4%	HIES, CSO (2004)	23% (1994)	Botswana Country Profile-Johannesburg Summit 2002
Infant mortality rate (per 1 000 live births)	26 in 2011	MICS: Multi Indicators Cluster Surveys, 2012	81 in 2000	MICS: Multi Indicators Cluster Surveys, 2012	53 in 1990	MICS: Multi Indicators Cluster Surveys, 2012
Primary cause of < 5 deaths	Top three causes: Pneumonia,	Health Statistics Report 2009. CSO (2012)	Top three causes: Pneumonia,	Stats Brief No 20 2010/17 Botswana Causes of Mortality 2008. CSO (2010)	Data not available	Data not available

	Diarrhoea, Septicaemia		Diarrhoea, HIV/AIDS			
Maternal mortality rate (per 100 000 live births)	188.86 (2011)	Stats Brief No 2012/19 CSO (2012)	157.9 (2005)	Stats Brief Issue no 8 CSO (2008)	140 (1990)	WHO/ UNICEF UNFPA & World Bank Estimates www.unfpa.org/webdave/site/global/shared/document/publications/2012. Accessed 28-08-2013.
Underweight prevalence. Children (<5) malnutrition	11.9%	Botswana Family Health Survey (2007)	11.0%	Botswana Family Health Survey (2007)	14.6% in 1993	Determinants of Child malnutrition in Botswana: a national study Ubomba-Jaswa & Belbase (1996)
Prevalence of Stunting children <5	31.2%	Family Health Survey (2007)	30.4%	Multi Indicators Cluster Surveys (MICS) (2000)	25.9% (1993)	Determinants of Child malnutrition in Botswana: a national study Ubomba-Jaswa & Belbase (1996)
Wasting (%) children <5	8.6%	Family Health Survey (2007)	7.2%	MICS: Multi Indicators Cluster Surveys (2000)	Data not available	
Prevalence of low birth weight (%)	13.1%	Family Health Survey (2007)	8%	Multi Indicators Cluster Surveys MICS (2000)	Data not available	
Exclusive Breastfeeding (proportion of infants less than 6 months who were exclusively breastfed)	23.3	Family Health Survey (2007)	29	Multi Indicators Cluster Surveys (MICS) (2000)		
Adult Literacy Rate total	83.2%	Botswana Core Welfare Indicator Survey Draft Report (2013)	80.9%	CSO Adult Literacy Report (2003)	68.9%	CSO Adult Literacy Report (1993)
Primary school net enrolment total	337,206 (88.6%)	Stats Brief 2013/1-Primary Education Stats 2012, CSO (2013)	327,618	2007 Education Stats Report CSO (2007)	322,268	2007 Education Stats Report CSO (2007)
Primary school net enrolment of males	172, 347	Stats Brief 2013/1-Primary Education Stats 2012, CSO (2013)	166,987 (85.7%)	2007 Education Stats Report CSO (2007)	165,932 (87.2%)	2007 Education Stats Report CSO (2007)

Primary school net enrolment of females	164, 859	Stats Brief 2013/1-Primary Education Stats 2012, CSO (2013)	160,631 (88.1%)	2007 Education Stats Report CSO (2007)	163,519 (91.1%)	2007 Education Stats Report CSO (2007)
Primary school net enrolment ratio of females/males	0.956	Stats Brief 2013/1-Primary Education Stats 2012, CSO (2013)	0.961	2007 Education Stats Report CSO (2007	0.985	2007 Education Stats Report CSO (2007
Agro-nutrition Indicators						
Access to safe water sources total	98% (2010)	The World Bank www.worldbank.org/population May 2011 (accessed 28.08.2013)	96.2% (2002)	Botswana Aids Impact Survey 2001	83.2%	HIES, CSO (2003)
Access to safe water sources in urban areas	99.8% (2007)	BFHS, CSO (2009) Indicators Cluster Surveys	99.4% in 2004	Botswana Aids Impact Survey II 2005	100%	HIES, CSO (2003)
Access to safe water sources in rural areas	91.3% (2007)	BFHS, CSO (2009)	91.4% in 2004	Botswana Aids Impact Survey II 2005	64.4% in 1993/94	HIES, CSO (2003)
Access to improved sanitation nationally	79.9%	BAIS, 2004	79.8% (2007)	BFHS, CSO (2009)	70% (1991)	Statistical Bulletin Botswana Sanitation (2010)
Food Availability Indicators						
Minimum dietary energy requirement	1,840 kcalories/ person/day (2008)	World Data Atlas http://knoema.com/atlas/Botswana/Minimum-dietary-energy-requirement	1,820 kcalories/ person/day (2002)	World Data Atlas http://knoema.com/atlas/Botswana/Minimum-dietary-energy-requirement	1,760 kcalories/ person/day (1992)	World Data Atlas http://knoema.com/atlas/Botswana/Minimum-dietary-energy-requirement
Dietary energy supply (DES) in kcal/person/day	2,267 kcalories/ person/day (2007)	African Development Bank, Food Security, December 2011 http://knoema.com/ADBFSP2011?tsId=1060830	2,145 kcalories/ person/day (2000)	African Development Bank, Food Security, December 2011 http://knoema.com/atlas/Botswana/Minimum-dietary-energy-requirement	2,266 kcalories/ person/day (1990)	African Development Bank, Food Security, December 2011 http://knoema.com/atlas/Botswana/Minimum-dietary-energy-requirement

Food Consumption Indicators						
Average daily consumption of calories p.p. (WHO/FAO – 55-75)	2,230 kcalories/ person/day (2006/08)	www.fao.org/fileadmin/templates/ess/documents/foodsecuritystatistics/foodconsumptionnutrients/en.xls	2,160 kcalories/ person/day (2000/02)	FAO Statistical Yearbook (2004) Table D.1	2,240 kcalories/ person/day (1989/91)	FAO Statistical Yearbook (2004) Table D.1
Calories from protein (WHO/FAO – 10-15)	64 g/ person/day (2005/07)	www.fao.org/fileadmin/templates/ess/documents/foodsecuritystatistics/foodconsumptionnutrients/en.xls	69 g/ person/day (2000/02)	FAO Statistical Yearbook (2004) Table D.1	69 g/ person/day (1989/91)	FAO Statistical Yearbook (2004) Table D.1
Calories from fat and oils (WHO/FAO – 15-30)	54 g/ person/day (2005/07)	www.fao.org/fileadmin/templates/ess/documents/foodsecuritystatistics/foodconsumptionnutrients/en.xls	50 g/ person/day (2000/02)	FAO Statistical Yearbook (2004) Table D.1	44g person/day (1989/91)	FAO Statistical Yearbook (2004) Table D.1

b. Geography, Population & Human Development

Botswana is a land locked country situated in Southern Africa. With a surface area of about 581 730 sq km, Botswana is the world's 48th largest country. It is bordered by its neighbours South Africa to the east and south, Namibia to the west and north, Zambia to the north and Zimbabwe to the north-east. It is 84% covered by the Kalahari (Kgalagadi) Desert. Most of its population is settled in the east and southeast of the country.

A mid-sized country of just over two million people, Botswana is one of the most sparsely populated countries in the world. The total population estimated for the 2011 is 2 024 904, growing at a rate of 1.9% per annum. The population is heavily weighted towards younger age groups. About 33% of the population is younger than 15 years of age. Over 63% of the population is settled in urban areas (cities, towns and urban/major villages).

The vast majority of the population of Botswana depends on agriculture for their livelihoods. Recent surveys indicated that the percentage of people living under poverty has dropped from 30.6% in 2002/3 to 19.3% in 2009/10 (BCWIS Draft Report, 2013).

Botswana was one of the poorest countries in Africa when it gained independence from the United Kingdom in 1966, with a GDP per capita of about US$70. Botswana has since transformed itself, becoming one of the fastest-growing economies in the world to a GDP (purchasing power parity) per capita of about $14,000, and a high gross national income, possibly the fourth-largest in Africa, giving the country a modest standard of living. The country also has a strong tradition as a representative democracy.

Between 1980 and 2012 Botswana's UNDP's HDI rose by 2.7% annually from 0.449 to 0.634 today (UNDP HDI 2011), which gives the country a rank of 119 out of 187 countries with comparable data. The HDI of Sub-Saharan Africa as a region increased from 0.366 in 1980 to 0.475 today, placing Botswana well above the regional average. In Africa, Botswana is among the 10 highest HDIs. The HDI trends tell an important story both at the national and regional level and highlight the very large gaps in well-being and life chances that continue to divide our interconnected world.

c. Food and Nutrition Situation

Main indicators of the food insecurity situation include: food accessibility (quality and quantity), diversity, and utilization. The diet in Botswana is based on cereals (maize, sorghum and millet) and pulses (mainly beans). Consumption of micronutrient dense foods such as animal products and fruits and vegetables is infrequent and subsequently micronutrient deficiencies are widespread. At national level, the dietary energy supply does not meet average energy requirements of the population. Botswana thus imports food to meet production shortfalls. The country is semi-arid and therefore rainfall in the entire country is scarce and irregular. Rural households spend up to 20.5% of their income on food (BCWIS Draft Report, 2013); and price volatility is a major concern. The Dietary diversification index is very low, as starchy foods provide almost three quarters of the total energy supply, despite Botswana being a cattle country and the wide variety of food available in the country.

d. Economic Development (Including Specific Focus on Agriculture)

At independence in 1966, Botswana was one of the poorest countries in the world with an annual per capita income of US $100 and was regarded as one of the 10 poorest countries in the world. Botswana's economy was dominated by Agriculture then, which accounted for about 40 percent of GDP and 90 percent of total employment in the economy. Agriculture was the main source of income and employment in the country at independence. In the early years of independence, Botswana was dependent on foreign aid for most of her capital and recurrent budget. The discovery and exploitation of copper, nickel and diamonds in the 1970s, increased FDI inflows and resulted in economic growth. After three decades of rapid economic growth, Botswana has become an upper-middle income developing country. Therefore, Botswana stands out as a graduate of least developed to a middle income country. The rapid economic growth is mainly driven by mineral revenue from diamonds. Mining sector contributes about 50 percent of the total GDP and revenue in Botswana. Botswana has been transformed from being a largely agrarian and beef exporting country to an economy based on mining and services.

Agriculture was the engine for growth as it was the major source of income and employment for Botswana at independence. However, the agricultural share to the economy has been declining since independence; from the second half of the 1970s, the structure of the economy changed. Mining which was non-existent in 1966, became the dominant sector. Agriculture share to total employment has also decreased since independence from 90 percent to 16 percent in the 1990s. The decline in the agricultural share was due to the expansion of the other sectors and the poor performance of the sector in terms of productivity and output growth. Table 1 shows the agricultural sector share of GDP from 1966 to 2008/09 (selected years).

Table II: Agricultural sector share of GDP - selected years 1966 to 2008/09 (Percent)

Economic Sector	1966	1985/86	2008/09
Agriculture	42.7	5.6	1.9

Source: *National Accounts Statistics (Central Statistics Office)*

Despite its comparatively low contribution to the GDP, the agricultural sector remains an important source of food and provides income, employment and investment opportunities for the majority of the population in rural areas. The agricultural sector is also important for providing linkages in the economy with upstream and downstream industries. It is the supplier of raw materials for agro-based industries such as meat processing, tanning, milling, oil, soap, brewing, furniture manufacturing and industries that supply agricultural inputs, both of which have the potential to create more jobs, when the agricultural sector grows.

e. Food Security (Food Availability, Access, Utilization & Coping Mechanisms)

Botswana has one of the most stable food security statuses, at least at national level, in Africa. Subsequent to 1991, Government moved from promoting food self-sufficiency to driving "food security"[1]. The shift brought with it one substantial change: recognition of the potential role to be played by trade which was, prior to 1991, neglected given the emphasis on food self-sufficiency. Today, food availability, mostly driven by imports which are largely sourced from South Africa, is a major policy focus.

While there is commendable success in relation to access to food (measured in terms of availability and access to markets), at least at the national level, there is concern regarding food price increases. Available evidence indicates that food prices have increased over the years. Initial results from Botswana Vulnerability Assessment Results (BVAC) for 2013 show that prices for staple foods have increased by 27% since 2009/2010. By lowering the purchasing power of nominal incomes, rising food prices would erode affordability, especially in the case of low income households. If uncurbed, this has the potential to result in compromised food security at household level.

Calculations for 2013/2014 marketing year show national requirements for maize and sorghum/millet are estimated at a total of 316 928 metric tons. Botswana will need to import over 80% of these grains in order to meet her national requirements. Domestic production, from the 2012/2013 cropping season was undermined by low harvest due to below normal and erratic rainfall followed by prolonged dry spells. The reliance on food imports (staple and non-staple) is expected to grow and thereby influence future market operations in terms of price and consumer behaviour (preferences).

Notably, food utilisation in Botswana is not a widely monitored concept of food security. In Food security, utilisation encompasses adequacy of diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. It also includes preparation[2] and storage as most rural (or preferably agriculture dependent) households produce and store own food in traditional storages or the way. These facilities are in most cases inadequate in a variety of ways and in many cases result in losses in terms of quality and quantity.

The most common form of coping strategies during times of perceived food insecurity can be categorised into two: food coping strategies and income/expenditure coping strategies. The former normally entails unconditional transfers offered by the Government in the form of rations and food baskets to the vulnerable groups. Income coping strategies normally entails selling of some asserts and enrolment in government relief programmes such as *Ipelegeng* and/or *Namolo Leuba* (public works). A less known strategy involves families cutting back on their consumption or complete removal of certain items from the food basket.

[1] Source: 1991 National Policy on Agricultural Development

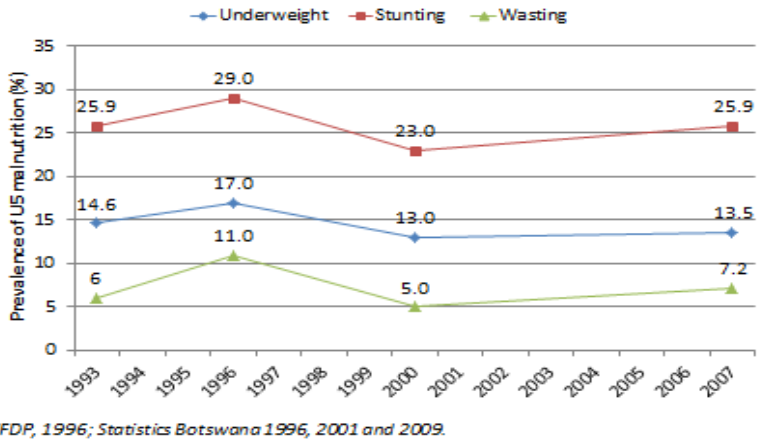
[2] This part of utilization is normally covered under health when dealing with issues of malnutrition. It involves the way food is prepared in general and in accordance with nutritional requirements of individual family members.

f. Nutritional situation

f.1 Malnutrition from the Perspective of Nutrition and Food Insecurity

The common nutrition problems in Botswana are protein energy malnutrition, micronutrient deficiencies, and diet related non communicable diseases. The causes of nutrition related problems include inadequate food intake, inadequate maternal and child caring practices and pre disposing diseases such as TB, and HIV/AIDS.

The Botswana Health survey show that in the year 2007, 13.5%, 7.2% and 25.9% of children were under-weight, wasted and stunted respectively (Data based on NCHS Reference). The re analysis of this data based on the 2006 WHO Growth Standards indicates that 11.9%, 31.2% and 8.6% of children were underweight, stunted and wasted respectively (Nnyepi, Mokgatlhe, Gobotswang, & Maruapula, 2011). All surveys undertaken in the country indicate that prevalence of underweight is higher in rural areas than in urban areas. Figure 1 below indicates prevalence of malnutrition among under-five children between 1993 and 2007. On the other hand clinic based prevalence of underweight is lower than survey findings since some children do not attend monthly child welfare clinics after they have finished their essential vaccinations. Figure 2 indicates the trend in clinic based prevalence of under-five malnutrition for rural districts, between 2001 and 2012 (BNNSS/DAT Report, 2013).



Ref: MFDP, 1996; Statistics Botswana 1996, 2001 and 2009.

Figure 1: **Trends in child under nutrition in Botswana: 1993 – 2007 (NCHS reference)**

The BFHS (2007) also recorded that 13.1% of new born weighed less than 2.5kg suggesting that their mothers suffered from poor maternal health and malnutrition around conception or during pregnancy. Low birth babies are more likely to die than heavier infants (UNICEF and WHO, 2004) In figure 3 below information from the BFHS Survey (2007) also indicate that 15.2% children were overweight or obese. Overweight or obese children are likely to stay overweight /obese into adulthood and are likely to develop non communicable diseases like diabetes and cardiovascular diseases at a younger age.

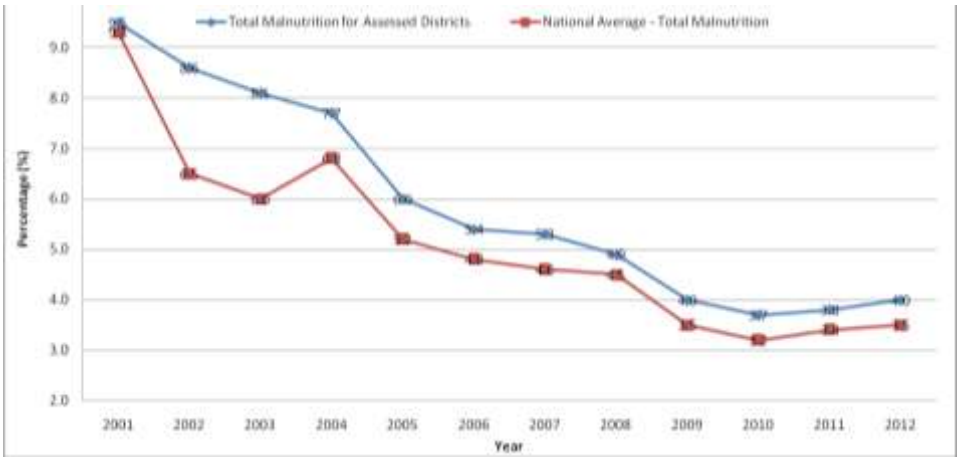
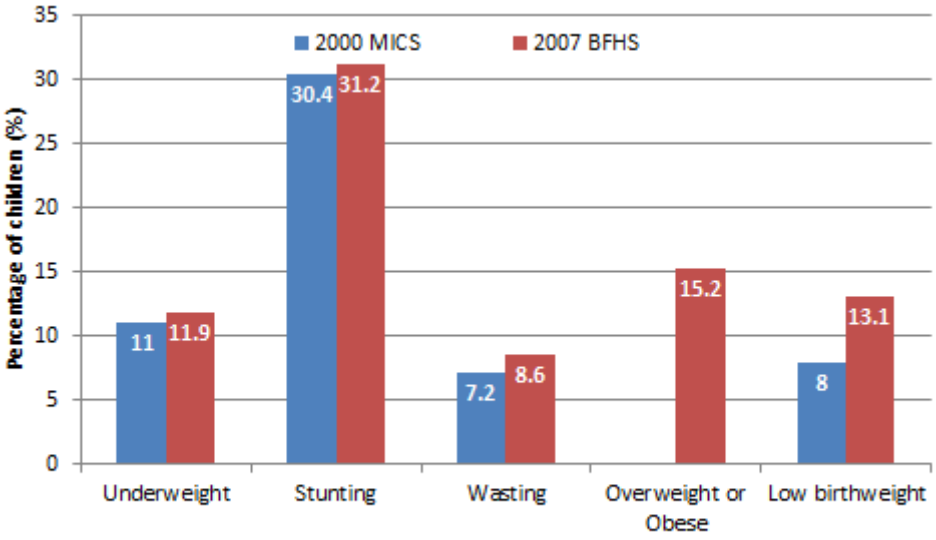


Figure 2: **Malnutrition Trend (Clinic based prevalence of underweight)**

Source: BNNSS - Drought Assessment Tour (2013) Report.

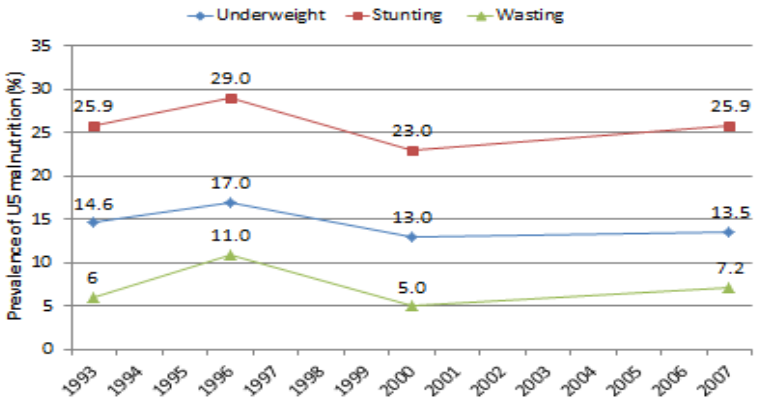
Information on adult nutritional status from the BFHS in 2007 and STEPS Survey (Botswana Chronic Disease Risk Factor Survey), MOH (2010) indicate that both men and women suffer from overweight and obesity. About a quarter of women (age 25 – 64 years) were obese and between 12.9% and 16.5% men were overweight or obese. The prevalence of underweight in both adult men and women was relatively low (7.8% - 10%) in women and 19% in men (STEPS survey). However these figures are higher than the WHO /global estimate of adults underweight prevalence (BMI <18.5) for a healthy population which is 3 – 5% (BMI) <18.5(WHO, 2010), indicating that Botswana has about double the prevalence of a 'healthy population'.



Ref: Nnyepi et al. Child Nutrition Situation in Botswana: Observations from the 2000 and 2007 Household Surveys (WHO standard)

Figure 3: **Changes in malnutrition status 2000 - 2007**

Micronutrient deficiencies often referred to as “hidden hunger” or “hidden forms of malnutrition” are also prevalent as they cannot be seen as is the case with underweight, wasting or stunting. Though information on micronutrient deficiency is scanty old surveys (1994) indicate that 35% of under-five children were vitamin A deficient, and 38% of under-five children and 33% of women were anaemic. The primary causes of child under nutrition include inter alia, household food insecurity (quality, quantity and diversity), inadequate infant and young child feeding practices; low complementary feeding and continued breastfeeding rates and Illnesses - Pneumonia, diarrhoea and HIV/AIDS



Ref: MFDP, 1996; Statistics Botswana 1996, 2001 and 2009.

Figure 4: **Trends in child under nutrition in Botswana: 1993 – 2007 (NCHS reference)**

The BFHS (2007) also recorded that 13.1% of new born weighed less than 2.5kg suggesting that their mothers suffered from poor maternal health and malnutrition around conception or during pregnancy. Low birth babies are more likely to die than heavier infants (UNICEF and WHO, 2004) In figure 3 below information from the BFHS Survey (2007) also indicate that 15.2% children were overweight or obese. Overweight or obese children are likely to stay overweight /obese into adulthood and are likely to develop non communicable diseases like diabetes and cardiovascular diseases at a younger age.

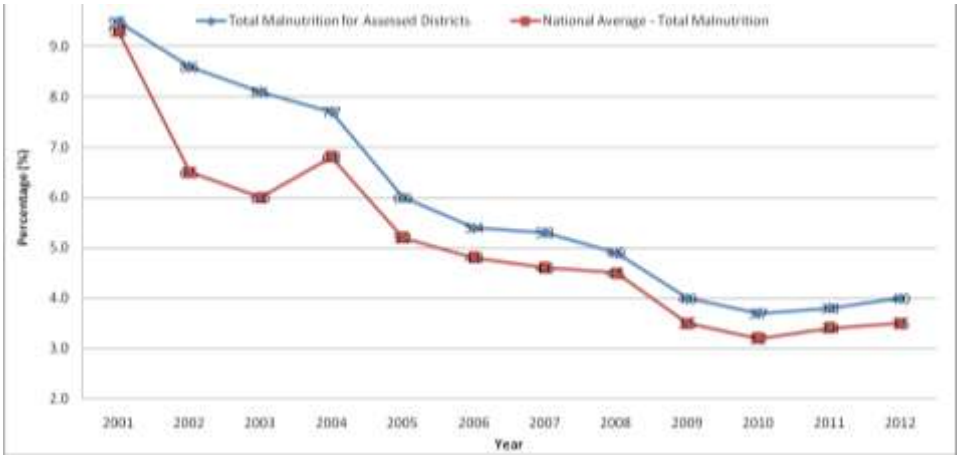
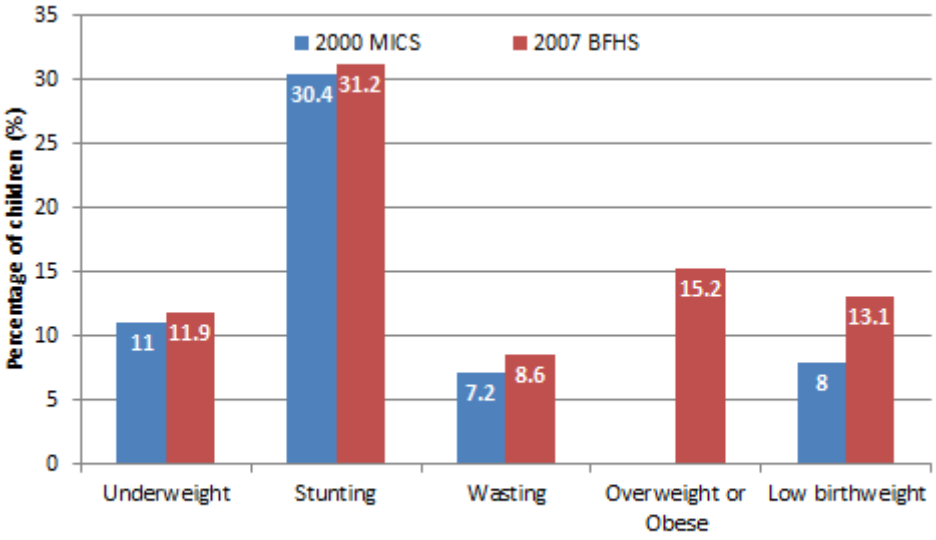


Figure 5: **Malnutrition Trend (Clinic based prevalence of underweight)**

Source: BNNSS - Drought Assessment Tour (2013) Report.

Information on adult nutritional status from the BFHS in 2007 and STEPS Survey (Botswana Chronic Disease Risk Factor Survey), MOH (2010) indicate that both men and women suffer from overweight and obesity. About a quarter of women (age 25 – 64 years) were obese and between 12.9% and 16.5% men were overweight or obese. The prevalence of underweight in both adult men and women was relatively low (7.8% - 10%) in women and 19% in men (STEPS survey). However these figures are higher than the WHO /global estimate of adults underweight prevalence (BMI <18.5) for a healthy population which is 3 – 5% (BMI) <18.5(WHO, 2010), indicating that Botswana has about double the prevalence of a 'healthy population'.



Ref: Nnyepi et al. Child Nutrition Situation in Botswana: Observations from the 2000 and 2007 Household Surveys (WHO standard)

Figure 6: **Changes in malnutrition status 2000 - 2007**

f.2 Women's nutritional status

Regarding maternal nutrition data from the Botswana Chronic Disease Risk Factor (STEPS) Survey (Ministry of Health, 2010) covering subjects aged 12-49 years, and the data from Botswana family Health Survey (2009) covering subjects aged 25-64 years indicate that malnutrition prevalent among women. The results from these two data sets indicated that between a third and a half of Batswana women are overweight or obese depending in the age group under consideration. Almost a quarter of women 25-64 years old were obese. The difference in prevalence from the two data sets reflected that older women are obese (STEPS survey included women 50-64 who were not included in the BFHS sample.) In contrast the prevalence of underweight in women was 7.8% in the STEPS survey and 11.5% in the BFHS. The results from the two surveys show that younger women are underweight as compared to older women.

f.3 Infant feeding

To achieve optimal growth, health and development, the initiation of breastfeeding within the first hour of birth and exclusive breast feeding in the first six months of life is promoted. This is to be followed by the introduction of appropriate (soft, nutritionally adequate, locally produced) complementary foods at six months, with continued breastfeeding for up to two years of age or beyond as supported by the draft National Infant and Young Child Feeding (IYCF) Policy. This practice of successful breastfeeding is important as it boosts immunity and has been shown to significantly reduce neonatal mortality.

However data from the 2007 Botswana Family Health Survey (BFHS, 2009) and the Master Indicator Cluster Survey (MICS, 2000) suggest that despite all these good practices, child feeding situation is poor and has deteriorated since 2000. The extent of the practice of exclusive breastfeeding in Botswana has not been documented recently and deserves further study. The 2007 data shows that only one in five Batswana children in the age range 0-6 months exclusively breastfed. More than 50% of children 6-9 months were not started on complementary foods. The data also reveals that mothers stop breastfeeding earlier than recommended such that only about a third of children are still receiving breast milk at 12-15 months and almost none are still being breastfed at 20-23 months. These practices definitely contribute to poor nutritional status of young children.

f.4 Micronutrients deficiencies

Micronutrient deficiencies often referred to as "hidden hunger" or "hidden forms of malnutrition" are also prevalent as they cannot be seen as is the case with underweight, wasting or stunting. Though information on micronutrient deficiency is scanty old surveys (1994) indicate that 35% of under-five children were vitamin A deficient, and 38% of under-five children and 33% of women were anaemic. The primary causes of child under nutrition include inter alia, household food insecurity (quality, quantity and diversity), inadequate infant and young child feeding practices; low complementary feeding and continued breastfeeding rates and Illnesses - Pneumonia, diarrhoea and HIV/AIDS

f.5 National food security and nutrition information system

As an endeavour to monitor food security situation in Botswana, Government has put in place numerous multi sectorial fora which deal with early warning for food security and food security and vulnerability assessment and analysis. The National Early Warning Committee, whose activities are coordinated by Ministry of Agriculture, is an inter-ministerial committee which meets monthly to discuss issues pertaining to production, trade, nutrition and natural resources for the purposes of providing early warning information for policy decision making. In 2009 Government formalised Botswana Vulnerability Assessment Committee (BVAC) at the recommendation of and technical assistance from SADC. The objective of BVAC was to develop an improved information system on livelihoods and food security in order to enhance poverty reduction and the management of disasters by Year 2016.

II. Current Strategy & Policy Framework for Improving Food Security and Nutrition

Botswana currently has The Revised National Food Strategy (NFS) of 2000. The strategy was first instituted in 1985 as an overarching policy framework to address food security concerns in Botswana. The Revised National Food Strategy was founded on the vision:

"The realisation of a stable and sustainable physical and economic access for all Batswana to basic supplies of safe and nutritionally adequate food for an active and healthy life."

The general aims of the strategy were to ensure physical and economic access to food at household and national levels, improvements in nutritional status of the nation and ensure food safety and quality. Specifically the strategy was aimed at reducing number of food insecure people, reduce underweight children and contribute towards poverty alleviation.

NFS outlines the monitoring and evaluation mechanism called NFS-Monitoring Group which is coordinated by Rural Development Council. Furthermore, to advocate for food security in Botswana, 1991 National Policy on Agricultural Development was instituted. Since 1991, the agricultural development objectives were focused at improving food security among others which was divergent from food self-sufficiency as emphasised before 1991. Some programmes and policies are listed below.

Table III: Strategies, Policies and Programs related to Agriculture/Nutrition/Food Security

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
STRATEGIC FRAMEWORK						
Vision 2016-3rd pillar	2016	The Vision 2016 seeks to ensure adequate nutrition for all citizens and provision of good sanitation and adequate supply of safe water for human needs. • Halving poverty from 47% (1994) to 23% by 2007 • Maintaining 8% per annum GDP growth until 2016 • Increasing per capita income from $3300 in 1997 to $8500 in 2016 • Maintaining Budgetary allocation of 35% to social sector while improving targeting for "pro-poor" action • Containing and reversing the spread of HIV and AIDS with a view to achieving an AIDS-free generation in 2016 • Mainstreaming Gender into the development process and • Promoting a Just, Participatory and Compassionate Society.		Government of Botswana	Botswana's Vision 2016 underscores the notion that development will be sustainable and will take account of the preservation of the environment and renewable resources. It also endorses that incomes for all in Botswana will be raised closer to those in developed nations, and that all Batswana, rural and urban, male and female, will have the opportunity of paid employment, access to good quality housing, as well as increased resource ownership	
NDP 10	2009-2016	-Improve food security at house hold and national levels, -Diversify agricultural production base, -Increase agricultural output and productivity, -Increase employment opportunities, -Provide secure and productive environment for agricultural producers, and -Conserve scarce agricultural and land resources.			To realize these objectives and to enhance the contribution of the sector to the national economy, the government has devised the following plans or strategies: -The Revised National Policy for Rural Development (RNPRD); -The National Strategy for Poverty Reduction (NSPR).	

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
National Strategy for Poverty Reduction (NSPR)	2003	Provide for a coordinated approach to poverty reduction.			The strategy emphasizes the importance of identifying the groups most vulnerable to poverty.	
National Population Policy					The policy recognizes consequences of population increase and family size on food insecurity and malnutrition	
Remote Area Dwellers Program (RADP)					This is a special program that complements the Government's rural development efforts and aims to address the extreme poverty situation in remote areas.	
Community Based Strategy for Rural Development (CBSRD)						

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
AGRICULTURE						
The National Master Plan for Arable Agriculture and Dairy Development (NAMPAADD);	2002				During the current plan period, the target is to bring 5,200–5,400 ha of farm land under irrigation of which 1,600–1,800 ha of land is planned for irrigation with fresh water and 3,600 hectares with reclaimed urban wastewaters. On top of these area–specific measures, emphasis will be given to expand infrastructure services such as roads, electrical power, and telecommunication facilities to the production areas	
Agricultural Policy	2002, currently under review	to improve food security at national and household level				
Comprehensive Africa Agriculture Development Programme (CAADP)						
Bankable Investment Projects Profiles (BIPPS): Pandamatenga Commercial Arable Farms Infrastructure Development		Main objective: increase the productivity of the Pandamatenga Commercial Arable Farms by reducing water–logging through the provision of a drainage system. The specific objectives are: -Increasing cereal production; -Creating favorable conditions for the development of agro–industrial enterprises; -Reducing the foreign exchange the country spends for importing food crops; -Enhancing the food security at the national level; -Increasing employment opportunities.	FAO-NEPAD US$ 65 million		Expected outputs: -150 km drainage channels constructed and lined; -275 km bunds constructed; -160 km gravelled road network.	

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
National Food Strategy					This strategy gives support for sustainable improvements in the nutritional status of the nation. It also targets efforts to ensure food safety and quality.	
FOOD SECURITY						
National Programme for Food Security (NPFS)		The overriding goal of the NPFS is to improve the food and nutrition security of Botswana by contributing to the operational nature of the rural non-farm sector. The NPFS therefore aims at: • increasing local food production of crops, livestock, fish and wild forest foods; • improving the access to food; • enhancing food quality and food safety in the country; • raising levels of food nutrition among the general population	FAO US$ 81 million		Beneficiaries make up 30 percent of the population and include female-led households, people living in absolute poverty, those with HIV/AIDS (and their families), the disabled, the elderly, orphans, rural poor, urban poor, the unemployed as well as emerging and small-scale farmers (who may not be poor or food insecure but who have an important role to play in ensuring a diversified and affordable food supply for the poor consumer).	

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
Regional Programme for food Security					Botswana is a member of the Southern African Development Community for which an RPFS was prepared. Priorities identified under the RPFS cover, among other things, the development of household food security and nutrition monitoring systems, the establishment of cross border quality livestock export trade, the establishment of a national progeny testing programme and the strengthening of agriculture marketing information systems.	
The Revised National Policy for Rural Development (RNPRD)						
NUTRITION						
National Plan of Action on Nutrition						
Marketing of foods for infants and young children regulations	2005					
Regulations on Salt Iodization	2010					
Vulnerable Group Feeding Program					Provision of supplementary foods to children aged 6-59 months	
Community-based Management of	2009					

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
Acute malnutrition						
National Nutrition Surveillance Systems					The NNSS monitors and evaluates child nutrition interventions. Indicators are based on the new WHO child growth standards and optimal infant feeding practices is used to monitor progress.	
World Breastfeeding Trends Initiatives (WBTi)						
Monitoring and enforcement of the International Code of Marketing of Breast-milk Substitutes						
School Feeding Programme		The objectives of the School Feeding Programme are to: 1. Prevent children from feeling hungry during the school day; 2. Provide children with a balanced diet; 3. Keep children in school the whole day; and 4. Improve school attendance.			The programme caters for 331 000 beneficiaries in 752 primary schools country wide. The school feeding programme beneficiaries include 66 987 Remote Area Dwellers (RADs) children who are provided with a second meal	
Under five Children Feeding Programme					The programme caters for 253 200 beneficiaries in all government health facilities Currently a total of 41 262 beneficiaries get doubled monthly ration of vegetable oil, beans,	

Strategy / Policy	*Reference Period*	*Objectives and main components*	*Budget / Donor*	*Stakeholders*	*Key points*	*Integration of Nutrition*
					Malutu and *Tsabana*. The extra ration covers 110 clinics in the six districts that have been identified to be poverty stricken	
HEALTH & SOCIAL PROTECTION						
Health Sector Strategy				Ministry of Health	Component on Nutrition and Food Control	
Botswana National HIV/AIDS Prevention Support Project	2008-2013		US$50 million	NATIONAL AIDS COORDINATING AGENCY GoB MoH World Bank	support AIDS Coordinating Agency (NACA) support public sector line ministries civil society organizations private sector	
Accelerated Child Survival and Development strategy						
Prevention of Mother to Child Transmission of HIV programme					Children born from HIV infected mothers get free infant formula for up to 12 months of age to avoid transmission of HIV through breastfeeding	

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

a. Main programmes being implemented to improve nutrition through multi-sectoral approach

Table IV: Programs being implemented to improve nutrition through multisectoral approach

Programme	Ministry responsible for Programme	Target Groups	Packages
Destitute Persons Programme	MLG&RD	▪ Individuals unable to engage in sustainable economic activities, due to disability or chronic health problems. ▪ Individuals with insufficient assets or income sources. ▪ Individuals who due to physical or mental disability are unable to engage in sustainable economic activity. ▪ ▪ Children <18 years living under difficult circumstances. ▪ Individuals who are terminally ill	▪ Permanent destitute – food baskets amounting to P211.90/month (rural) and P211.40/month (urban).* ▪ Temporary destitute – monthly food baskets valued at P181.90 (rural) and P181.40 (urban)* ▪ Food baskets are intended to provide 1750 calories per day ▪ Plus additional P70/month in cash for personal (non-food) items ▪ Provisions made for shelter, medical care, occasional fares, funeral expenses (when needed) and exemptions from service levies, taxes, water charges, street licenses, school fees and tools for rehabilitation.
Vulnerable Group Feeding Programme (VGFP)	MLG&RD	▪ Children under 5 for the objective of minimizing child malnutrition. ▪ Was originally intended only for droughts but was made blanket in 1999 ▪ Medically selected pregnant (anaemic, with children of poor weight, not gaining weight, teenagers, fifth or more pregnancy, history of poor pregnancy outcome) and lactating (anaemic, feeding twins or triplets, with children of poor weight, teenagers) ▪ TB and leprosy patients	▪ Tsabana (fortified sorghum and soya product) for children 6-36 months ▪ Malutu (fortified sorghum and soya meal) for children 37-60 months, medically selected pregnant and lactating women and TB and leprosy patients ▪ Beans and vegetable oil for children 37-60 months, medically selected pregnant and lactating women, TB and leprosy patients ▪ All given as take-home ration from health facilities
Orphan Care Programme	MLG&RD	▪ Children under 18 years of age who have lost one or two married parents (biological or adoptive)	▪ Food baskets amounting to P216/month provided through local retailers; each basket based on nutritional needs of the child.* ▪ Clothing, toiletries, transport fees, school fees
Community Home Based	MLG&RD	▪ Provides optimal care for terminally ill patients in their local	▪ Food baskets based on recommendations of a doctor or dietician – no price limit

Care Programme		environment ▪ Established in response to HIV/AIDS epidemic but covers other conditions as well ▪ Needy patients only ▪ Assessment guidelines for destitute programme applied	▪ In practice baskets range from P200-P1,500 per month
Primary School Feeding Programme (PSFP)	MLG&RD	▪ All children attending public primary schools ▪ Objective is to enhance learning	▪ Food basket caters for one third of daily caloric requirements ▪ Two meals provided in school – mid-morning snack and lunch
Old Age Pension Scheme (OAP)	MLG&RD	▪ All citizens 65 years and over	▪ P191/month in cash
World War II Veterans Grants	MLG&RD	▪ All WW II veterans or his widow when he dies ▪ If both veteran and his wife are dad, children under the age of 21 receive the payment ▪ NB. All WW II veterans are older than 65	▪ P312/month in cash
Labour Based Drought Relief Programme (LBRP) or Labour Intensive Public Works Programme (LIPWP)	MLG&RD	▪ Provides temporary income support during periods of drought; workers are engaged in labour intensive programmes ▪ Operational on declaration of a drought. ▪ When no drought functions as LIPWP	▪ Labourers receive P15 while supervisors receive P20 per six-hour day
Remote Area Development Programme (RAD)	MLG&RD	▪ Targeted at all marginalized communities in the remote areas of Botswana. ▪ Objective to accelerate economic development, alleviate poverty and promote sustainable livelihoods in 64 designated settlements. Earlier social service infrastructure goals largely achieved.	▪ Provides basic facilities to communities including education, health, drinking water, and vulnerable group feeding programmes ▪ Promotes access to land and water through water rights ▪ Promotes income-generating opportunities ▪ Promotes self-reliance, social integration etc.
Growth Monitoring & Promotion	MOH	Children under the age of five years, medically selected pregnant and lactating mothers	Provides health services at child welfare clinics including immunizations, food rationing and health education.
Infant and Young Child Feeding (IYCF)	MOH	Infant and young child feeding and counseling for underfives and caregivers	Training materials including IYCF guidelines,
Food Safety	MOH	General Public	Food Safety

Eliminating Micronutrient Deficiencies	MOH	Children 6 – 59 months	Eliminating Micronutrient Deficiencies
Diet Related Non Communicable Diseases	MOH	General Public	NCDs policy and Strategy
De-worming under-fives	MOH	Under planning	Nutrition Strategy

Vulnerable Groups Feeding Programme

The Government of Botswana introduced the Vulnerable Group Feeding Program (VGFP) to provide food supplements intended as a preventive measure to reduce the incidence of malnutrition among groups considered highly at risk especially in times of declining household food security. The programme specifically targets children under the age of five (<5) as well as medically selected expectant and lactating mothers, tuberculosis patients and primary school children. Currently the VGFP caters for 584,200 beneficiaries covering Primary Schools and Health facilities. The distribution level of food supplements under the VGFP stood at 69% in 2010, 37% in 2011 and 62% in 2012.

School Feeding Programme

The programme caters for 331 000 beneficiaries in 752 primary schools country wide. The objectives of the School Feeding Programme are to:

1. Prevent children from feeling hungry during the school day;
2. Provide children with a balanced diet;
3. Keep children in school the whole day; and
4. Improve school attendance.

The distribution level of food supplements under the school feeding programme was 72.47% in 2012 as compared to that of 2011 and 2010 which stood at 73% and 76% respectively. There was a decline of 0.53% in the year 2012.

The school feeding programme beneficiaries include 66 987 Remote Area Dwellers (RADs) children who are provided with a second meal. The number of children fed the additional meal increased during financial year 2012/13 because of declaration of partial drought for that year. This meant that even children who reside in non RADs areas had to be fed an additional meal since July 2012 to date.

Under five Children Feeding Programme

The programme caters for 253 200 beneficiaries in all government health facilities. The main objective of the programme is to combat the widespread malnutrition among children. Food commodities provided under the programme include *Tsabana* and *Malutu*. These are pre-cooked sorghum and Soya cereals nutritionally improved by the addition of minerals and vitamins. *Tsabana* is intended for use as a

complement to breast milk and other foods commonly given to children aged between 6 - 36 months, and *Malutu* meant for children of age 37 to 59 months, and 60 to 72 months for those who have not started going to school. Other beneficiaries are medically selected expectant and lactating mothers as well as TB patients.
Currently a total of 41 262 beneficiaries get doubled monthly ration of vegetable oil, beans, *Malutu* and *Tsabana*. The extra ration covers 110 clinics in the six districts that have been identified to be poverty stricken.

b. Coordination mechanisms

At National level

At the national level nutrition programs are coordinated by the Nutrition and Food Control, Division which grew from the Nutrition Unit under the Ministry of Health. The division is small and has limited capacity to influence National level policy decisions including allocation of resources for the effective implementation of nutrition programmes. The Draft National Policy on Infant and Young Child Feeding proposes a semi-independent multi sectoral nutrition body to coordinate implementation of the strategy.

At district level

At district level, health and Nutrition programs are under the coordination and mandate of District Health Management Teams (DHMT) manned by the Public Health Specialist. The Coordinator of DHMT in turn is answerable to the Department of Clinical services of the Ministry of Health. The main constraint at the district level is the limited skilled personnel in the nutrition field. Currently there are eleven (11) districts health with nutrition officers out of twenty-eight (28) health districts operating as nutrition focal points. Ideally the goal is to have nutrition focal persons in all districts.

c. Monitoring & Evaluation mechanisms

Currently, there is no established monitoring and evaluation mechanism to systematically track the performance of nutrition indicators and to evaluate the efficacy of nutrition programmes nationwide. However, under the Public Health Department of Ministry of Health, Nutrition and Food Control Division coordinates nutrition programmes such as the Growth Monitoring and Promotion program which monitors child nutrition status of under-fives as a proxy indicator for the country nutrition situation. The data collected monthly from all health districts is analysed through the BNNSS at national level and shared with stakeholders. In addition, Statistics Botswana conducts periodic (every ten years) Family Health Surveys (BFHS) and or Multiple Indicator Cluster Surveys (MICS) which includes food and nutrition related indicators.

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

d.1 *Health Sector*

On the basis of the nature and causes of malnutrition, nutrition cuts across various sectors in different government, parastatal, nongovernmental as well as private sector organisations. Such a situation necessitates a coordinating body to oversee implementation, and monitoring and evaluation of the

nutrition interventions. Coordination, monitoring and evaluation of nutrition activities are currently undertaken by the Nutrition and Food Control Division in the Department of Public Health (Ministry of Health). Under the Division a **Five year National Plan of Action** for Nutrition (NPAN, 2005 – 2010) was developed and implemented by a multi sectorial team of stakeholders (Ministry of Agriculture (Food Security), Health, Local Government, Education, Finance, and parastatal organisations through a National Reference Group.

For effective implementation and coordination the draft policy on IYCF and the NPAN proposes the need to strengthen and upgrade the institutional structure to the level that is able to influence sectorial development plans and programs as well as resources allocation. The draft policy on Infant and Young child feeding proposes a semi-independent multi sectorial nutrition body to serve the purpose and this is yet to be affected. Currently a National Nutrition Strategy is being developed as a follow up of NPAN (2005/2010) and this requires a supportive institutional framework with co-ordinating structures with a principal body responsible for the nutrition plans including budget allocation for implementation.

d.2 *Agriculture Sector*

Agricultural activities impact on household food security and individual nutritional well-being in different ways. If agriculture policies and programmes neglect to consider this impact, they miss the opportunity to improve the nutritional well-being of the population, especially the most vulnerable groups.

Botswana is faced with the challenge to attain food security at household and national levels. Domestic production has consistently failed over the years to meet the national demand for food. This has been due to a number of factors, including poor management practices of subsistence farmers, who constitute the vast majority of the farming community, as well as the effect in recent years of climate change. The country, has therefore, relied heavily on imports to augment national production to meet the household and national food security needs. Increasing agricultural productivity and output remains one of the most effective ways to combat hunger and poverty. As a result, the government has introduced Agricultural Support Programmes such as Livestock Management and Infrastructure Development (LIMID) to increase l, and Integrated Support Programme for Arable Agricultural Development (ISPAAD).

In Africa, efforts to strengthen the contribution of the agriculture sector in reducing poverty are laid out in the CAADP Framework for African Food Security, which sets out a plan of action for achieving MDG1 in Africa through agriculture led growth. CAADP is therefore an opportunity for agriculture to engage in the “nutrition momentum” and join forces with other sectors in the fight against malnutrition. Botswana therefore needs to fast track the process of implementing CAADP; that is the country should sign the compact and develop an Investment Plan which will incorporate nutrition issues.

e. Funding opportunities

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

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

b. Main management and technical capacities at the institutional level

c. Disaster prevention/management structures

d. Monitoring and Evaluation capacities

e. Main technical and financial partners

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

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

h. Main issues at stake to improve the mainstreaming and scaling up of nutrition at the country level and regional/international level

Botswana is a multi-party democracy with a strong commitment to address social and community issues including nutrition. The development partners such as UNICEF, President Emergency Program for Aides Relief (PEPFAR) work in partnership with government departments and NGO's to improve the nutritional status of the population particularly the vulnerable groups such women and children.

Challenges:

•Lack of overall coordination, implementation and monitoring mechanism both at national and district levels. This has been due to lack of independent nutritional body.

•The fragmented and often uncoordinated approach has resulted in weak coordination and linkages between ministries and other stakeholders.

To overcome these challenges recommendations have been made in several nutrition policy documents such as draft Infant and Young Child feeding policy, the National Plan of Action for Nutrition (2005-2012) and the new draft Nutrition Strategy (2013-2016) .

•At regional and international level Botswana's participation in nutrition issues has been minimal due to competing priorities in the country and the perceived status of Botswana economic status as upper middle income country resulting in minimal support from development partners.

•Recurrent drought and high prevalence of HIV&AIDS pandemic coupled with global economic meltdown has negatively affected our endeavours' to scaling up of nutrition programmes.

V. ANNEXES

Annex 1: TASK FORCE

	Criteria[3]	First Name	Last Name	Organisation / Post	Email	Tel
1	CAADP Focal Point	Motlamedi	Shatera	Ministry of Agriculture / Dept of Research & Statistics **Director**	mshatera@gov.bw	3689050
2	Policy Analysis Management	Kebotsemang	Ofaletse	Ministry of Agriculture / Dept of Research & Statistics **Chief Policy Analyst**	kofaletse@gov.bw	3689052
3	Ministry of Health	H.	Tarimo	Ministry of Health / Nutrition & Food Control Division **Principal Health Officer**	htarimo@gov.bw	3632121
4		Michael	Basheke	Ministry of Health / Nutrition & Food Control Division **Principal Health Officer**	mbasheke@gov.bw	3632162
5		Yvone	Chinyanga	Ministry of Health / Nutrition & Food Control Division **Senior Health Officer**	ychinyanga@gov.bw	3632186
6		Goabaone	Mogomotsi	Ministry of Health/Dept of HIV/AIDS prevention and Care **Principal Health Officer**	gpmogomotsi@gov.bw	3632313
7		Onalenna	Ntshebe	Ministry of Health/Nutrition Rehabilitation	onamihil@yahoo.com	3621627
8	Food Resources	Vanity	Mafule	Ministry of Local Government & Rural Development / Dept of Finance & Procurement	vmafule@gov.bw	3973238
9	Ministry of Agriculture	Kehumile	Sebi	Ministry of Agriculture / Dept of Crop Production **Principal Scientific Officer**	ksebi@gov.bw	3689336
10	Food Technology & Research	Boitumelo	Motswagole	Food Science - National Food Technology & Research Centre	stokie@naftec.org	5445577
11		Lemogang	Kwape	Nutrition & Dietetics – National Food Technology & Research Centre	kwape@naftec.org	5445519
12	UN Agencies	David	Tibe	FAO	David.tibe@fao.org	3105483
13	Academia Rep working on Agric, Nutrition & Food Security	Segametsi	Maruapula	University of Botswana - Nutritionist	MARUAPU@mopipi.ub.bw taplis@gmail.com	71962284
14		David	Mmopelwa	Botswana Institute of Development and Policy Analysis (BIDPA) **Researcher**	dmmopelwa@bidpa.bw	3971750
15		Rosemary	Lekalake	University of Botswana – College of Agriculture	rlekalake@bca.bw	74570273
16	Farmers Associations	Michael	Diteko	Botswana Horticultural Council **Chairperson**	mditeko@hotmail.com	71307422
17		Moses	Mooko	BOCCIM	mmooko@yahoo.com	71301346 /3918919
18	Ministry of Education	Mogametsi	Kowa	Ministry of Education/ Basic Education	mjkowa@gov.bw	3655316
19	Ministry of Agriculture / Dept of Research & Statistics	Rakgantswana	Tidimalo	Ministry of Agriculture/ Research, Ministry of Agriculture / Dept of Research & Statistics	trakgantswana@gov.bw	3689129
20		Modo	Lesedi	Ministry of Agriculture / Dept of Research & Statistics	ldmodo@gov.bw	3689391
21		Selelo	Seloinyana	Ministry of Agriculture / Dept of Research & Statistics	semogatle@gov.bw	3689353

[3] Indicate criteria on the basis of the list suggested in the guidance : CAADP Focal Point, Ministry of Agriculture (Agriculture, Animal Resources/Livestock, Fishery, Forestry), Ministry of Health, Ministry of Education, National Planning Commission, Ministry of Finance, multi-sectoral coordination committee on food and nutrition security, National HIV/Aids Council, Civil Society, Private sector, Academia, Country Workshop Support person

Annex 2: Data/Information Sources

Source	Information	Web Link
FAO	Nutrition Country Profiles	
	FAO Country Profiles	
	FAO STATS Country Profiles	
UNICEF	Nutrition Country Profiles	
	MICS: Multi Indicators Cluster Surveys	
DHS	DHS Indicators	
OMS		
CAADP		
SUN		
WFP		
UNDP	HDI Report	
WHO		
National Sources	CSO Household Income and Expenditure Survey	
	BFHS	
	BAIS	
	Stats Botswana 2011 Population & Housing Census, 2012	