THE REPUBLIC OF UGANDA
MINISTRY OF HEALTH

NATIONAL MULTISECTORAL STRATEGIC PLAN FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES

(2018 – 2023)

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FOREWORD

Although Noncommunicable diseases (NCDs) were once considered diseases of the developed world, it's now apparent that they are a worldwide public health problem. Industrialization, urbanization, economic development, and market globalization have led to rapid changes in diet and lifestyles over the past decade. This has heavily impacted the health and nutritional status of populations in developing countries and countries in transition including Uganda.

NCDs are now causing nearly a third of the overall mortality in Uganda and they have kept increasing over the last ten years. Uganda prioritises actions to prevent and control six NCDs; including the four major ones – Cardiovascular diseases, chronic respiratory diseases, cancers and diabetes plus two others – sickle cell disease and mental and neurological disorders. The four major risk factors – excessive alcohol consumption, tobacco use, physical inactivity and unhealthy diets, shared by the four major NCDs, are also rapidly increasing among the Ugandan population. Nearly a quarter of our adult population is overweight/obese and one in every four adults has hypertension, which calls for strategic measures to address NCDs and their risk factors. Consequences of NCDs have economic and development implications that arise from the cost of treatment of those suffering from a NCD and their productivity respectively.

The goal of the National Multisectoral Strategic Plan for the prevention and control of NCDs is to reduce the risk factors and mortality associated with NCDs among the Ugandan population for the period 2018-2023. This strategy was developed in line with the WHO Global action plan 2013-2020, NDP II and HSDP and has also been aligned with the Vision 2040 which emphasizes empowerment of households and communities to take greater control of their health by promoting healthy practices and lifestyles. It will also contribute towards the achievement of the target of Sustainable Development Goal 3 which emphasises reduction by one third premature mortality from NCDs through prevention and treatment and promotion of mental health and wellbeing. Therefore, this strategy calls for rigorous multi-sectoral efforts to combat NCDs with a focus on cost effective and evidence-based interventions.

The Government of Uganda acknowledges and appreciates the multi-stakeholder and multi-sectoral approach adopted during the development of this strategy. In particular, members of the NCDs Multisectoral Committee, NCDs technical working group, Office of the president, Office of the prime minister, Ministry of Agriculture, Animal Industry and Fisheries, Ministry of Gender, Labour and Social Development, Ministry of Education and Sports, Ministry of Trade, Fisheries and Cooperatives, Ministry of Finance, Planning and Economic Development, Ministry of Local Governments, Civil Society Organisations, development partners, Research and Academic institutions, and the private sector. This strategy seeks to advocate and prioritise NCDs prevention and control initiatives

For God and My Country

Hon. Dr Aceng Jane Ruth

MINISTER OF HEALTH, REPUBLIC OF UGANDA

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The National Multisectoral Strategic Plan for the prevention and control of NCDs could not have been developed if it were not for the substantial contribution of several stakeholders. In particular, the Government of Uganda is grateful to the World Health Organisation for the financial and technical support that enabled the development of this strategic plan. Our thanks are further extended to the NCDs Multisectoral Committee, NCDs technical working group and the secretariat at the NCD Department in the Ministry of Health for leading the development process.

We acknowledge the contribution of other sectors of government, ministries, departments, agencies and institutions towards the development of this strategy. Office of the president, Office of the prime minister, Ministry of Agriculture, Animal Industry and Fisheries, Ministry of Gender, Labour and Social Development, Ministry of Education and Sports, Ministry of Trade, Fisheries and Cooperatives, Ministry of Finance, Planning and Economic Development, Ministry of Local Governments, Kampala Capital City Authority, Uganda NCD Alliance, Makerere University School of Public Health, AMICALL Uganda, Uganda Diabetes Association, Centre for Tobacco Control in Africa (CTCA), Uganda Bureau of Statistics, Makerere Lung Institute, Diabetes Care Uganda, Uganda Heart Foundation, St Francis Hospital Nsambya, Development partners and the private sector.

Thank you all for the tremendous individual and collective contributions.

Dr Atwiine Diana

PERMANENT SECRETARY, MINISTRY OF HEALTH

EXECUTIVE SUMMARY

Noncommunicable diseases (NCDs) are becoming a global and national public health burden. The prevalence and mortality due to NCDs is on the rise in Uganda. The recent National NCDs Survey, that employed the World Health Organisation STEPS approach, found a similarly high magnitude of the risk factors of NCDs in our population. For instance, the prevalence of excessive alcohol consumption, tobacco use, physical inactivity and unhealthy diet consumption were 3, 11.2, 4.3 and 88% respectively. In addition, the survey revealed a higher prevalence of high body mass index (overweight; 14.5% and obesity; 4.6%) and high blood pressure (24.3%), which are strongly associated with the development of majority of NCDs. The four major NCDs (cardiovascular diseases, chronic respiratory diseases, cancers and diabetes) are now among the top 25 causes of Disability Adjusted Life Years (DALYs) and account for 27% of all deaths in the country. Low income countries including Uganda have been documented to have the greatest premature mortality from NCDs according to the World Health Organisation. The consequences of NCDs are not only serious and potentially life threatening; but also, are associated with decline in productivity and consequent decline in economic development.

The goal of the National Multisectoral Strategic Plan for the prevention and control of NCDs is to reduce the risk factors and mortality associated with NCDs among the Ugandan population for the period 2018-2023. This strategy is based on five strategic areas with several key actions that advocate for and encourage improvement of practices and services that promote healthy lifestyles to reinforce the prevention of NCDs through reducing on the risk factors. Basically, this document explores strategies that strengthen advocacy, multisectoral capacity, risk factor reduction, health systems, national research capacity, surveillance and monitoring and evaluation for NCDs. This strategy was developed in line with the WHO Global action plan 2013-2020, NDP II and HSDP and has also been aligned with the Vision 2040 which emphasizes empowerment of households and communities to take greater control of their health by promoting healthy practices and lifestyles. It will also contribute towards the achievement of the target of Sustainable Development Goal 3 which emphasises reduction by one third of premature mortality from NCDs through prevention and treatment and promotion of mental health and wellbeing. The implementation of the strategic plan will be coordinated by the National NCD Multisectoral Committee, hosted by the Ministry of Health.

Whilst there are challenges such as limited access to NCD information, limited trained human capacity and finances to address NCDs; existing resources, structures and cost-effective interventions and actions have been considered while developing this strategy.

The framework for monitoring and evaluating the progress in the implementation of this multisectoral strategic plan has been developed and incorporated to support surveillance and reporting on specific NCD indicators and targets. Mobilisation of resources for the implementation of this strategy is a combined effort involving financial support from the Ugandan Government, financial contribution from developing partners, civil society, the private sector and the media and community.

LIST OF ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
CDC	Centre for Disease Control
CHD	Coronary Heart Disease
CHEWs	Community Health Extension Workers
COPD	Chronic Obstructive Pulmonary Disease
CRD	Chronic Respiratory Diseases
CSO	Civil Society Organization
CVD(s)	Cardiovascular Disease(s)
DALY	Disability Adjusted Life Years
EMHS	Essential Medicines and Health Supplies
FAO	Food and Agriculture Organisation
FCTC	Framework Convention on Tobacco Control
GATS	Global Adult Tobacco Survey
GDP	Gross Domestic Product
GYTS	Global Youth Tobacco Survey
HDP	Health Development Partners
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPAC	Health Policy Advisory Committee
HPV	Human Papilloma Virus
HSDP	Health Sector Development Plan
HSSIP	Health Sector Strategic and Investment Plan
IDF	International Diabetes Federation
IEC	Information Education and Communication
KCCA	Kampala Capital City Authority
LMICs	Low- and Middle-Income Countries
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MakSPH	Makerere University School of Public Health
MJCA	Ministry of Justice and Constitutional Affairs
MLI	Makerere Lung Institute

MoES	Ministry of Education and Sports
MoFPED	Ministry of Finance Planning and Economic Development
MoGLSD	Ministry of Gender, Labour and Social Development
MoH	Ministry of Health
MoIA	Ministry of Internal Affairs
MoICT	Ministry of Information and Communications Technology
MoWE	Ministry of Water and Environment
MSTF	Multi-sectoral Task Force
MTIC	Ministry of Trade, Industries and Cooperatives
NARO	National Agricultural Research Organisation
NCD(s)	Noncommunicable Disease(s)
NCD-GAP	Noncommunicable Disease Global Action Plan
NDP	National Development Plan
NEMA	National Environment Management Authority
NGO	Non-Governmental Organisation
NIH	National Institute of Health
NIRA	National Identification and Registration Authority
OP	Office of the President
OPD	Out Patient Department
OPM	Office of the Prime Minister
RRH	Regional Referral Hospital
SARA	Service Availability and Readiness Assessment
SBCC	Social Behavioral Change Communication
SCD	Sickle Cell Disease
SMC	Senior Management Committee
UBOS	Uganda Bureau of Statistics
UCC	Uganda Communications Commission
UCI	Uganda Cancer Institute
UDHS	Uganda Demographic and Health Survey
UHI	Uganda Heart Institute
UNBS	Uganda National Bureau of Standards
UNCDA	Uganda Noncommunicable Disease Alliance
UNDP	United Nations Development Programme
UNEPI	Uganda National Expanded Programme on Immunisation
UNFPA	United Nations Population Fund
UNHRO	Uganda National Health Research Organization

UNICEF	United Nations Children's Fund
UNMHCP	Uganda National Minimum Health Care Package
UNPS	Uganda National Panel Survey
UNRA	Uganda National Roads Authority
USAID	United States Agency for International Development
VHT	Village Health Team
WDF	World Diabetes Federation
WFP	World Food Programme
WHO	World Health Organization

SECTION I

INTRODUCTION

CHAPTER 1: BACKGROUND

1. STATUS, TRENDS AND OPPORTUNITIES

1.1 Status and trends of main Noncommunicable Diseases and their risk factors

The burden of Noncommunicable Diseases globally:

Non-Communicable Diseases (NCDs) are the leading cause of death globally and account for 70% (40 million) deaths annually [1]. Each year, 15 million people die from NCDs between the ages of 30 and 69 years; over 80% of these "premature" deaths occur in low- and middle-income countries (LMICs) [2]. Over three quarters of deaths from Cardiovascular diseases and Diabetes, and nearly 90% of deaths from chronic respiratory diseases and more than two thirds of all cancer deaths occur in LMICs [3].

While the number of NCD deaths are projected to increase by 15% worldwide between 2010 and 2020 (44 million deaths), the region of Africa, South East Asia and Eastern Mediterranean will have the greatest increase – estimated to be about 20% [4]. The increasing burden of NCDs in the World Health Organisation (WHO) African Region threatens already over-stretched health systems; and it is predicted that the burden of NCDs will surpass that of communicable diseases by 2030. In the African region, NCDs will be attributable to 3.9 million deaths by 2020 [4]. Below is the burden for each of the four major NCDs

i. **Cardiovascular diseases:**

Globally, more people die annually from Cardiovascular disease (CVD) than any other cause, making it the number one killer in the world. CVD was the leading cause of death in 2015 claiming 17.7 million lives, which accounted for 31% of all global deaths and 46.2% of NCDs deaths [5]. Of these, 7.4 and 6.7 million deaths were attributed to coronary heart disease and stroke respectively (ibid). Hypertension or raised blood pressure is the leading CVD associated risk factor accounting for 9.4 million deaths and 7% of the overall disease burden – as measured in Disability Adjusted Life Years (DALYS) in 2010 [6]. Of the 16 million global premature deaths due to NCDs, 37% were attributable to CVD and about 75% of these deaths occurred in LMICs [ibid].

ii. Cancer:

Cancer is the second leading cause of death after cardiovascular disease and accounted for 8.2 million or 21.7% of NCD deaths globally in 2012 [7]. The incidence of cancer increased by 11% from 12.7 million in 2008 to 14.1 million in 2012 [ibid]. This trend is projected to continue with the number of new cases rising further by 75% to more than 20 million over the next two decades.

Developing countries accounted for 56% of incident cases, 62% of deaths and 70% of DALYs in 2013 [7].

iii. Diabetes:

In 2015, 415 million adults around the world were living with diabetes and this is projected to increase to 642 million by 2014 [8,9]. The global prevalence of diabetes has nearly doubled since 1980 from 4.7% to 8.5% in 2016 among the adult population [10]. Diabetes caused 1.5 million deaths in 2012 while higher-than-optimal blood glucose caused an additional 2.2 million deaths, by predisposing people to cardiovascular disease risk and other diseases [ibid]. Forty three percent of these 3.7 million deaths were premature – killing people before the age of 70 years [10]. Just like the rise in diabetes prevalence over the past two decades, the percentage of premature deaths attributable to higher blood glucose or diabetes is higher in LMICs. In 2015, African region was estimated to have 14.2 million adults living with diabetes with a regional prevalence of 3.3% [8]. Three quarters of these cases were undiagnosed, the highest proportion of undiagnosed cases among all regions of the world [9].

iv. Chronic respiratory diseases:

Chronic respiratory diseases (CRDs) including chronic obstructive pulmonary disease (COPD) and asthma are among the four major NCDs estimated to contribute considerably to the global death toll. CRDs are not curable, making access to essential medicines and treatments very crucial in controlling symptoms and improving the quality of life for people with the disease.
COPD accounted for over 3 million deaths in 2005 – about 6% of all deaths worldwide; and it is evident that more than 90% of COPD deaths occur in LMICs [11]. Asthma is the commonest NCD among children [12]. An estimated 334 million people currently suffer from asthma worldwide [13] and about 383000 deaths due to the disease were reported in 2015 [14].

The burden of Noncommunicable Diseases in Uganda:

In Uganda, the four major NCDs (cardiovascular diseases, cancer, chronic respiratory diseases, and diabetes) account for 27% (40% including injuries) of the annual deaths and of these, 60% occur in people less than 70 years [15]. Out of these deaths, 9% are attributed to cardiovascular diseases, 5% to cancers, 2% to chronic respiratory diseases, 1% to diabetes, and 10% to other NCDs [ibid]. The increasing trend of NCDs in Uganda is attributed to modifiable unhealthy lifestyles such as physical inactivity, unhealthy diet, tobacco use and excessive alcohol consumption [16].

i. Cardiovascular diseases (CVD)

In Uganda, the 2014 NCD risk factor survey found that about one in four adults (24.3%) had raised blood pressure or had been taking medication for raised blood pressure. Moreover, majority of those with raised blood pressure (76.1%) were not aware of their condition or taking any form of

medication [16].

The figure below shows an upward trajectory of hypertension; according to national surveillance data.

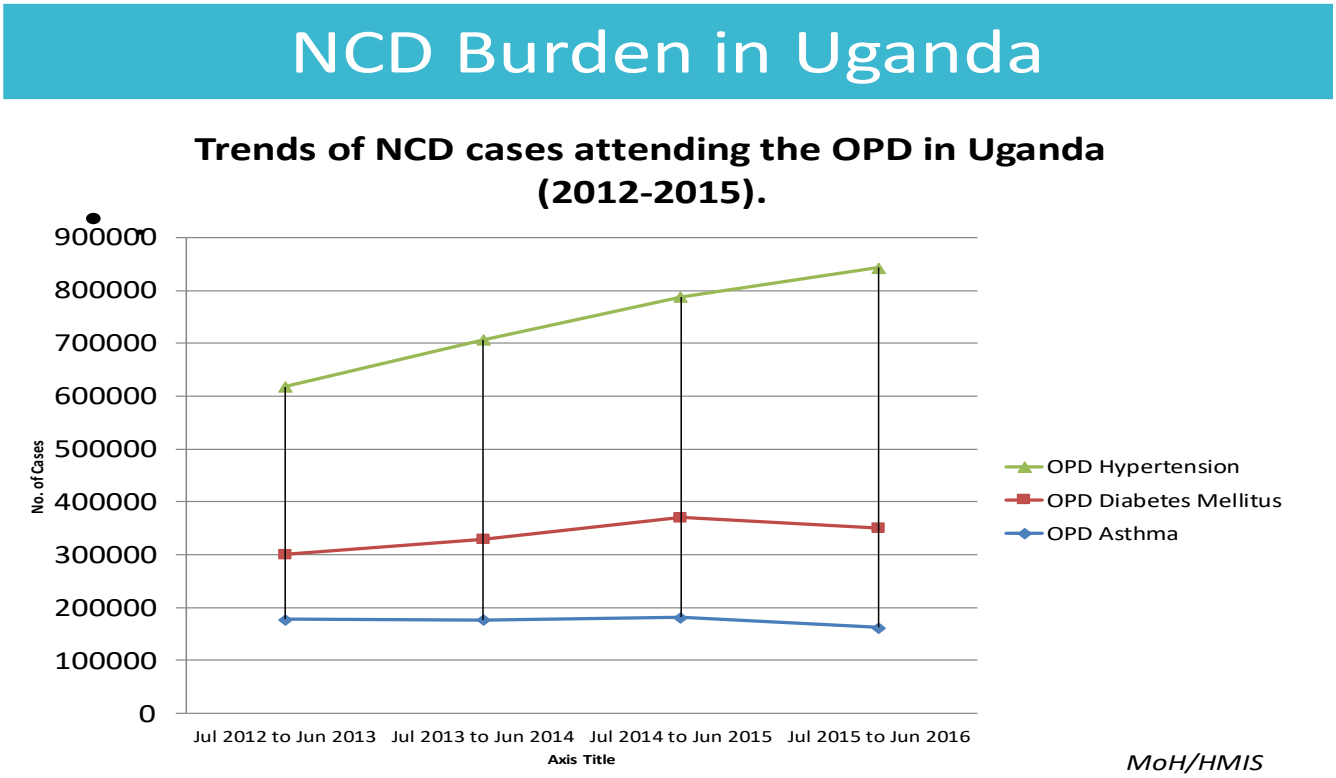

Figure 1: *The NCD burden and the upward trend of Hypertension in Uganda (Source: MoH, HMIS Data)*

ii. Cancer

Uganda recorded an estimated 21,542 deaths from cancer in 2012 [7]. Ranked by the number of new cases, Cervical cancer (44.4/100,000), Kaposi Sarcoma (16.1/100,000), Prostate cancer (48.2/100,000), Breast cancer (27.5/100,000) and cancer of the Oesophagus (17.1/100,000) are the top 5 most frequent cancers in Uganda [17]. The figure below shows trends of cancer cases recorded at Uganda Cancer Institute annually.

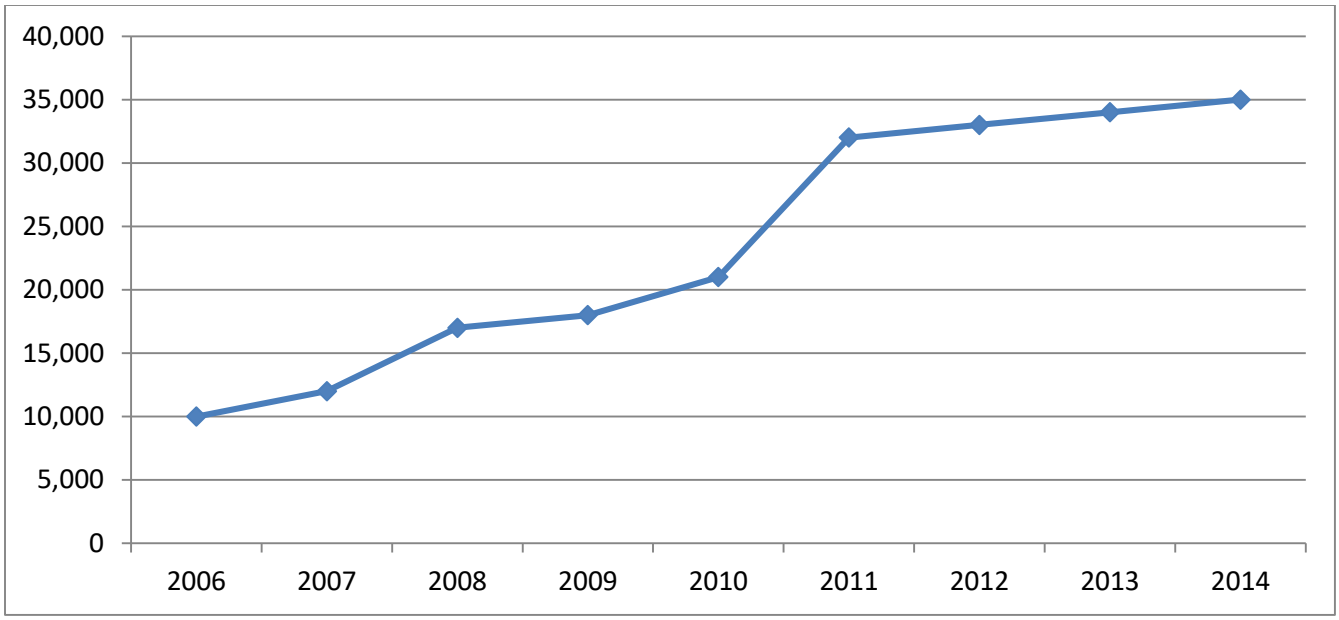

Figure 2: *Trends in total number of cancer cases seen at the UCI from 2006-2014*

iii. Diabetes

WHO estimates that 4,690 Ugandans died of diabetes in 2016. The 2014 Uganda NCD risk factor survey found the prevalence of raised fasting blood glucose including diabetes to be 1.3%; with urban areas having a higher prevalence - 2.7% than rural areas - 1.0% [16]. Furthermore, other studies show that the prevalence of diabetes varies across the country with some parts being as high as 7.4% for diabetes and 8.6% for pre-diabetes [18]. Just as is the case with the global estimates, over 90.5% of individuals in Uganda with impaired fasting blood glucose (IFG) and 48.9% with Diabetes were not aware, leading to late presentation with complications [19]. The mean age of people having diabetes in Uganda is 35 years compared to high-income countries where majority of people living with diabetes are over 60 years [19,20].

iv. Chronic respiratory diseases

In Uganda, the prevalence of COPD ranges between 8%-16% and its more common among those aged 30-39 years [21]. In terms of mortality, the incidence of death among Ugandan COPD patients is 115/1000-person years [unpublished data]. According to the Uganda National Asthma Survey (2016), about 11.2% of Ugandans 12 years and older have asthma. Asthma mortality rate in Uganda is 27.5/1000-person year [Kirenga B, et al. Unpublished data, 2016]. However, at the chest clinic and the accident and emergency unit at Mulago National Referral hospital, the prevalence of asthma was found to be 16.9% and 2.5% respectively [22].

v. Sickle Cell Disease

Sickle cell disease is one of the two categories of haemoglobin disorders, the other being thalassaemia. Sickle cell disease is mostly predominant in Africa. Globally, it is estimated that about 5% of the world population are healthy carriers of the sickle-cell gene, with significant variations in some regions [23]. For instance, the burden of carriers in the tropical regions can be as high as 25%.

In Uganda, it is estimated that between 25,000-30,000 babies are born with sickle cell disease each year[24,25]. Unfortunately, 70-80% of these babies die before their 5th birthday. The 2014/15 Uganda sickle cell surveillance survey[25] found a high prevalence of the sickle cell trait, with notable variations across the ten regions of Uganda. The overall prevalence of the sickle cell trait among children (below 1 years) was 13.3% while that of sickle cell disease was 0.7%. Eight districts have sickle-cell trait prevalence higher than 20% and the sickle cell trait was found in all districts of Uganda. There are fewer cases of sickle-cell disease among children older than 12 months, one indicator of early mortality. Unfortunately, there was no newborn screening program in the country and diagnosis is usually made late following a crisis; while many children die before they are diagnosed. Furthermore, lack of pre-marital genetic counseling and testing leads individuals with the Sickle cell trait and Sickle cell disease to intermarry compounding the problem.

vi. Injuries and violence

Injuries and violence are a major public health problem in many countries world over. Every day over 14,000 people die as a result of injuries [26]. About 5.8 million global deaths are as a result of injuries, representing 10% of all global deaths [ibid]. The leading causes of injuries are acts of violence against others or oneself, road traffic crashes, burns, falls, drowning and poisonings. Globally, road traffic accidents kill over 1.24 million people, while 20-50 million people suffer non-fatal injuries annually [27]. Vulnerable road users – pedestrians, cyclists and motorized 2- and 3-wheelers – constitute more than half (52%) of road fatalities. Road traffic injuries are a substantial burden across all regions of the world and the 8th leading cause of the global burden of disease. Although 22% of the global road traffic deaths are pedestrians, in the African region that proportion is 38%. The adolescents are more at risk of injury, with road accidents being the leading cause death among boys globally [28].

In Uganda road traffic accidents are among the top ten causes of death [29]. Annually, approximately 11 – 15% of Ugandan are affected by injuries [30]. Road traffic injuries account for 35 – 50% of all injuries and are the leading cause of injuries related deaths [ibid]. Drowning remains the number one cause of injury deaths for communities living close to water bodies. Falls, burns and road traffic injuries are the leading cause of injury deaths among children and adolescents. It was reported that 1,000 and 10,000 Ugandans were killed and injured respectively as a result of road traffic accidents in the period of 2010-2013 [31]. Moreover, it is widely believed and

acknowledged by Police that some accidents are never reported. Although no independent study has been carried out in Uganda to establish the cost of road crashes, the WHO Global Status Report on Road Safety 2015, estimates that developing countries lose 2-3% of GDP, which is about 2,163.81 Billion Ugandan shillings, based on the 2014 GDP in Uganda. The Government approved a road safety policy in 2014 which spells out the interventions required. However, enforcement of these policies is still limited.

vii. Mental Health

The burden of mental disorders has continued to grow globally, despite known effective prevention and management strategies. Mental disorders are the major contributor to years lived with disability globally; they account for 32.4% of years lived with disability (YLDs) and 13% of disability adjusted life years (DALYs)[32]. In sub-Saharan Africa Mental, Neurological and Substance use (MNS) disorders account for 19% of YLDs. Common mental and neurological disorders accounting for the biggest burden in the general population in Uganda include epilepsy, depression, substance abuse, schizophrenia, bipolar, childhood disorders and HIV Psychosis. MNS disorders disproportionately affect the poor and undermine efforts to achieve sustainable development goals.

Although no national survey has been conducted on mental and neurological disorders in Uganda, a review of the HMIS data over 5 years (2012-2016) showed that there was an average annual increase of 9% in Mental health problems among the general population; whereas another report suggests that 35% (approximately 9.5 million) of Ugandans have a mental health condition[33].

Major NCD risk factors:

The four-main shared behavioral risk factors – tobacco use, harmful use of alcohol, physical inactivity and unhealthy diet – are the most important risk factors for NCDs. These risk factors combined are associated with four major NCDs that accounted for 68% of NCD deaths [6]. These risk factors are modifiable and avoidable. Other risk factors include drug abuse, occupational and environmental hazards such as; smoke from exhaust fumes and burning of biomass, radiations from the sun, aflatoxins from poorly stored legumes and cereals among others. Therefore, population reduction of exposure to these risk factors is crucial in the prevention and management of NCD morbidity and mortality.

i. Tobacco use

Tobacco use is one of the leading causes of death, illness and impoverishment in the world. Premature deaths and morbidity from tobacco use deprive families of income, burden the health care system and hinder economic development. Tobacco smoke contains more than 4,000 chemicals, of which 250 are harmful and 50 are known to cause cancer. Tobacco use including second smoke causes cardiovascular and respiratory diseases including heart disease and lung

cancer in adults, low birth weight in pregnant mothers and sudden death in infants. Tobacco use and exposure to second-hand smoke are estimated to account for 7 million as a result of direct tobacco use and around 650,000 deaths due to exposure to second-hand smoke by non-smokers[6]. The burden of tobacco-related illness and death is heaviest in LMICs where almost 80% of the more than one billion smokers live. By 2030, it is projected that tobacco use will lead to 8 million annual deaths if nothing is done to curb the epidemic [ibid].

According to the Uganda NCD risk factor survey 2014, one in every ten Ugandans was a daily tobacco user [34]. Men were about six times more likely to be daily tobacco users compared to women. The likelihood of being a daily tobacco user increases with increasing age and lower education level. The Global Adults Tobacco Survey[35] revealed that 11.6% of men and 4.6% of women, overall 7.9% (1.3 million adults) were tobacco users (smoked or smokeless). In addition, the Global Youth Tobacco Survey[36] found that 15% of boys and 13% of girls in secondary schools start smoking annually. A study conducted at the Uganda cancer institute in Mulago National Hospital found that 75% of the patients with oral cancer had a history of smoking for 2-38 years. This finding indicates that some people suffer the health consequences of tobacco use after relatively short periods of use. Similarly, it was also found that 26% of deaths due to cancers of the respiratory system and 14% of deaths due to other respiratory diseases are attributable to tobacco use[37]. The 2017 economic study report on tobacco found that for every 1 dollar received from the industry, 4 dollars are spent on treating the tobacco related illnesses thus resulting in a net loss to governments[38]. Implementing the proven strategies for tobacco control have shown to reduce the harmful effect of tobacco to humans and to the environment.

ii. Harmful use of Alcohol

Globally the harmful use of alcohol is estimated to have caused 3.3 million deaths or 5.9% of total deaths in 2015 [39]. More than 200 disease and injury conditions are also attributed to harmful use of alcohol, contributing 5.1% of the global burden of disease and injury [40]. Harmful use of alcohol also increases the risk of premature deaths and preventable disability from a range of conditions including mental and behavioral disorders, and infectious diseases such as tuberculosis and the course of HIV/AIDS [ibid].

The Global status report on alcohol and health 2014 reported the average annual per capita alcohol consumption in Uganda to be 23.7 liters [39]. It is also estimated that 3.4% of the population are heavy episodic drinkers that is drinking 6 or more standard drinks of alcohol in the past 30 days [*1 drink equals approximately 350mls of regular beer, containing at least 14g of pure alcohol*].

The 2014 Uganda NCD risk factor survey found that the level of alcohol use among adults in Uganda is high, with 26.8% of adults in Uganda being alcohol users and males more likely to be heavy drinkers than females. The survey also revealed that 9.8% of the adult population living with

an alcohol related disorder [41]. According to the Uganda National risk behavioral survey (2017), 17% of adolescent boys and girls had ever drunk alcohol with peers and adults/parents as the main source of exposure. The proportion is higher among adolescents out of school than those in school. Factors that are significantly associated to heavy drinking are gender, ethnicity, age and region of residence. Central and Western Uganda had more heavy drinkers compared to Eastern Uganda. Harmful use of alcohol was also found to increase with increasing age. For instance, Ugandans aged 50-69 years are twice likely to be heavy drinkers compared to those aged 18-29 years [16].

iii. Unhealthy diet

Worldwide, excessive consumption of salt/sodium was estimated to cause 1.7 million deaths from CVD in 2010 [42]. WHO estimates that diets low in fruits and vegetables was responsible for 1.7 million deaths which is about 14% of gastrointestinal cancers, 9% of strokes and 11% of ischemic heart disease deaths globally. Unhealthy diets especially those high in fats, free sugars and salt predispose to NCDs such as diabetes, stroke, heart disease and cancer. Evidence shows that in order to achieve a healthy energy intake, total fat consumption should not exceed 30% of total energy intake.

In Uganda, the 2014 NCD risk factor survey found that the consumption of fruits and vegetables is generally very low in Uganda. An estimated 87% of females and 88% of males were found not to consume fruits and vegetables to recommended levels [*WHO recommends at least five servings of fruits and vegetables; i.e. an equivalent of 400g per day*]. Consequently, this has resulted in a high prevalence of overweight at 14.5% and obesity at 4.6% among adults. The prevalence of overweight among women was more than twice that of men. Obesity in women was significantly higher than in men at 7.5% and 1.8% respectively. Compared to rural areas, urban areas had significantly higher prevalence of obesity and overweight; probably explained by the change in dietary patterns from consumption of healthy natural foods to processed high energy foods.

iv. Physical inactivity

Physical inactivity is one of the ten leading risk factors for mortality worldwide. It is also a key risk factor for NCDs including CVD, cancer and diabetes. Insufficient physical activity causes about 3.2 million deaths annually [43]. Despite global commitments by all WHO member states to reduce physical inactivity by 10% by 2025, increasing levels of physical inactivity are being observed globally. It is estimated that 1 in every 4 adults is not physically active enough. Insufficient participation in physical activity during leisure and adoption of sedentary lifestyles are partly responsible for the high levels of physical inactivity. In nearly every country around the world, physical activity levels among women are lower than those of men.

WHO recommends at least 150 minutes of moderate intensity or 75 minutes of vigorous intensity

physical activity per week or 30 minutes of moderate activity per day for five days in a week in adults. The recommended time can be met through work, travel and/or leisure related physical activities. In Uganda, the national NCD risk factor survey conducted in 2014 found that 94.3% of adult Ugandans meet the WHO physical activity recommendations [44]. In addition, 75% of the adolescents reported that physical exercise was irregular and 30% did not participate in any physical exercise with those in central region and urban areas being the most physically inactive. The increasing levels of urbanization in Uganda with associated changes towards unhealthy lifestyles that are characterized by physical inactivity and other NCD risk factors threaten the maintenance of the high levels of physical activity in the population.

Other NCD risk factors:

The modifiable risk factors mentioned above are the four major ones. However, there are also other risk factors for developing NCDs. Some of these include:

- Environmental risk factors (exposure to smoke from cooking using firewood and other biomass, consumption of foods especially legumes and cereals contaminated with aflatoxins, long term exposure to sun radiations, excessive consumption of foods with added preservatives among others)
- Occupation exposure (such as exposures to heavy metals like lead, cadmium among others)
- Drug abuse

1.2 Global response and commitment

As part of the efforts to prevent and control NCDs, the 66th World Health Assembly endorsed the WHO Global action plan 2013 – 2020 (resolution WHA66. 10). This action plan puts in place a standard by providing a roadmap and a variety of policy options for member states, WHO and other UN agencies and intergovernmental organizations, NGOs and the private sector. If the policies stipulated in this action plan are successfully executed within that period, the nine voluntary targets can be achieved. Additionally, this action plan is a sequel of the commitments put forward by the Heads of State Government in the United Nations Political Declaration on the prevention and control of NCDs (resolution A/RES/66/2).

1.3 National response and commitment

The Ministry of Health has approved the formation of NCD department with two divisions; a division of Mental Health and Substance Abuse and a division of Lifestyle Diseases. The Ministry has also included NCD prevention and control in strategic frameworks such as the National Health Policy (NHP) II, the Health Sector Development Plan (HSDP 2015/16-2019/20), National Development Plan (NDP II 2015/16-2019/20) and the Revised Adolescent Health Policy 2017.

The Multi-Sectoral Strategic Plan for NCD Prevention and Control and national NCD risk factor Communication strategy have also been developed. A multi-sectoral committee (The national Multi-Sectoral Task Force [MSTF]) was established to fast track implementation of NCD interventions in line with the NCD Global Action Plan 2013-2020. In addition, this committee also acts as the coordination mechanism for multi-sectoral and inter-sectoral engagement for NCD prevention and control efforts.

The NCDs Technical working group is also in existence which brings together several partners and stakeholders to discuss key NCD issues and those to be forwarded to the Ministry of Heath Senior Management Committee (SMC).

In 2015, Human Papillomavirus (HPV) vaccination targeting 10-year-old girls was rolled out. Administration of Hepatitis B vaccine to vulnerable adults and routine immunization of infants to prevent liver disease and cancer is also ongoing. Screening for cervical cancer, the commonest cancer in Uganda, has been initiated in selected health facilities around the country.

In 2014, a nationally representative NCD risk factor survey was conducted, and it generated reliable local data on NCDs and associated risk factors. The survey report has been published by Ministry of Health[16] and findings have been used to inform this NCDs multi-sectoral strategic plan. Processes to develop other crucial NCD prevention and control tools in Uganda will also utilize findings from that survey.

Prevention and Health Promotion

Health promotion by government and civil society organisations continue to play a pivotal role in the prevention of NCDs. NCD prevention and control interventions are incorporated into the Uganda health care delivery system which consists of; multi-sectoral collaboration at the national level, Ministry of Health, National and Regional Referral Hospitals, General hospitals, Health Center IV, III, and IIs as well as Village Health Teams (VHTs). However, there is need to intensify health promotion on NCD prevention and control as awareness in the community is still very low. Screening of key types of NCDs such as diabetes, cardiovascular diseases, sickle cell, cancers, and chronic respiratory diseases have been mainstreamed in the National Health Service delivery.
Vaccines against some of the causes of Cancer have been included in the Uganda National Expanded Program on Immunisation (UNEPI) and are routinely administered to infants. The most common being hepatitis B in preventing chronic liver diseases such as liver Cancer, and HPV vaccine (targeting HPV type 16 and 18) which has the potential to prevent up to 70% of cervical cancers [45].

Additionally, Ministry of Health in partnership with civil society organisations carry out joint annual commemoration campaigns such as cancer awareness campaigns, sickle cell awareness weeks,

World Heart day, World Hypertension day, World Cancer day, World Asthma day, International diabetes days among others.

Media and social marketing to promote healthy lifestyles and for increasing knowledge and awareness of NCD risk factors are targeted. The media has of recent reported on NCDs but much more is required to disseminate NCD prevention information to the population.

Management of NCDs

Management of NCDs in the country is guided by the National Clinical Guidelines[46]. The Government of Uganda has established Centers of excellence including at national, regional and district levels, treatment and referral centers such as Cancer, lung and heart Institutes as well as National referral hospitals like Mulago, Mbarara and Butabika. The regional and district hospitals are also managing NCDs with services such as screening, drug administration and some surgeries. Management of NCDs has also been integrated in the routine health service delivery in the lower Health Centre's (HC2 &HC3). However, NCD services at these health centres are characterized by inadequate medical kits, and lack of standard expertise among the health workers.

Partnership and Collaborations

The burden of NCDs cuts across all sectors. Prevention and management of NCDs involves a wide spectrum, of actors including public sector, development partners, civil society and private sector at national, district and community levels.

Currently, the NCD division under the Ministry of Health has partnership with; WHO and other UN agencies as well as World Diabetes Foundation globally. Locally, there are partnerships with Civil Societies, private sector, professional associations and academia. There are also inter-sectoral collaborations that include OPM, Office of the President, the Ministry of Gender, Labor and Social Development, Ministry of Public Service, Ministry of Local Government, Ministry of Agriculture, Animal Industry and Fisheries, Ministry of Education and Sports among others. It is strongly believed that with the newly established Multi-Sectoral task force, the coordination will improve promoting an effective response to NCDs

Surveillance, Monitoring and Research

Research and surveillance perform a vital function across the intervention pathway for NCD prevention and control. Economic costs of NCD, cost effectiveness and cost-benefits of prevention strategies and related research provide strong arguments for instituting policy and regulatory interventions to reduce the NCD burden. Uganda carried out the first national NCD risk factor survey in 2014. In addition, the National Risk Behavioural Survey for Adolescents (2017) was carried out. The academia and research institutions have also carried out NCD related research. However, more research is needed to evidence and inform policy. The Health Management

Information System (HMIS) now captures more information on NCDs. The Uganda Demographic and Health Survey also captures information on NCD indicators however more NCD related indicators will be included in the next survey. Other regular surveys such as the Uganda National Panel Surveys (UNPS) will also be requested to incorporate information on NCD indicators.

Human Resource Capacity

Human resources for NCDs including health workers, educationists, environmentalists, nutritionists, agriculturalists and social workers among others need to be identified, recognized, adequately skilled and resourced to effectively participate and contribute towards NCD prevention, management and control.

However, there is general understaffing both at the program management and implementation level. At all health facility levels, there is general lack of adequate human resources and specific NCD treatment and management skills.

Funding for NCD services

There is a general underfunding of NCD activities in Uganda. The program area receives inadequate funding for carrying out NCD services nationally despite NCDs contributing to 40% of total mortality [15]. Moreover, NCDs have not attracted funding from government and development partners.

Legal and regulatory framework for NCDs in Uganda

The government of Uganda ratified the WHO Framework Convention on Tobacco Control in 2007 which binds Uganda to implement all its provisions. The There is also the Tobacco Control law which the president assented to in November 2016 and it came into full force in May 2017.

There's is the anti-narcotics law 2014 which is aimed at preventing drug abuse among the population. The Mental health act is also in parliament yet to be discussed which will help to ensure increased access to primary and referral services for Mental Health, prevention and management of substance use problems including tobacco, psychosocial disorders and common neurological disorders such as epilepsy. Th overall aim of such a legislation is to to protect, promote and improve the lives and mental well-being of citizens. This Mental Health act is a resultant of a repeal of the Mental Treatment Act of 1964. The process of developing the National alcohol control policy is at cabinet level aimed at regulating the consumption of alcohol in the community. The Country has the 'enguli' law of 1964 which is currently under review.

Challenges in the prevention and control of NCDs in Uganda

Efforts to prevent and control NCDs in Uganda have been met with some challenges including: inadequate funding of the NCD programme and other NCD-related activities, ineffective legislation or existence of outdated/poor legislation to support effective NCD efforts, poor enforcement of laws linked to the prevention and control of NCDs, lack of awareness and knowledge about NCDs in the general population and an already overstretched health system due to infectious diseases.

1.4 Rationale for action

Noncommunicable diseases place a double burden on already overstretched yet resource constrained health systems in LMICs, against a backdrop of the communicable disease epidemics. This double burden necessitates concomitant approaches and interventions. The economic impact of NCDs goes beyond the costs to health services. Indirect costs such as lost productivity can match or exceed the direct costs. In addition, a significant proportion of the total cost of care falls on patients and their families due to the need for lifelong treatment. This leads to escalating health care costs, reduced income and loss of productivity due to disability hence driving individuals and families into poverty. If appropriate efforts are not urgently taken, global financial losses due to NCDs will reach 7 trillion US dollars between 2011 to 2025 [47]. Nevertheless, low-cost high impact solutions and interventions exist to address both the major modifiable risk factors and associated NCDs.

Uganda has a significantly growing burden of NCDs just like many other LMICs. However, current efforts to combat the NCD epidemic require strengthening; and this strategic plan has been designed to address the existing gaps in NCD prevention and control. Achieving progress in the prevention and control of NCDs will require broad collaboration from people and organizations across the whole of society. This implies that the government, nongovernmental organizations (NGOs), civil society, the private sector, academia, health professionals, communities and individuals have a role to play as explicitly stated by World leaders in the 2011 Political Declaration on the Prevention and Control of NCDs. The declaration recognizes that multi-sectoral engagement with a whole-of-government and whole-of-society approach incorporating evidence-based, affordable, cost-effective population wide interventions can greatly prevent and reduce the incidence and impact of NCDs.

Significance of the multi-sectoral plan

The multi-sectoral plan will serve as a reference to guide implementation of interventions for prevention and control of NCDs by stakeholders from various sectors from 2018- 2023. It contains broad strategic actions and key milestones to be achieved within the given time span by the stake holders. Given the high priority accorded to this plan, it will be supervised by a multi-sectoral committee chaired by Office of the Prime Minister (OPM) with Ministry of Health as the

Secretariat. All the deliverables and milestones will be closely monitored by the government through engagement with a wide range of stakeholders including civil society.

To ensure maximum participation and effective coordination, focus on results based planning will be emphasized. Although implementation of interventions will closely follow this plan, new cost-effective interventions will be adopted as they arise.

2. SCOPE, STRUCTURE OF THE PLAN AND LINKAGE WITH THE EXISTING RELEVANT PLANS

2.1 Scope of the plan

In accordance with the UN General Assembly resolution calling upon member states to develop action plans for the four major NCDs and 4 common risk factors as well as the Brazzaville Declaration on the prevention and control of NCDs in the African region, by Ministers of Health from all the countries in Africa[1], Uganda will include sickle cell disease, road traffic injuries and mental health illnesses as additional NCDs.

2.2 Linkage with the existing relevant plans

The activities and targets in this strategic plan are derived from the WHO Global Action Plan for the prevention and control of NCDs 2013-2020. The action plan provides a roadmap and policy options for WHO member states to take coordinated and coherent actions on nine global targets including: a 25% relative reduction in premature mortality from cardiovascular diseases, cancers, diabetes or chronic diseases by 2025. Similarly, one of the targets of SDG 3 is the reduction by one third premature mortality from Noncommunicable diseases through prevention and treatment and promotion of mental health and wellbeing.

The WHO Afro regional strategy on NCDs 2000 (AFR/RC50/10) calls on countries to put emphasis on surveillance, improvement of the performance of the health system and the development of multi-sectoral strategies for reducing risk factors particularly tobacco use, unhealthy diets and physical inactivity.

[1] World health organization /African Regional Office. The Brazzaville declaration on Non-communicable diseases prevention and control in the WHO African region. 6 April 2011

This document is further aligned with the Vision 2040 which emphasizes empowerment of households and communities to take greater control of their health by promoting healthy practices and lifestyles. In addition, this strategy conforms to the NDP II (2015/16-2019/20) which aims at reducing by one third premature mortality from NCDs through prevention and treatment to promote the mental health and wellbeing of Ugandans. Furthermore, this strategy seeks to achieve target 4 of the HSDP (2015/16-2019/20).

This plan also takes into consideration the objectives of the strategies, policies and laws that address the NCD risk factors i.e. Tobacco and excessive consumption of alcohol.

CHAPTER 2: PROCESS OF DEVELOPING THE NATIONAL NCD MULTI-SECTORAL ACTION PLAN

1. THE INITIATION AND COORDINATION:

Since 2000, the global strategy for NCD prevention and control was developed for which a global action plan (2008-2013) was endorsed. In 2013, a global action plan for prevention and control of NCDs (2013-2020) incorporating all earlier NCD related strategies was endorsed. It is on this basis that Uganda under the stewardship of the Ministry of Health initiated the development of the NCDs multi-sectoral strategic plan. A multi-sectoral NCD taskforce was inaugurated by the Minister of Health in 2016 to oversee the development and implementation of the National Multi-sectoral NCD strategic plan. In the same year, the process of developing the plan was initiated.

2. PARTICIPATION OF RELEVANT SECTORS IN THE PROCESS

The process of developing the strategy was led by Ministry of Health with support from WHO and the World Diabetes Federation (WDF). A National level stakeholders' meeting were held which resulted into the development of a draft NCDs Multi-sectoral strategic plan. The stakeholders who participated included Office of the Prime Minister, Office of the President, MoES, MoFPED, MoTIC, MoGLSD, MAAIF, UNCDA, UHI, UCI, UDA, Academia (MakSPH), KCCA and AMICAALL Uganda among others [*for full list of stakeholders, see section 2.2, chapter 3*]. The different sector gave their technical input and information regarding planned and/ or ongoing NCD prevention and management interventions, activities or programs that are in line with the strategic actions presented in this plan. The draft NCD multi-sectoral strategy was then presented to the NCD technical working group for review and input before being presented to the Ministry of Health for approval.

3. PRIORITIZATION OF ACTIONS

The priority actions under this strategy were informed by the WHO global action plan for prevention and control of NCDs (2013-2020) and findings presented in the WHO global status report on NCDs 2014. In 2014, the Ministry of Health with support from WHO undertook a NCD risk factor survey using the STEPS methodology to determine the status of NCDs and their risk factors in Uganda. The gaps and magnitude of the several NCDs and NCD risk factors identified in this survey further informed the priority NCDs interventions and actions stipulated under this strategy.

SECTION II

NATIONAL MULTISECTORAL ACTION PLAN FOR NCD PREVENTION AND CONTROL

CHAPTER 3: THE NATIONAL STRATEGIC AGENDA FOR NCDs

1. NATIONAL STRATEGIC AGENDA ON NCDS

1.1 Vision

A healthy and productive Ugandan population, free from the preventable burden of noncommunicable diseases to enhance socio-economic development.

1.2 Mission

To significantly reduce the preventable burden of disease, disabilities and deaths due to NCDs through multi-sectoral interventions.

1.3 Goal

To attain a 20% relative reduction in risk of premature mortality from NCDs by 2025.

1.4 National NCD goals and targets

Table 1: National NCD targets and indicators

Framework Element	Baseline (2010)	Target 2023	Target 2025	Indicator
Premature mortality from NCDs	21%	17.4%	16.8% [Target: 20% relative reduction]	Mortality from NCD (unconditional probability of dying from NCDs)
Incidence (per 100,000) of the four most common cancers	Breast: 27.5 Esophagus: 17.1 Cervix: 44.4 Prostate: 48.2	26.3 16.4 42.5 46.1	26.1 16.2 42.2 45.8 [Target: 5% relative reduction in incidence of cancers by type]	Cancer incidence, by type of cancer per 100,000 population.
Harmful use of alcohol among adults and adolescents	Adults: 3.0%	2.7%	2.7% [Target: 10% relative reduction]	Age standardized prevalence of heavy episodic drinking among adults and adolescents
	Adolescents: *Data Not available*	< 1%	< 1% [Target: 10% relative reduction]	

Physical inactivity	4.3%	4.1%	4.1% [Target: 5% relative reduction]	Prevalence of insufficient physical activity
Salt/ sodium intake	10.2g/day*	9.3g/day	9.2g/day [Target: 10% relative reduction]	Mean population intake of salt in persons aged 18+ years
Tobacco use	11%	9.1%	8.8% [Target: 20% relative reduction]	Prevalence of current tobacco use among adults
Raised blood pressure	24.3%	20.1% relative reduction	19.4% [Target: 20% relative reduction]	Prevalence of raised blood pressure among adults
Diabetes and obesity	Diabetes: 1.3% Obesity: 4.6%	1.3% 4.6%	1.3% 4.6% [Target: 0% increase]	Prevalence of raised blood glucose/ diabetes among adults
Essential medicines and basic technologies to treat Diabetes	Medicines: 43%	75.1%	80% [Target: 80% availability]	Proportion of HCs that stocked out on tracer Diabetes medicines in the last quarter
	Technologies: 80%	88.7%	90% [Target: 90% availability]	Proportion of HCs with functional glucometers
Essential medicines and basic technologies to treat CVDs	Medicines: 39%	74.5%	80% availability [Target: 80% availability]	Proportion of HCs that stocked out on tracer CVD medicines in the last quarter
	Technologies: 93%	94.7%	95% [Target: 95% availability]	Proportion of HCs with functional BP machines and stethoscopes
Essential medicines and basic technologies to treat COPD	Medicines: 26%	72.8%	80% [Target: 80% availability]	Proportion of HCs that stocked out on tracer COPD medicines in the last quarter
	Technologies: 35%	74%	80% [Target: 80% availability]	Proportion of HCs with functional COPD machines [i.e. Spirometers and peak expiratory flow (PEF) meters, nebulizers and spacers]
Essential medicines and basic technologies to treat Sickle Cell	Medicines – *Data not available*	80%	80% [Target: 80% availability]	Proportion of HCs that stocked out on Penicillin V and hydroxyurea in the last quarter
	Technologies – *Data not available*	80%	80% [Target: 80% availability]	Proportion of HCs with HB Electrophoresis machines and the Rapid kits.

**National data not available; Salt estimates based on African mean salt intake [48,49].*

2. NATIONAL ACTION FRAMEWORK

Table 2: National action framework for NCD prevention and control

<table>
<tr><td colspan="2">Vision
A healthy and productive Ugandan population, free from the preventable burden of noncommunicable diseases to enhance socio-economic development.</td></tr>
<tr><td colspan="2">Mission
To significantly reduce the preventable burden of disease, disabilities and deaths due to NCDs through multi-sectoral interventions.</td></tr>
<tr><td colspan="2">Goal
To attain a 20% relative reduction in risk of premature mortality from NCDs by 2025.</td></tr>
<tr><td colspan="2">National NCD targets to be achieved by 2025 (with 2010 baseline)</td></tr>
<tr><td>▪ 5% reduction in physical inactivity
▪ 10% relative reduction of salt/ sodium intake
▪ 20% relative reduction of tobacco use
▪ 20% relative reduction of raised blood pressure
▪ Halt the rise in diabetes and obesity
▪ 80% availability of essential NCDs medicines and up to 95% availability of basic technologies.
Other national targets:
▪ 100% availability of morphine at all health sub districts and higher levels of care
▪ At least a policy adopted to limit saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils in the food supply within the population.
▪ 100% Availability of HPV vaccine at all health centers IIIs and above</td><td>▪ At least a policy adopted to reduce the marketing of foods and non-alcoholic beverages high in saturated fats, trans fatty acids, free sugars, or salt to the general population.
▪ 95% vaccination coverage against hepatitis B
▪ At least 60% of women aged 25years -49 years screened for cervical cancer
▪ At least 80% of the couples intending to get married screened for sickle cell and given appropriate premarital counselling.
▪ 100% of children below 5 years screened for sickle cell and their status known
▪ 100% of all children below 5 years with sickle cell disease linked to appropriate care.
▪ 80% of the people with MNS disorders utilizing MNS disorder care services
▪ 80% of health facilities providing MNS disorder services</td></tr>
<tr><td colspan="2">Strategic action area and objectives</td></tr>
<tr><td>Proposed strategic action area
1. Public policy and advocacy
2. Leadership, governance and capacity building
3. Risk factor reduction and health promotion
4. Comprehensive and Integrated management for NCDs
5. NCDs research
6. Surveillance, monitoring and evaluation</td><td>Strategic objectives:
1. To strengthen advocacy efforts to raise the priority accorded to the prevention and control of NCDs in the national development agenda
2. To strengthen multi-sectoral capacity, to accelerate country response for NCD prevention and control
3. To reduce modifiable risk factors for NCDs and underlying social determinants of health
4. To strengthen the health system to address NCDs through people-centered primary health care
5. To strengthen the national capacity for quality research for the prevention and control of NCDs
6. To strengthen the national M&E system for NCDs</td></tr>
<tr><td colspan="2">A detailed implementation plan [see chapter 4]</td></tr>
</table>

3. GUIDING PRINCIPLES FOR ACTION

This strategic plan is guided by the following principles:

i. Multi-sectoral and Inter-sectoral engagement

Achieving sustainable health gains in combating NCDs requires a multi-stakeholder approach involving all relevant sectors of government and non-state actors. NCDs are driven by such factors as the effects of globalization on marketing and trade, rapid urbanization and population ageing – over which the conventional health sector alone has limited influence. Equitable prevention and control of NCDs therefore needs to leverage multi-sectoral collaboration across sectors outside health and inter-sectoral collaboration between the government and non-state actors. Mechanisms and processes to facilitate multi-sectoral and inter-sectoral collaboration need to be integrated right from the planning stage of NCD programmes and activities and continue through implementation, enactment of public policies to monitoring and evaluation.

ii. Empowerment of individuals and communities

People and communities have the right to receive appropriate information and should be empowered to make healthy lifestyle choices. Their involvement in NCD prevention and control activities such as advocacy, planning, policy formulation, service provision, legislation, monitoring, research and evaluation is critical.

iii. Life-course approach

Even though morbidity and mortality from NCDs occurs mainly in adulthood, exposure to risk factors begins early in life. Health promotion, disease prevention and comprehensive care should therefore begin from pre-conception, pregnancy, childhood and adolescence where the best chance for primary prevention occurs, and continue throughout life to harness opportunities for prevention and control of NCDs that occur at multiple stages of life. Policies, plans and service delivery models therefore need to consider health and social needs of individuals and communities across the lifespan; including maternal health at preconception, antenatal and postnatal care, maternal nutrition and avoiding environmental exposure to risk factors, and continuing through promotion of breast feeding and proper feeding for children, adolescents and youths followed by promoting healthy working life and care for people living with NCDs.

iv. Human rights approach

The current Constitution of the Republic of Uganda pronounces itself clearly on the right to life. The enjoyment of the highest possible standard of health is also a fundamental human right that is enshrined in the Universal Declaration of human rights as adopted by all United Nations member states in 1948. This plan is therefore anchored on the recognition of these rights regardless of a person's tribe, sex, language, religion, political affiliation, race, origin or other status.

v. Evidence-based

The strategies and actions to prevent and control NCDs in the plan will utilize evidence-based approaches and best practices with due consideration of their cost-effectiveness, affordability and cultural appropriateness.

vi. Equity-based approach

The inequitable distribution of the social determinants of health largely dictates the unequal distribution of NCDs among different groups in society. An equitable approach to addressing NCDs should consider action on the social determinants of health for both vulnerable groups and whole of society.

vii. Integration

Integrated approaches to policy and health service delivery are necessary to reduce barriers to healthy lifestyles, boost patient centeredness and increase the efficiency of the primary health care system in handling the prevention and control of chronic NCDs.

viii. Management of conflicts of interest

Although multiple stakeholders and actors need to be engaged to effectively combat NCDs, public health policies, strategies and multi-sectoral actions should be protected from any real, perceived or potential conflicts of interest.

4. STRATEGIC AREAS AND OBJECTIVES

Table 3: Strategic area, objectives and priority action

Strategic objective	Key elements	Priority action/ Interventions
1. To strengthen advocacy efforts to raise the priority accorded to the prevention and control of NCDs in the national development agenda	Advocacy	**Key priority actions:** ▪ Disseminate evidence and information about NCDs and development ▪ Integrate NCD prevention and control into national sectoral programs ▪ Advocate for budget allocation to NCD integration into sectoral programs ▪ Facilitate multi-sectoral coordination among key stakeholders ▪ Conduct targeted sensitization exercises for local governments to prioritize NCDs **Others priority actions** ▪ Conduct a national dialogue of NCD preventions ▪ Meetings with key influencers for prioritization of NCD prevention and control ▪ Mass media engagement to raise NCD agenda at National and local level ▪ Develop and implement the NCD communication strategy ▪ Identify goodwill ambassadors/champions
2. To strengthen multi-sectoral capacity, to accelerate country response for NCD prevention and control	▪ Capacity development ▪ Leadership and Governance ▪ Multi-sectoral action, Coordination, cooperation and partnerships	**Key priority actions** ▪ Conduct a national multisectoral NCD capacity needs assessment ▪ Strengthen multisectoral leadership and coordination capacity ▪ Review sectoral policies and programs for NCD integration ▪ Strenghten capacity of parliamentary NCD forum for effective leadership and coordination **Other priority actions:** ▪ Lobby for strengthening the Human resource, technical and logistical capacity of the NCD department at Ministry of Health and decentralized levels ▪ Assign an NCD focal person at District level ▪ Formalize and support functionality of the National NCD taskforce and technical working group ▪ Integrate NCDs in to existing multi-sectoral committees at decentralized level ▪ OPM to convene a multi-sectoral meeting for sectors to mainstream NCDs in their programming ▪ Ministry of Health to support OPM to develop guideline for NCD integration. ▪ Senior Management Committee (SMC), Health Policy Advisory Committee (HPAC) and Top Management to give guidance on prioritizing NCDs in their agenda by stakeholders. ▪ Health Development Partners to advocate for NCDs and allocate financial resources to NCD activities. Conduct district level coordination meetings to review and guide NCD prevention and control interventions
3. To reduce modifiable risk factors for NCDs and underlying social determinants of health	▪ Modifiable risk factors (unhealthy diet, physical inactivity,	**Key priority actions:** **2. Promoting healthy diets:** ▪ Review national food and nutritional policies, standards, guidelines and action plans for NCD prevention

	tobacco use and harmful use of alcohol) ▪ Vaccination (HPV & Hepatitis B) ▪ School, facility and community linked programmes for NCD prevention and control ▪ Pre-marital counselling and newborn screening for sickle cell disease	▪ Develop national food and nutritional policies, standards, guidelines and action plans with integrated NCD prevention and control ▪ Implement national food and nutrition policies and action plans ▪ Create awareness on healthy diets in schools, workplaces, clinics, hospitals, public and private institutions and child care centres ▪ Build capacity for communities and families to operate small home gardens 2. Promoting physical activity: ▪ Review national physical education and sports policy, guidelines, standards, action plans and regulations for NCD prevention ▪ Develop a national physical education and sports policy for NCD prevention ▪ Develop a policy for improved physical education in all levels of schools ▪ Develop health and safety promotion guidelines for work places ▪ Implement the national physical education and sports policy for NCD prevention ▪ Develop a policy to promote physical activities of daily living including active transport, recreation and sports ▪ Review national and sub national plans and transport policies to improve accessibility, acceptability and safety of supportive infrastructure for walking and cycling 3. Reduction in tobacco use: ▪ Finalize the development of the tobacco control regulations ▪ Disseminate national tobacco control regulations to stakeholders ▪ Monitor implementation of the pictorial health warnings regulations and messages ▪ Monitor implementation of the national regulations ▪ Review tobacco product tax system ▪ Ratify ITP protocol ▪ Monitor Implementation of the comprehensive ban of tobacco advertising, promotion and sponsorship ▪ Implement smoke free law ▪ Implement tobacco cessation programmes 4. Reduction in harmful use of alcohol ▪ Review existing legislations on alcohol ▪ Develop a comprehensive national alcohol control policy ▪ Develop a new alcohol control law ▪ Sensitize communities on the harmful effects of alcohol use and the enforcement of the alcohol laws Other priory actions ▪ Streamline mainstreaming of NCDs in all sectors working on the social determinants of health ▪ Promote Hepatitis B and HPV vaccination ▪ Use periodic mass and SBCC campaigns on NCD and modifiable risk factors ▪ Strengthen school based health activities for NCD prevention and control

		▪ Support VHTs/CHEWs, and CBOs to integrate NCD prevention and control in their activities ▪ Advocate for pre-marital counselling and new born screening for sickle cell disease. ▪ Equip health facilities with basic medicines and technologies to screen and manage sickle cells
4. To strengthen the health system to address NCDs through people-centered primary health care	▪ Health service delivery ▪ Health work force ▪ Health information systems ▪ Access to essential medicines ▪ Health systems financing ▪ Leadership and governance	Key priority actions: ▪ Scale up services for NCDs to primary health care facilities ▪ Integrate NCD services with other health programs ▪ Build capacity among public and private service providers in NCD prevention, care, rehbilitation and palliative care ▪ Strengthen quality assurance for NCD interventions with emphasis on primary health care ▪ Increase access to essential NCD medicines and diagnostics ▪ Advocate for sustainable and equitable health financing for NCDs ▪ Increase awareness for merits of early detection of NCDs among the general public ▪ Strengthen human resources for the prevention and control of NCDs
5. To strengthen the national capacity for quality research for the prevention and control of NCDs	▪ National NCD research agenda ▪ Mapping national NCD research activities ▪ Strengthen national capacity for NCD research ▪ Improve implementation of the NCD plan through research	Key priority actions: ▪ Develop a research agenda for NCDs ▪ Strengthen national capacity for NCD research and innovation ▪ Strengthen the research capacity of existing centres of excellence for NCDs ▪ Promote evidence based programming for NCDs ▪ Advocate for integration of NCD research into government programs and policies ▪ Advocate for investment in NCD research and capacity development ▪ Promote south to south collaborations, partnerships and coordination for NCD research

4. To strengthen the national M&E system for NCDs	▪ Incorporate NCD into national health information system ▪ Strengthen national NCD surveillance system ▪ Assess national health system response to NCDs ▪ Improve monitoring and evaluation of NCD programmes ▪ Strengthen national capacity for NCD surveillance	Key priority actions: ▪ Review and strengthen the HMIS for improved NCD data ▪ Identify data sources for integration into national surveillance and health information system for NCDs ▪ Develop a national monitoring and surveillance system for NCDs ▪ Track and periodically review NCD trends ▪ Advocate for establishment of more centres of excellence for major NCDs ▪ Institutionalize the NCD STEPs survey ▪ Advocate for increase in budget allocations to NCD surveillance and monitoring ▪ Strengthen institutional and technical capacity to manage and implement the national surveillance and health information system for NCDs

CHAPTER 4: IMPLEMENTATION PLAN

1. A DETAILED IMPLEMENTATION PLAN:

1.1 Strategic area 1: Public policy and advocacy

Strategic objective 1:

To strengthen advocacy efforts to raise the priority accorded to the prevention and control of NCDs in the national development agenda.

There is growing consensus that addressing NCDs are a priority for socioeconomic development and human wellbeing as acknowledged by world leaders in the Political Declaration of the High-level Meeting of the General Assembly on the prevention and control of NCDs. Advancing the momentum generated by world leaders and raising the priority of NCDs on the national development agenda will require coordinated and effective advocacy for whole-of-government, whole-of-society and health-in-all policies approach.

The following key strategic actions shall be undertaken to achieve this objective;

1. Disseminate evidence and information about NCDs and development
2. Integrate NCD prevention and control into national sectoral programs
3. Advocate for budget allocation to NCD integration into sectoral programs
4. Facilitate multi-sectoral coordination among key stakeholders
5. Conduct targeted sensitization exercises for local governments to prioritize NCDs

Table 4: Strategic Area 1 – Public policy and advocacy

Strategic Objective One: To strengthen advocacy efforts to raise the priority accorded to the prevention and control of NCDs in the national development agenda.						
Key priority actions/ activities	Expected output	Indicators	Lead Agencies	Supporting sectors	Partners	Time frame
5. Disseminate evidence and information about NCDs and development	NCD evidence and information disseminated	Dissemination reports	MoH	• MAAIF, MTIC, MGLSD, MoES, MoFPED, MoLG, OPM, OP, MoWT, MoWE, MoICT	UN Agencies, CSO, Private sector, Media, NGOs	2018 – 2023
6. Integrate the prevention and control of NCDs into national sectoral programs	NCDs prevention and control integrated into national sectoral programs	Number of sectoral plans with NCDs interventions	OPM	• MAAIF, MTIC, MGLSD, MoES, MoFPED, MoLG, OP, MoWT, MoWE, MoICT	UN Agencies, CSO, Private sector, Media, NGOs	2018 -2023
7. Advocate for budget allocation to NCD integration into sectoral programs	NCD sectoral Interventions budgeted for	# sectoral costed interventions	MoFPED	• MAAIF, MTIC, MGLSD, MoES, MoLG, OPM, OP, MoWT, MoWE, MoICT	UN Agencies, CSO, Private sector, Media, NGOs	2018 -2023
4. Facilitate multi-sectoral coordination among key stakeholders	National Multi-sectoral task force technically and financially facilitated	• # of technical backstopping meetings organised • Proportion of the financial budget	MoH	• MAAIF, MTIC, MGLSD, MoES, MoLG, OPM, OP, MoWT, MoWE, MoICT	UN Agencies, CSO, Private sector, Media, NGOs	2018 -2023
5. Conduct targeted sensitization exercises for local governments to prioritize NCDs	• Targeted district sensitisation exercises carried out	No. of District sensitisation workshops	MoH	• MAAIF, MTIC, MoGLSD, MoES, MoLG, OPM, OP, MoWT, MoWE, MoICT	UN Agencies, CSO, Private sector, Media, NGOs	2018 2023

1.2 Strategic area 2: Leadership, governance and capacity building

Strategic objective 2:

To strengthen national capacity, leadership, governance, multi-sectoral action and partnerships to accelerate country response for the prevention and control of NCDs

As the ultimate gurdians of the population's health, the government of Uganda has the principal responsibility to ensure that appropriate institutional, legal, financial and service arrangements are in place for the prevention and control of NCDs.

The following key strategic actions shall be undertaken to achieve this objective;

1. Conduct a national multisectoral NCD capacity needs assessment
2. Strengthen multisectoral leadership and coordination capacity
3. Review sectoral policies and programs for NCD integration
4. Strenghten capacity of parliamentary NCD forum for effective leadership and coordination

Table 5: Strategic area 2 - Leadership, governance and capacity building

Strategic Objective Two: To strengthen national capacity, leadership, governance, multi-sectoral action and partnerships to accelerate country response for the prevention and control of NCDs.						
Key priority actions/ activities	Expected output	Indicators	Lead Agencies	Supporting sectors	Partners	Time frame
1. Conduct a national multi-sectoral capacity needs assessment for NCD prevention and control	National multi-sectoral capacity needs assessment conducted	National multi-sectoral capacity needs assessment report	MoH	MAAIF, MTIC, MGLSD, MoES, MoLG, OPM, OP, MoWT, MoWE, MoICT	UN Agencies, CSO, Private sector, Media, NGOs, Academia	2018 – 2023
2. Strengthen multi-sectoral capacity to provide leadership and coordination for NCD prevention and control	Strengthened multi-sectoral capacity (HR, Equipment, Data management systems) for NCD leadership	# of capacity building sessions conducted	MoH	MAAIF, MTIC, MGLSD, MoES, MoLG, OPM, OP, MoWT, MoWE, MoICT	UN Agencies, CSO, Private sector, Media, NGOs, Academia	2018 – 2023

3. Review multi-sectoral policies and programs to integrate NCD prevention and control	Multi-sectoral policies and programs reviewed	# of Multi-sectoral policies and programs reviewed	OPM	MAAIF, MTIC, MGLSD, MoES, MoLG, MoH, OP, MoWT, MoWE, MoICT	UN Agencies, CSO, Private sector, Media, NGOs, Academia	2018 – 2023
4. Strengthen the capacity of NCD parliamentary forum to provide leadership and coordination for NCD prevention and control	Strengthened NCD Parliamentary forum	Strengthened NCD Parliamentary forum	MoH	Civil society		2018 20 23

1.3 Strategic area 3: Risk factor reduction and health promotion

Strategic objective 3:

To reduce modifiable risk factors for NCDs and underlying social determinants of health

The following key strategic actions shall be undertaken to achieve this objective

1. Promotion of healthy diet
    - Review national food and nutritional policies, standards, guidelines and action plans for NCD prevention
    - Develop national food and nutritional policies, standards, guidelines and action plans with integrated NCD prevention and control
    - Implement national food and nutrition policies and action plans
    - Create awareness on healthy diets in schools, workplaces, clinics, hospitals, public and private institutions and child care centres
    - Build capacity for communities and families to operate small home gardens

Table 6: Strategic area 3 – Risk factor reduction and health promotion (Promoting Healthy diets)

Strategic Objective 3: To reduce modifiable risk factors for NCDs and underlying social determinants of health						
Key strategic action 1: Promoting Healthy Diets						
Activity (Priority action)	**Expected Output**	**Indicators**	**Lead Agencies**	**Other Supporting Sectors**	**Partners**	**Time Frame**
Review the national food and nutritional policies, standards, guidelines and action plans for prevention of NCDs	Reviewed national food and nutritional policies, standards, guidelines and	Policies, standards, guidelines and action plans reviewed	MAAIF	MoH, MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023

Food and nutrition policy (FNP) 2003	action plans for prevention of NCDs		MoH	MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
School Feeding Guidelines (SFG)			MoE	MoH, MAAIF MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
School Health Policy Education Sector Strategic Plan 2009 2015			MoE	MoH, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Local Government Nutrition Guidelines			MoLG	MoH, MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Develop the national food and nutritional policies, standards, guidelines and action plans for prevention of NCDs	Developed national food and nutritional policies, standards, guidelines and action plans for prevention of NCDs	Policies, standards, guidelines and action plans developed	MAAIF	MoH, MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Micronutrient Policy			MoH	MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Draft nutrition guidelines for prevention and control of NCDs			MoH	MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Drug and Food Safety Act			MoH	MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Support implementation of national food and nutritional policies, standards, guidelines and action plans for prevention of NCDs	Implemented national food and nutritional policies, standards and action plans for prevention of NCDs	Policies, standards, guidelines and action plans implemented	MAAIF	MoH, MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Uganda Nutritional Action Plan 2011-2016			MAAIF	MoH, MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Health Sector Development Plan 2015/2016-2020/2021			MoH	MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Agriculture Sector Strategic Plan 2015/2016-2020/2021			MAAIF	MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Maternal and child nutrition strategy			MoH	MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023

Breast Feeding and Complementary guidelines			MoH	MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
National Standards and Quality Policy Implementation Plan			MTIC	MAIF, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
National Sanitary and Phyto Sanitary Policy			MTIC	MAAIF, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Food based dietary guidelines			MoH	MAAIF, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Draft Uganda Aflatoxin prevention and Control Action Plan			MAAIF	MTIC, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Local Government Nutrition Guidelines			MoLG	MAAIF, MoES, MGLSD, MoH MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Community Mobilization Guidelines for Nutrition under			MoGLSD	MoH, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Create awareness about health diets for prevention of NCDs in schools, work places, clinics, hospitals, public and private institutions, child care centres and other educational institutions	IEC materials developed Radio spot messages developed Meetings/Seminars held/conducted	Number of IEC materials developed Number of Radio spot messages Number of meetings/seminars held/conducted	MoH	UNCDA, Academia, MoGLSD, MAAIF	WHO, UNICEF	2018-2023
Build capacity of the communities, public institutions, schools and hospitals to produce and manage small home gardens	Trained communities, public institutions, schools and hospitals	Number of meetings held with communities, public institutions, schools and hospitals	MAAIF	MoH, MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023

2. Promotion of physical activity

- Review national physical education and sports policy, guidelines, standards, action plans and regulations for NCD prevention
- Develop a national physical education and sports policy for NCD prevention

- Develop a policy for improved physical education in all levels of schools
- Develop health and safety promotion guidelines for work places
- Implement the national physical education and sports policy for NCD prevention
- Develop a policy to promote physical activities of daily living including active transport, recreation and sports
- Review national and sub national plans and transport policies to improve accessibility, acceptability and safety of supportive infrastructure for walking and cycling

Table 7: Strategic area 3 – Risk factor reduction and health promotion (Promoting Physical Activity)

Strategic Objective 3: To reduce modifiable risk factors for NCDs and underlying social determinants of health						
Key strategic action 2: Promoting Physical activity						
Activity (Priority action)	**Expected Output**	**Indicators**	**Lead Agencies**	**Other Supporting Sectors**	**Partners**	**Time Frame**
Review the national physical education and sports policy, guidelines, standards, action plans and regulations for prevention of NCDs		National physical education and sports policy, guidelines, standards, action plans and regulations for prevention of NCDs reviewed		MoH, MTIC, MoGLSD, MoES, MoFPED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
National Physical Education and Sports Policy 2004	Reviewed national physical and sports policy		MoES	MoH, MTIC, MoGLSD, MoES, MoFPED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Physical Education Guidelines 2009	Physical education guidelines implemented	Physical education guidelines implemented	MoES	MoH, MTIC, MoGLSD, MoES, MoFPED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Develop the national physical education and sports policy for prevention of NCDs	National education and sports policy developed	National education and sports policy developed	MoES	MoH, MTIC, MoGLSD, MoES, MoFED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Develop a policy for improved provision of quality physical in education setting from infant to tertiary level including opportunities for physical activities before during and after the formal school day	Policy for improved provision of quality physical education developed	A policy for improved provision of quality physical education developed	MoES	MoH, MTIC, MoGLSD, MoES, MoFPED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023

Develop the health and safety promotion guidelines at work places for prevention of NCDs	Health and safety promotion guidelines developed	A health and safety promotion guidelines developed	MoLGSD	MoH, MTIC, MoGLSD, MoES, MoFPED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Support implementation of the national physical education and sports policy for prevention of NCDs	National physical education and sports policy implemented	National physical education and sports policy implemented	MoES	MoH, MTIC, MoGLSD, MoES, MoFPED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Develop a policy to promote physical activities of daily living including active transport recreation, and sports	Policy to promote physical activities of daily living developed	A policy to promote physical activities of daily living developed	MoLG	MoH, MTIC, MoGLSD, MoES, MoFPED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023
Review national and sub national plans and transport policies to improve the accessibility, acceptability and safety of supportive infrastructure for walking and cycling	National and sub national plans and transport policies reviewed	National and sub national plans and transport policies reviewed	MoLG	MoH, MTIC, MoGLSD, MoES, MoFPED, OPM, NARO, Academia	WHO, UNICEF, FAO, WFP, UNCDA	2018-2023

3. Reduction in tobacco use

- Finalize the development of the tobacco control regulations
- Disseminate national tobacco control regulations to stakeholders
- Monitor implementation of the pictorial health warnings regulations and messages
- Monitor implementation of the national regulations
- Review tobacco product tax system
- Ratify ITP protocol
- Monitor Implementation of the comprehensive ban of tobacco advertising, promotion and sponsorship
- Implement smoke free law
- Implement tobacco cessation programmes

- Support the implementation of economically viable alternatives to tobacco farming
- Develop a tobacco control communcation strategy
- Develop a tobacco law enforcement guide
- Training of law enforcement officers on the tobacco act and regulations
- Strengthen enforcement of tobacco control act and regulations
- Develop an integration plan for for tobacco control into relevant sectors

Table 8: Strategic area 3 – Risk factor reduction and health promotion (Reduce Tobacco use)

Strategic Objective 3: To reduce modifiable risk factors for NCDs and underlying social determinants of health						
Key strategic action 2: Reduce tobacco use						
Activity (Priority Area)	**Expected Output**	**Indicators**	**Lead Agencies**	**Other Supporting Sectors**	**Partners**	**Time Frame**
Finalize the development of the national TC regulations	National TC regulations finalized	Approved National TC regulated	MOH	MoTIC, Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD, NEMA,URA, NFA, MoES,PO,OPM, MAAIF	UN agencies CSOs Academia Media	2018
Disseminate National TC regulations to Stakeholders	National TC regulation disseminated	No. of stakeholders disseminated to	MOH	MoTIC, Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD, NEMA,URA, NFA, MoES,OP,OPM, MAAIF	UN agencies CSOs Academia Media	2018
Develop pictorial health warning regulations and message	pictorial health warning regulations and message developed	-PHW regulations -PHW message -PHW message & regulation approved &36azette	MOH	MoTIC, Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD, NEMA,URA, NFA, MoES,OP,OPM, MAAIF	UN agencies CSOs Academia Media	2019
Monitor Implementation of the PHW regulation and messages	Monitoring report on the implementation of PHW regulation and messages	-No. monitoring reports	National Tobacco control committe e	UNBS, MoTIC, Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD, NEMA,URA, NFA, MoES,OP,OPM, MAAIF	UN agencies CSOs Academia Media	2018 – 2023

Monitor Implementation of the National regulations	Monitoring report on the implementation of the National regulations	-No. monitoring reports	National Tobacco control committee	UNBS, MoTIC, Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD, NEMA,URA, NFA, MoES,OP, OPM, MAAIF	UN agencies CSOs Academia Media	2018 – 2023
Review Tobacco product tax system	Tobacco product tax system reviewed	New Tobacco product tax system in place	National Tobacco control committee	URA, MoTIC, Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD, NEMA,URA, NFA, MoES,OP, OPM, MAAIF	UN agencies CSOs Academia Media	2019
Ratify ITP protocol	Uganda Recognized for ratifying ITP	Uganda member of the ITP	MoH			2018
Support implementation of the comprehensive ban of TAPS (advert, promotion and sponsorship)	TAPS regulation Implemented	Proportion of points of sales adhering to TAPS regulation	NTCC	MoTIC, Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD, NEMA,URA, NFA, MoES,OP, OPM, MAAIF	UN agencies CSOs Academia Media	2018 – 2023
Support implementation of Smoke free law(SFL)	Smoke free regulations developed and enforced	proportion of Public places that are implementing 100% SFL	TC Committee	Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD,URA, NFA, MoES,OP, OPM, MAAIF	UN agencies CSOs Academia Media	2018 – 2023
Support implementation of Tobacco cessation programmes	TDCP adopted and customized	# facilities implementing TDCP	MoH	MoTIC, Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD, NEMA,URA, NFA, MoES,OP, OPM	UN agencies CSOs Academia Media	2018 – 2023
Support the implementation of economically viable alternatives to tobacco farming	economically viable alternatives to tobacco farming promoted	# economically viable alternatives to tobacco promoted and adopted # of capacity building programs for tobacco farmers	MAAIF Mo LG and MoT	Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD,URA, NFA, MoES,OP, OPM, MAAIF		2018 – 2023
Develop a tobacco control communication strategy	communication strategy developed	A Functional communication strategy	MoH	Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD,URA, NFA, MoES,OP, OPM, MAAIF		2018

Develop a tobacco enforcement guide	tobacco enforcement guide developed	Tobacco enforcement guide operationalized	MoH	Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD,URA, NFA, MoES,OP, OPM, MAAIF		2018
Training of law Enforcers on the tobacco act and regulation	Law enforcers trained based on the TC Act	# Law enforcers trained based on the TC Act	MoH	Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD,URA, NFA, MoES,OP, OPM, MAAIF, MoLG		2018
Strengthen the enforcement of TC Act						2018 – 2023
Develop an integration plan for TC into relevant sectors	Integration plan developed	Adopted integration plan	MoH	Mo FPED, MoIA, Mo JCA,MoWE, MoGLSD,URA, NFA, MoES,OP, OPM, MAAIF		2018 – 2023

4. Reduction in harmful use of alcohol

- Review existing legisations on alcohol
- Develop a comprehensive national alcohol control policy
- Develop a new alcohol control law
- Sensitize communities on the harmful effects of acohol use and the enforcement of the alochol laws

Table 9: Strategic area 3 – Risk factor reduction and health promotion (Reduce harmful use of alcohol)

Strategic Objective 3: To reduce modifiable risk factors for NCDs and underlying social determinants of health						
Key strategic action 2: Reduce harmful use of alcohol						
Activity (Priority Area)	**Expected Output**	**Indicators**	**Lead Agencies**	**Other Supporting Sectors**	**Partners**	**Time Frame**
Review existing legislations on alcohol	Existing legislation reviewed	Review reports indicating the identified gaps for action	MoTIC	MoH MAAIF MGLSD MoJCA MoFPED	WHO UNICEF Civil Society Uganda Law Society	2018
Develop comprehensive national alcohol control policy	National alcohol control policy developed	Approved national alcohol control policy	MoTIC	MoJCA MoLG / Urban authorities	WHO	2018 – 2019

					Uganda Investment Authority	
Develop a new alcohol control law	Alcohol control law enacted	Alcohol control law	MoTIC MoH	MoJCA MoFPED	WHO	2018 – 2019
Sensitization of communities on the harmful effects of alcohol and the law	-Awareness campaigns conducted -IEC materials developed	-Number of awareness campaigns conducted -IEC materials developed and distributed	MoH MoES Mo LGs	MoGLSD MoIA CSOs	Media	2018 – 2023
Regulate location of drinking places and time of drinking	Guidelines developed	Harmonised guidelines on location and opening hours for drinking premises	Min. of trade Min. of LGs	MoH Local governments Civil society	Civic leaders	2018 – 2019
Regulate against underage drinking	Guidelines developed	-Rates of underage drinking	Min. of Educ Min. of LG	MoH Min. of Internal Affairs	Civil society Media	2018 – 2023
Advocate for enforcement of regulations on drink driving	-Advocacy campaigns -Information materials	-Advocacy campaigns conducted -Leaflets distributed	-Min. Internal Affairs -Police	UNRA Civil Society Local Governments Min. of Transport	Media	2018 – 2023
Support Community Health Extension Workers (CHEWs) in delivering NCD prevention and health promotion interventions about harmful use of alcohol	-Awareness on harmful alcohol use raised. -Alcohol control activities carried out	-Improved awareness about effects of harmful alcohol use. -Number of alcohol control campaigns carried out	District local governments, MoH	Civil society organisations	Community leaders	2018-2023

1.4 Strategic area 4: Comprehensive and Integrated management for NCDs

Strategic objective 4:

To strengthen the health system to address NCDs through people-centered primary health care

Key elements for this objective are:

- Health service delivery
- Health work force
- Health information systems
- Access to essential medicines

- Health systems financing
- Leadership and governance

The following key strategic actions shall be undertaken to achieve this objective;

1. Scale up services for NCDs to lower level healthcare facilities – primary health care facilities
2. Integrate NCD services with other health programs
3. Advocate for sustainable and equitable health financing for NCDs
4. Build capacity among public and private service providers in NCD prevention, care, rehbilitation and palliative care
5. Increase access to essential NCD medicines and diagnostics
6. Strengthen quality assurance for NCD interventions with emphasis on primary health care
7. Increase awareness for merits of early detection of NCDs among the general public
8. Strengthen human resources for the prevention and control of NCDs

Table 10: Strategic area 4 – Comprehensive and Integrated management for NCDs

Strategic objective 4: To strengthen the health system to address NCDs through people-centered primary health care						
Activity/Priority Areas	**Expected Outputs**	**Indicators**	**Lead Agency**	**Support Agencies**	**Partners**	**Time Frame**
Scale up services for NCDs to lower level healthcare facilities – primary health care facilities	NCD services integrated into primary health care facilities	Proportion of health facilities providing level-specific NCD services	Ministry of Health	Local governments MoFED	WHO UNICEF CSOs UNFPA	2018-2023
Integrate NCD services with other health programs.	NCDs integrated into to other health programs	Number of health programs that have integrated NCDs	Ministry of Health	Local governments Min of Finance Public services	WHO UNICEF CSOs UNFPA	2018-2023
Advocate for establishing sustainable and equitable health financing towards NCDs	Financing for NCDs included in national budget Health Insurance	Proportion of health budget dedicated to NCDs Number of insurance groups covering NCDs, including cancer	Ministry of Health	Local governments Ministry of Finance Office of the President State House	WHO UNICEF CSOs UNFPA UNDP	2018-2023
Build capacity among public health providers in addressing NCD care,	Capacity to address NCDs increased to	Number of health workers in NCDs	Ministry of Health	Local governments	WHO UNICEF CSOs	2018-2023

prevention, rehabilitation and palliative care	expected level among providers	Number of health facilities with capacity to address NCDs Number of facilities with NCD clinic days per month		Ministry of Finance	UNFPA UNDP	
Build capacity among private health providers in addressing NCD care, prevention, rehabilitation and palliative care	Capacity to address NCDs increased to expected level among providers	Number of health workers in NCDs Number of health facilities with capacity to address NCDs Number of facilities with NCD clinic days per month	Ministry of Health	Local governments Ministry of Finance	WHO UNICEF CSOs UNFPA UNDP	2018-2023
Increase access to NCD essential medicines and equipment	NCD medicines and equipment readily available	Availability of essential medicines and equipment Number of facilities with no reported stock-outs for NCD tracer drugs etc.	Ministry of Health	Local governments	WHO and other UN agencies, Private cooperate organizations, Norvatis Pharmaceutical, and other drug manufacturing companies.	2018-2023
Strengthen quality assurance for prevention and management of NCDs with emphasis on primary health care including use of evidence based guidelines, and protocols	Development of guidelines and protocols (standards) Supervision	Number of evidence based guidelines and protocols developed Number of supervision visits	Ministry of Health	Local governments Professional councils – e.g. UMDPC Academia	WHO UNICEF CSOs UNFPA USAID/CDC	2018-2023
Scale up awareness for early detection and management of NCDs among the general public	IEC materials Media programs Community awareness campaigns	Number of ICE materials developed and disseminated Media programs conducted – print and electronic Number of community awareness programs conducted	Ministry of Health	Ministry of ICT Min of Information and National Guidance	WHO UNICEF CSOs UNFPA USAID/CDC Media Houses	2018-2023

Strengthen human resources for the prevention and control of NCDs	Required competencies identified Health workers at various levels trained Career tracks for health workers	Number of competences and skills identified. Number of health workers trained in NCDs Post graduate training and fellowship programs on NCDs	Ministry of Education	Public service Academic Institutions Ministry of Health	World Bank ADB EADB CDC WHO	2017-2021

1.5 Strategic area 5: NCD research

Strategic objective 5:

To strengthen the national capacity for quality research for the prevention and control of NCDs

The following key strategic actions shall be undertaken to achieve this objective;

1. Develop a research agenda for NCDs
2. Strengthen national capacity for NCD research and innovation
3. Strengthen the research capacity of existing centres of excellence for NCDs
4. Advocate for integration of NCD research into government programs and policies
5. Promote evidence-based programming for NCDs
6. Advocate for investment in NCD research and capacity development
7. Promote south to south collaborations, partnerships and coordination for NCD research

Table 11: Strategic area 5 - NCD research

Strategic objective 5: To strengthen the national capacity for quality research for the prevention and control of NCDs						
Activity/Priority Areas	**Expected Outputs**	**Indicators**	**Lead Agency**	**Support Agencies**	**Partners**	**Time Frame**
Develop a research agenda for NCDs	Detailed NCD research agenda for the country.	Approved NCD research agenda	MoH	Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. UCI, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018
Strengthen national capacity for research and innovation in relation to NCD prevention and control	Capacity building programs on NCDs research developed Financial and human resource for NCDs identified	Functional capacity building programs	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018 – 2023
Strengthen the existing centres of excellence on NCDs regarding their research capacity, equipment and infrastructure	Research capacity built in at least 4 centres of excellence Equip at least 2 centres of excellence	Number of PhDs, Masters with bias in NCDs Number of implementation science training programs for policy makers and academia Number of centres of excellence equipped for NCD research	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018 – 2023

Work with the existing government programs and academia to integrate NCD research in their programs & policy development	Government and academia integrated NCDs into their programs and policy development	-No. programs and policy integrating NCDs	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018 – 2023
Promote the use of research information in NCD programing	Dissemination plan Evidence based NCD programming	# of dissemination work shops Weekly releases on NCDs Journals on NCDs Policy Briefs # of publications on NCDs	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018 – 2023
Advocate for investment in NCD research and capacity building	Level of investment for the Research and capacity building for the Agenda on NCDs	% of the total NCD budget allocated to research and development	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018 – 2023
Promote south to south cooperation for NCD research collaboration, partnership and coordination	Networks for NCD research and capacity building collaboration, partnership and coordination established	# of functional networks established on NCD research and capacity building	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018 – 2023

1.6 Strategic area 6: Surveillance, monitoring and evaluation

Strategic objective 6:

To strengthen the national M&E system for NCDs

The following key strategic actions shall be undertaken to achieve this objective;

1. Develop a national monitoring and surveillance system for NCDs
2. Review and strengthen the HMIS for improved NCD data
3. Track and periodically review NCD trends
4. Identify data sources for integration into national surveillance and health information system for NCDs
5. Strengthen institutional and technical capacity to manage and implement the national surveillance and health information system for NCDs
6. Advocate for increase in budget allocations to NCD surveillance and monitoring
7. Advocate for establishment of more centres of excellence for major NCDs
8. Institutionalize the NCD STEPs survey

Table 12: Strategic area 6 – Surveillance, monitoring and evaluation

Strategic objective 6: To strengthen the national M&E system for NCDs						
Activity/Priority Areas	**Expected Outputs**	**Indicators**	**Lead Agency**	**Support Agencies**	**Partners**	**Time Frame**
Adopt the global targets and indicators to the national context	An NCD prevention and control monitoring frame work	Indicator protocol developed and disseminated Targets for NCDs	MoH	Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. UCI, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018
Develop the national surveillance and monitoring system for NCDs	National surveillance and monitoring system developed	Functional monitoring and surveillance system on NCDs	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018-2023

				and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia		
Review and strengthen the existing HMIS to improve on the data capture on NCDs	HMIS with NCD data sources reviewed based on the target and indicators HMIS with NCD data sources integrated based on the target and indicators	A set of NCD data sources identified A set of NCD data sources integrated	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018-2023
Contribute to the routine basis information on trends on NCDs with respect to mortality, morbidity, by cause, risk factors and other determinants disaggregated by age, gender, disability and socio-economic status	Routine NCD trend analysis	NCD trend analysis by age, gender, disability and socio-economic status	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018-2023
Identify datasets & data sources for integration into national surveillance and health information system on NCDs	Relevant NCD datasets and sources identified for integration	Integrated NCD data sources	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018-2023
Strengthen the technical and institutional capacity to manage and implement the national surveillance and health information system on NCDs	Capacity building programs on surveillance and health information system on NCDs	# of technical staff trained based on capacity building programs on surveillance and	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018-2023

		health information system on NCDs # of institutions strengthened to manage and implement the national surveillance and health information system on NCDs		Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia		
Advocate to increase and prioritize budget allocations for surveillance and monitoring system for the prevention and control of NCDs	An increased level of funding for the prevention and control of NCDs	Proportion of funding allocated to surveillance and monitoring system for the prevention and control of NCDs	MoH	MaKSPH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018-2023
Lobby for establishment of centre of excellence for NCDs	centre of excellence for NCDs established	A functional centre of excellence established	Makerere University	MoH, Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018-2023
Institutionalize STEPs	Disseminate the STEPs findings	Number of dissemination conducted Peer reviewed publications published	MoH	Fellowship programs, MAAIF, MTIC, MoGLSD, UBOS, Centers of excellence e.g. Uganda Cancer Institute, Diabetic and chest clinics and UHI, NEMA, MoFPED, MWE, MoES, UNBS, UCC, Academia	WHO, CSOs, UN agencies, USAID, CDC, NIH	2018-2023

2. GUIDE TO IMPLEMENTATION

2.1 Strengthen Coordination for Multi-sectoral action:

Roles and functions of the Ministry of Health

The Ministry of Health will:

I. Host the secretariat for the multi-sectoral NCD taskforce
II. Host the NCD Multi-sectoral task force as well as the NCD technical working group.
III. Provide leadership and guidance in the development, implementation, quality control and monitoring of advocacy and SBCC media and materials.
IV. Give guidance to the Office of the Prime Minister to convene a multi-sectoral meeting for sectors to mainstream NCD activities in their programming.
V. Monitor and supervise NCD prevention and control strategies at all levels across the country.
VI. Mobilize resources for NCD prevention and control activities
VII. Provide management support at all levels of health service delivery.
VIII. Regulate and guide the population on NCD prevention and control strategies.
IX. Provide reports and disseminate NCD related data to inform programming.
X. Build capacity and conduct continuous professional development for health care providers on NCD prevention and control.
XI. Ensure a favorable policy environment by facilitating the integration of NCD prevention and control into existing sectoral policies and programs. Moreover, the Ministry of Health shall ensure that the linkage between NCDs and the broader national development agenda including Vision 2040 and National Development Plan are well explored to make the case for investment in NCD prevention and control.

Roles and functions of partners and other stakeholders:

Partners include the private sector, implementing partners, professional associations, civil society, international partners and academia.

I. Partners shall advocate for continued inclusion of NCDs in the national development agenda, development cooperation initiatives, economic and sustainable development policies and frameworks as well as poverty reduction strategies.
II. They will strengthen advocacy to increase the interest of senior political leaders and the different arms of government in implementing evidence-based interventions aimed at achieving the national NCD targets and strengthening multi-sectoral capacity among all

relevant stakeholders at the national and sub-national levels including communities and people living with NCDs.

III. Partners shall promote international cooperation within the framework of South-South, North-South and triangular collaboration to facilitate exchange of information on best practices and dissemination of research findings in the areas of health promotion, legislation, regulation, monitoring and evaluation, health system strengthening, building of institutional capacity, training of health personnel and development of appropriate infrastructure.

IV. Moreover, partners shall be responsible for strengthening existing alliances and forging new collaborative partnerships to enhance capacity for implementation, monitoring and evaluation of the strategic plan for the prevention and control of NCDs.

2.2 National coordination mechanism

The Office of the Prime Minister will be responsible for the overall coordination of the NCD multi-sectoral strategic plan through:

I. Chairing the NCD Multi-sectoral committee
II. Providing oversight of sectors in the implementation of the strategic plan.
III. Mobilizing resources for sectors to implement the strategic plan.
IV. Working with the Ministry of Health to provide technical coordination of the strategic plan.

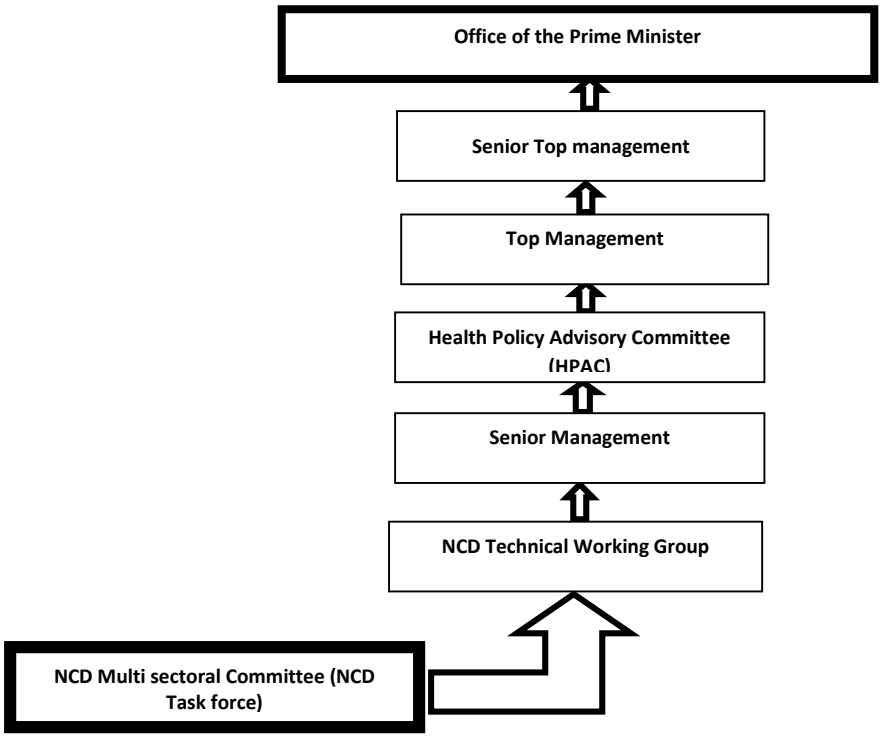

Figure 3: *The national multi-sectoral NCD coordination committee and coordination process*

Table 13: Members National NCD Multi-sectoral committee (NCD Task force)

Government sector	NGOs, civil society and Private sector
▪ Office of the President ▪ Office of the Prime Minister ▪ Ministry of Health ▪ Ministry of Education and Sports ▪ Ministry of Gender, Labour and Social Development ▪ Ministry of Agriculture, Animal Industry and Fisheries ▪ Ministry of the Presidency ▪ Ministry of Trade, Industry and Cooperatives ▪ Ministry of internal Affairs ▪ Ministry of Local Government ▪ Ministry of Finance, Planning and Economic Development ▪ Ministry of Justice and Constitutional Affairs ▪ Other relevant sectors (Uganda Heart Institute, Uganda Cancer Institute) ▪ Local Government – Kampala Capital City Authority	▪ National Health Professional organization ▪ NCD Alliance ▪ Uganda Diabetes Association ▪ Uganda Heart Foundation ▪ Diabetes Care Uganda ▪ Makerere Lung Institute (MLI) ▪ St Francis Hospital Nsambya ▪ AMICALL Uganda. ▪ Academia: Makerere University School of Public Health ▪ Centre for Tobacco Control in Africa ▪ Uganda Bureau of Statistics ▪ Central Public Health Laboratories

2.3 Summary of roles and responsibilities of the relevant sectors and other stakeholders

Table 14: Summary of roles and responsibilities of the relevant sectors and other stakeholders

Sector	Strategic Area					
	Public policy and Advocacy	Leadership, governance and capacity building	Risk factor reduction and health promotion	Comprehensive and Integrated management for NCDs	NCD research	Surveillance, monitoring and evaluation
Office of the president	x	X				x
Office of the Prime Minister	x	X				x
Health	x	X	X	X	x	X
Agriculture	x		x			x
Education and sports	x		x		x	x
Finance	x	X				x
Trade			x			
Urban planning	x		x			
Justice and constitutional affairs	x					x
Academia	x				x	x
CSOs and Private sector bodies				X	x	

2.4 Capacity building:

The Ministry of Health will lead the training of program managers from the relevant sectors on prevention and control of NCDs. The ministry of Health will train, supervise and mentor health workers on prevention and control of NCDs. Other relevant stakeholders including opinion leaders, cultural, political religious, will be sensitized about the prevention and control of NCDs.

2.5 Validation:

This follows the coordination mechanism at National level above (section 2.2)

CHAPTER 5 – COSTING THE PLAN AND FINANCING OF NCD MAP

5 COSTING ESTIMATE FOR IMPLEMENTING THE PLAN

1.2. Introduction

The Uganda National Multisectoral Strategic Plan for The Prevention and Control of Noncommunicable Diseases (MSAP) (2019 – 2023) provides a blueprint for action to prevent and control NCDs through a multisectoral approach. The MSAP 2019-2023 to be coordinated by the Uganda Ministry of Health (MoH) received technical support from WHO for the planning and cost estimation using national and international technical support personnel.

1.2.1 Overview of NCDs in Uganda

In 2016, 56.9 million global deaths were reported, 40.5 million, or 71%, were due to noncommunicable diseases (NCDs). Noteworthy is the disproportionately rising burden of these diseases among lower income countries and populations. In 2016, over three quarters of NCD deaths 31.5 million were reported to have occurred in low- and middle-income countries with about 46% of deaths occurring before the age of 70 in these countries.

The four main NCDs are cardiovascular diseases, cancers, diabetes and chronic lung diseases. The leading causes of NCD deaths in 2016 were cardiovascular diseases (17.9 million deaths, or 44% of all NCD deaths), cancers (9.0 million, or 22% of all NCD deaths), and respiratory diseases, including asthma and chronic obstructive pulmonary disease (3.8 million of 9% of all NCD deaths). Diabetes caused another 1.6 million deaths[i].

Cancer: In Uganda, an estimated 21,542 deaths were reported to have occurred as a result from cancer in 2012. Cervical cancer, Kaposi Sarcoma, Prostate cancer, Breast cancer and cancer of the Oesophagus are the top 5 most frequent cancers in Uganda.

Diabetes: 4,690 Ugandans died of diabetes in 2016 according to WHO. The 2014 Uganda NCD risk factor survey found the prevalence of raised fasting blood glucose including diabetes to be 1.3%; with urban areas having a higher prevalence - 2.7% than rural areas - 1.0%. the report further established that the mean age of people having diabetes in Uganda is 35 years compared to high-income countries where majority of people living with

diabetes are over 60 years[2].

COPD: The prevalence of COPD in Uganda ranges between 8%-16% and is reported to be more common among persons aged 30-39 years. According to the Uganda National Asthma Survey (2016), about 11.2% of Ugandans 12 years and older have asthma.

Sickle Cell: In Uganda, it is estimated that between 25,000-30,000 babies are born with sickle cell disease each year. 70-80% of these babies die before their 5th birthday. The 2014/15 Uganda sickle cell surveillance survey found a high prevalence of the sickle cell trait, with notable variations across the ten regions of Uganda. The overall prevalence of the sickle cell trait among children (below 1 years) was 13.3% while that of sickle cell disease was 0.7%.

Accidents and Injuries: For injuries and accidents, road traffic accidents are among the top ten causes of death in Uganda. Annually, approximately 11 – 15% of Ugandan are affected by injuries 30. Road traffic injuries account for 35 – 50% of all injuries and are the leading cause of injuries related deaths [ibid]. Drowning remains the number one cause of injury deaths for communities living close to water bodies.

Mental Health: Although no national survey has been conducted on mental and neurological disorders in Uganda, a review of the HMIS data over 5 years (2012-2016) showed that there was an average annual increase of 9% in Mental health problems among the general population; whereas another report suggests that 35% (approximately 9.5 million) of Ugandans have a mental health condition.

Risk Factors: The four-main shared behavioural risk factors – tobacco use, harmful use of alcohol, physical inactivity and unhealthy diet have contributed significantly to NCDs burden in Uganda.

Tobacco Use: According to the Uganda NCD risk factor survey 2014, one in every ten Ugandans was a daily tobacco user. A study conducted at the Uganda cancer institute in Mulago National Hospital found that 75% of the patients with oral cancer had a history of smoking for 2-38 years.

Alcohol Abuse: The 2014 Uganda NCD risk factor survey found that the level of alcohol use among adults in Uganda is high, with 26.8% of adults in Uganda being alcohol users and males more likely to be heavy drinkers than females. The survey also revealed that 9.8% of the adult population living with an alcohol related disorder 41. According to the Uganda National risk behavioural survey (2017), 17% of adolescent boys and girls had ever drunk alcohol with peers and adults/parents as the main source of exposure. The proportion is higher among adolescents out of school than those in school.

[2] National Multisectoral Strategic Plan for The Prevention and Control of Noncommunicable Diseases (2018 – 2023)- Page 5, 21/11/2018, 3:00pm

Healthy Diet: In Uganda, the 2014 NCD risk factor survey found that the consumption of fruits and vegetables is generally very low in Uganda. An estimated 87% of females and 88% of males were found not to consume fruits and vegetables to recommended levels[3]. Consequently, this has resulted in a high prevalence of overweight at 14.5% and obesity at 4.6% among adults. The prevalence of overweight among women was more than twice that of men. Obesity in women was significantly higher than in men at 7.5% and 1.8% respectively.

Physical Inactivity: on the brighter side, the national NCD risk factor survey conducted in 2014 found that 94.3% of adult Ugandans meet the WHO physical activity recommendations 44. In addition, 75% of the adolescents reported that physical exercise was irregular while 30% did not participate in any physical exercise with those in central region and urban areas being the most physically inactive.

1.3 National Response

The Multi-Sectoral Strategic Plan for NCD Prevention and Control and national NCD risk factor Communication strategy have also been developed to facilitate the National Response to risks posed by NCDs in the country. Implementation of interventions will be fast-tracked by a multi-sectoral committee (The national Multi-Sectoral Task Force [MSTF]) established in line with the NCD Global Action Plan 2013-2020. In addition, this committee also acts as the coordination mechanism for multi-sectoral and inter-sectoral engagement for NCD prevention and control efforts. The MSTF will serve as the over-arching coordination mechanism.

to facilitate broader participation in executing actions for the control and prevention of NCDs, a NCDs Technical working group has been inaugurated. The TWG which brings together several partners and stakeholders highlight critical NCD issues for the attention of the Ministry of Heath' Senior Management Committee (SMC). Members of both platforms were instrumental in the development of the MSAP 2019-2023 as well as defining the costing assumptions.

As aforementioned, the plan, is consistent with the Global Action Plan 2013–2020 for the prevention and control of NCDs (1) and the NCD Global Monitoring Framework (2), sets national NCD targets, milestones and priority actions/interventions for the period 2019–2023. and identifies six strategic areas of focus. It considers four factors – tobacco, alcohol, unhealthy diet and insufficient physical activity – that have been identified as the main modifiable behavioural risk factors for NCDs.

[3] [*WHO recommends at least five servings of fruits and vegetables; i.e. an equivalent of 400g per day*]

The goal of The NCD MSAP 2019-2023 is To attain a 20% relative reduction in risk of premature mortality from NCDs by 2025.

Six (6) critical national targets and three (3) other national targets for 2025 were set to achieve set goals through six (6) strategic objectives.

NCD MSAP National Targets

- 5% reduction in physical inactivity
- 10% relative reduction of salt/ sodium intake
- 20% relative reduction of tobacco use
- 20% relative reduction of raised blood pressure
- Halt the rise in diabetes and obesity
- 80% availability of essential NCDs medicines and up to 95% availability of basic technologies.

Other national targets:

- 100% availability of morphine at all health sub districts and higher levels of care
- At least a policy adopted to limit saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils in the food supply within the population.

100% Availability of HPV vaccine at all health centres IIIs and above

6 MSAP Strategic Objectives

1) To strengthen advocacy efforts to raise the priority accorded to the prevention and control of NCDs in the national development agenda
2) To strengthen multi-sectoral capacity, to accelerate country response for NCD prevention and control
3) To reduce modifiable risk factors for NCDs and underlying social determinants of health
4) To strengthen the health system to address NCDs through people-centered primary health care
5) To strengthen the national capacity for quality research for the prevention and control of NCDs
6) To strengthen the national M&E system for NCDs

Delivering on sets targets and goals will be through Six strategic action areas outlined below:

1. Public Policy and Advocacy
2. Leadership, Governance and Capacity Building
3. Risk Factor Reduction and Health promotion and
4. Comprehensive and Integrated Management for NCDs
5. NCD Research
6. Surveillance, Monitoring and Evaluation

2.0 Cost of the Plan

2.1 Objectives

The objective of this report is to present the best possible cost estimates for implementing the NCD MAP 2019–2023. The estimates will provide a basis for decision-making, resource mobilization and phasing of implementation.

2.2 Data and Information for Costing

Data and information collected for the report included:

- Population
- Facilities related to NCDs,
- Relevant information contained in existing documents, collected through desktop review of the documents (this was the main method of data collection);
- data relating to quantities and frequencies of activities under each strategic area, collected using a series of meetings with strategic stakeholders and
- baseline data for the base year (i.e. 2018) for different interventions, collected mainly from the MSAP 2019-2023 which collated dated from the health management information system, and Global Burden of Diseases estimates.

2.3 General Assumptions

Assumptions cogitated for the costing are as follows;

- **Inflation Rate**: Inflation rate of 3.1% was used as a multiplier to project the cost of plan from 2019 to 2023
- **Exchange Rate**: UGX 3,800.7/$1 was used as exchange rate
- **Population Projection**: Annual population growth rate of 3.62% was used to project the population from 2019 to 2023 using 2017 as a base year. The projections aim to estimate characteristics and size of population in the future and these was useful figure to estimate per capita share of the total cost of implementation plan from 2019 to 2023.
- **Estimation of Population in Need and population covered**: The population in need was derived using the baseline and target year indicators to determine the population in the cohort. The differences that exist between the baseline value and target value was used to determine the population to be served or covered in each respective year.

2.3 Costing Methodology and Approach

The cost of implementing the NCD MAP has been estimated in consideration to the targets and activities defined in the MSAP 2019-2023. A customized program using Microsoft Excel was developed to enhance the computation and costing of the entire plan. The program

involved six (6) sheets and all were linked to each other to ensure adequate and reliable costing figure.

Costs were estimated for the activities that fall under the purview of the MoH; however, many other line ministries will also be involved in the implementation. Implementation costs were then estimated through a consultative process that was further refined following discussion with key divisions and units.

Estimation of the costs of delivering health services considered the existing network and capacity of health facilities aside from specific the human resources profile. Current consumption of the drugs and routine services was included.

The methodology was based on the targets and actions, and on the country-specific data and reliable sources available, supplemented by data from global databases where necessary. It included the cost of implementing the NCD MAP until 2023.

2.4. Results

2.4.1 Total Cost of Plan

A total of UGX 389,225 billion ($102.4 million) will be required to finance the Strategic Plan for period of 5 years. A total sum of UGX 74,466 billion ($19.6) will be needed to finance 2019 activities, UGX 66,920 billion ($17.6 million) in 2020, UGX 69,724 billion ($18.4million) in 2021 and in 2022 and 2023, sum of UGX 85,690 billion ($22.6million) and UGX 91,900 billion ($24.2million) respectively.

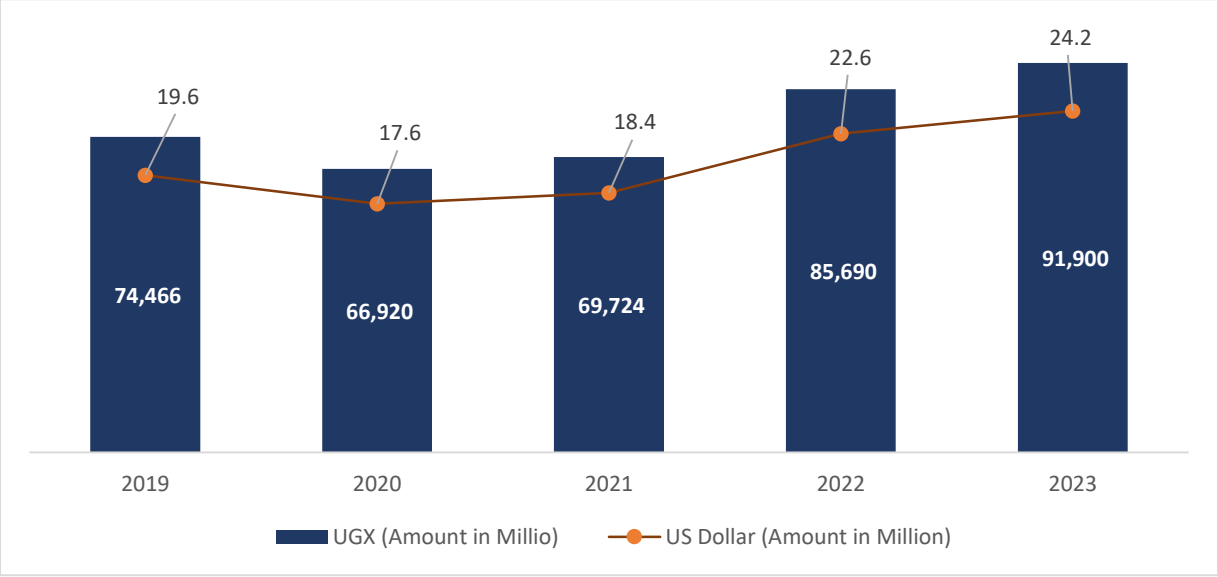

Figure 4 Total Cost of MSAP 2019-2023

2.4.2 Per Capital Cost of Plan vs Projected Population for 2019 - 2023

The cost per capital stood at UGX 1,702 for a population of 43.8 million people in the in 2019. The cost of plan per capita per person dropped to UGX 1,474 in 2020, only to marginally increase in 2020 to UGX 1,484, and further increased to UGX 1,760 and UGX 1,821 in 2022 and 2023 respectively. See Figure below

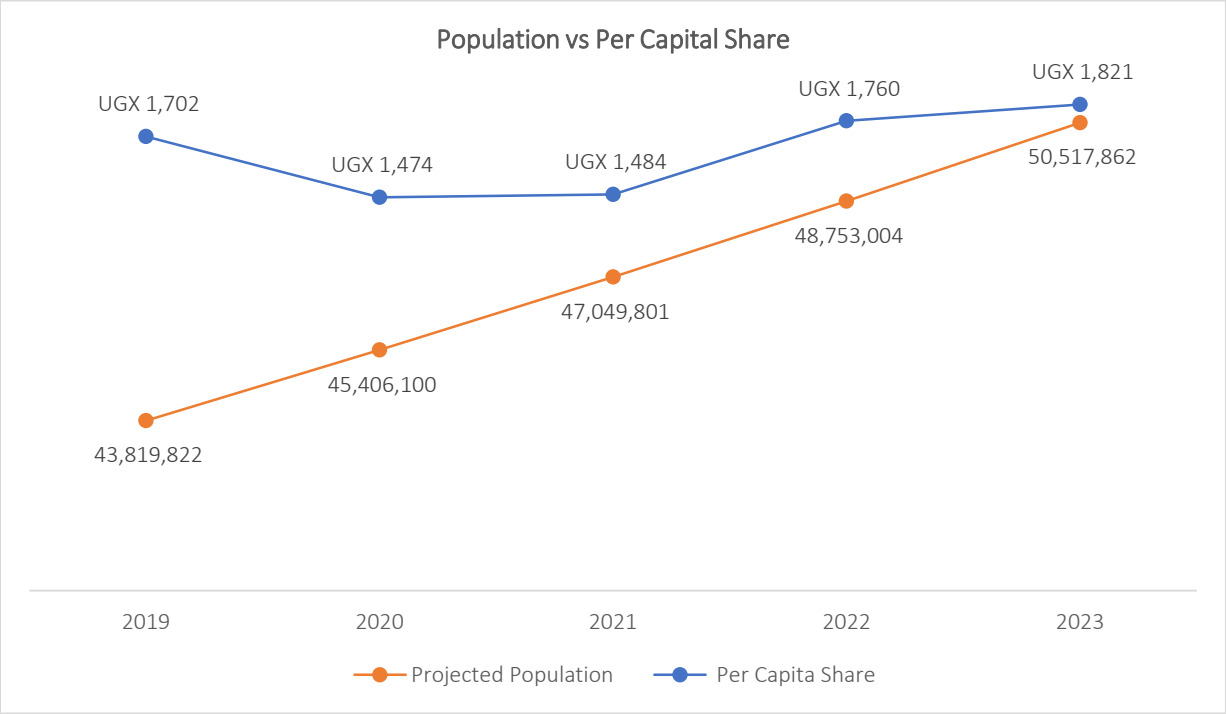

Figure 5 Per Capital Cost of Plan vs Projected Population for 2019 - 2023

2.4.3 Funding Gap

Figure 3 below presents funding gap spanning 2019 to 2023. The funding gap was determined using 2017 funds (UGX 100 Million) for NCD from the government with the assumption that the funds for NCD will remain constant across the years and the government will be the only source of funds. It can be seen (Figure 3) from data provided that there is over 90 percent funding gap across the five (5) years. In event of availability of data on available funds, the funding gap will be certainly bridged. Being the first, multisectoral action plan for NCD, it is expected that the implementation will also prioritize resource envelop mapping.

There should be a resource pooling from both public (government) and private sectors (Donors agencies, cooperation and households) in order to actualize the plan effectively.

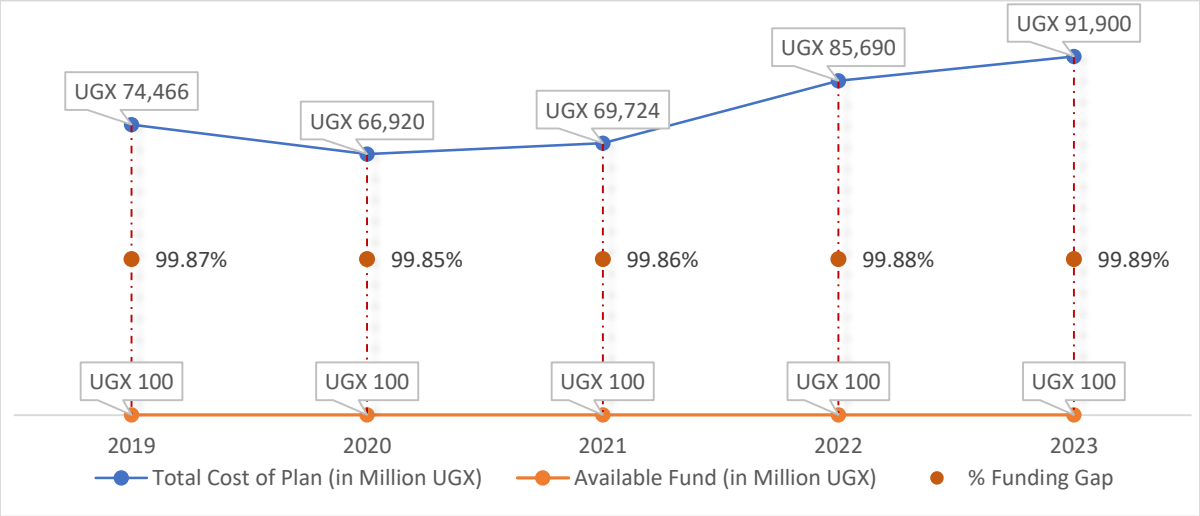

Figure 6 Funding Gap for MSAP 2019-2023

2.4.4 Cost by Strategic Areas

This section presents composite cost by strategic areas.

Table 1 shows the cost breakdown by strategic action area. Of the total estimated cost of implementation for the next 5 years. 56.6% is required for comprehensive and integrated management for NCDs (Strategic action area 4), 41.7% for health promotion and risk reduction (Strategic action area 3) and 0.5% for NCDs research.

Name of Strategies	Total Cost (Million UGX)					Overall Cost
	FY2019	FY2020	FY2021	FY2022	FY2023	
Public policy and advocacy	645	726	166	147	432	2,116
	0.9%	1.1%	0.2%	0.2%	0.5%	0.5%
Leadership, governance and capacity building	43	109	492	38	326	1,008
	0.1%	0.2%	0.7%	0.0%	0.4%	0.3%
Risk factor reduction and health promotion	42,783	34,818	27,442	31,695	25,298	162,036
	57.5%	52.0%	39.4%	37.0%	27.5%	41.7%
Comprehensive and Integrated management for NCDs	30,529	29,473	41,159	53,406	65,353	219,921
	41.0%	44.0%	59.0%	62.3%	71.1%	56.6%
NCDs research	389	478	389	389	415	2,061
	0.5%	0.7%	0.6%	0.5%	0.5%	0.5%
Surveillance, monitoring and evaluation	76	1,318	76	14	76	1,559
	0.1%	2.0%	0.1%	0.0%	0.1%	0.4%
Total	74,466	66,920	69,724	85,690	91,900	388,700
	100%	100%	100%	100%	100%	100%

Table 15 Breakdown of the Total Cost (Million) of Implementation Plan by Strategic Areas in 2019-2023

2.4.4 Cost categorization by NCD Best Buys

This section presents best buys interventions as stated in the WHO guidelines, however, since there are cost of best buy interventions not adequately prioritize due to policy direction, the cost driver has to be contextualized into category programmed in the activities planned. The highest best buy interventions for this plan is Unhealthy Diet Physical Inactivity at UGX 230 billion representing 66.98% of the total best buy interventions for NCD. Follow by Cardio Vascular Diseases (CVD) at 24.41% representing UGX 84 billion. Tobacco Use has UGX 25 billion representing 7.34% of the total cost of plan. The least of the total share of best buy interventions is Harmful Alcohol Use at UGX 4 billion representing 1.27%. The foregoing reflects health intention and policy drive of improving the health system that will deliver on the target sets. The capacity building component of the plan is to deplore health workers supply to meet health demand. Figure 4 illustrates overall cost between 2019 to 2023 while Figure 5 indicates year on year percentage distribution of cost.

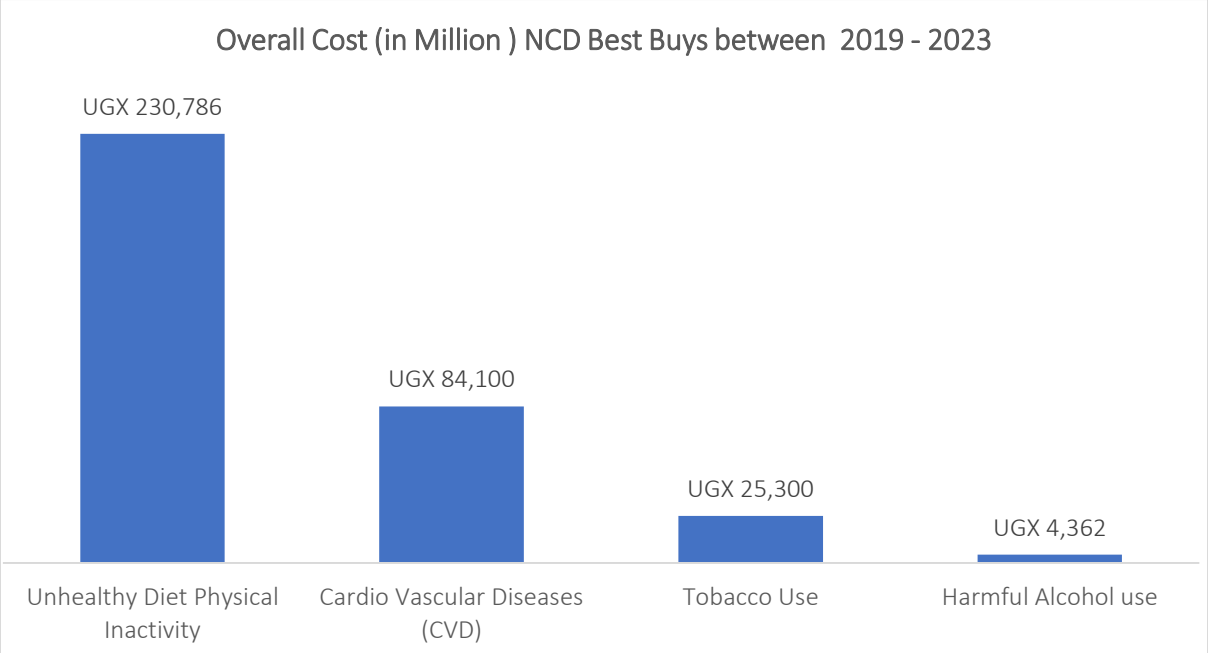

Figure 7 Overall Cost NCD Best Buys 2019-2023

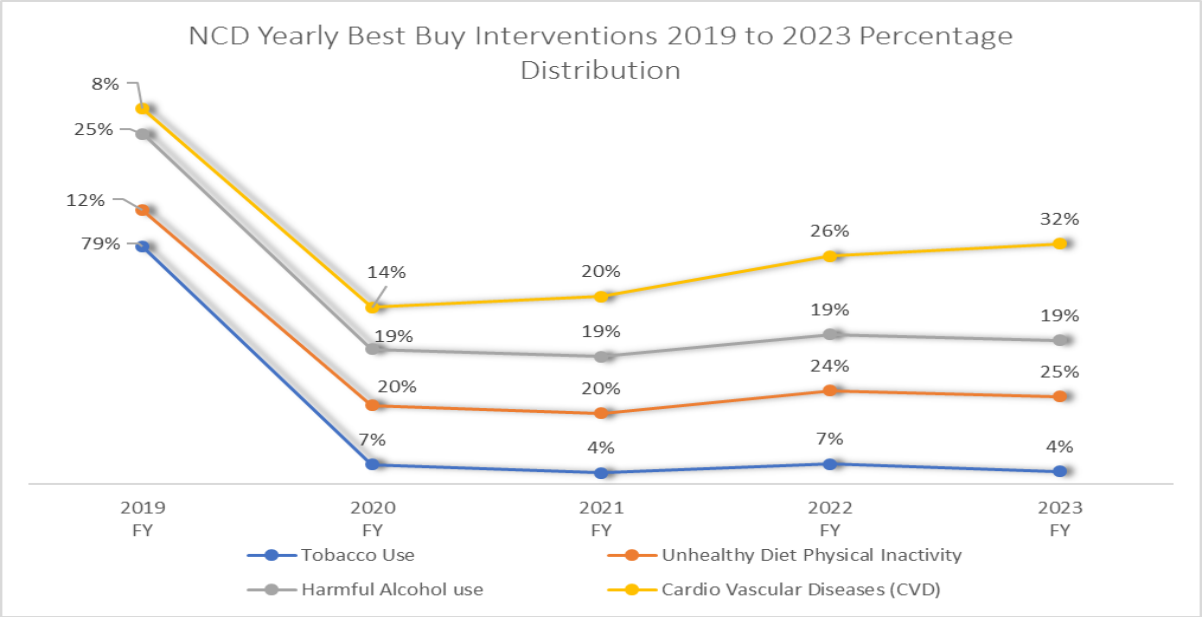

Figure 8 Cost Categorization of NCD Best Buys Interventions

2.4.6Cost Per Implementing Sector

This shows the cost per implementing sector in the multi-sectoral plan of Uganda NCD plan. The NCD unit under Federal Ministry of Health which is coordination and lead partner has 66.3% cost estimates share representing a total of **UGX 250** billion of the total cost of plan. This is followed by Labour, Gender and Social Development has 20% cost estimates share representing UGX 76 billion. The Agricultural, Animal Industries and Fisheries will anchor implementation of 11% of cost estimated share of NCD plan representing UGX 41 billion of total plan share. The Education and Sports will take lead in the implementation of 2% of cost estimate share of total plan representing UGX 8 billion of total cost of plan. Urban Planning will implement 0.6% representing UGX 2 billion. Trade, Industries and Cooperatives will take lead in the implementation of 0.2% representing UGX 0.6 billion. See Table 6 below;

	Total Cost (Million UGX)						
	2019	2020	2021	2022	2023	Overall Total	% share
Labour, Gender and Social Development	15,045	15,432	15,058	15,058	15,058	75,652	20.1%
Urban Planning	1,472	172	172	172	172	2,160	0.6%
Trade, Industries and Cooperatives	539	13	5	13	5	574	0.2%
Education and Sports	2,283	1,634	1,390	1,389	1,389	8,086	2.1%
Ministry of Health	51,400	33,714	42,892	55,002	66,469	249,477	66.3%

Agriculture, Animal Industry and Fisheries	1,440	13,664	8,063	11,452	5,995	40,614	10.8%
Total	72,179	64,629	67,580	83,086	89,089	376,562	100.0%

Table 16 Sectoral Allocation of Cost Estimate vis-à-vis Total Cost of Plan

2.4.5 Breakdown of Cost Per Strategic Areas

This section presents the breakdown of cost by priority interventions per strategic areas.

Strategic Area 1- Policy and Advocacy

		2019	2020	2021	2022	2023	Overall
1.1	Disseminate evidence and information about NCDs and development	388	49	5	-	255	696
1.2	Integrate the prevention and control of NCDs into national sectoral programs	73	-	-	-	-	73
1.3	Advocate for budget allocation to NCD integration into sectoral programs	80	66	72	58	80	357
1.4	Facilitate multi-sectoral coordination among key stakeholders	84	84	84	84	84	422
1.5	Conduct targeted sensitization exercises for local governments to prioritize NCDs	-	252	-	-	-	252
	Total	625	452	161	142	419	1,800

Table 17 Breakdown of Financial Cost (Million) of Plan for Policy and Advocacy

Strategic Area 2- Leadership, Governance and Capacity Building

		2019	2020	2021	2022	2023	Overall
2.1	Conduct a national multi-sectoral capacity needs assessment for NCD prevention and control	42	106	164	37	37	386
2.2	Strengthen multi-sectoral capacity to provide leadership and coordination for NCD prevention and control	-	-	-	-	-	-
2.3	Review multi-sectoral policies and programs to integrate NCD prevention and control	-	-	35	-	-	35
2.4	Strengthen the capacity of NCD parliamentary forum to provide leadership and coordination for NCD prevention and control	-	-	-	-	-	-
	Total	42	106	199	37	37	421

Table 18 Breakdown of Financial Cost (Million) of Plan for Leadership, Governance and Capacity Building

Strategic Area 3- Risk Factors and Health Promotion

		2019	2020	2021	2022	2023	Overall
3.1	Review national food and nutritional policies, standards, guidelines and action plans for NCD prevention	-	294	242	242	236	1,013
3.2	Develop national food and nutritional policies, standards, guidelines and action plans with integrated NCD prevention and control	252	106	-	4	-	362
3.3	Implement national food and nutrition policies and action plans	1,433	13,539	7,902	11,291	5,734	39,899
3.4	Create awareness on healthy diets in schools, workplaces, clinics, hospitals, public and private institutions and child care centres	15,035	15,062	15,048	15,048	15,048	75,241
3.5	Build capacity for urban communities and families to operate small home gardens	-	64	-	-	-	64
3.6	Review national physical education and sports policy, guidelines, standards, action plans and regulations for NCD prevention	74	73	74	73	73	368
3.7	Develop a national physical activity and safety promotion policy for NCD prevention at work places and community environments	981	333	88	88	88	1,578
3.8	Develop a policy for improved physical educatio in all levels of schools	-	-	-	-	-	-
3.9	Develop health and safety promotion guidelines for work places	10	370	10	10	10	410
3.10	Implement the national physical education and sports policy for NCD prevention	1,228	1,228	1,228	1,228	1,228	6,140
3.11	Develop a policy to promote physical activities o daily living including active transport, recreation and sports	-	-	-	-	-	-
3.12	Review and improve national and sub national plans and transport policies to improve accessibility, acceptability and safety of supportive infrastructure for walking and cycling	1,472	172	172	172	172	2,160
3.13	Finalize the development of the tobacco control regulations	-	-	-	-	-	-
3.14	Disseminate national tobacco control regulation to stakeholders	297	-	-	-	-	297
3.15	Monitor implementation of the pictorial health warnings regulations and messages	85	120	85	120	85	493
3.16	Monitor implementation of the national regulations	18	18	18	18	18	90
3.17	Review tobacco product tax system	49	5	5	5	5	69
3.18	Ratify ITP protocol	-	8	-	8	-	15
3.19	Monitor Implementation of the comprehensive ban of tobacco advertising, promotion and sponsorship	-	-	-	-	-	-
3.20	Implement smoke free law	100	8	38	14	33	192
3.21	Implement tobacco cessation programmes	19,322	1,496	732	1,447	732	23,728
3.22	Support the implementation of economically viable alternatives to tobacco farming	7	61	161	161	261	651
3.23	Develop a tobacco control communication strategy	7	-	-	-	-	7
3.24	Develop a tobacco law enforcement guide	12	-	-	-	-	12

		2019	2020	2021	2022	2023	Overall
3.25	Training of law enforcement officers on the tobacco act and regulations	11	-	-	-	-	11
3.26	Strengthen enforcement of tobacco control act and regulations	-	-	-	-	-	-
3.27	Develop an integration plan for for tobacco control into relevant sectors	-	-	-	-	-	-
3.28	Review existing legislations on alcohol	0	-	-	-	-	0
3.29	Lobby for the endorsement of the NACP by cabinet	121	-	-	-	-	121
3.30	Develop a new alcohol control law	169	-	-	-	-	169
3.31	Sensitize communities on the harmful effects of alcohol use and the enforcement of the alcohol laws	814	814	814	814	814	4,072
	Total	43,516	35,791	28,638	32,764	26,560	157,163

Table 19 Breakdown of Financial Cost (Million) of Plan for Risk Factor and Health Promotions

Strategic Area 4- Comprehensive and Integrated Management of NCDs

		2019	2020	2021	2022	2023	Overall
4.1	Scale up services for NCDs to lower level healthcare facilities – primary health care facilities	355	578	793	472	139	2,339
4.2	Integrate NCD services with other health programs	14	14	14	14	14	72
4.3	Advocate for sustainable and equitable health financing for NCDs	-	-	-	-	-	-
4.4	Build capacity among public and private service providers in NCD prevention, care, rehabilitation and palliative care	68	78	24	34	24	228
4.5	Increase access to essential NCD medicines and diagnostics	28,627	27,799	39,027	51,216	63,161	209,831
4.6	Strengthen quality assurance for NCD interventions with emphasis on primary health care	512	57	29	29	14	641
4.7	Increase awareness for merits of early detection of NCDs among the general public	14	14	14	14	14	68
4.8	Strengthen capacity of NCD Unit at MoH to coordinate/oversee/implement/supervise NCD prevention and control activities	21	46	21	21	21	130
	Total	29,611	28,586	39,922	51,801	63,388	213,309

Table 20 Breakdown of Financial Cost (Million) of Plan for Comprehensive and Integrated Management for NCDs

Strategic Area 5- NCDs Research

		2019	2020	2021	2022	2023	Overall
5.1	Develop a multisectoral research agenda for NCDs	-	25.36	-	-	25.36	50.72
5.2	Strengthen national capacity for NCD research and innovation	300.92	300.92	300.92	300.92	300.92	1,504.58
5.3	Strengthen the research capacity of existing centres of excellence for NCDs	-	-	-	-	-	-
5.4	Advocate for integration of NCD research into government programs and policies	-	-	-	-	-	-
5.5	Promote evidence-based programming for NCDs	40.00	100.60	40.00	40.00	40.00	260.60
5.6	Advocate for investment in NCD research and capacity development	-	-	-	-	-	-
5.7	Promote south-to-south and north-south collaborations, partnerships and coordination for NCD research.	36.60	36.60	36.60	36.60	36.60	182.98
	Total	377.51	463.47	377.51	377.51	402.87	1,998.88

Table 21 Breakdown of Financial Cost (Million) of Plan for NCDs Research

3.0 Conclusion

Half of the estimated annual 28 million non-communicable diseases (NCDs) deaths in low- and middle-income countries (LMICs) are attributed to weak health systems. Current health policy responses to NCDs are fragmented and vertical particularly in the African region. The World Health Organization (WHO) led NCDs Global action plan 2013–2020 has been recommended for reducing the NCD burden. The Uganda MSAP 2019-2023 aligns with the global roadmap.

The total estimated cost of implementing NCD MAP amounted to UGX 389,225 billion ($102.4 million) over the next 5 years, of which about 56.6% is needed for comprehensive and integrated management of NCDs (i.e. for Strategic area 4), and 41.7% for health promotion and risk reduction (i.e. for Strategic area 3). 0.5% of the cost is programmed for NCDs research (i.e. for strategic area 5) and 1% of cost programmed for public policy and advocacy are estimated to be less than expected; hence, there may be a need to re-examine the strategies specified within the costing, to see whether these are sufficient to strengthen NCD adequately for scaling up these actions in the two areas.

In estimating the cost of the MSAP 2019-2023, the main drivers are costs for providing comprehensive and integrated excluding human resource for health. This is primarily because human resources for health, cost drivers such as salaries and benefits considered the costliest elements of the health sector was not costed here.

Finally, the costing estimates for the MSAP 2019-2023 does not cover all other NCD partners and their major investments. This has informed the huge funding gap of over 98%.

Given that there might be more funds spent through donors' channels and nongovernmental organizations, the true costs of implementing the plan may be higher than the costing estimates here presented.

1 FINANCING NCD PREVENTION AND CONTROL

With a total estimated cost of UGX 389,225 billion ($102.4 million) over the next 5 years, NCD MSAP 2019-2023 proposed financing plan aligns with the National Health Financing Strategy which identified various strategies for resource mobilization for both demand and supply sides of health services which includes NCDs. The strategy recognizes the importance of proper nutrition and leading a healthy lifestyle identified revenue collection, risk pooling and strategic purchasing.

The strategy aims at facilitating the attainment of Universal Health Coverage in Uganda through enabling the effective/efficient delivery of and access to the essential package of health services while reducing exposure to financial risk, by 2025[4]. In re-emphasizing government's obligation to providing basic health services and promoting proper nutrition and healthy lifestyles, the plan and by extension government recognizes the importance of funding NCDs[5].

Despite government's good intentions, allocation to health still falls short of the standard set by the Abuja Declaration[6]. Financing resource gaps entails that government commitments adequately cover substantial NCD strategic plan which will smoothly allow for target achievement. If the

[4] Republic of Uganda Health Financing Strategy 2015/16 – 2024/25

[5] Republic of Uganda Health Financing Strategy 2015/16 – 2024/25 Page 9 of 53 Assessed 23/03/19, 8:05am

[6] National Health Accounts 2018 Page 10 OF 79 Paragraph 5 Assessed 23/03/19 8:20am

commitments from government falls short of 90% resource commitment, then household finances will dwindle. It is a know fact that poverty levels remain relatively high, with estimates of National Health financing of 19.7% living below national poverty line ($1.25/day. This attest to the fact that 43.3% are more likely to experience poverty if private sector resourcing drives this plan.

The percentage of Non Communicable Diseases (NCD) for public and private health expenditure at 0.9% and 15.2%[7] of the total health expenditure (THE) for 2015 to 2016 showed that out of pocket expenditure take the larger chunk of the spending on NCD. There is need to crowd in investment into the public sector resource pool of NCD sub-health sector to achieve the target set for the NCD. For 2019, the $0.45 and for 2020 is $0.39 which shows that the cost component is reasonably achievable. Using the current exchange rate of UGX**3,800.7,** the calculated rate of $1.84 is estimated per capita for 2016. If public sector, estimated expenditure is at $1.84, it then means that if this plan is funded 100%, then per capital at $0.45 is at low cost and very achievable.

The costing of this NCD revealed 57% is needed for comprehensive and integrated management of NCDs (i.e. for Strategic area 4), and 42% for health promotion and risk reduction (i.e. for Strategic area 3) financing the plan will entail aggressive resource mobilization. This should make raise further resource commitment from non-health implementing partners that can source for external support whether within the economy or outside the economy. The is likely going to reduce financial burden on the health sector coordinating NCD plan.

The plan is cost effective provided the cost of plan is less than when benchmark against the current health expenditure. However, the strategies for investment should take cursory look at population demand for service at $0.45 for 2019 cost estimate which is projected population at 3.62 growth rate. Notwithstanding this, the cost of plan is still cost efficient at less than $1 per capita.

Financing this plan will need more financial commitments from government that her percentage share has drop to 6.9% of total budgetary allocation based on Health Financing Strategic. This simply mean NCD sub-sector must device means of funding this plan if it is to meet all the set target. However, heavy reliance on external resources at 47% of health plan is not sustainable. Households will be made to commit more of their income to NCD services which can reduce net resources available for further economic spending elsewhere. Thus, health insurance should be pursued with the intent to rake in more resources from risk pooling. The insurance strategic should be adopted where subscription for services will accommodate more NCD services for subscribers. Additionally, other a key global option identified for funding NCDs include tobacco and alcohol taxation. Identified as a best buy, regional peculiarities should inform taxation options to be enforced. 80% of revenue earned should contribute to funding quick wins.

Specifically, this plan will be finance through the following:

1. Health Insurance Scheme
2. Sin Taxation
3. Overseas Development Assistance
4. Financial Incentives for NCD services

[7] National Health Account 2018 Page xvii Assessed 9:34am

The government will have to assume a greater role in resourcing the plan by allocating a greater share of public funds to NCD control efforts. As a signatory of the Abuja Declaration, government committed to spending 15% of its annual budget on health[8] hence should strive to meet up with this commitment in order to bridge a significant gap in resource the plan. The growth in health budget by -1% shows that resources to the sector is arithmetically reducing and by extension resources to NCD sub-sector of health will reduce. It is in line with this that more strategic approach be adopted for financing this NCD plan as enumerated above in the previous paragraph.

[8] The Abuja declaration. 2001 (OAU/SPS/ABUJA/3 paragraph 26).

SECTION III

NATIONAL ACCOUNTABILITY FRAMEWORK

CHAPTER 6 – MONITORING AND EVALUATION

2 NATIONAL MONITORING FRAMEWORK

Table 22: National monitoring framework

Goal: To attain a 20% relative reduction in risk of premature mortality from NCDs by 2025.	
Framework element	Subjects
Input and process indicators	▪ Fund for NCDs ▪ Human resource development ▪ Health infrastructure for NCDs ▪ Coordination mechanism
Output	▪ Agreement or declaration of coordination ▪ Products of activities ▪ Meeting reports ▪ NCD Knowledge and practice skills for human resource ▪ Adequate budget ▪ Policies, plans and activities and interventions implemented for NCD prevention and control. ▪ Partnerships created ▪ Awareness campaigns conducted ▪ NCD coordination committees formed & functional
Impact/Outcome by 2023	▪ Reduction in the four major NCD risk factors among the Ugandan population ▪ Reduction in mortality and morbidity due to NCDs ▪ Improved health care delivery for NCDs ▪ Improved quality of life among the general population ▪ Increased availability and basic of medicines for NCD treatment ▪ Increased vaccination among key eligible populations for HPV and Hepatitis B ▪ Available policies to limit promote healthy diets, reduce tobacco use, reduce harmful alcohol consumption and increase physical activity

3 MONITOR IMPACT/ OUTCOME

Table 23: Monitoring Outcome/ Impact of national NCD MAP

WHO Framework element	National Baseline (2010)	National Targets		Global Target 2025	Indicator	Measurement techniques/data source
		Target 2023	Target 2025			
Premature mortality from NCDs	21%	17.4%	16.8% [National Target: 20% relative reduction by 2025]	A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	Unconditional probability of dying between ages of 30 and 70 from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases	▪ Death Registries ▪ NIRA
Harmful use of alcohol	Adults: 3.5% Adolescents: *Data not available*	2.7%	2.7% [National Target: 10% relative reduction by 2025]	At least 10% relative reduction in the harmful use of alcohol	1. Total alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol 2. Age-standardized prevalence of heavy episodic drinking among adolescents and adults, as appropriate 3. Alcohol-related morbidity and mortality among adolescents and adults	▪ UDHS (2021) ▪ NCD steps survey (2019)
Physical inactivity	Adults: 4.3% Adolescents: *Data not available*	4.1%	4.1% [National Target: 5% relative reduction by 2025]	A 10% relative reduction in prevalence of insufficient physical activity	1.Prevalence of insufficiently physically active adults and adolescents, defined as less than 30 and 60 minutes of moderate to vigorous intensity activity daily respectively. 2. Age-standardized prevalence of insufficiently physically active persons	▪ NCD steps survey ▪ Other National surveys

					aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)	
Salt intake	10.2g/day*	9.3g/day	9.2g/day [National Target: 10% relative reduction by 2025]	A 30% relative reduction in mean population intake of salt	Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years	▪ National salt consumption survey (2018)
Tobacco use	11%	9.1%	8.8% [Target: 20% relative reduction by 2025]	A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ year	1. Prevalence of current tobacco use among adolescents 2. Age-standardized prevalence of current tobacco use among persons aged 18+ years	▪ GATS (2020) ▪ NCD steps ▪ GSHS ▪ UDHS
Raised blood pressure	24.3%	20.1%	19.4% [National Target: 20% relative reduction by 2025]	A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances	1.Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure ≥140 mmHg and/or diastolic blood pressure ≥90 mmHg) and mean systolic blood pressure	▪ UDHS ▪ NCD steps survey
Diabetes	1.3%	1.3%	1.3% [National Target: 0% increase by 2025]	Halt the rise in diabetes	Age-standardized prevalence of raised blood glucose/ diabetes among persons aged 18+ years (defined as fasting plasma glucose concentration ≥ 7.0 mmol/l (126 mg/dl) or on medication for raised blood glucose)	▪ UDHS ▪ NCD steps survey
					1. Prevalence of overweight and	

Obesity	4.6%	4.6%	4.6% [National Target: 0% increase by 2025]	Halt the rise in obesity	obesity in adolescents (defined according to the WHO growth reference for school-aged children and adolescents, overweight – one standard deviation body mass index for age and sex, and obese – two standard deviations body mass index for age and sex) 2. Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index ≥ 25 kg/ m² for overweight and body mass index ≥ 30 kg/m² for obesity)	▪ UDHS ▪ NCD steps survey
Drug therapy to prevent CVD	N/a	50%	50% [National Target: 50% of eligible persons receive drug therapy & counselling by 2025]	At least 50% of eligible people receive drug therapy and counseling (including glycaemic control) to prevent heart attacks and strokes	Proportion of eligible persons (defined as aged 40 years and older with a 10-year cardiovascular risk ≥30%, including those with existing cardiovascular disease) receiving drug therapy and counseling (including glycaemic control) to prevent heart attacks and strokes	▪ SARA survey

Essential medicines and technologies to treat major NCDs	**Medicines:** Diabetes: 43% CVD: 39% COPD: 26% Sickle cell: *Data not available* MNS disorders: *Data not available* **Technologies:** Diabetes: 80% CVD: 93% COPD: 35% Sickle cell: *Data not available* MNS disorders: *Data not available*	 75.1% 74.5% 72.8% 80% 80% 88.7% 94.7% 74% 80% 80%	 80% 80% 80% 80% 80% [National Target: 80% essential medicine availability in both public and private health facilities] 90% 95% 80% 80% 80% [National Target: 80% - 95% availability of basic technologies in both public and private health facilities]	An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities	Availability and affordability of quality, safe and efficacious essential Non-communicable disease medicines, including generics, and basic technologies in both public and private facilities	▪ Periodic drug stock surveys ▪ SARA survey

OTHER NATIONAL NCDTARGETS						
National Framework Element	**Baseline**	**National Target 2023**	**National Target 2025**	**National Target statement**	**Indicator**	**Measurement techniques/data source**
Access to Palliative care medicines	*Data not available*	100%	100%	100% availability of morphine at all health sub districts and higher levels of care	1. Access to palliative care assessed by morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer	SARA survey
Saturated & Trans-fats supply in the general population	*Data not available*	1	1	At least a policy adopted to limit saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils in the food supply within the population.	2. Adoption of national policies that limit saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils in the food supply	Review of existing policy documents from the relevant Ministries in the NCD multi-sectoral committee
HPV vaccination	*Data not available*	100%	100%	100% Availability of HPV vaccine at all health centers IIIs and above	3. Availability, of cost-effective and affordable vaccines against human papillomavirus, according to national programs and policies	Immunization Coverage Survey
Junk food supply in the general population	*Data not available*	1	1	At least a policy adopted to reduce the marketing of foods and non-alcoholic beverages high in saturated fats, trans fatty acids, free sugars, or salt to the general population.	4. Policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans fatty acids, free sugars, or salt	Review of existing policy documents from the relevant Ministries in the NCD multi-sectoral committee

Hepatitis B vaccination	78%	92.7%	95%	95% vaccination coverage against hepatitis B	5. Vaccination coverage against hepatitis B virus monitored by number of third doses of Hep-B vaccine (HepB3) administered to infants	National Immunization Coverage Survey
Cervical cancer screening	10%	53.3%	60%	At least 60% of women aged 25years -49years screened for cervical cancer	6. Proportion of women between the ages of 25–49 screened for cervical cancer at least once, or more often, and for lower or higher age groups according to national programs or policies	NCD STEPS UDHS
Sickle cell pre-marital counselling, screening and care	Premarital counselling: *data not available* Screening for children < 5 years: *data not available* SS Children < 5yrs linked to care: *data not available*	80% 100% 100%	80% 100% 100%	1. At least 80% of the couples intending to get married screened for sickle cell and given appropriate counselling. 2. 100% of children below 5 years screened for sickle cell and their status known. 3. 100% of all children below 5 years with sickle cell disease linked to appropriate care.	1. Proportion of married couples who screened for sickle cell and received appropriate counselling. 2. Screening of children below 5 years for sickle cell disease. 3. Children below 5 years with sickle cell disease linked to appropriate care, having a follow up record book from the facility where care is given	Public and Private Laboratory records -Public and private Health facility records -HMIS records Sickle cell clinic records

Mental health care services	MNS disorder patients utilizing care services: *Data not available* Health facilities providing MNS services: *Data not available*	80% 80%	80% 80%	At least 80% of patients with MNS disorders utilizing MNS care services At least 80% of health facilities providing MNS services.	Proportion of MNS disorder patients utilizing MNS care services. Proportion of health facilities providing MNS services.	-Public and private Health facility records -HMIS records Mental health clinic records

3. MONITORING AND EVALUATING THE PROGRESS IN IMPLEMENTING NCD MAP

Table 24: Monitoring and Evaluating the progress in implementing NCD MAP

Goal:			
Objectives	Core Indicator	Outcomes	Assumptions
Strategic Objective 1: To strengthen advocacy efforts to raise the priority accorded to the prevention and control of NCDs in the national development agenda.			
1. To strengthen advocacy efforts to raise the priority accorded to the prevention and control of NCDs in the national development agenda.	I. Existence of functional partnerships to address NCDs *(identified, MoUs, plans & Budget allocations, support activities) at national and sub national levels.* II. Number of Ministries Department and Agencies (MDA) integrating NCDs interventions in their work Plans III. Proportion of the national and local government budget that is allocated to the prevention and control of NCDs. IV. Number of Health workers trained on NCDs prevention and control V. Number of CSOs & private sector involved in prevention and control of NCDs VI. Existence of community-based structures to prevent and control NCDs VII. Proportion of the population that is aware of prevention and control of NCD s and their risk factors.	1. Strong national and international cooperation on NCDs 2. Increased integration of NCDs interventions in Ministries Department and Agencies (MDA) Plans 3. Enhanced resources for NCDs 4. Improved awareness about NCDs and their risk factors at and sub national levels Increased coverage of the population accessing NCD services	1. Political commitment by gov't to supporting NCDs 2. Functional Task Force on NCDs 3. Functional NCD Unit (financing & human capacity) 4. UN support 5. Donor support 6. Routine joint work planning and review 7. Availability of laws & guidelines 8. Supportive enforcement structures
Strategic Objective 2: To strengthen multi-sectoral capacity, to accelerate country response for the prevention and control of NCDs			

2. To strengthen multi-sectoral capacity, to accelerate country response for the prevention and control of NCDs	I. Existence of a functional high Level Multi-sectoral NCD committee II. Existence of a functional NCD Department III. Existence of work place policy for the prevention and control of NCDs across sectors. IV. Existence of a national multi-sectoral plan for the prevention & control of NCDs	1. Improved coordination and leadership mechanism for NCD prevention and control 2. NCD interventions mainstreamed in MDAs and non-state actors' operations	
Strategic Objective 3: To reduce modifiable risk factors for NCDs and underlying social determinants of health			
1. Tobacco use	I. Prevalence of current tobacco use among adolescents disaggregated by gender. II. Age-standardized prevalence of current tobacco use among persons aged 18+ years disaggregated by gender	Reduced current tobacco use among adolescents Reduced prevalence of current tobacco use among persons aged 18+ years	
2. Harmful use of Alcohol	Total alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol disaggregated by gender	Reduced per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol	
	Age-standardized prevalence of heavy episodic drinking among adolescents and adults disaggregated by gender	Reduced prevalence of heavy episodic drinking among adolescents and adults	
3. Salt consumption	Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years disaggregated by gender	Reduced intake of salt (sodium chloride) per day in grams in persons aged 18+ years	
4. Vegetable and fruit consumption	Percentage of adults consuming vegetables and fruits disaggregated by gender and location (urban vs rural).	Improved consumption of vegetables and fruits among adults	
	Percentage of the children < 2 years with minimum acceptable dietary diversity score	Improved consumption of vegetables and fruits among children under 2 years	

4. Consumption of saturated fatty acids and trans-fats	Number of national policy frameworks (guidelines, strategies, standards) developed to regulated consumption of saturated fatty acids and trans-fats.	Reduced amount of saturated fatty acids and trans fats in the food supply	
5. Physical activity	I. Proportion of adults (18+ years) engaged in physical moderate or intensive activities for at least 30 minutes in a day for five days a week. II. Proportion of physically inactive adolescents.	1. Increased physical activity among the population aged 18+ years. 2. Increased physical activity among adolescents	
6. Hypertension	Prevalence of high blood pressure among persons aged 18+ years disaggregated by gender and location.	Reduced prevalence high blood pressure in persons aged 18+ years.	
7. Raised blood glucose	Prevalence of raised blood glucose among persons aged 18+ years disaggregated by gender and location.	Reduced prevalence of raised blood glucose among persons aged 18+ years.	
8. Overweight /Obesity	I. Prevalence of overweight in adolescents II. Prevalence of obesity in adolescents III. Prevalence of overweight among adults (18+ years) IV. Prevalence of obesity among adults (18+ years)	1. Reduced prevalence of overweight in adolescents 2. Reduced prevalence of obesity in adolescents 3. Reduced prevalence of overweight in persons aged 18+ years 4. Reduced prevalence of obesity in persons aged 18+ years	
Strategic Objective 4: To strengthen the health system to address NCDs through people-centered primary health care.			
Objective 4: To strengthen the health system to address NCDs through people-centered primary health care	I. Percentage of HC with affordable basic technologies to detect and manage NCDs II. Percentage of the HCs with adequate essential medicines for the management of NCDs in both public and private facilities III. Proportion of health workers trained in the prevention and control of non-communicable diseases IV. Existence of a functional integrated referral system for the management of NCDs	1. Improved detection and monitoring of patients with or at high risk for NCDs. 2. Reduced stock out of essential medicines for the management of NCDs. 3. Improved knowledge and skills among the health workers to manage NCDs. 4. Existence of a Palliative care policy guideline	

Strategic Objective 5: To strengthen national capacity for quality research for the prevention and control of NCDs			
Objective 5: To strengthen national capacity for quality research for the prevention and control of NCDs	I. Existence of a national research agenda for NCDs II. Number of research collaborations established for the prevention and control of NCDs III. Existence an NCD research repository	A national research agenda developed and implemented. Increased collaboration with research institutions Existence of a stop center for NCD information	
Strategic objective 6: To strengthen the national M&E system for NCDs			
Objective 6: To strengthen the national M&E system for NCDs	I. Existence of comprehensive national M&E plan for NCDs II. Existence of an up to date (functional) MIS for NCD management III. Existence of periodical M&E reports for NCDs IV. Percentage of Health Workers trained in M&E for NCDs	Improved evidence based planning and decision-making process for the prevention and control of NCDs.	

4. MONITORING IMPLEMENTATION OF KEY ACTIVITIES

Table 25: Monitoring the progress of key activities

Strategic Objective 1	**To strengthen advocacy efforts to raise the priority accorded to the prevention and control of NCDs in the national development agenda**										
Indicator Statement	**Indicator Definition**	**Baseline value/Year**	**Target**						**Data Collection Source**	**Data Collection Method / Tool**	**Responsible Party**
			Y1	**Y2**	**Y3**	**Y4**	**Y5**	**EoP**			
Existence of functional partnerships to address NCDs at national and sub national levels	A functional partnership is a collaborative relationship among institutions evidenced by MOUs and registration, formal documented arrangements, shared activity plans and reports	*Data not available*	5	10	15	20	25	25	Implementing partners, MOH	Document review	MOH
Number of Ministries, Department and Agencies (MDAs) integrating NCD interventions in their work Plans	Integrating NCDs interventions refers to including interventions that promote reduction of risk factors and prevention of NCDs in implementation plans	*Data not available*	5	10	15	20	25	25	Ministry reports and Plans	Document review	MOH
Proportion of national budget allocated to NCD prevention and control	Percentage of national budget allocated to NCD prevention and control by sector (Amount of funding to NCD activities by each sector / Total National Budget)	*Data not available*	1%	2%	3%	4%	5%	5%	Sector budgets	Document review	MOH
Proportion of Local Government (LG) budgets allocated to NCD prevention and control	LG budget allocated to NCD prevention and control (Amount of funding to NCD activities / Total LG Budget)	*Data not available*	1%	2%	3%	4%	5%	5%	Local Government budgets	Document review	MOH

Proportion of HFs with Health workers trained in NCD prevention and management	HFs with at least one health worker with in service training in NCDs in the last two years	1%**	5%	15%	30%	45%	55%	55%	MOH	Document review	MOH
Proportion of CSOs & private sector entities involved in NCD prevention and control	Health-related CSOs and private sector entities with NCD prevention and control activities in their plans and reports	*Data not available*	5%	10%	20%	30%	40%	40%	District community-based service department, URSB, NGO board	Survey	MOH
Proportion of community-based structures with NCD interventions	Community based structures such as VHTs, CHEWs, CBOs that have NCD prevention and control interventions in their work plans and reports	*Data not available*	10%	30%	50%	70%	70%	70%	District health departments and Community Developmen t Officers	Survey	MoGLSD MOH
Proportion of the population that is aware of at least two NCD risk factors and/or prevention measures	Community members aware of at least two NCD risk factors	*Data not available*	10%	20%	30%	40%	50%	50%	NCD STEPs report	Survey	MOH

***Value based on current estimates of 260 health workers trained between 2015-2016 in 65 health facilities out of the known 7325 public facilities.*

Strategic Objective 2	To strengthen multi-sectoral capacity, to accelerate country response for NCD prevention and control										
Indicator Statement	**Indicator Definition**	**Baseline value/ Year**	**Target**						**Data Collection Source**	**Data Collection Method/Tool**	**Responsible Party**
			Y1	**Y2**	**Y3**	**Y4**	**Y5**	**EoP**			
Existence of a functional Multi-sectoral NCD committee	Committee with senior representatives from key sectors meeting at least quarterly	4	4	4	4	4	4	20	Minutes and reports from the committee meetings	Annual meeting minute review	MOH
Existence of a functional NCD Department	NCD department adequately staffed, with a vote, work plan and budget	0	0	1	1	1	1	1	Ministerial statement	MOH document review	MOH
Existence of work place guidelines for health promotion including NCD prevention and control	Work place health promotion guidelines including NCD prevention and control	0	0	1	1	1	1	1	MoGLSD	Document review	MoGLSD
Existence of a national multi-sectoral plan for the prevention & control of NCDs	Costed NCD multisectoral strategic plan approved by cabinet	0	1	1	1	1	1	1	Cabinet secretariat	Document review	MOH

Strategic Objective 3	To reduce modifiable risk factors for NCDs and underlying social determinants of health										
Indicator Statement	**Indicator Definition**	**Baseline value/Year** 2010	**Target**						**Data Collection Source**	**Data Collection Method/Tool**	**Responsible Party**
			Y1	**Y2**	**Y3**	**Y4**	**Y5**	**EoP**			
Tobacco use: 1. Prevalence of current tobacco use among adolescents disaggregated by gender 2. Age-standardized prevalence of current tobacco use among persons aged 18+ years disaggregated by gender	Percentage of male and female adolescents currently using any tobacco or tobacco product	17.3%	15.2%	15.0%	14.8%	14.5%	14.3%	14.3%	Survey Reports	Questionnaires	MOH
	Percentage of male and female adults currently using any tobacco or tobacco product	11%	9.7%	9.5%	9.4%	9.2%	9.1%	9.1%			
Harmful Alcohol use: 1. Total alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol	Formal consumption of pure alcohol (ethanol) in litres per person aged 15+ during one calendar year	Male: 25.6Ltrs Female: 19.6Ltrs Overall: 23.7Ltrs	24.1 Ltrs 18.4 Ltrs 22.3 Ltrs	23.9 Ltrs 18.3 Ltrs 22.1 Ltrs	23.7 Ltrs 18.2 Ltrs 22.0 Ltrs	23.6 Ltrs 18.0 Ltrs 21.8 Ltrs	23.4 Ltrs 17.9 Ltrs 21.6 Ltrs	23.4Ltrs 17.9Ltrs 21.6Ltrs	Survey Reports	Questionnaires	MOH

disaggregated by gender 2. Age-standardized prevalence of harmful use of alcohol among adolescents and adults disaggregated by gender	Adults (male and female) reporting drinking 6 (60 grams of pure alcohol) or more standard drinks in a single drinking occasion	Male: 5% Female: 1.2% Overall: 3%	4.7 % 1.1 % 2.8 %	4.7 % 1.1 % 2.8 %	4.6 % 1.1 % 2.8 %	4.6 % 1.1 % 2.8 %	4.6 % 1.1 % 2.7 %	4.6% 1.1% 2.7%	Survey Reports	Questionnaires	MOH
Unhealthy diet:											
Fruit and vegetable consumption 1. Percentage of adults consuming more than 400g of vegetables and fruits disaggregated by gender and residence (urban vs rural)	Adults consuming more than 5 servings (400g) of fruits and vegetables per day	Male: 11.6%	34.6 %	37.2 %	39.8 %	42.3 %	45.0 %	45.0%	Surveys reports	Questionnaire	MOH
		Female: 12.7%	35.1 %	37.6 %	40.1 %	42.5 %	45.0 %	45.0%			
		Overall: 12.2%	34.9 %	37.4 %	39.9 %	42.4 %	45.0 %	45.0%			
2. Percentage of the children < 2 years with minimum acceptable diet (MAD)	Children aged 0 – 2 years having at least four or more food groups (e.g. grains, tubers, leafy vegetables, fruits, poultry, fish) per day.	6%	35.4 %	38.7 %	41.9 %	45.2 %	48.5 %	48.5 %	Surveys reports	Questionnaire	MOH
Salt consumption: 3. Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years disaggregated by gender	Number of grams of salt (Sodium chloride) per day in male and female persons aged 18+ years	Overall: 10.2g	9.6g	9.5g	9.5g	9.4g	9.3g	9.3%	Surveys reports	Questionnaires	MOH

Saturated fatty acids and trans fats: 4. Number of national policy frameworks (guidelines, strategies, standards) developed to regulate consumption of saturated fatty acids and trans fats	Trans fats are hydrogenated vegetable oils SFAs are solid fats at room temperature (animal fats)	0	1	1	1	1	1	1	Ministerial statements	Document review	MoH
Physical inactivity: Proportion of adults (18+ years) engaged in physical moderate or intensive activities for at least 30 minutes in a day for five days a week Proportion of physically inactive adolescents	Adults engaged in moderate or intensive physical activities for at least 30 minutes in a day for five days a week	95.7%	98.3 %	98.6 %	98.9 %	99.1 %	99.4 %	99.4%	Surveys reports	Questionnaires	MOH
	Adolescents engaged in moderate to vigorous physical activity for less than 60 minutes daily.	*Data not available*	95%	96%	97%	98%	99%	100%			
Hypertension: Prevalence of high blood pressure among persons aged 18+ years disaggregated by gender and location	Blood pressure more than 140 systolic and/or 90 diastolic in men and women	Male: 25.8%	22.7 %	22.4 %	22.0 %	21.7 %	21.3 %	21.3%	Surveys reports	Questionnaires	MOH
		Female: 22.9	20.2 %	19.8 %	19.5 %	18.9 %	19.2 %	18.9%			
		Overall: 24.3%	21.4 %	21.1 %	20.7 %	20.4 %	20.1 %	20.1%			

Raised blood glucose: Prevalence of raised blood glucose among persons aged 18+ years disaggregated by gender and location	Blood glucose more than 126 mg/dl (7.0 mmol) among adults	Male: 1.7%	1.7 %	1.7 %	1.7 %	1.7 %	1.7 %	1.7%	Surveys reports	Questionnaires	MoH
		Female:1%	1%	1%	1%	1%	1%	1%			
		Overall: 1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%			
Overweight/ Obesity 1. Prevalence of overweight in adolescents	Overweight in adolescents is defined by a BMI for age z score of > +1SD	*National data not available*	<5%	<5%	<5%	<5%	<5%	<5%	Surveys reports	Questionnaires	MoH
2. Prevalence of obesity in adolescents	Obesity in adolescents is defined by a BMI for age z score of > +2SD	*National data not available*	<1%	<1%	<1%	<1%	<1%	<1%			
3. Prevalence of overweight among adults (18+ years)	Overweight in adults is defined by a BMI of 25-29.9kgs/m^2	14.5%	14.5 %	14.5 %	14.5 %	14.5 %	14.5 %	14.5%			
4. Prevalence of obesity among adults (18+ years)	Obesity in adults is defined by a BMI of 30kgs/m^2	4.6%	4.6 %	4.6 %	4.6 %	4.6 %	4.6 %	4.6%			

Strategic Objective 4:	**To strengthen the health system to address NCDs through people-centered primary health care**					
	Indicator Definition		**Target**		**Data Collection**	

Indicator Statement		Baseline value/Year	Y1	Y2	Y3	Y4	Y5	EoP	Data Collection Source	Method/Tool	Responsible Party
Percentage of HFs with affordable basic technologies to detect and manage NCDs	HC IIs and above having affordable basic technologies [BP machines, stethoscopes, Sickle Rapid test kits, Hb Electrophoresis machines, nebulisers, spirometers, spacers, and Glucometers]	Stethoscopes: 90%	93%	93.3%	93.7%	94%	94.3%	94.3%	HIMS District Health Office		MOH
		BP machines: 87%	91.8%	92.3%	92.9%	93.4%	94%	94.0%			
		Sickle cell rapid kits: NA	52%	57%	61%	66%	71%	71%			
		Glucometers: 39%	69.6%	73%	76.4%	79.8%	83.2%	83.2%			
		Hb Electrophoresis machines: NA	10	20	30	40	50	50%			
		Spirometers: NA	10	20	30	40	50	50%			
		Spacers: NA	10	20	30	40	50	50%			
		Nebulisers: NA	10	20	30	40	50	50%			
Percentage of the HCs with adequate essential medicines for the management of NCDs in both public and private facilities	Private and public health centres with essential medicines for NCDs management with no stock outs in the last quarter. [for essential medicines: refer to the WHO NCD Kit list of medicines [50]]	*Data not available*	10%	20%	30%	40%	50%	50%	HIMS District Health Office	Database review Document review	MOH
Proportion of Health workers trained on NCD prevention and control	Health workers who have had in service training in NCD prevention and control in the last two years	~1%	10	20%	30%	40%	50%	50%	MOH Reports	Document reviews	MOH
Proportion of health centres with an existing functional referral system for the management of	A system where health workers at one level having insufficient resources (drugs, skills and equipment) to manage an NCD seek	*Data not available*	10	20%	30%	40%	50%	50%			

NCDs	assistance of other HFs and data kept										

Strategic Objective 5	**To strengthen the national capacity for quality research for the prevention and control of NCDs**										
Indicator Statement	**Indicator Definition**	**Baseline value/Year**	**Target**						**Data Collection Source**	**Data Collection Method/Tool**	**Responsible Party**
			Y1	**Y2**	**Y3**	**Y4**	**Y5**	**EoP**			
Existence of a national research agenda for NCDs	Documented priority research areas for NCD prevention and control	0	1	1	1	1	1	1	MOH work plans	Document Review	MOH
Number of NCD research collaborations established	Working together to achieve a common goal of achieving new scientific knowledge in relation to NCD prevention and control	*Data not available*	20	30	40	50	60	60	MOH Reports	Document Review	MOH
Number of NCD research projects aligned to the national research agenda	NCD research projects conducted annually and are in line with the NCD research agenda.	*Data not available*	20	30	40	50	60	60	NCD Research Database	Database review	MOH
Existence of an NCD research repository at the MOH NCD department	Central location where NCD data is stored and managed	0	1	1	1	1	1	1	MOH Reports/TWG meeting minutes	Document Review	MOH

Strategic Objective 6	**To strengthen the national M&E system for NCDs**

Indicator Statement	Indicator Definition	Baseline value/Year	Target						Data Collection Source	Data Collection Method/Tool	Responsible Party
			Y1	Y2	Y3	Y4	Y5	EoP			
Existence of comprehensive national M&E plan for NCDs	The document that will guide the monitoring and evaluation of NCD prevention and control interventions	0	1	1	1	1	1	1	MOH Reports	Document Reviews	MOH
Existence of an up to date (functional) MIS for NCD management	Capturing all NCD related indicators at all levels producing reports	0	1	1	1	1	1	1	MOH Reports	Document Reviews	MOH
Proportion of health workers trained in M&E for NCDs	Health workers who have had in service training in NCD M&E	*Data not available*	100	500	1000	1500	2000	2500	MOH Reports	Document Reviews	MOH

ANNEXES:

Situation Analysis

Demographic characteristics, health and socioeconomic situation

Uganda has a population of 34.6 million people, an increase of 10.4 million people from the 2002 population census [51]. With an average annual growth rate of 3.0%, Uganda's population is projected to reach 42.4 million in 2020. More than 70% of the population lives in rural areas. The population is predominantly young with more than 50% of the entire population under the age of 18. Average life expectancy increased from 50.4 years in 2002 to 63.3 years in 2014. The Uganda poverty status report 2014 shows that there is a downward trend in poverty rates from 24.5% in 2009/2010 to 19.7% in 2012/2013 and a more than triple growth in the middle class over the last two decades [52]. Rural to urban migration is on the rise with mainly young people and youths moving to towns in search for better jobs and improved standard of living.

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