

THE REPUBLIC OF UGANDA

Ministry of health

Community Health Extension Workers Strategy in Uganda (2015/16- 2019/20)

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Table of Contents

	TABLE OF CONTENTS	ii
	LIST OF TABLES	iii
	LIST OF FIGURES	iii
	ACRONYMS	iv
	FOREWORD	v
	ACKNOWLEDGEMENT	vi
	EXECUTIVESUMMARY	vii
1	BACKGROUND	1
1.1	Geography and demographic situation	1
1.2	The socioeconomic environment	1
1.3	Administrative structure	1
1.4	Health status	3
1.5	Health system organization	4
2	EXPERIENCES OF DIFFERENT COUNTRIES IN IMPLEMENTING COMMUNITY HEALTH PROGRAMS	5
2.1	Experiences from Latin America	5
2.2	Experiences from South Asia	6
2.3	Experiences from Africa	7
3	THE STRATEGY	16
3.1	Priority issues and challenges in Uganda village health team strategy	16
3.2	Rationale	20
3.3	Guiding Principles	21
3.4	Core values	22
3.5	Objectives	22
3.6	Objectives description	23
3.7	Strategies and main activities	34
3.8	Logical framework	38
3.9	Strategy cost	42
4	IMPLEMENTATION ARRANGEMENT	43
5	MONITORING AND EVALUATION	48
6	FOLLOW UP ACTION	51
7 8	CONCLUSION	51 53

List of tables

Table 1:	Health sector structure	4
Table 2:	Key finding of VHT assessment	16
Table 3:	Schedule for the CHEWs Training	24
Table 4:	Basic Equipment and Supplies at the Health center II	25

List of figures

Figure 1:	The hierarchy and relationship of Local Governments in Uganda	2
Figure 2:	Model family training and graduation	29
Figure 3:	CHEWs governance structure	33

ACRONYMS

AIS	AIDS Indicator Survey
ARI	Acute respiratory infections
BRAC	Bangladesh Nation-wide ShasthoShebika Program
CBOs	Community based organizations
CHEWs	Community Health Extension Workers
CHWs	Community health workers
DGHS	Director General Health Services
HC	Health center
HEP	Health Extension Program
HEWs	Health extension workers
HMIS	Health Management Information System
HSAs	Health Surveillance Assistants
HSDP	Health Sector Development Plan
ICCM	Integrated Community Case Management
ICT	Information and communication technology
IMCI	Integrated Management of Childhood Illness
IRC	Integrated refresher course
IRS	Indoor residual spray
ITN	Insecticide treated nets
LC	Local government
MDG	Millennium Development Goal
MMR	Maternal mortality ratio
МОН	Ministry of health
NCD	Non-Communicable Diseases
NGO	Non- government organization
NTD	Neglected tropical disease
PS	Permanent Secretary
RH	Reproductive health
SWAP	Sector-wide Approach
TVET	Technical and vocational education training
UDHS	Uganda demographic and health survey
UHC	Universal Health Coverage
VHT	Village Health Teams
WHS	World Health Statistics

FOREWORD

According to 2011 Uganda demographic and health survey (UDHS) report, there were some improvements on the Millennium Development Goal (MDGs) related to health, but the improvements failed to achieve the targets set for 2015. Achievement of the MDGs required a functional health system with adequate, qualified and motivated health personnel providing quality and equitable health services with active and full participation of the communities.

During the period leading to 2015, the Health Sector faced challenges in the delivery of health services, key amongst which included; inadequate financing and inadequate human resources needed for the provision of quality health services. As a result, the Sector was not able to dramatically reduce inequalities in access to health care, especially for the most poor and those in remote areas. However, evidence from countries that have strong Community Health Programs indicate that effective use of community health extension workers leads to improved health outcomes. Many countries have implemented Community Health Workers programs as part of the wider health sector reform processes, aiming at enhancing accessibility and affordability of health services to rural and poor communities within a primary health care context.

Cognizant of this fact, Uganda initiated the Village Health Teams strategy in 2001 to bridge the gap in health services delivery between the health facilities and the community level. However, after 15 years of implementing the VHT program, the strategy has proved ineffective and unsustainable over a long period of time has it is hinged on volunteerism as the main pillar and therefore has been very poorly resourced. Lessons from other countries indicate that, for it to be effective, the provision of community health services often require full-time engagement which therefore cannot be cost free. Given the present pressures on health systems, it is recommended that a developing country like Uganda should establish an effective Community Health Extension Workers (CHEWs) program.

This CHEWs strategy aims to achieve the goal of the Health Sector Development Plan (HSDP) on Universal Health Coverage (UHC), address the existing and emerging health challenges and the weakness of the current VHT system. It is designed to provide cost effective basic services to all Ugandans, through the core principle of community ownership that empowers communities to manage health problems specific to their localities, thus enabling them to produce their own health. The successful implementation of the strategy will contribute to improved health outcomes on major health interventions. Effective implementation of the strategy entails ensuring inclusion of specific activities and the corresponding budgets in annual work plans at different levels and relevant tools and guidelines. The strategy sets objectives and actions which guide policy makers, development partners, training institutions and service providers in supporting government efforts towards the attainment of good health at the community and household levels.

To this end, I wish to urge all the concerned to actively contribute to the successful implementation of this strategy for the benefit of the people of Uganda.

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EXECUTIVE SUMMARY

Despite major strides to improve the health of the population in the last 10 - 15 years, the health status of Ugandans remains relatively poor with high morbidity and mortality from preventable causes. The National Population and Housing Census 2014 show a life expectancy of 63.3 years and under five mortality of 80/1000. The major health problems of the country largely arise from preventable communicable diseases, non-communicable diseases and nutritional disorders. The majority (about 75%) of Ugandans live in rural areas, many of which are remote and lack health services. Government therefore recognized the need to develop a health care delivery system designed to improve the health status of households, with their full participation, using local technologies and resources.

In 2001, the Ministry of Health established the Village Health Teams (VHT) strategy as an innovative approach to empower communities to participate in improving their own health as well as strengthen the delivery of health services at both community and household levels. Although the VHT strategy had a potential to improve rural access to healthcare due to their mix of preventive, promotive and basic curative roles, the health status of Uganda's population remained relatively poor with high morbidity and mortality from preventable causes. Malaria, malnutrition, respiratory tract infections, HIV/AIDS, tuberculosis and perinatal and neonatal conditions remain the leading causes of morbidity and mortality.

The national VHT assessment conducted in 2014/2015 established a number of gaps and challenges in the implementation namely; insufficiency and inconsistencies in program funding, poor supervision, lack of medical equipment and supplies, poor documentation and reporting, weak referral system and linkage with the health system, lack of community involvement, insufficient initial and continuing education, lack of standardized incentive mechanisms and career enhancement opportunities. Based on the challenges, the assessment strongly recommended the need to redesign VHT strategy to be more functional, sustainable and responsive to the health services delivery.

In line with the above, the CHEWs strategy has been developed to: achieve the goal of HSDP plan on universal health coverage (UHC), address the existing as well as the emerging health problems and the weakness of the current VHT approach. The CHEW strategy provides a framework for strategic partnerships for increased investments for community health program. It is also in line with the UN general assembly resolution that recommends developing countries to use CHEWs to fill the human resource gaps and improve community health.

The Goal of the strategy is to establish and strengthen community health workers program as part of the national health system in order to bring services closer to the community and ensure equitable distribution of community and household centered health care services. The general objective is to establish an adequate and competent Community Health Extension Workers for delivery of quality, preventive, promotive and selected basic curative health services at the community level. Specifically, the strategy aims to:

1. Initiate and strengthen the training, motivation and performance management of community health extension workers

2. Develop the governance and leadership of Community Health Extension Workers in line with the decentralized health care delivery

3. Mobilize financial resources for implementation of the Community Health Extension Workers Strategy

4. Improve community participation, engagement and ownership of health programs and

5. Develop CHEWs performance monitoring and evaluation system

The strategy will be implemented over a five-year period (2015/16-2019/20) during which 15,000 community health extension workers will be trained and deployed. The total cost required for full implementation of the strategy is estimated to be USD 102,209,806. The implementation of the strategy will be led by the Ministry of Health, supported by stakeholders, within the framework of HSDP. Three types of indicators; Output, Outcome and Impact have been drawn from HSDP to monitor the implementation of the strategy. Mid-term reviews and end of implementation evaluation will be conducted to determine the extent to which the strategy achieved the intended objectives. The successful implementation of this strategy will require: sustainable funding mechanisms, development of human resources, provision of quality services, improvement of the information system, political will, community involvement, and strengthening monitoring, assessment and accountability mechanisms.

1. Background

1.1 Geography and Demographic Situation

The Republic of Uganda is situated in East Africa and has a total area of 241,551 square kilometers, of which the land area covers 200,523 square kilometers. Uganda is a landlocked country that borders Kenya to the east, Tanzania to the south, Rwanda to the southwest, the Democratic Republic of Congo to the west, and South Sudan to the north. The southern part of the country includes a substantial portion of Lake Victoria, (that it shares with Kenya and Tanzania) within which it shares borders with Kenya and Tanzania.

According to the national population and housing census 2014 report, the total population of Uganda is 34.6 million. Of the total, 50.7% and 49.3% are females and males respectively. Uganda has an average population density of 173 per square km. The average number of people per household is 4.7. The majority (about 75 %) of the total population reside in rural areas. At an annual growth rate of 3.03%, the population is expected to reach 42.4 million by the year 2020.

1.2 Socioeconomic environment

The economy is predominantly agricultural, with the majority of the population dependent on subsistence farming and light agro-based industries. The country is self-sufficient in food, although its distribution is uneven over all areas. Coffee remains the main foreign exchange earner for the country. In the 1970s through the early 1980s, Uganda faced a period of civil and military unrest, resulting in the destruction of the economic and social infrastructure. The growth of the economy and the provision of social services such as education and health care were seriously affected. Since 1986, however, the government has implemented several reform programs that have steadily reversed prior setbacks and aimed the country towards economic prosperity.

1.3 Administrative Structure

Administratively, Uganda is divided into districts which are further sub-divided into lower administrative units namely; sub-counties, parishes and villages. Overtime, the numbers of districts and lower level administrative units have increased with the aim of making administration and delivery of social services easier and closer to the people. The local government system is formed by a five-tier pyramidal structure, which consists of the village (LC1), parish (LC2), sub-county (LC3), county (LC4) and district (LC5) in rural areas.

In the urban areas; cell or village (LC1), ward or parish (LC2), division (LC3), (municipal division, town, or city division (LC3),) municipality (LC4), and city (LC5). Currently, the country is divided into 112 districts and one City.



Figure1. The hierarchy and relationship of Local Governments in Uganda

Source - Local government council's performance and the quality of service delivery in Uganda, ACODE Policy Research Paper Series No. 39, 2010

The political organ at all local levels is the council, whose members are elected in regular elections. Councilors either represent specific electoral areas or interest groups, namely women, youth, and disabled persons. The administrative organs of both higher and lower local governments comprise of administrative officers and technical planning committees who are respectively in charge of accounting and coordination as well as monitoring of the implementation of sectoral plans. With regard to the assignment of responsibilities to different local levels, the Local Government Act is very comprehensive and precise in determining which levels of government are in charge of which functions and services. In line with the principle of subsidiarity, it is established that local governments and administrative units are responsible for those functions and services, which the respective higher levels are less able and appropriate to fulfill. In general, local governments and administrative units are thus responsible for all functions and services that are not assigned to the center. In very broad terms, the central government is responsible for the provision of national public goods, such as defense, security, foreign relations, and the elaboration of national guidelines for sectoral policy-making, while local authorities deliver local public goods and services and manage facilities.

The decentralization process practiced in Uganda is based on devolution of powers, functions and responsibilities to local governments. The local governments have powers to make and implement their own development plans; to implement a broad range of decentralized services previously handled by the center. This extensive devolution of powers is intended to improve service delivery by shifting responsibility for policy implementation to the local beneficiaries themselves; to promote good governance by placing emphasis on transparency and accountability in public sector management

In the health sector this reform approach transfers fiscal, administrative, ownership, and political authority for health service delivery from the central Ministry of Health to local government and this creates space for learning, innovation, community participation and the adaptation of public services to local circumstances including increased autonomy in local resource mobilization and utilization, an enhanced bottom-up planning approach, increased health workers' accountability and reduction of bureaucratic procedures in decision making. Moreover it creates conducive environment for the implementation of community health program and has the potential for a more rational and unified health service that caters to local preferences, improved implementation of health programs, decrease in duplication of services as the target populations are more specifically defined, reduction of inequalities, greater community financing and involvement of local communities, greater integration of activities of different public and private agencies and improved intersectoral coordination, particularly in local government and rural development activities.

1.4 Health status

Despite major strides to improve the health of the population Ugandan still faces a high rate of morbidity and mortality mainly from preventable causes and the health status remains relatively poor. The National Population and Housing Census 2014 show a life expectancy of 63.3 years. Malaria, HIV/AIDS, lower respiratory infections, and tuberculosis are still estimated to cause the highest numbers of years of life lost in Uganda. Although Protein Energy Malnutrition has also reduced, it still remains the underlying cause in nearly 60% of infant deaths. On the other hand, Non-Communicable Diseases (NCDs) are increasingly becoming a major burden due to life style changes, increased life expectancy in addition to genetic factors. The latest burden of risk factors show alcohol use, tobacco use, household air pollution, childhood underweight, iron deficiency and high blood pressure as the most significant risk factors, responsible for over 16% of all disease conditions. The health workforce is still a key bottleneck for the appropriate provision of health services, with challenges in the inadequacy of numbers and skills, plus retention, motivation, and performance challenges.

According to millennium development goals report 2015; there has been significant progress in the reduction of both under-five and infant mortality rates in Uganda. The under-five mortality rate declined by 42% from 156 per 1,000 live births in 1995 to 90 per 1,000 live births in 2011. The infant mortality rate declined 37% from 86 to 54 per 1,000 live births in 2011. Uganda narrowly missed the under-five and infant mortality targets which was 56 and 31 per 1000 respectively. According to the reports made by health facilities, malaria remains the leading cause of death among infants and the under-fives. In 2013/14, the malaria was responsible for 20% of hospital-based under-five deaths, and 28% of under-five deaths in all inpatient facilities, the other leading causes of child fatalities are pneumonia (12.4%), anemia (12.2%) and perinatal conditions in newborns (9.7%). Uganda's maternal mortality ratio (MMR) fell from 506 per 100,000 live births in 1995 to 438 in 2011 and the overall fall in maternal mortality has fallen short of the MDG target which was 131 per 100,000 live births. In 2013/14, the main causes of maternal death occurring in health facilities were postpartum hemorrhage (26%), hypertension (15%), sepsis (14%), uterine rapture (11%) and abortion-related deaths (10%). Uganda has experienced a generalized HIV epidemic for more than two decades. The country had impressive success controlling HIV during the 1990s, bringing down HIV prevalence among adults aged 15 to 49 years from a national average of 18.5% in 1992 to 6.4% in 2004/2005. However the 2011 AIDS Indicator Survey (AIS) revealed this trend had reversed, with the prevalence rate among 15 to 49 year olds increasing to 7.3%. To ensure further improvements, it is important to implement an appropriate balance of strategies to prevent and treat HIV/AIDS.

1.5 Health system organization

Uganda uses decentralized health system to deliver essential health services and ensure referral linkages. The health system is structured into national and regional referral hospitals, general hospital, Health Centre (HC) IVs, HC IIIs, HC IIs and Village Health Teams (HC Is). The health sector structure follows the administrative structure as indicated in the table 1 below.

Health unit	Physical structure	Location	Population covered
Health Centre I	None	Village	1,000
Health Centre II	Outpatient services only	Parish	5000
Health Centre III	Outpatient services, maternity, General Ward and laboratory	Sub-county	20,000
Health Centre IV	Outpatients, Wards, Theatre, Laboratory and blood transfusion	County	100,000
General Hospital	Hospital, laboratory and X- ray	District	500,000
Regional Referral Hospital	Specialists services	Regional	3,000,000
National Referral Hospital	Advanced Tertiary Care	National	10,000,000

Table 1. Health sector structure

Source- Uganda health sector strategic plan 2010-2015

2. Experiences of different countries in implementing community health programs

Human resources for health crisis is one of the factors underlying the poor performance of health systems to deliver effective, evidence-based interventions for priority health problems, and this crisis is more critical in developing countries. Participation of community health workers (CHWs) in the provision of primary health care has been promoted all over the world for several decades, and there is an amount of evidence showing that they can significantly add to the efforts of improving the health of the population, particularly in those settings with the highest shortage of skilled, motivated and capable health professionals.

With the overall aim of identifying countries experience in CHWs programs to contextualize and adapt in Uganda, desk review of experiences from Latin America (Brazil), South East Asia (Bangladesh) and sub-Saharan African (Kenya, Mail, Ethiopia, Malawi, and Uganda) countries was conducted. The focus was on key aspects of these programs, encompassing typology of CHWs, selection, training, supervision, incentives/motivation and impact of their services. Among countries reviewed detail literature review incorporated Ethiopian health extension program for the purpose of learning their context before, during and post implementation period. Ethiopia is one of countries with strong community based health program worthy to learn from and shares similarities with Uganda.

2.1 Experiences from Latin America

Community Health Agents Program of Brazil

In 1988 the Brazilian government launched the Unified Health System (Sistema Unico de Saúde), with the declared aim to provide universal health services to Brazilians, which evolved from primary health care initiative (community health agents' program) in the northeastern state of Ceará. The initial focus was on universal coverage but later on during 1990s, the program expanded its horizon into the Family Health Program (Programa Saúde da Família) that encompassed integrated components like promotion, preventive and curative services using a family health team of workers assigned to a specified geographic area. The standard team comprises of one physician, one nurse, nurse aides' and 4-6 community health workers.

Community health agents were responsible for home visits, in which they collect demographic, epidemiological and socioeconomic information of each family, promote healthy practices, and link families to health services. Their activities ensured the implementation of a community component in Integrated Management of Childhood Illness.

The CHWs were selected from the communities where the program is implemented and their selection was done by the program. Ninety Five percent of the CHWs are women and are supervised by a nurse who also works full-time in the basic health unit, as part of the family health team. The program uses a team approach for referrals of sick children. A unique operational aspect of the program is that CHWs are paid health professionals. The state government pays the salaries of CHWs on agreement that municipal governments provide salaries for nurse supervisors. The Brazilian Community Health workers Program is organized as follows

Education:	Primary School	
Training duration:	8 weeks residential course + 4 weeks field work	
Refresher:	Done Quarterly	
Supervision of CHWs: Done by Nurses		

Incentive: Regular salary

The Brazilian CHWs Program expanded dramatically from the 35 participating municipalities with 1500 CHWs when it was initiated in 1998 to 150 municipalities with 8000 CHWs trained and deployed in communities. The initiative was expanded to include 'the family health program', a team approach to primary health, and adopted at a national level. In 2001, there were 13,000 family health program teams covering 3,000 municipalities, with an estimated coverage of more than 25 million people. Currently there are more than 30,000 family health teams and more than 240,000 CHWs across the country, covering about half of the Brazilian population. The CHWs program activities include; vaccination, promotion of breastfeeding, increased use of oral rehydration salts, management of pneumonia and growth monitoring. The extended coverage of the Program has been associated with declines in the infant mortality rate.

2.2 Experience from south Asia

Bangladesh Nation-wide ShasthoShebika Program (BRAC)

The BRAC was formed in 1972 and has been supporting CHW program since 1977. The BRAC program has trained community health workers who are known as ShasthoShebika and are responsible for treating common diseases: anaemia, cold, diarrhoea, dysentery, fever, goiter, intestinal worms, ringworm, scabies and stomatitis. They sell medications for these ailments for a nominal fee. Each CHW is responsible for approximately 300 households and visits about 15 households each day. In addition to treating the common diseases and referring patients, the ShasthoShebika work in many different programs (treatment of tuberculosis cases through directly observed therapy, control of diarrheal disease, immunization, family planning and prevention of arsenic poisoning), encourage people to seek care at BRAC and government clinics, and assist at satellite clinics that focus on antenatal care and immunization

The ShasthoShebika comprised of women chosen by their communities and are members of the BRAC-sponsored village organizations. ShasthoShebikas are volunteers; they support themselves through the sale of commodities provided by BRAC, such as oral contraceptives, birth kits, iodized salt, condoms, essential medications, sanitary napkins and vegetable seeds. The ShasthoShebikas use a system of verbal referral of cases. The ShasthoShebikas program is organized as follows:

Education:	Few years of schooling
Training duration:	18 days basic and 3 days TB management training
Refresher:	One day each month
Supervision:	ShasthoKormi
Incentive:	money earned through sales of medication

BRAC has achieved extensive coverage and have been associated with marked improvements in women and children's health. Oral rehydration therapy was first used clinically for diarrhoeal illness in Bangladesh, and BRAC was the first organization to implement a community-based program promoting oral rehydration therapy on a wide scale. Reductions in neonatal, post-neonatal and infant mortality were observed after the introduction of the oral therapy extension program

2.3 Experiences from the Africa region

Village Drug Kits, Bouzouki, Mali

A village drug kit Program in southern Mali was implemented by the Malian government in 1990s in which village drug-kit managers were trained to manage a kit containing eye ointment, paracetamol, oral rehydration salts, alcohol, bandages, Chloroquine tablets and Chloroquine syrup. Anti-malarial treatment was given presumptively. In limited areas, zinc treatment for diarrhea was also distributed and sulfadoxine-pyrimethamine was provided as intermittent presumptive treatment for malaria in pregnant women.

The Village drug-kit managers are selected by the villages they serve, generally by a committee of village leaders. In the communities, the Village drug-kit managers counsel and manage the drug kit.

They are provided with visual aids to help them explain to caregivers how to administer Chloroquine to children in various age groups, and to describe symptoms, such as convulsions and difficulty in breathing that require immediate referral to a health facility. The village drug-kit program is organized as follows:

Education:	Usually illiterate
Training:	35 days literacy classes and one week malaria treatment classes
Refresher:	Once a month

An evaluation of this CHW initiative found that the drug kits were successful in increasing the availability of Chloroquine at the village level. In the household interviews with the parents, it was reported that 42% of children in the intervention group were referred to the community health center by the drug-kit managers as compared to 11% in the comparison group. This intervention is now implemented in all the village drug-kit programs established by Save the Children in collaboration with the local health services.

CARE Community Initiatives for Child Survival, Siaya, in Kenya

In 1995, CARE Kenya implemented the Community Initiatives for Child Survival in Siaya district which ended in 1999. In 2003, CARE commenced the second phase of the project with a wide-ranging intervention package aimed at improving child and maternal health in the Siaya district. Community health workers in this district were trained to treat many diseases in children by using simplified IMCI guidelines. Promotion of family planning, immunization and HIV/AIDS prevention were also included in the education package. The CHWs were assigned to 10 households each in their community. The

supply of drugs in this program was based on the Bamako Initiative. Community-based pharmacies were established to serve as resupply points for the CHWs' drug kits. The CHWs sell the drugs to community members and use monies from sales to buy more drugs to restock their kits in a revolving fund scheme

The CHWs were selected by the community and trained to use the guidelines to classify and treat malaria, pneumonia and diarrhea/dehydration and use flow charts to assist in the application of these algorithms. CHWs provided verbal referral, and the cases referred take the front of the queue to receive treatment at facilities. The Kenyan CHWs program is organized as follows;

Training duration: 3 weeks

Refresher: once every week

Supervision: by a field staff

Incentive: no incentives are paid to them

Every two years, the United States Center for Disease Control evaluates the performance of CHWs. The recent evaluation demonstrated that 85% of the cases that the CHWs treat were correctly classified as malaria, acute lower respiratory infection or diarrhoea. CHWs adequately treated 90.5 per cent of malaria cases, but they had difficulty in classifying and treating sick children with pneumonia. Four years after the implementation of the project, a reduction of 49% in the child mortality rate was noted.

Health Surveillance Assistants (HSAs) of Malawi

In Malawi, the Health Surveillance Assistants (HSAs) are the main professional CHWs. The HSA program was developed in response to Malawi's health workers insufficiency and is funded through a pooled funding mechanism known as a Sector-wide Approach (SWAP) which includes funding from the Ministry of Health, international donors, and NGOs. Malawi's HSA program coordinates the delivery of primary care services at the community level including services for environmental health, family planning, maternal and child health, HIV/AIDS, Integrated Management of Childhood Illness (IMCI), and sanitation. They HSAs don't always originate from the communities they serve and may not reside in their catchment area. The Malawian CHWs program is organized as follows:

Education: completed primary school *Training duration: 12 weeks Refresher:* two weeks *Supervision:* by Assistant Environmental Health Officer (AEHO) *Incentive:* paid regular salaries

As of 2013, there were more than 10,000 HSAs active in urban and rural areas of Malawi. Malawi has targeted a ratio of 1 HSA per 1,000 people, but the current ratio is closer to 1 per 1,200. Malawi is considered to be on track to reach MDG 4, and Malawi's HSA program has contributed to a significant drop in the country's child mortality rates. Under-five mortality rates have declined from 222 per 1000 live births in 1990 to 92 per 1000 live births in 2010. An assessment has shown that HSAs are able to treat sick children at a level of quality similar to the care provided in fixed facilities.

Village Health Teams - Uganda

In 2001, Uganda established the Village Health Teams (VHT) strategy as recommended in the Health Sector Strategy Plan I (UHSSP I) to bridge the gap and improve equity in access to health services at the community level. The VHTs were charged with the responsibilities to empower communities to take control of their own health and wellbeing and to participate actively in the management of the local health services. The decision to establish VHTs was in line with the Alma-Ata (1978) and the Ouagadougou (2008) declarations on Primary Health Care.

The VHTs are volunteers selected by their communities. The VHT strategy incorporates all the community health structures including community change agents, Community Drug Distributors, and Traditional Birth Attendants. The VHTs are involved in a number of activities including Maternal and Child Health, Integrated Community Case Management (ICCM), HIV/AIDS, TB, reproductive health, immunization, nutrition, and sanitation. Other activities significantly contributed to by the VHTs are health education, community mobilization, referrals, Rapid Diagnostic Testing for malaria, distribution of drugs, condoms, mosquito nets and linking communities to health facilities. Some reported achievements by the VHTs include; improvement in hygiene and sanitation, uptake of immunization, antenatal care and HIV services and reduction of some illnesses and deaths in the communities after the introduction of VHTs in the country. The VHT strategy is organized as follows:

Education:	Able to read and write
Training duration:	5-7 days
Refresher:	Ranging from 2-5 days, but not regulated
Incentive:	Varies from partner-to-partner and from activity-to-activity

According to the VHT assessment conducted in the country in 2014/15 there are a total of 179,175 village health team members working in 112 districts.

Health extension program, Ethiopia

Ethiopia is Located in the Horn of Africa, and covers an area of approximately 1.14 million square kilometers. With a population of 90 million people, Ethiopia is the second-most populous country in Africa. Before the 1990s, Ethiopia's health care delivery system was ineffective and inefficient, characterized by top heavy and uncoordinated planning and implementation. The health service system had eight specialized vertical programs, the programs were poorly integrated and lacked appropriate direction and management, leading to inefficiency and limited impact. The major health problems were dominated by preventable and communicable diseases, which constituted 60–80 percent of the disease burden. Aggravating this was the rapidly growing population and poor infrastructure, which had been crippled by the decades of war and neglect. The health institutions were few compared to the size of the population and ill-equipped and inequitably distributed. In 1994, roughly 50 percent of Ethiopia's health facilities were in urban areas with over 30 percent needing either major repair or replacement.

The health sector was poorly financed and had the following characteristics: The sector's share of government expenditures was less than 5 percent (under 2 percent of the Gross Domestic Product),

curative care dominated most health spending as demonstrated by the allocation of a significant proportion of the health budget to hospitals in the capital, the cost recovery (user fees) system was ad hoc and grossly inefficient and misused. The sector was further characterized by an acute and chronic shortage of human resources coupled with poor community and private sector participation in service delivery and management. The pattern of distribution of human resources for health was skewed toward urban centers, following the distribution of health facilities. Voluntary community health workers of different types were introduced in the mid-1990s to deliver health promotion and prevention services and commodities, such as antenatal care, contraceptives, and delivery services. These workers included community health agents, community-based reproductive health agents, and trained traditional birth attendants. However, the functionality and sustainability of these arrangements proved to be unsatisfactory due to their voluntary nature and the poor ownership of the lower levels of the government structures.

In 1993 the government published the country's first health policy in 50 years, articulating a vision for the health care sector development. The policy fully reorganized the health services delivery system as contributing positively to the country's overall socioeconomic development efforts. Its major themes focus on:

- Democratization and decentralization of health system;
- Expanding the primary health care system and emphasizing preventive, promotional, and basic curative health services; and
- Encouraging partnerships and the participation of the community and nongovernmental actors.

In pursuit of the health policy goals of improving the health status of the Ethiopian population and to implement the health policy, a Health Sector Development Program (HSDP) was developed every five years beginning in 1997/98. HSDP II included a strategy, called the Health Extension Program (HEP), for scaling up an institutionalized primary health care system. HEP was piloted and scaled up in 2005.

The HEP implementation tools were defined and covered a package of health care interventions, delivery mechanisms, and human resource development. These tools also outlined the roles and responsibilities of the various health sector actors. HEP is premised on the belief that access and quality of primary health care for rural communities can be improved through the transfer of health knowledge and skills to households. HEP aims to improve primary health services in rural areas through an innovative community based approach that focuses on prevention, healthy living, and basic curative care. Health extension workers (HEWs) are recruited based on nationally agreed-upon criteria that include residence in the village, knowledge of the local language, graduation from 10th grade, and willingness to go back to the village and serve the community. Two female trainees from the community are admitted to technical, vocational, and educational training institutions with a short practical training in health centers; the training lasts a year. After graduation, HEWs are assigned to the village from which they came to provide HEP health services. The local government pays their salary. The design of the package of HEW health interventions was based on an analysis of major disease burdens for most of the population. The package consists of 16 health interventions from the four major categories i.e., family health, disease prevention and control, personal and environmental hygiene, and health education.

The HEP has significantly corrected the skewed distribution of health facilities and human resources. In five years, Ethiopia's human resources for health doubled as a result of the deployment of more than 34,000 HEWs. A 2010 study indicated that about 92 percent of households were within an hour's

(5 km) distance from a health facility. HEP has enabled Ethiopia to increase primary health care coverage from 76.9 percent in 2005 to 98 percent in 2015

Since its rollout, the HEP has shown substantial outcomes in areas related to disease prevention, family health, hygiene, and environmental sanitation. A case control study conducted in HEP and non-HEP villages during the introduction of the program between 2005 and 2007 indicated that the proportion of households with access to improved sanitation reached 76 percent in the intervention villages (from 39 percent at baseline). In contrast, access to improved sanitation in the control villages increased from 27 percent at baseline to just 36 percent during the follow- up survey period. Awareness of HIV/AIDS also improved, with the level of knowledge of condoms as a means of preventing HIV increasing by 78 percent in HEP villages and 46 in control villages. The increase in the use of any contraceptive method among currently married women was also higher in HEP villages (where it rose from 31 percent to 46 percent) than in control villages (where it rose from 30 percent to 34 percent). A case control study indicates that from roughly similar levels of coverage at baseline, ownership of nets increased more in HEP villages (87 percent) than in control villages (62 percent) during the follow-up period. Residents in HEP and control villages showed a marked difference in seeking treatment for malaria. In HEP villages, about 53 percent of patients with fever or malaria sought treatment with anti-malaria drugs the day of or the day after the onset of symptoms. In control villages, only 20 percent of patients sought treatment under similar conditions.

Although it is difficult to attribute improvements in health care directly to the rollout of the HEP, between 1990 and 2015, under-five mortality decreased from 184, per 1,000 live births to 67 per 1,000 live births and achieved MDG 4 target three years earlier. The achievements in child health are mostly attributable to large scale implementation of promotive, preventive and curative primary health care interventions. These include ICCM, prevention and management of malaria (under 5 children sleeping under insecticide treated nets (ITN) with indoor residual spray (IRS) of houses in endemic areas and community based nutrition programs. The dramatic increase in immunization coverage has also significantly decreased fatalities associated with vaccine preventable diseases. According to UN estimates, Ethiopia has so far reduced maternal mortality by 69% from the 1990s estimate with annual reduction rate of 5% or more. According to the latest UN estimate, the proportion of mothers dying per 100,000 live births has declined from 1400 in 1990 to 420 in 2013.

The trend in the last two decades was for Ethiopian women to give birth to an average of seven children in their lifetime (Total fertility rate). According to the recent Mini-EDHS 2014, the average total fertility among Ethiopian women has reduced to 4.1 and the contraceptive prevalence rate increased from 8.1% to 41.8%. The prevalence of anemia among Ethiopian women aged 15 – 49 years has declined from 27% in 2005 to 17% in 2011. Stunting in under-five children declined from 58 percent to 40 percent and use of insecticide-treated nets increased from 1.3 percent to 42 percent. According to the HIV related estimates and projections for Ethiopia, the adult HIV prevalence is estimated at 1.2% (0.8% in males and 1.6% in females) and the adult HIV incidence stood at 0.03% in 2014. This indicates that Ethiopia has achieved the MDG target of halting and reversing the epidemic well ahead of time by reducing HIV new infection by 90% and mortality by more than 50% among adults in the last decade. Ethiopia is one of the few sub-Saharan African countries with a rapid decline" of HIV burden, with a reduction by 50% of new HIV infections among children between 2009 and 2012.

Lessons Learned from Ethiopia

HEP was initiated in response to a health system that was centralized, urban biased, inefficient, and poorly aligned with the country's major public health problems. Before HEP, the system also suffered from weak infrastructure and insufficient human resources and financing, along with a lack of community participation. Primary health care was poorly institutionalized, relying heavily on voluntary community-based workers who proved to be dysfunctional and unsustainable. The following are factors that have contributed to the success of HEP and that can improve the performance of this program and inform the replication of similar programs.

1. Ownership and Leadership by the Government and Local Communities

HEP is a product of government ownership and leadership. The program has been made part of the government development agenda at all levels. The roles and responsibilities of the FMOH, local governments, and communities are clearly defined and regularly monitored. Beneficiary communities are involved at all stages. The village community is in charge of providing material and labor support for the construction and maintenance of health posts; participating in health promotion campaigns such as clearing malaria breeding sites; and, most importantly, facilitating the work of HEWs. HEWs have a presence on village councils. The district administration is expected to secure a budget for HEP, including salaries for HEWs, and to facilitate the planning and monitoring of HEWs.

2. Relevance, flexibility and adaptability of HEP to various contexts.

In selecting, designing, and implementing a national program such as HEP, it is important to give attention to technical relevance and cultural sensitivities. To this end, the health interventions were selected based on their relevance and effectiveness in reversing major public health problems in the country as well as the ease of delivering them at low-cost through the deployment of HEWs. To avoid a one-size-fits-all approach, three versions of HEP were designed to tailor the interventions and mode of delivery to the various settings (agrarian, urban, and pastoralist).

3. Capacity Building and System wide Support

3.1 Innovative training strategy

Training more than 38,000 health extension workers could not have been done through traditional means. Innovative approaches were applied through the use of existing technical and vocational education training (TVET) for theoretical training and health centers for practical training. The Federal MOH provided training materials; regional health bureaus provided the stipend and transportation services for the students. Health extension workers must complete a 12-month course of theoretical and field training. One-quarter of the period is allocated to theoretical teaching at TVET institutions; three-quarters of the period is spent in a practicum in the community. HEP has been central to health system strengthening, including providing standards and manuals, regular evaluation of the program, in-service trainings focused on identified skills gaps, and supportive supervision. Defining the HEP management structure is crucial to motivate and retain this massive health workforce. A systematic upgrading of the skills as well as the management of the HEWs began through regular evaluation of their performance and identification of gaps. Continuously HEWs receives integrated refreshed inservice training to strengthen their capacity.

3.2 Infrastructure

One of the components of the sector strategy was the construction and rehabilitation of health facilities. To date more than 16,000 health posts manned by HEWs have been constructed

3.3 Accountability structure for health extension workers

A supportive accountability mechanism was established to support health extension workers. Supervisors were trained and deployed in 3,200 health centers. Each supervisor supports 10 health extension workers in 5 satellite health posts, which together form a primary health care unit.

3.4 Adequate supplies and equipment

Ensuring continuous logistics supply, contraceptives, vaccines, insecticide-treated nets, delivery kits, and so forth is a crucial area of support to health extension workers

3.5 Information systems

Information systems that facilitate the collection, analysis, use, and dissemination of data were perceived as significantly improving the support provided to the HEP as well as the quality and relevance of the HEP to beneficiary communities. Accordingly, the FMOH designed a robust, simplified, and standardized health management information system contextualized to the Ethiopian setting. Family folders were developed based on the 16 packages of health interventions, and health extension workers and HEP supervisors were trained on the system's application and use. Each household has a family folder that records the status of its members (for family planning, antenatal care, expanded program of immunization, and so forth) and the household in general (ownership and use of a latrine, clean water supply and use, waste disposal, and so forth) in terms of completing the desired changes indicated in the HEP. The Ministry of Health does the printing of the family folders to ensure that all households in Ethiopia have a formal medical record.

4. Stronger Partnerships and Greater Investment in Health

As a flagship of the HSDP, HEP is considered the major vehicle for delivering primary health care to the community. The priority health interventions have been made part of the HEP package of interventions. Accordingly, as part of the National Health Sector Strategy, the government called for alignment of community-based health services with HEP. Development partners have aligned around the national health strategy during HEP implementation. Significant resources have been channeled from the partners to pay for medical equipment, drugs, supplies, and pre- and in-service training and teaching materials. The partners have also contributed technically and financially to the distribution of commodities and continuous evaluation of HEP to provide evidence for improving program implementation. Local governments (regions, zones, and districts) took responsibility for covering the full cost of constructing health posts and fully paying the salaries of health extension workers

5. Mobilizing financial support from development partners

The progressive increase in domestic resource allocation to priorities was key to ensuring sustainability. With regard to the HEP, an agreement was reached between FMOH and regional health bureaus under which the ministry mobilizes funds from development partners to provide support to the

TVET institutions for printing the HEP training manuals and tools and for procuring and distributing medical equipment, insecticide-treated nets, contraceptives, and other supplies; subnational governments allocate domestic resources for stipends to health extension workers during training, pay their full salary on deployment, and cover the costs of building the health posts.

In conclusion Ethiopia's HEP implemented since 2005 and has shown tangible positive impacts on community health, in disease prevention, family health, and environmental hygiene and sanitation. The government has made HEP the foundation of the country's emerging new health system and local government and community participation is gaining momentum. HEP demonstrates that instead of sticking to traditional health provider and medication-oriented models, context-sensitive and affordable functional models and approaches could be developed to expand primary health care services. With strong political will and a sense of purpose, low income countries can replicate and use this innovative approach to achieve universal coverage of primary health care.

Lessons learnt and conclusions from different countries experiences

Evidence shows that human resources drives health system performances. Throughout history, periods of acceleration in health achievements have been sparked by popular mobilization of workers in the societies. Higher worker density and better work quality improve population based health and survival indicators. A lot of similarities are found across CHWs programs with very few differences which exist to meet a country's specific targets and goals. According to the evidence on functionality of CHWs program; CHW should be selected from the communities and preferably by their own community members. Apart from these characteristics, CHWs in all these programs are also scrutinized on their age limits, sex, marital status and occupational status taking into considerations their culture and social values.

The literature also shows that merely being a person from community is not enough to ensure that they can create an impact on the health and social wellbeing of communities, education has its own imperative effects. The educated person gives responsible direction to the community and at the same time has his/her own social standing and respect in community, which makes his/her role easy in imparting knowledge and bringing up healthy modifications in attitudes and practices.

Training is the most crucial element in the implementation of the CHWs program. This is the phase where the much touted transfer of knowledge from professionals to community representatives takes place. Though universal guidelines for the extent of training are not laid down but it ought to be extensive, thorough and complete which should always be appraised by the exam or viva, so that it ensures their competency in working with the communities. For a CHWs program to be effective, investment in provision of proper supervision, equipment and supplies, and linkages with health system is required to complement their training. Supervision has proven to be effective in improving the impact of CHWs driven interventions. The services from CHWs with proper skills and handful supplies can be further enhanced if they work hand to hand with formal health system. The role of CHWs in the community would be incomplete if they work in isolation, without creating a link with health care system.

Key functional areas for CHWs activities include creation of effective linkages between communities and the health care system, where they can refer cases. One of the most critical problems for CHW programs is the high rate of attrition which leads to a lack of continuity in the relationship between a CHW and community, and increases costs of selecting and training new CHWs. Indeed, the effectiveness of CHW's work usually depends on their retention. Apart from monetary rewards, in countries where CHWs are volunteers, they are given non-monetary rewards in terms of career advancement, and recognition and rewards for their services.

The countries from South Asia, Sub Saharan Africa, and Latin America that have been reviewed have surely achieved impressive health and social gains from their CHWs programs. However, these achievements are not exempt of challenges and difficulties.

- Most of the programs have shortages of medical equipment for patient examination, and essential supplies useful for promotive, preventive and curative health services.
- Lack of opportunities for upgrading, training and refresher courses on relevant areas.
- Lack of promotion, and professional advancement
- The curriculum and the modules for CHWs training needs to be revised according to country specific goals and targets. Also the curriculum may have more time for theory than the practical skills needed for hands-on practice.
- Countries often report deficiencies in the practical training of CHWs particularly on skilled delivery and key clinical skills due to limited facilities for large numbers of trainees.
- In some countries, CHWs are expelled on migrating to another area different from where they are deployed. In order to overcome such issues, guidelines need to be clear from the outset regarding deployment, transfers, leave of absence, and career structure.
- Some CHWs programs do not have clearly instituted documentation and reporting system.
- Weak referral system and linkage with the formal health system, limited capacity of health systems to effectively provide support from the higher levels to the CHW program creates a big challenge. The necessary working and living conditions for CHWs are not created in most of the cases which is compounded by poor communication and transportation system and long distances from health centers.

In conclusion commitment from Government to allocate adequate resources to support the training, procurement of supplies and equipment, pay salaries and conduct regular supportive supervision is paramount to the success of any CHWs program.

3. The CHEW Strategy

3.1 Priority issue and challenges in Uganda village health team strategy

In 2014/2015 a nationwide VHTs assessment was conducted in 112 districts to determine the functionality and sustainability of the strategy towards achieving universal primary health coverage in Uganda. The assessment outlined major gaps in the implementation of VHT strategy. The gaps relate to composition of VHTs, training, retention and motivation, coordination, partnership and inter sectorial collaboration, supervision, referral linkage, political commitment and community perceptions. In addition to this the assessment recommended the need to redesign the VHT strategy to make it more functional, sustainable and responsive to the health services delivery system.

Table 2 below summarizes the key finding of VHT assessment.

Summary of findings of VHTs strategy implementation in Uganda		
Functionality criteria	Assessment Finding	
Recruitment	• The VHTs ages range from 18 years to 78 years. It was found that the VHTs aged 50 and above have inefficiencies in report writing and swift movement during mobilization activities.	
	• The educational status of VHTs ranged from the illiterate up to tertiary level. The engagement of illiterate people in the VHTs program create a challenge to provision of quality health service	
	• 10% of the VHTs were not selected by their communities, but by community leaders and NGOs, while others joined on their own.	
	• Some VHTs were found to be employed by NGOs; some are students while others are local council members which is inconsistent with the VHT selection guidelines	
Initial/ basic Training	 30% of the 179,175 VHTs in Uganda did not undergo the basic training and yet they are working as VHTs. Some VHTs could not remember or did not know if they had received initial training. 	

	 The duration of the VHT Basic training was reduced from 14 days to between five – seven days due to financial limitations, but the curriculum was not adjusted to fit in this short time. The 5-7 days training of VHTs is inadequate to equip them with appropriate knowledge and skills needed to promote all health programs and as well as to provide quality services to the communities. Due to resource constraints, supervision has not been adequately done to ensure that training is the same across the board for all VHTs. It was also noted that there are no training databases for the VHTs in the districts as well as at the national level.
Ongoing/ refresher Training	• Program specific trainings have been conducted by various implementing partners. These trainings lasted for 2-5 days, but are not harmonized in terms of standardized materials, content, duration and methods. In addition, the trainings were not uniform.
Supervision	• In general, supportive supervision was inadequate across all levels. Supervision of the VHTs activities was hampered by lack of resources including funds, transport and technical capacity for supervision.
Program performance evaluation	• No general performance evaluation conducted to demonstrate the contribution of the VHTs to health improvements
Incentives	• Although the MoH and Partners provided different kinds of motivation, there is no system for tracking the different incentive packages and support given to the VHTs. The various motivation approaches were not uniform thus creating disharmony at the district level and among the VHTs.
Referral System	• Most of the VHTs referred clients to health facilities. However, most health workers never respected referrals made by VHTs because they are not part of the formal health care delivery system and are considered people of low education who are not

Professional Advancement	 competent in disease management. No system in place for professional advancement for the VHTs
Documentation and information system	• VHTs reporting took place based on availability of tools and priorities of implementing partners. The inadequate reporting tools, existence of various implementing partners and reporting formats coupled with low education level of some VHTs resulted in irregularity and poor quality reporting
Coordination	• Poor coordination of implementing partners created a problem in supervision of the program and eventually in sustainability when the partners' projects end.

Discussion and conclusion of VHT assessment

Based on the findings of VHT assessment and the gaps identified in the existing VHT strategy and the services rendered, various recommendations are made regarding their recruitment criteria, ongoing and refresher training, supervision, incentives and professional advancement. Weaknesses that are boldly cited in the national VHT assessment include insufficiency and inconsistencies in program funding, poor supervision, lack of equipment and supplies, poor documentation and reporting, weak referral system and linkage with the health system, lack of community involvement, insufficient initial and continuing education, lack of standardized incentive mechanisms and career enhancement opportunities.

The national VHT assessment identified low educational levels of VHTs as a main factor that hindering their performance and this is similar with the findings of other studies. Setting up stringent post-primary or secondary education criteria as a pre-requisite for becoming a community health worker does not sound practical when it comes to meeting the health care needs of less privileged communities far removed from health care facilities. However, higher education levels at recruitment promotes quick competency development, improves proper documentation, referrals and records keeping of the supplies. Moreover, CHWs who are involved in case management should be strictly scrutinize for their education level.

Issues such as the reliable provision of transport, drug supplies and equipment have been identified as another weak link in VHTs effectiveness. The result is not only that they cannot do their job properly, but also that their standing in communities is undermined. Failure to meet the expectations of the populations, with regard to supplies, destroys their image and credibility. CHWs should always be posted in the areas that they belong to so as to assure maximum local engagement and ownership. It is widely acknowledged and emphasized in the literature that the success of CHW programs hinges on regular and reliable support and supervision. The CHW programs without supervision system have shown gaps in program functionality in terms of inadequate documentation and linkages with overall health system.

Much of the literature as well as VHT strategy tends to imply that volunteers are the ideal to which most CHW schemes aspire, and assumes that there is a sufficient pool of willingness to conduct voluntary social service in rural areas and informal settlements. However, the reality is different, probably in acknowledging the fact that most CHWs are poor people, living in poor communities and do require income. Evidence shows that most programs pay their CHWs either a salary or an allowance. Moreover, control on attrition and demand for accountability can be achieved with regular performance based financial incentives and recruiting CHWs as full time employees rather than part time volunteers. They should also be given a wage if they work as full time, and those working as part time should be given incentives for their work. It is recommended that CHWs be paid adequate wages commensurate with their work load and time they put in.

It is necessary to keep up with the changing demands of the health care needs of community in terms of both supplies and services. Moreover, the effect of the additional workload on the trained CHWs also need to be monitored, to ensure that they are not being overburdened and that there is no detrimental effect on the provision and supervision of services to the community. As such both external and internal evaluations need to be carried out on regular basis to improve the services and analyze the need of various logistics, supplies and training according to the requirements. It is recommended that programs should evaluate their own performance on annual basis, while a third party evaluation could be recommended in every 4-5 years, which would generate a neutral findings.

The attitudes and interactions of health personnel in the formal health services with CHWs have an immediate impact on critical aspects of CHW program management, such as selection, continuing training and supervision. In the findings of national VHT assessment, health care personnel who come into contact with VHTs are not involved in the planning, implementation, monitoring and evaluation of such programs. Furthermore, many health personnel lack the background and orientation to provide a supportive environment for VHTs. A proper linkage is required to be created with health system right from the planning of introducing the CHW program to the actual implementation of the program. CHWs should be properly linked to how referral of cases to health facilities and the documentation should be done to prevent duplication in reporting.

CHWs should be recruited for training on the basis of standard and transparent criteria for selection. Since being a resident of a locality is an important criterion for selection, evidence confirming this must be assessed, followed by confirmation of their educational certificates. Because of the low level of education of CHWs programs often develop or adapt training materials and activities specifically for CHWs rather than using training packages developed for facility-based workers. Furthermore, continuing or refresher training is as important as initial training. If regular refresher training is not available, acquired skills and knowledge are quickly lost. Looking at the diversity of interventions CHWs deliver in community, they should be provided with at least 6 months of classroom training and another 6 months hands-on-training. In addition, it is advisable to plan for professional advancement pathways for CHWs to ensure continued interest and enthusiasm

In conclusion evidences confirmed that CHWs intervention or program is considered successful if, it addresses diseases of public health importance; is owned and financed by the government (to ensure sustainability); fits into the country's conventional health system without creating parallel structures; is flexible enough to be applied in different socioeconomic, cultural, and geographic settings; is embraced and supported by development partners, nongovernmental organizations, and other stakeholders; is delivered at low cost and shows concrete results in terms of improving health outcomes.

3.2 Rationale for establishing Community Health Extension Workers (CHEWs) Program

The use of community health workers to increase the reach of health services has been part of various health programs in both developed and developing countries since the 1970s. As more countries face critical health workforce shortages, increased involvement of community health workers as a strategy to address the human resource gaps became more apparent. There have been many experiences throughout the world with community health programs ranging from large scale, national programs to small-scale community-based initiatives. The roles and activities of community health extension workers are enormously diverse throughout their history, within and across countries and programs. CHEW programs have a role to play that can be fulfilled neither by formal health services nor by communities alone. Ideally, the CHEW combines service and developmental functions that are not just in the field of health. The most important developmental or promotional role of the CHEW is to act as a bridge between the community and the formal health services in all aspects of health development. The bridging activities of CHEWs provide opportunities to increase both the effectiveness of curative and preventive services and more importantly, promotes community management and ownership of health-related programs.

CHEWs may be the only feasible and acceptable link between the health sector and the community that can be developed to meet the goal of improved health in the near term. The CHEW is expected to perform a wide range of functions, which includes: home visits, environmental sanitation, safe water usage, first aid and treatment of simple and common ailments, health and nutrition education, disease surveillance, maternal and child health and family planning activities, communicable disease control, community development activities, referrals, record-keeping, and collection of data on vital events. Services provided by community health extension workers are expected to be more appropriate to the health needs of populations than those of clinic-based services, to be less expensive and to foster self-reliance and local participation. Furthermore, CHEWs are more accessible and acceptable to clients in their communities. Particularly the CHEWs will increase utilization of available health services by poorer and more rural individuals and households. In short, the CHEWs programme improves the cost-effectiveness of health care systems by reaching large numbers of previously underserved populations with high-impact basic services at low cost.

The VHT Strategy implemented in Uganda since 2001 was intended to: empower communities to participate in their own health; strengthen the delivery of health services at both community and household level and as a means to realize the Alma Ata declaration. Despite the fact that the VHT strategy seemingly had a strong potential to improve community health, the key health indicators at the community level remained largely poor throughout the country.

The VHT programme has proved to be unsustainable over a long period of time since it has been hinged on volunteerism as the main pillar. For it to be effective, the provision of community health services often requires full-time engagement which therefore cannot be cost free. Given the present pressures on health systems and their proven inability to respond timely and adequately, the existing evidence overwhelmingly suggests that developing countries like Uganda should establish an effective CHEW programs. It should be noted though that CHEW programmes are not cheap or easy to establish, but are nonetheless a good investment. Community Health Extension Workers undertake actions that lead to improved health outcomes if they are carefully selected, appropriately trained and equipped with adequate and continuous support. It requires total commitment from political leadership and a substantial and consistent financial, technical and material support.

In conclusion, with political will, the government of Uganda can adopt a more flexible approach by planning CHEWs program within the context of the overall health sector activities rather than as a separate activity. The successful implementation of the strategy will contribute to improved health outcomes on major health intervention (Maternal and Child health, Major communicable and non-communicable diseases, Nutrition, Hygiene and Sanitation). The strategy is in line with HSDP and is meant to provide a framework for strategic partnerships for increased investments for community health program. The strategy will be implemented over a period of five years form 2016/17 to 2020/21.

Vision, Mission, Goal, Guiding Principles and Core Values

3.3) Vision

A healthy and productive community that actively participates in promoting their own health

3.4) Mission

To establish an effective and sustainable community health structure that empowers communities to take responsibility for improving their own health for wealth creation.

3.5) Goal

To establish and strengthen community health workers program as part of the national health system in order to bring services closer to the community and ensure equitable distribution of community and household centered health care services

3.6) Guiding principles

Integration: The CHEWs will be the focal point for community mobilization to access and utilize available health services holistically.

Equity and universal access to health: The activities of CHEWs will benefit all members of the community with special focus on the poor, vulnerable, most at risk, disabled and the hard to reach populations.

Honesty and social-accountability: The CHEWs will perform their roles in a transparent manner at all times addressing the needs of the local population. In executing their duties, the CHEWs will be the link between the communities and the health care system and will be accountable to both parties.

Human Rights: The CHEW strategy will use the Human Rights based approach to promoting health.

Gender equity: The CHEWs strategy will be responsive to equal opportunity in accessing and utilizing the available health services. The CHEWs will also encourage active participation of males and females in discussing the issues that affect their health with the view of coming up with solutions. **Ownership and Sustainability:** The CHEWs strategy will actively promote community participation

and involvement in planning, delivery, utilization and ownership of health services.

Evidence based/interventions: The operation of CHEWs program will be based on scientifically proven evidence.

3.7) Core values

Equity: The CHEW program shall ensure equal access to quality care according to needs for individuals with the same health conditions

Accountability: At the various levels of implementation, a high level of efficiency and accountability shall be maintained. The program will be accountable for its performance to clients' communities as well as to political and administrative system

Stewardship: The program will strengthen governance and supervision at the national, district, and community levels in order to harness their contribution to the performance of the program

Community ownership: Communities shall be empowered to own and influence the operation of the CHEW program through their participation in selection of CHEWs and provision of feedback about the program

Honesty and Transparency: The program will be guided by adherence to the set implementation guidelines and honest reporting of outputs of the program

3.8 Objectives

General Objective

To establish an adequate and competent Community Health Extension Workers (CHEWs) for equitable delivery of quality, preventive, promotive and selected basic curative health services at the community level.

Specific objectives

- 1. To initiate and strengthen the training, motivation and performance management of community health extension workers
- 2. To develop the governance and leadership of Community Health Extension Workers in line with the decentralized health care delivery
- 3. To mobilize financial resources for implementation of the Community Health Extension Workers Strategy
- 4. To improve community participation, engagement and ownership of community health programs
- 5. To develop a framework for monitoring and evaluating the CHEWs performance

3.9 Objectives description

1. To initiate and strengthen the training, motivation and performance management of community health extension workers

This strategic objective entails: leadership development, planning, training, refresher training and continuous development and management of the CHEWs including recruitment, retention and performance management. The desired outcome of the strategic objective is an adequately trained, motivated and committed CHEWs ready to work and stay in a sector.

Selection criteria for CHEWs training

The CHEWs will be identified and nominated by their communities. The following criteria will be used to select the CHEWs candidates for training:

- a) Citizen of Uganda
- b) Resident of the parish and willing to work in that parish
- c) 18-35 years old
- d) Have a minimum of Uganda Certificate of Education (Ordinary level)
- e) Be able to communicate in the local language and English

Selection

District health office will coordinate the overall selection process. Primarily the community will recommend two potential CHEW candidates among whom one will be male and the other one female. The final selection and approval will be performed by the district health office using predefined criteria.

Training

The overall training period for the CHEWs will be for 12 months (with a 1 month holiday in between). The training will include various approaches among which are; theoretical, practical, field visits and community attachments. Half of the training period will be devoted for theoretical sessions and the rest for practical sessions. Training centers will be identified and accredited.

The curriculum and training materials (manuals and guidelines) will be developed and master trainers will be trained and these will be selected from government and non-governmental organizations. The master trainers will conduct a 3 week Training – of - Trainers for selected CHEWs tutors. The CHEWs will be trained on the following packages.

- 1. Human anatomy and physiology
- 2. Family and reproductive health service
- 3. Hygiene and environmental health
- 4. Communicable disease prevention and control
- 5. Non -communicable disease prevention and control
- 6. Health promotion, education and communication
- 7. Community health service management
- 8. First aid
- 9. Disaster and risk management

10. Vital Statistics and Data management

A total of 15,000 CHEWs will be trained and deployed over a period of four years. The training of CHEWs will be conducted in a phased manner beginning in the first year with 10%, second year 20%, third year 40% and fourth year 30%

Table 3:	Schedule for the CHEWs Training
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		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Number of trainees	CHEWS	1500	3000	6000	4500

Award

On completion of the basic training, the successful trainees will be awarded a certificate in community health extension practice

Deployment

After completing the basic training CHEWs trainees will be certified as community health workers and will be deployed back to their parishes to serve their communities. Each CHEW will be expected to serve a population of about 2,500 people or 500 households. The CHEWs will not be transferrable from one parish to another.

Continued professional development for the CHEWs

A series of needs based integrated refresher course (IRC) will be conducted to ensure quality improvement in the service delivery as well as to increase the CHEWs knowledge, skills on the services they provide to communities and households. The aim of IRC will be to provide a frame work for harmonized community based interventions and standardized methods to train CHEWs, CHEWs supervisors and community health volunteers in an integrated, cost effective and sustainable way. The IRC will be conducted every two years and each integrated refresher course will last one month.

Motivation and retention

Government will employ the CHEWs and they will receive a salary. In addition an incentive package which includes standardized financial and non- financial packages to motivate and retain them will be put in place. MOH and partners will examine the existing incentive packages and guidelines and agree on the appropriate package. To monitor each CHEWs performance; regular individual performance evaluation will be conducted annually based on agreed plan and evaluation tool. A feedback mechanism and reward system will be based on individual CHEWs performance. After the basic training, a career path will be designed to enable the CHWEs to upgrade. Professional enhancement of the CHEWs will not only improve their competency towards better achievement, but also empower, motivate and have them committed to their work.

2. To develop the governance and leadership of Community Health Extension Workers in

Uganda in line with the decentralized health care delivery

This strategic objective refers to planning, monitoring, evaluation and partnership in the implementation of CHEWs strategy and also incorporates effective resource allocation and leadership development for CHEWs program within the sector. The desired outcome of the objective is an effective governance, leadership and management of the program that ensures that community institutions are transparent and accountable.

A CHEW Division will be created in the Department of Community Health at the Ministry of Health, headed by an Assistant Commissioner, who will also serve as the CHEW program coordinator. The CHEW division will have principal and senior officers in charge of training, monitoring and supervision, information systems management (MIS, HMIS), logistics and operations as well as a team of support staff.

To provide quality service and win community trust and satisfaction as well as engage the community in CHEWs interventions, health centre II will be equipped with the following equipment and supplies shown in table below

Service area	Furniture and equipment		
ANC and delivery	Adult weighing scale, ANC kit, Blood pressure apparatus,		
Child care	Baby weighing scale, Measuring tap, Measuring board Graduated measuring jar, Spoons,		
Immunization	Cool box , Ice box		
First aid care	Gowns, Examination bed, Stretcher, Stethoscope, Thermometer		
Health centre II essential medicines			
Service areas	Essential medicines		
Antimalarial Drugs	Coartem(ACT),		
Diarrhoeal control	ORS, Zinc		
Pneumonia treatment	Amoxacilin, rapid breathing count		
Contraceptives	Short acting contraceptives		
Micronutrient Supplementation	Iron Tablet , Folic Acid, Vitamin A Capsule		
Others	Analgesics - Aspirin/Paracetamol, 1% tetracycline eye		

Table 4. Basic Equipment and Supplies at the Health centre II for the CHEWs to use

	ointment,
Health Centre II General supplies	
	AD Syringes and needles, Mixing Syringes, Syringes and needles, Gloves, Gauze, Alcohol, Savlon, Iodine, Gentian Violet, Disinfectants, Cord ligatures (Ties), RDT for Malaria, Condoms

To provide continuity of care in the health system, the CHEW will screen patients who need treatment beyond first aid and refer them to the health center III or the nearest available health facility with trained professionals. The CHEW will also help to follow up patients in the community on long term treatment such as HIV/AIDS, TB, and Non Communicable Diseases and link them to the health facility.

To enhance partnership, MoH will bring together key actors in the sector to harmonize and align their actions and procedures with the country CHEW strategy. MOH will establish CHEWs national coordination committee

3. Mobilize financial resources for implementation of the Community Health Extension Workers Strategy

This strategic objective includes a proactive approach in the mobilization of resources from domestic and international sources through; active negotiation at all levels of administration in order to increase government allocation to CHEWs strategy, strengthening international health partnership, publicprivate partnership, and maximizing collaboration with national and international civic society organizations and NGOs. The capacity for management at all levels will be built to develop evidence based plans to enable health managers use evidences for active negotiation with government to increase allocation to the health sector. To increase resources mobilized from domestic sources different innovative financing mechanisms will be put in place. The management and utilization of the resources for the CHEWs programme will be in line with the existing government financial management system

4. To improve community participation, engagement and ownership on health

This involves creating awareness, transferring knowledge and skills to communities, and ensuring their participation and engagement in planning, implementation, monitoring and evaluation of health activities to be able to produce their own health. This will be accomplished through strong social mobilization and the model households' approach which will be the key strategy for scaling up improvement in health in the families.

The model household approach

The Model household approach is a means of enabling and empowering selected households with hygiene and environmental sanitation, family and reproductive health, communicable and non-communicable disease prevention and control practices so that the model households are able to influence their communities to adopt the same practice. Training of model households is one of the CHEWs important strategies, and is adapted from the mass communication/diffusion of innovation theory. The basic philosophy of the community health workers program is to transfer ownership and

responsibility for maintaining health to individual households through transfer of health knowledge and skills. Community health extension workers will engage 60 percent of their time visiting families in their homes and performing outreach activities in the community. The house-to-house activity starts by identifying households to serve as role models. The households to be chosen would have earned the respect and credibility of the community because of their extraordinary performance in other social aspects, like agricultural production. They should be willing to change and, upon completion of the training, are able to persuade and convince other households to follow appropriate health practices. The model households are considered early adopters of health practices in line with heath extension packages. They help diffuse health messages, leading to the adoption of the desired practices and behaviors by the rest of the community.

To become model households, household members need to take training on the model family package. When implementing the training, priority is given to activities that are easy and inexpensive to implement, and activities that are not contradictory to the community's values. Two community health extension workers with VHT and other volunteers are expected to train about 60 model households a year. The training lasts 96 hours, after which the household "graduates" receive a certificate as recognition. The following are some of the parameters to be fulfilled in order for a household to graduate as a model household.

Maternal and Child Health

- ✤ All infants less than one year should be fully vaccinated
- Exclusive breastfeeding of newborns for six months
- Proper infant and child feeding
- Growth monitoring of all children under two years of age
- Women and girls in the household above 15 years vaccinated for tetanus
- Knowledgeable in family planning or uses of family planning methods
- Seeking urgent medical care for sick mothers and children
- ♦ Use of ORS for children with diarrhoea and providing them with adequate liquid food
- Prevention of harmful traditional practices
- Pregnant women attend four ante-natal care visits
- ✤ Women are assisted by skilled birth attendant and receive at least two post-natal care services within the first 48 hours.

Malaria Prevention and Control

- Consistent and proper use of Impregnated bed nets (ITN)
- Seek treatment immediately during a malarial attack and proper use of anti-malarial drugs
- Participate in environmental control activities to prevent malaria in their communities
- ✤ Allow indoor residual spraying (IRS) in their homes

Personal and Environmental Hygiene

- Availability of hand washing facility near the latrine and washing hands with soap after latrine use
- Construction of pit latrines and its regular use by all family members
- Maintain clean houses
- Availability and use of solid waste bin or use of solid waste for compost
- Proper liquid waste disposal
- Household feeding utensils cleaned and properly shelved
- ✤ Use separate kitchen to prepare food
- ✤ Use separate housing for domestic animals

- Filter or boil water if it is from an unprotected source
- Hand washing practice during critical time (Before preparing food, before eating and after toilet use, after cleaning a child)

HIV/AIDS, TB and NCD

- ✤ Implementing prevention measure for HIV and TB
- Practicing healthy lifestyle
- ✤ No stigma and discrimination
- Seeking health care for TB,HIV/AIDs and NCDs
- ✤ Regularly follow up of TB, HIV and NCD treatment

The CHEWs will also mobilize and use other volunteers, such as the VHTs to deliver messages and to implement interventions. They are also expected to train such volunteers and use them as assistants and promoters of health issue
Figure 2: Model family training and graduation



Role of VHTs as heads of volunteers model households

The current VHTs who fulfill the selection criteria and are interested will be absorbed in the CHEWs training program and will become CHEWs. Those VHTs who will not be enrolled in the CHEWs programme will remain as volunteers and constitute the first Heads of volunteer households to undergo the basic model household training provided by the CHEWs. After they have graduated, the VHTs as heads of volunteer model households will work closely under the support and supervision of the CHEWs in conducting the following activities:

- Continue community health extension activities after they are trained and be role models for others
- Gather every month for experience sharing

- Report vital events and Mobilize communities for health activities and influence their neighbors and relatives through diffusion of health messages to bring behavioral changes for improved health outcomes
- Promote and implement hygiene and sanitation and provide basic environmental health services
- Promote key massages on early detection and prevention of communicable and noncommunicable diseases
- Identify and refer suspected cases and follow up cases
- Identify targets and provide information on Family Planning, ANC, institutional delivery, postnatal care and immunization
- Refer and follow up clients
- Identify and refer sick child

Community Health extension workers will be trained to manage operations of health center II, such as, conducting home visits and outreach services to promote preventive health actions; refer cases to health centers; follow up on referrals; identify, train, and collaborate with volunteer community groups; and provide reports to health center III and parish chief. Community health extension workers will also conduct baseline survey of the village, using a standardized tool and map households population by age category. They will also prioritize health problems of the parish, set targets with respect to the packages of services, and draft a plan of action for the year. The draft plan of action is then submitted to the health center III and parish chief for approval.

Besides the family package, the CHEWs also run house to house visits and deal with individuals. Through this, they give trainings, make demonstrations, and educate families starting from common problems and issues that would face less resistance to topics for which deep rooted cultural issues may exist such as female genital mutilation, wife inheritance, and early marriage etc. The other function of the CHEWs is organize the community for joint plans, and joint interventions related to health such as environmental and water projects, drainage of swampy areas etc.

Health extension workers also work with communities through traditional associations, schools, women's associations, and youth associations. These institutions help communicate health messages and mobilize the community to help with environmental cleanup, health center II maintenance, and other efforts. The CHEW uses all the available opportunity to educate and mobilize the community in this aspect.

The CHEW is required to engage 60% of her/his time outside the HCII, dealing with model families, community groups or households. For the remainder of their time, they will provide services at HC II which complement the rest of the package and work. These include immunization, health education, Antenatal care, family planning, postnatal care, growth monitoring of children, diagnosis and treatment of malaria, diagnosis and treatment of childhood diarrhoea, and acute respiratory infections (ARI), provide first aid, micronutrient supplementation, referral of difficult cases, documentation and reporting. Health centers play a crucial role in providing referral care and technical and practical support.

The CHEWs program is designed to give services at parish level covering health extension packages under following major areas:

- 1. Prevention and Control of communicable diseases
 - Educate the community on early detection and prevention of communicable diseases (malaria, Tuberculosis, HIV/AIDS and NTDs)
 - Perform disease surveillance and follow up of cases

- 2. Prevention and Control of non-communicable diseases
 - Educate the community on healthy life style and early detection of diseases
 - Screen and refer clients requiring further investigation and management
 - ✤ Follow up cases and promote community based rehabilitation
 - ✤ Provide first aid service and refer client requiring further care
- 3. Family and Reproductive health Services.
 - Provide basic nutrition information/education to the client
 - Provide antenatal examination and information for a pregnant woman
 - Promote institutional Delivery
 - Conduct home visit and refer a pregnant woman with risk factors
 - Provide services for lactating mothers on infant care, nutrition and exclusive breast feeding
 - Implement family and community practices that promote child survival, growth and development activities (Exclusive breast feeding, complementary feeding, Micronutrients ,hygiene, immunization, use of bed nets for malaria prevention, psychosocial development, homecare of illness, home treatment for infections, care seeking, compliance with advice and ANC)
 - Assess and manage common child hood illness and refer child requiring further care (childhood diarrhoea, malaria and ARI)
 - Educate the community on family planning options/methods and provide family planning service
 - Promote adolescent and youth RH services
- 4. Hygiene and Environmental Sanitation.
 - Promote and provide environmental and personal hygiene education
 - Establish and demonstrate community-appropriate sanitation technologies
 - Provide education on environmental health services (excreta disposal, solid and liquid waste disposal, water supply safety measures, food hygiene and safety measures, healthy home environment, control of insects and rodents, personal hygiene)
- 5. Health Promotion, Education and Communication
 - Provide health promotion and education services
 - Train model families
 - Perform advocacy for identified health issues
 - Promote community mobilization on the identified health issues
 - Participate in health campaigns
 - 6. Community health service management
 - Plan, coordinate and lead the Community health program at parish level in collaboration with local government, the community, partners, VHTs and other voluntary health workers
 - ✤ Avail and manage inputs for implementation of CHEWs program
 - Strengthen the implementation of the referral system
 - Ensure the availability of registers and forms and use them
 - Establish and strengthen the documentation and filing system
 - Request medicines and supplies in a timely manner, collecting them, registering in accordance with official guidelines
 - ✤ Manage supplies and equipment
 - 7. First aid
 - ✤ Assess , identify client's condition and provide first aid service
 - Refer client requiring further care
 - 8. Disaster and risk management
 - Evaluate and Apply essential first aid techniques during disaster situation
 - 9. Vital Statistics and Data Management

- Collect vital events and surveillance data
- Prepare and submit reports

6. Develop a Performance Monitoring and Evaluation system

This strategic objective will support evidence-based decision making through integration of health programs at CHEWs intervention level. It will comprehensively address; identification of CHEWs strategy bottlenecks, performance monitoring, quality improvement, use of information for policy formulation, planning, governance and resource allocation. The expected outcome of the strategic objective is to generate and use evidence of CHEW's performance at all levels of the health system.

Proper information flow and feedback mechanism will be designed for CHEWs strategy. Basic records will be kept by the CHEWs on cases seen or referred and items dispensed or used. Health center II performance report will be prepared by CHEWs and sent to HC III. Health center III staffs will compile all reports received from health center II in their catchment area and will send to health center IV. Health center IV will send their reports to the district. The District will compile all the reports received from health center IVs and send to MOH headquarter. MOH will develop a data base at national and district level to update CHEWs performance data regularly. Timely feedback mechanism will be established at each level.

CHEWs program performance evaluation will be conducted regularly to identify best practices to scale up as well as to make early corrective actions on things which are not accomplished as per target or plan. Supportive supervision will be carried out regularly to provide feedback, coaching, problem solving, skill development, and data review. Health center IIIs will conduct supportive supervision to health center IIs on a monthly basis. District health office will conduct supportive supervision at health center III, IV and general hospital level on a quarterly basis. MOH will conduct integrated supportive supervision at district health office, general hospital, and health center IV and occasionally to a few selected health Centre IIIs, IIs and community for validation. CHEWs will receive strategic leadership from parish chiefs and technical support from health center III. In general, to sustain the functionality of CHEWs strategy, competent human resource, logistics and governance structure will be put in place at all levels.



3.10: Main Strategies and activities

1. Initiate and strengthen the training, motivation and performance management of community

health extension workers

Strategies:

1.1 Design and Conduct basic Training of CHEWs

- Develop Standard curriculum
- Develop Training materials for CHEWs basic training
- Select and accredit Training centers
- Conduct TOT for master trainers
- Conduct TOT for tutors
- Conduct training for CHEWs

1.2 Design and conduct refresher training of CHEWs:

- Develop refresher training materials and courses
- Orient master trainers for refresher training
- Conduct refresh training for CHEWs

1.3 Establish Individual Performance Evaluation, Incentives and Opportunity for Advancement for CHEWs

- Establish regular performance evaluation system for CHEWs
- Prepare standardized performance appraisal format and distribute to CHEWs supervisors
- Establish feedback and rewarding mechanism for CHEWs
- Develop standardized guideline for CHEWs financial and non-financial incentive packages in collaboration with all stakeholders
- Design CHEWs career path

2. To develop the governance and leadership of Community Health Extension Workers in Uganda in line with the decentralized health care delivery

Strategies:

2.1 Establish Linkages of CHEWs with health center III

- Establish appropriate structural arrangement for HC III to implement linkage with CHEWs including assigning personnel to manage and follow the system.
- Ensure annual work plans are in place to guide working arrangements between professional staff at HC III and CHEWs
- Prepare guideline on health center III linkage to the CHEWs
- Conduct Orientation for CHEWs and health center III staffs on the linkage
- Develop a joint Plan to implement linkage between CHEWs and health center III and communicate the plan to all relevant stakeholders including community members.
- Develop a work plan on how the H.C III professional staff will support the CHEWs.

2.2 Enhance partnership with all stakeholders

- Collaborate with stakeholder (Government, NGOs, CBOs, Private organizations and International Organizations) to strengthen community health extension program
- Establish coordination committees at national, district, sub district and sub-county levels to follow implementation of CHEWs interventions and document and disseminate best practices
- Develop and implement advocacy plans for resource mobilization
- Orient partners on one plan, one budget and one report
- Conduct joint planning and coordination meetings with stakeholders/partners for community health extension program at all levels
- Promote political support and commitment for community health Extension as a top priority.

2.3 Avail the required equipment and supplies including job aides

- Prepare and distribute Job aides for CHEWs
- Equip Health center II with the required equipment and supplies
- Conduct a needs assessment, planning and distribution of appropriate supplies and equipment regularly.
- Establish monitoring mechanism to verify stock out status, expiration date, quality and inventory of all supplies and equipment
- Develop and distribute reference manuals and packages

2.4 Design and strengthen Referral System:

- Design clear referral and feedback mechanism and communicate with CHEWs, health facility staff and community leaders
- Conduct orientation for CHEWs and health facility staffs about the referral flow and feedback mechanisms
- Prepare standardized referral and feedback Form and distribute to CHEWs and health facilities

2.5 Define the role of CHEWs and create clarity on the roles with all stakeholders

- Prepare CHEWs Implementation guideline which includes the defined roles of the CHEWs and
 roles and responsibilities of each actor in the implementation of CHEWs strategy
- Conduct consultation meetings at appropriate levels to create clarity on the role of CHEWs to build a consensus.
- Engage all stakeholders on the preparation of CHEWs implementation guideline to create stakeholders ownership on CHEWs role as well as to avoid the creation of parallel services in CHEWs strategy

2.6 Strengthen leadership and management of the health system

- Develop governance structure for CHEWs strategy
- Recruit technical and administrative staff to coordinate the CHEWs strategy at national level
- Conduct Orientation for health facility staff on governance structure of CHEWs
- Align and incorporate CHEWs strategy in HSDP
- Develop data base for CHEWs and update regularly
- Develop and distribute appropriate reporting formats/registers

3. To mobilize financial resources for implementation of the Community Health Extension

Workers Strategy

Strategy

3.1 Resource mobilization and utilization

- Develop mechanisms for better integration of community health extension program with the health sector development budgetary process to be funded by government.
- Design and conduct advocacy meeting with political leaders at national, district and sub-county levels regarding the benefit of community health extension program and sustainable government budget allocation for the successful implementation of the program
- Increase mobilization and utilization of both local and external assistance
- Promote the participation of private sector, NGOs and CSOs in health care both in their own capacity as well as through greater public-private partnerships.
- Encouraging communities to participate in the financing and management of basic health services

4. To improve community participation, engagement and ownership through CHEWs strategy

Strategies:

4.1 Identification and scale up of best practices

- Conduct Experience sharing visit for CHEWs and CHEWs program managers to best performing areas within or outside the country
- Document and disseminate best experience of CHEWs strategy using different communication channels
- Conduct capacity building activities for the communities on the basic skills and knowledge of CHEWs packages as well as on the technique of skill transfer.
- Conduct capacity building activities for program mangers on the identification and scale up of best practices for CHEWs strategy.
- Prepare guideline on the identification and scale up of best practices for CHEWs strategy

4.2 Involve the Community in CHEWs strategy implementation

- Involve the community on the selection of CHEWs trainee in their catchment area
- Establish Community feedback mechanism so that the community will be able to provide feedback to the CHEW on her/his service in the community
- Provide for the representation of the Community in the monitoring and evaluation of CHEWs performance
- Provide for the representation of the Community in CHEWs governance structure
- Work with opinion leaders, respect community values and norms and win community trust and respect,
- Conduct intensified information, education and communication about health to create understanding with community
- Establish participatory community dialogue or forums to discuss issues, where success in CHEWs strategy are discussed, shared and owned by the community,
- Collaborate with other sectors as they share their experiences and agenda, which is essential to address the community needs
- Celebrate the success story with the community

• Conduct periodic monitoring and evaluation to identify the level of community participation.

7. Develop a Performance Monitoring and Evaluation Plan

- Develop reporting format and distribute to CHEWs
- Conduct capacity building activities for CHEWs on how to collect, use and report on information collected from the community.
- Conduct program evaluation of CHEWs achievements against program indicators
- Conduct operational research
- Develop standardized supervision guideline and checklist and distribute to all levels of health system
- Establish health programs integration during CHEWs supportive supervision
- Conduct capacity building for program managers, technical staffs and supervisors on basic skills and knowledge of supervising the CHEWs

3.11 Logical frame work for the implementation of CHEWs strategy in Uganda

Objective1. To initiate and strengthen the training, motivation and performance management of community health extension workers

Strategy	Out put	2016/17	2017/18	2018/19	2019/20	Activities	Who is responsible
Conduct basic Training of CHEWs	Curriculum developed CHEW training materials developed Accredited training institutions Trained CHEWs	100% 100% 100%	20%	40%	30%	 Develop Standard curriculum Develop Training materials for CHEWs basic training Select and accredit Training centers Conduct TOT for master trainers Conduct TOT for school tutors Conduct training for CHEWs 	MOH MOE DHO Development partners
Design and conduct Continuous Training or refresher training of CHEWs:	Training manuals developed Refresher training for CHEWs conducted		100%		70%	 Develop refresher training materials and courses Orient master trainers for refresher training Conduct refresh training for CHEWs 	MOH DHO Health facility staff Development partners
Establish Individual Performance Evaluation, Incentives and Opportunity for Advancement for CHEWs	Individual performance evaluation mechanism in place Incentive mechanism in place Career path for CHEWs designed		100%	100%		 Establish Regular performance evaluation system for CHEWs Prepare Standardized performance appraisal format and distributed for CHEWs supervisors Establish Feedback and rewarding mechanism for CHEWs Develop Standardized guideline for CHEWs financial and non-financial incentive packages in collaboration with all stakeholders Design CHEWs career pathway structure 	MOH MOE DHO Development partners

Objective 2. To develop the governance and leadership of Community Health Extension Workers in Uganda in line with the decentralized health care delivery

Strategy	Out put	2016/17	2017/18	2018/19	2019/20	Activities	Who is responsible
Establish Linkages of CHEWs with health center III	Functional CHEWs to health center III linkage in place		10%	30%	70%	 Establish appropriate structural arrangement of HC III to implement linkage with CHEWs including assigning personnel to manage and follow the system. Ensure annual work plans are in place to guide working arrangements between professional staff at HC III and CHEWs Prepare guideline on health center III linkage to the CHEWs Conduct Orientation for CHEWs and health center III staffs on the linkage Develop a joint comprehensive Plan to implement linkage between CHEWs and health center III and communicate the plan to all relevant stakeholders including community members. Develop a work plan on how the H.C III professional staff will support the CHEWs. 	MOH DHO HF CHEWs Development partners
Enhance partnership with all stakeholders	Functional national coordinatio n mechanism in place Joint planning and reporting in place	100%	100%	100%	100%	 Collaborate with stakeholders (Government, NGOs, CBOs, Private organizations and International Organizations) to strengthen community health extension program Establish coordination committees at national, district, sub district and sub-county levels to follow implementation of CHEWs interventions and document and disseminate best practices Develop and implement advocacy plans for resource mobilization Orient partners on one plan, one budget and one report Conduct joint planning and coordination meetings with stakeholders/partners for community health extension program at all levels Promote political support and commitment for community health Extension as a top priority. 	MOH DHO HF CHEWs Development partners
Avail the required equipment and supplies including job aids	Availability of required job aides ,equipment and supplies at HC II		100%	100%	100%	 Prepare and distribute Job aides for CHEWs Equip Health center II with the required equipment and supplies Conduct a needs assessment, planning and distribution of appropriate supplies and equipment regularly. Establish monitoring mechanism to verify stock out status, expiration date, quality and inventory of all supplies and equipment 	MOH DHO HC Development partners

Design and strengthen Referral	Functional referral and		10%	30%	70%	 Design clear referral and feedback mechanism and communicate with CHEWs, health facility staff and 	МОН
System	feedback mechanism					community leaders	DHO
	in place					• Conduct orientation for CHEWs and health facility staffs about the referral flow and feedback mechanisms	Health facilities
						• Prepare standardized referral and feedback Form and distribute to CHEWs and health facilities	Development partners
Define the role of CHWs and create clarity on the role CHEWs among stakeholders	Availability of CHEWs implementa tion guideline which defines CHEWs role	100%				 Prepare CHEWs Implementation guideline which includes defined roles of CHEWs, implementation strategy, role and responsibility of each actor in the implementation of CHEWs strategy Conduct consultation meeting with community and general health system staffs to create clarity on the role of CHEWs as well as to reach an agreement on the roles. Engage all stakeholder on the preparation of CHEWs implementation guideline to create stakeholders ownership on CHEWs role as well as to avoid the creation of parallel services in CHEWs strategy 	MOH, development partners
Strengthen leadership and management of the health system	A functional CHEWs governance structure in place CHEW databases Developed		100%			 Develop governance structure for CHEWs strategy Recruit technical and administrative staff to coordinate the CHEWs strategy at national level Conduct Orientation for health facilities staff on governance structure of CHEWs Align and incorporate CHEWs strategy in HSSIP Develop Data base for CHEWs strategy and update regularly Develop and distribute appropriate reporting formats/registers/ 	MOH DHO Development partners

Objective3. To mobilize financial resources for implementation of the Community Health Extension Workers Strategy

Strategy	Out put	2016/17	2017/18	2018/19	2019/20	Activities	Who is responsible
Resource mobilizat ion and utilizatio n	Allocated budget for CHEWs strategy by the government Resource mobilized from stakeholders	100%	100%	100%	100%	 Develop mechanisms for better integration of community health extension program with the health sector development program budgetary process to be funded by government. Design and conduct advocacy meeting with political leaders regarding the benefit of community health extension program for the community and sustainable government budget allocation for the successful implementation of the program. Increase mobilization and utilization of external assistance (loans and grants) 	MOH DHO Development partners

	50%	100%	100%	100%	Promote the participation of private sector and non- governmental organizations in health care both in their own capacity as well as through greater public-private partnerships
					• Encouraging communities to participate in the financing and management of basic health services

Objective 4. To improve community participation engagement and ownership through CHEWs strategy

Strategy	Output	Yearly tai	rgets			Activities	Who is responsible
		2016/17	2017/18	2018/19	2019/20		
1.Identificati on and scale up of CHEWs strategy best practices	Best practice identified and scaled up				25%	 Conduct Experience sharing visit for CHEWs and CHEWs program managers at best performing areas within or outside the country Document and disseminate best experience of CHEWs strategy using different communication channels 	MOH Development partners DHO
						 Conduct capacity building activities for the community on the basic skills and knowledge of CHEWs packages as well as technique of skill transfer. Conduct Capacity building activities for program mangers 	HCs
						on the identification and scale up of best practices for CHEWs strategy.•Prepare Guideline on the identification and scale up of best practices for CHEWs strategy	
2. Involve the Community in CHEWs strategy implementati on	Community involvement and representation mechanism in place for CHEWs strategy	50%	100%	100%	100%	 Involve the community in the selection of CHEWs trainee in their catchment area Establish Community feedback mechanism so that the community will be able to provide feedback on CHEWs for her/his service in the community Represent the Community for the monitoring and evaluation of CHEWs performance Represent the Community in CHEWs governance structure Work with opinion leaders, respect community values and norms and win community trust and respect, Conduct Intensified information, education and communication about health to create understanding with community Establish participatory community dialogue or fora to discuss issues, where success in CHEWs strategy are discussed and success will be shared and owned by the 	DHO HC CHEWs
						 community, Collaborate with other sectors as they share their experiences and agenda, which is essential to address the community needs Celebrate the success story with the community 	

			•Conduct Periodic monitoring and evaluation to identify the level of community participation	
			level of community participation.	

Objective 5. Develop a Performance Monitoring and Evaluation Plan

Strategy	Out put	2016/17	2017/18	2018/19	2019/20	Activities	Who is responsible
Strengthen Information Management, supportive supervision and Performance Evaluation of CHEWs strategy	Supervision mechanism in place Program performance evaluation conducted	100%	100%	100%	100%	 Develop reporting format and distribute to CHEWs Conduct capacity building activities for CHEWs on technique of information collection from the community, reporting and local use of information Conduct program evaluation of CHWs achievements against program indicators and Outcomes Develop Standardized supervision guideline and checklist and distribute at each level of health system Establish health programs integration during CHEWs supportive supervision Conduct Capacity building activities for program managers, technical staffs and supervision 	MOH DHO HF Development partners

3.12 Cost of CHEWs strategy

Major initiatives	FY16/17 (US \$)	FY17/18 (US \$)	FY18/19 (US \$)	FY19/20 (US \$)	GRAND TOTAL (US \$)
CHEW Tools, Equipment and Supply	829,112	2,144,444	4,917,502	10,809,666	18,700,724
CHEWs basic and refresher Training	2,809,182	4,599,070	8,721,403	7,624,480	23,754,135
Coordination and Supervision of CHEWs	781,417	1,174,832	2,503,245	3,377,849	7,837,343
CHEWs' Salaries and Allowances	1,540,037	4,758,715	11,436,778	34,161,656	51,897,186
Electronic Information Systems Development	14,560	1,400	1,442	3,016	20,418
Total Cost	5,974,308	12,678,461	27,580,370	55,976,667	102,209,806

4. Implementation Arrangements

The implementation of this strategy will be led by the Ministry of Health and implemented jointly with stakeholders within the framework of HSDP. The stakeholders include development partners, related line ministries and agencies, the civil society, community based organizations, professional associations, faith-based organizations, voluntary agencies and the private sector. The implementation arrangements for the strategy which are summarized in the following sections reflect the mandates, roles and responsibilities of stakeholders at different levels.

1. Roles and Responsibilities of Ministry of Health

- ✤ Overall coordination of the CHEWs program
- Develop overall program concept, standards and implementation guides
- * Mobilize national and international resources
- Provide strategic leadership and guidance
- Provide communication tools and materials
- Procure medical equipment and supplies
- ♦ Set up Health Management Information System.
- Provide technical and professional guidance and assistance,
- Develop standardized continuous learning materials
- $\boldsymbol{\diamondsuit}$ Organize and conduct capacity building forum ,
- Strengthen collaboration with other stakeholders,
- Organize experience-sharing forum
- Develop standards for in-service training, further education and career structure for community health extension workers,
- Develop standard data collection, reporting and monitoring formats,
- Develop national referral guideline.
- Develop guidelines on CHEWs program integration with the overall health system
- ✤ Carryout, co-ordinate, and sponsor research and development on the health service extension programme implementation
- * Organize health service extension programme evaluation and review meetings
- Conduct integrated supportive supervision to districts and selected health facilities and community level

2. Roles and Responsibilities of the local government

- Manage and supervise CHEWs program
- Approve CHEWs plans and budgets
- ✤ Mobilize and allocate resources,
- Co-ordinate activities implemented by Governmental and Non-Governmental bodies
- Monitor and evaluate community health service extension programme
- * Mobilize community organizations and community members for health action
- Strengthen community involvement and participation in decision making
- Promote inter sectoral collaboration
- Ensure the availability of health service extension commodities
- Employ and deploy health extension workers

3. Roles and Responsibilities of district Health office

The district Health office is in charge of overseeing the implementation of the community health extension program in the district.

- ✤ Adapt implementation guidelines to local conditions
- Adapt communication tools and materials into local languages and distribute to health facilities
- Establish referral systems between Health center II and Health Centers III &IV
- Strengthen Health Management Information System.
- Bring the community health extension programme and related issues as top agenda
- Facilitate and co-ordinate the recruitment of community health extension trainees
- Create appropriate organizational and functional structure, and designate staff
- Provide technical support on CHEWs program for health facilities
- Organize experience sharing forum
- Collect, compile and prepare periodic reports and submit to the ministry of health and local government
- Organize health service extension programme evaluation and review meetings
- Strengthen and promote inter sectoral collaboration among stakeholders
- Organize and conduct capacity building forum, workshops, seminars and training of trainers
- Mobilize and manage resources for community health extension programme
- Coordinate and lead supervision, monitoring and evaluation
- Identify and prioritize the major health causes of morbidity, mortality and disability in the district
- Coordinate and carryout small scale research and development
- Ensure availability of essential resources, facilities, staff, materials and vehicles
- Ensure supplies and other commodities for CHEWs.
- Provide supportive supervision of CHEWs and the overall management of health centers
- Plan and provide in service training to CHEWs, health center III and district Health Office staff

4. Roles and responsibilities of HCIV

- ✤ Conduct integrated supportive supervision at health center III
- Collect, compile and prepare periodic reports and submit to the District health office and local government
- Provide technical support for CHEWs and health center III staffs
- Ensure the availability of appropriate logistic at HCII and III
- Conduct capacity building activities for CHEWs and health center III staffs
- Strengthen referral linkage between HC II and III as well as HC III and IV

5. Roles and Responsibilities of health center III

A health center III is mainly responsible for implementation and follow-up of the health extension packages. Every community health activities carried out at the health center II level should be considered as one major service area of the health center III.

- Plan, coordinate and Monitor CHEWs program and evaluate its implementation
- Identifies skill gaps in CHEWs, plan and provide on job capacity building activities accordingly
- Assign a staff from the health center III to cover health extension activities in the absence of the community health extension worker.
- Support the preparation of CHEWs annual plan
- Organize regular review meeting on CHEWs performance
- Ensure the implementation of the health extension packages as per the guideline.
- Organize and conduct regular community satisfaction survey.

- Develop a detailed plan to support CHEWs
- Conduct integrated supportive supervision at health center II and community level.
- Ensure appropriate resources are allocated to health center II and assure appropriate utilization.
- Ensure cordial CHEWs and local government work relation
- Provide technical support for CHEWs
- Collect, compile and prepare periodic reports and submit to the Health center IV and local government

6. Roles and responsibilities of CHEWs supervisor

- Document periodic plans of CHEWs under his/her supervision;
- Follow progress on the implementation of the CHEWs activities during regular supervision
- Provide onsite technical support and address any challenges and report any un addressed issue to the higher authorities along the political and technical lines
- Make random home visits to observe changes, identify problems, listen to community member reflections and discuss on CHEWs related issues
- ♦ Work closely with LC I and parish chairpersons in supporting the CHEWs
- Receive monthly reports, compile and submit to the HC III in charge
- ✤ Attend monthly CHEWs meetings at sub-county level and provide inputs to consolidate the program
- Participate in the performance evaluation of individual CHEW within his/her catchment
- Carry out periodic support supervision of the CHEW program

7. Duties and Responsibilities of health center II (CHEWs)

CHEWs will be assigned at HC II and will have the following duties and responsibilities as described below.

- Conduct home visits and outreach services
- Provide referral services to Health Center III and follow up on referrals
- ✤ Identify, train and collaborate with volunteer community groups
- Follow the implementation of the full health extension package as per national guideline
- ✤ Collect, compile and document the basic socio demographic information
- Develop and implement the plan in collaboration with Health center III and local government
- Ensure the availability of necessary equipment, drugs and supplies.
- * Implement the feedback given by the health professionals from health centers, district and MOH
- Participate in review meetings and present best practices and challenges on day to day activities
- Train model families and graduate model families and follow the health extension package implementation
- Collect, analyze, compile and report the Health extension package implementation to HC III and local government
- Participate with other sector's development workers in community based development

8. Roles and responsibility of the National CHEW coordination committee

- Acts as an advisory unit on community Health Extension workers Program policy dialogue, consensus building and information sharing platform for the ministry of health.
- Provides a consultative forum that can coordinate and monitor CHEWs program among government and non-government organizations
- Develop common mechanism of support to the Ministry of Health

- Develop common and unified frameworks and tools, including curriculum, training manual, implementation guideline, packages, indicators, incentive packages, etc.
- Maintain regular exchange of information among member organizations, including information on best practices and factors constraining or facilitating CHEWs programme delivery, to ensure complementarity of work and avoid duplication of activities;
- Provide a platform for members to arrive at a common understanding on key CHEWs issues
- Maintain the existing and develop new partnerships to promote CHEWs strategy, including partnerships with non-governmental, community and faith based organizations
- Review and discuss the current needs for strategic, programmatic, and technical operational coordination and support in the areas of community health extension program
- Explore opportunities to undertake common and joint monitoring and evaluation of programmes and projects of member organizations
- Jointly explore opportunities and engage in dialogue with potential donors to seek additional resources for CHEWs strategy
- Facilitate collaborations and building of synergies among stakeholders dealing with the issues of CHEWs;
- Strengthen the commitment and capacity of stakeholders at all levels to advocate and support CHEWs strategy;
- Support the MOH in creating and strengthening information, communication and demand creation for CHEWs program among all segments of the population
- Lead in distribution, implementation, review, and monitoring of the National CHEWs Strategy
- Review the annual work plan that corresponds with the five-year national CHEWs strategy
- Assist in the formulation and dissemination of national policies, practices and procedures that relate to CHEWs
- Liaise with concerned entities from other sectors and also coordinate issues relevant to CHEWs strategy to facilitate better problem solving

9. Parish CHEWs coordination committee

Parish CHEWs coordination committee is a platform at community level which support the coordination of CHEWs intervention and also monitor the implementation of packages in the community. The committee members comprise LCI chairperson, Parish Chiefs, CHEWs, HCIII in charge and community representatives. Their roles and responsibilities include;

- Follow up and peer review of different tasks to be performed and pledged by the government and development partners
- Organize and conduct regular meetings with community representatives in their respective parish to follow up, support and assess implementation progress
- Collect, organize and interpret information and data on model households and community health volunteers
- Mobilizing community resources for the construction and renovation of health center II and resident for the health extension workers
- Lead health development interventions in their respective parish by mobilizing and coordinating community efforts
- ✤ Follow up and supervise the work of the community health extension worker

10. Roles and responsibilities of other ministries

- Ministry of finance to give priority to health, especially community health extension program in budget allocation
- Ministry of education should review and integrate community health extension program in various school and pre-service curricula in collaboration with MOH
- Ministry of public service to provide strategic and managerial leadership on institutionalizing CHEWs in the health system
- Ministry of Gender, Labour and Social Development to facilitate the establishment of community groups to support CHEWs activities at all levels
- Ministry of ICT to promote information dissemination and educational programs on mass media regarding community health programs

11. Roles and Responsibilities of Development Partners

- Provide technical and financial support to the community health extension program
- Advocate nationally and internationally about community health extension program

12. Roles and Responsibilities of Civil Society Organizations and Professional Associations

- Forge partnership with different stakeholders including political leaders to promote community health extension programs
- Implement community based strategies
- Complement government efforts in the provision of quality community health services
- Mobilize and allocate resources for implementation of the CHEWs Program

13 . Roles and Responsibilities of Private Sector

- Complement Government efforts in the provision of quality community health extension services
- ✤ Invest in commodities and supplies for community health extension intervention

14. Role and Responsibilities of Training and Research Institutions

- Undertake relevant community health program research to provide evidence for policy directions and implementation guidance
- Review and update curricula to ensure relevant community health program issues are adequately addressed by training institutions
- Provide technical advice and updates on current developments on community health strategies to policy makers.

8. Monitoring and Evaluation

The objectives of Monitoring and Evaluation are to improve the management and optimum use of resources of the CHEWs program and to make timely decisions to resolve constraints and/or problems of implementation. The sources of information for timely monitoring are routine service and administrative records compiled through the Health Management Information System (HMIS). Monitoring and supervision will happen regularly throughout the lifetime of CHEW program through the collection and review of information available from HMIS sources, supervisory visits; review meetings and annual reports.

A limited set of core indicators will be used for monitoring the implementation of CHEWs Strategy as follows:

- 1. Process/Output indicators
- 2. Outcome indicators
- 3. Impact indicators

Group 1: Process / Output Indicators

No	Indicator	Baseline	Target	Source	Periodicity	Level of Data Collection
1	National level CHEWs strategy developed	O%	100%	MOH report	Monthly/quarterly	МОН
2	Proportion of parish with trained CHEW	0 %	100%	MOH report	Monthly/quarterly	District health office
3	Proportion of CHEWs trained with refresher training	0%	10%	MOH report	Monthly/quarterly	District health office
4	Proportion of districts with functioning CHEP coordination structures	0%	100%	MOH report	Monthly/quarterly	District health office
4	Availability of training curriculum, training manual and packages	0%	100%	MOH report	Monthly/quarterly	МОН
5	Existence of CHEWs Database at MOH	0%	100%	MOH report	Monthly/quarterly	МОН
6	Proportion of resource allocated for the health service	0%	100%	MOH report	Monthly/quarterly	MOH, district health

	extension programme					office
7	Existence of functional coordination committee	0%	100%	MOH report	Monthly/quarterly	МОН
8	Availability of supervision reports and feedback to CHEWs	0%	100%	MOH report	Monthly/quarterly	MOH, district health office, health center III and II
9	Number of referral received at health center III and number of referral feedback reports received at health center II.	0%	100%	MOH report	Monthly/quarterly	Health center III and II

Group 2: Outcome Indicators

No	Indicator	Baseline	Target (2020)	Source	Periodicity	Level of Data Collection
1	ANC 4+ coverage	32.4%	45	UDHS	Every 5years	Population
				HMIS	Monthly/Quarterly	All HFs
2	Contraceptive	30%	50%	UDHS	Every 5years	Population
	Prevalence Rate			HMIS	Monthly/quarterly	All HFs
3	Measles coverage	87%	95%	UDHS	Every 5years	Population
	under 1 year			HMIS	Monthly/Quarterly	All HFs
5	DPT _{3Hep + Hib}	93%	97%	UDHS	Every 5years	Population
	coverage			HMIS	Monthly/Quarterly	All HFs
6	Under-five Vitamin A second dose coverage	26.6%	66%	HMIS	Monthly/Quarterly	All HFs
7	Children below 5 years who are under	14%	5%	UDHS	Every 5years	Population

	weight			HMIS	Monthly/Quarterly	All HFs
9	Malaria cases per 1,000 persons per year (HMIS 2013/14)	460	198	HMIS	Monthly/Quarterly	All HFs
10	TB Case Detection Rate	80%	95%	HMIS	Monthly/Quarterly	All HFs
11	HIV+ women receiving ARVs for PMTCT	72%	95%	UDHS HMIS	Every 5years Monthly/Quarterly	Population All HFs
12	Latrine coverage	73%	82%	UDHS HMIS	Every 5years Monthly/Quarterly	Population All HFs
13	Model house hold trained and graduated	0%	38.2 %	HMIS	Monthly/Quarterly	Community

Group 3: Impact Indicators

No	Indicator	Baseline (2015)	Target (2020)	Source	Periodicity	Level of Data Collection
1	Maternal Mortality Ratio (per 100,000)	438 (UDHS 2011) 360 (WHS 2014)	320	UDHS	Every 5 years	population
2	Neonatal Mortality Rate (per 1,000)	26 (UDHS 2011) 23 (WHS 2014)	16	UDHS	Every 5 years	population
3	Infant Mortality rate (per 1,000)	54 (UDHS 2011) 45 (WHS 2014)	44	UDHS	Every 5 years	population
4	Under five mortality rate (per 1,000)	90 (UDHS 2011) 69 (WHS 2014)	51	UDHS	Every 5 years	population
5	Children below 5 years who are stunted	33% (UDHS 2011)	29%	UDHS	Every 5 years	population
6	Total Fertility Rate	6.2 (UDHS 2011)	5.1	UDHS	Every 5 years	population
7	Adolescent Pregnancy Rate	24% (UDHS 2011	14%	UDHS	Every 5 years	population

6. FOLLOW-UP ACTIONS

Several follow-up steps have to be taken at MOH, district, health facility and community levels to ensure coordinated and effective implementation of the strategy. The Ministry of Health will coordinate implementation of the strategy and assume responsibility for its execution, supervision and monitoring in collaboration with key stakeholders.

One of the first steps in this respect is to establish a strong national coordination committee and hold country-level stakeholders meeting with the relevant key stakeholders that will also be involved in the implementation of the strategy. The output from the stakeholders' meeting will be a joint plan of action for the country with budget provision and technical assistance from all partners.

The Government and its partners will make definite efforts to mobilize resources for the implementation of the CHEWs strategy. Every opportunity will be taken to facilitate resource mobilization and the buy-in of key national and international partners. Advocacy activities will be stepped up to draw the commitment of government for sustainable budget allocation for CHEWS.

In order to increase advocacy for CHEWS and mobilize resources for its implementation, each stakeholder is expected to promote the strategy using all available means. To help this effort, priority will be given to the consultations and information sharing both at the central and district levels. The MOH will undertake periodic assessments of strategy implementation. This will help to identify program strengths, weaknesses, and, if necessary, the need for adjustments. Furthermore, steps will be taken to ensure effective monitoring of services using the above listed indicators. Mid-term reviews and end of implementation evaluation will be made in collaboration and with the support of partners.

7. CONCLUSION

The strategy is expected to impact on universal primary health coverage as a means of creating equitable access to promotive, preventive and selected curative health care services to the communities. It also provides an effective and responsive health delivery system for the under-served populations who live in rural areas. For the successful implementation of the national strategy, it is important to ensure Political leadership and champions at the highest levels critical.

Implementation of the CHEWs program as a major political agenda of the government at various levels of the health system requires focus on involvement of various stakeholders.

Beyond the general increase in its fiscal space to finance the CHEWs program, the government shall make sure that such increments happen at local levels. Accordingly, salaries of community health extension workers and the basic running cost of the CHEWs program are (will be) financed mainly by districts; this creates (will create) the foundation for local ownership and sustainability of the program.

Secondly, delivery of services and management of programs should be integrated into existing systems. Vertical programs and projects can be successful in the short term, but they are often unsustainable. What CHEWs program should demonstrate is that vertically mobilized resources can be used for system wide interventions that make disease- specific programs successful while strengthening health systems. Adopting this approach avoids creating parallel systems and procedures in the delivery of services and management of programs, averting unnecessary administrative burdens, transaction costs, and inefficiencies.

Thirdly, community ownership is a key to sustainable impact. The major principle underpinning the CHEWs program is transferring the right knowledge and skills to communities and households so that they are able to adopt behaviors that improve their own health. Households are trained and certified, after which they take responsibility for promoting behaviors that lead to positive health outcomes.

Fourth, all components of the health system gaps need to be addressed to make a program work. The CHEWs program does not merely train and deploy health extension workers. Significant investment shall be made in setting up and equipping health center IIs to serve as formal institutional hubs for the program. A health information system shall be adapted, and health facility staff shall be oriented on the program to enhance supportive supervision and continuous improvement in quality of program management and service delivery. Continuous assessment and in-service training should be conducted to fill the gap in capacity of community health extension workers. Referral levels shall be expanded to ensure delivery of a complete package of essential services.

Fifth, buy-in and involvement of key stakeholders is crucial. A strong partnership and collaboration shall be evolved between the government and various actors in the health system, including the community, development partners, and other sectors. The growing trust among these stakeholders will result in harmonization of financing, program implementation, monitoring, and evaluation, leading to further strengthening of health systems.

Sixth, the program needs to be flexible and adaptable to various contexts. The CHEWs program shall be implemented in settings with significant diversity in socioeconomic, cultural, and geographic conditions without compromising the basic principles that lead to its success. It is important to design three versions of the CHEWs program (rural, urban, and pastoralist) to modify and fit key aspects of program implementation in these widely varying contexts. This flexible nature of the program provides key lessons that are unique to the different environments

Seventh, success of a program or an intervention should be assessed by concrete and measurable improvements in health outcomes. Implementation of CHEWs program shall be monitored and evaluated in terms of increasing coverage of essential interventions and reducing morbidity and mortality. Therefore, to attain the goal of this strategy, the Ministry of Health and all of its partners have to renew their commitment and invest more on Community based interventions; work towards improved planning, organization and management of services, provide adequate funding for the identified high impact interventions and monitor closely the progress made as a result of the implementation of activities undertaken at all levels.

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Annex 1. Detailed cost of CHEWs strategy

	FY16/17 (US \$)	FY17/18 (US \$)	FY18 /19 (US \$)	FY19/20 (US \$)	Total (US \$)
1. CHEW tools, Equipment and Supply Costs	829,112	2,144,444	4,917,502	10,809,666	18,700,724
2. Training Costs					-
Consultants costs curriculum development and development of training manuals	63,000	-	-	-	63,000
MOH consultation on curriculum development	17,664	-	-	-	17,664
MOH consultation on development of training manuals	24,658	-	-	-	24,658
Printing of CHEWS curriculum and basic training manuals	47,549	-	-	-	47,549
Printing of CHEWS refresher training manuals		33,683			33,683
Training Master trainers	30,553	-	-	-	30,553
Orientation of Tutors	23,878	-	-	-	23,878
Training of CHEWs Refresher training of CHEWs every 2	1673163	3171926	7120455	6575681	18541225
years	-	-	138,554	1,020,379	1,158,933
CHEWs field placement allowance CHEWs stipend while at the training	130,600	275,762	574,998		981,360
institutions	686,288	966,513	765,648		2,418,449
CHEWs transport refund	38,800	54,480	43,644		136,924
Training supervision at the districts Training supervision at the training	59,100	81,959	63,314	-	204,372
institutions	1,117	1,550	1,197	-	3,864
Assessment of the training of the first intake of CHEWs	12,812	13,197	13,593	28,420	68,022
Total Training Costs	2,809,182	4,599,070	8,721,403	7,624,480	23,754,135
3. Coordination and Supervision Costs					-
National coordination office salaries	28,070	-	-	-	28,070
National coordination office capital costs (vehicles, office equipment)	86,644	_	-	-	86,644
Development of CHEWs implementation guideline, referral linkage manual ,supervision guideline and tools	27,066				27,066
Printing of CHEWs implementation guideline, referral linkage manual ,supervision guideline and tools	100,000				100,000

Health center II capital costs (furniture)	435,334	896,788	1,847,383	1,427,103	4,606,608
Health center II operational					
costs(stationery)	87,067	269,036	646,584	1,931,346	2,934,034
National coordination committee	17,236	9,008	9,278	19,399	54,921
Total Coordination and Supervision					
Costs	781,417	1,174,832	2,503,245	3,377,849	7,837,343
4.CHEW Salaries and Allowances					
Rural CHEWs	1,404,213	4,339,018	10,428,107	31,148,756	47,320,094
	125.924	410 (07	1 000 (71	2 012 000	4 577 000
Urban CHEWs	135,824	419,697	1,008,671	3,012,900	4,577,092
Total CHEW Salaries and Allowances	1,540,037	4,758,715	11,436,778	34,161,656	51,897,186
5. Electronic information systems					
development and maintenance					-
Development of databases at the MOH and					
districts	13,200				13,200
Database Maintenance and upgrade	1,360	1,400	1,442	3,016	7,218
Total Electronic Information systems	14,560	1,400	1,442	3,016	20,418
TOTAL COST	5974308	12678461	27580370	55976667	102,209,806