

Ministry of Health

Community Health Extension Workers National Strategy

(2018-2022)

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Acronyms

AIS AIDS Indicator Survey

ANC Antenatal care

ARI Acute respiratory infections

BRAC Building Resources across Communities

CBO Community-based organisation

CDC Center for Disease Control and Prevention

CHEW Community Health Extension Worker

CHW Community health worker

DGHS Director General Health Services

FMOH Ethiopia Federal Ministry of Health

HC Health centre

HEP Health Extension Program
HEW Health extension worker

HMIS Health Management Information System

HSA Health Surveillance Assistant

HSDP Health Sector Development Plan

HSSP Health Sector Strategic 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

LLIN Long lasting insecticide-treated net

MDG Millennium Development Goal

MMR Maternal mortality ratio

MOE Ministry of Education

MOF Ministry of Finance

MOGLSD Ministry of Gender, Labour, and Social Development

MOH Ministry of Health

MOPS Ministry of Public Service

NCD Non-Communicable Disease

NGO Non- governmental organisation

NTD Neglected tropical disease

ORS Oral rehydration salts

PHC Primary health care

PS Permanent Secretary

RDT Rapid diagnostic test

SWAP Sector-wide approach

TB Tuberculosis

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 the 2016 Uganda Demographic and Health Survey (UDHS) report, Uganda achieved the Millennium Development Goal (MDG) 4 to reduce child mortality by two-thirds, but failed to achieve the remaining targets set for 2015. Achievement of the MDGs required an effective health system with adequate, qualified, and motivated health personnel providing quality and equitable health services and a primary health care system involving communities with their full participation.

Over the years, the Health Sector faced challenges in the delivery of health services, key amongst which included inadequate financing needed for the provision of quality health services. As a result, the Health Sector was not able to dramatically reduce inequalities in access to health care, especially for the poorest and those in remote areas. However, evidence from countries that have strong Community Health Programmes indicate that effective use of Community Health Workers (CHWs) leads to improved health outcomes. Many countries have implemented CHW programmes as part of the wider health sector reform processes, aimed at enhancing accessibility and affordability of health services to rural and poor communities within a primary health care (PHC) context.

Cognisant of this fact, Ministry of Health initiated the Village Health Team (VHT) programme in 2001 to bridge the gap in health services delivery between the health facilities and the community level. However, after 15 years of implementation, the programme has proved ineffective and unsustainable as it is solely based on volunteerism as the main pillar and therefore has been very poorly resourced and regulated. Lessons from other countries indicate that for a CHW programme to be effective, the provision of community health services often require full-time engagement that 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) programme.

This CHEWs strategy strives to contribute to the achievement of the Health Sector Development Plan's (HSDP) goal of Universal Health Coverage (UHC), by addressing the existing and emerging health challenges and weaknesses of the current VHT programme. It is designed to provide cost effective basic quality services to all Ugandans, through the core principle of community ownership, which empowers communities to manage health problems specific to their localities thus enabling them to take responsibility of their own health.

Effective implementation of the strategy entails the implementation of specific activities with corresponding adequate budgets included in annual work plans at different levels as well as the development of relevant tools and guidelines. The strategy sets objectives and actions that guide policy makers, development partners, training centres, 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 concerned to actively contribute to the successful implementation of this programme for the benefit of the people of Uganda.

Hon. Dr. Jane Ruth Aceng

Minister of Health

Acknowledgement

This National Community Health Extension Workers Strategy is the result of repeated consultations covering a wide-range of stakeholders at national and sub-national levels. The Ministry of Health (MOH) wishes to express its sincere and deepest appreciation to the key government sectors, various development partners, non-governmental organisations, individuals, and stakeholders who contributed to the development of this strategy. The consultations included MOH Departments, UN Agencies, Development Partners, Local Governments, community-based organisation and Civil Society Organisations. The MOH would like to express its appreciation to all individuals and organisations that have contributed to the development of this document.

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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 shows a life expectancy of 65 years and the latest UDHS shows under five mortality to be 64/1000. The major health problems of the country largely arise from preventable communicable diseases, non-communicable diseases, and nutritional disorders. The majority (approximately 75%) of Ugandans live in rural areas, many of which are remote and lack adequate and quality health services. Government therefore recognised 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. The VHT strategy improved rural access to healthcare due to the mix of preventive, promotive and basic curative roles; however the health status of Uganda's population remains relatively poor with high morbidity and mortality from preventable causes.

A national VHT assessment conducted in 2014/2015 showed a number of gaps and challenges in the implementation namely; insufficiency and inconsistencies in programme funding, poor supervision, lack of medical tools and supplies, poor documentation and reporting, weak referral system and linkage with the health system, minimal community involvement, insufficient initial and continuing education, lack of standardised 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 contribute to the achievement of 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 strengthening the community health system and strategic partnerships for increased investments for the community health programme. It is also in line with the United Nations (UN) General Assembly Resolution that urges developing countries to use CHEWs to address public health needs and improve community health.

The goal of the strategy is to establish and strengthen the community health system as part of the larger national health system, in order to bring services closer to the community and ensure equitable distribution of community and household-centred health care services. The general objective is to adequately and competently train and launch a cadre of CHEWs to deliver 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 CHEWs;
- 2. Develop the governance and leadership structures of CHEWs in line with the decentralised health care delivery system;
- 3. Mobilise financial resources for implementation of the CHEWs programme;
- 4. Improve community participation, engagement, and ownership of health programmes; and
- 5. Develop a CHEW performance monitoring and evaluation system.

The strategy will be implemented over a five-year period (2018-2022) during which 15,000 CHEWs will be trained and deployed. The total cost required for full implementation of the strategy is estimated to be approximately USD 95,083,545 million. The implementation of the strategy will be led by the Ministry of

Health, supported by partners, within the framework of HSDP. Three types of indicators; output, outcome, and impact have been drawn from the HSDP to monitor the implementation of the strategy. Mid-term reviews and an 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, improvement of the information system, political will, community involvement, and streamlined monitoring, assessment and accountability mechanisms.

1.0 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 kilometres, of which the land area covers 200,523 square kilometres. 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, (shared with Kenya and Tanzania) and shares land 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 kilometre. 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 programmes that have steadily reversed prior setbacks and directed 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, the structure includes the 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 121 districts and one city.

The heart of all local levels is the council, whose members are elected in regular elections. Councillors 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 responsible for 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 are designated to them to fulfil. In general, local governments and administrative units are thus responsible for all functions and services that are not assigned to the centre. In very broad terms, the central government is responsible for the provision of national public goods, such as defence, security, foreign relations, and the development of national guidelines and policies for sectoral functionality, while local authorities deliver local public goods and services as well as manage the health facilities.

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

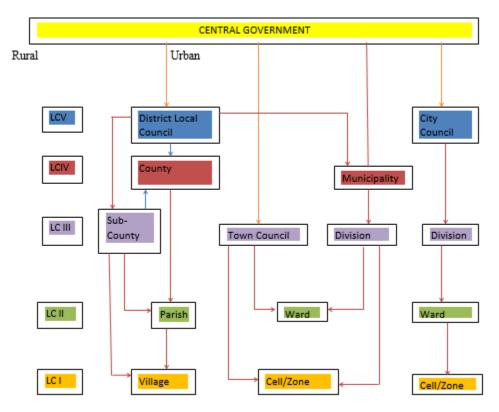


Figure 1 - The hierarchy and relationship of local governments in Uganda

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

This reform approach in the Health Sector transfers the fiscal, administrative, ownership, and authority for health service delivery from the central Ministry of Health (MOH) to local government, which creates space for learning, innovation, community participation, and the adaptation of public services to local circumstances. This enables autonomy in reduction of bureaucratic procedures in decision making, including increased local resource mobilisation and utilisation, enhanced bottom-up planning approach, and increased health workers' accountability. The reform also creates a conducive environment for the implementation of community health programmes, with potential for a more rational and unified health service that improves implementation of health programmes to:

- Cater to local preferences;
- Decrease duplication of services;
- Reduce inequalities;
- Increase community financing and involvement of local communities;
- Increase integration of activities of different public and private agencies; and
- Improve intersectoral coordination, particularly in local government and rural development activities.

1.4 Health status

Despite major strides to improve the health of the population, Uganda still faces a high rate of morbidity and mortality mainly from preventable diseases, leaving the health status to remain relatively poor. The 2014 National Population and Housing Census showed a life expectancy of 63.3 years. Malaria, HIV/AIDS, lower respiratory infections, and tuberculosis (TB) 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 and increased life expectancy in addition to genetic factors. The latest identified risk factors show the use of alcohol and tobacco, household air pollution, underweight children, 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, retention, motivation, and performance.

According to the 2015 MDG report, there has been significant progress in the reduction of both underfive and infant mortality rates in Uganda. The under-five mortality rate declined by 42%, from 156 per 1,000 live births in 1995 to 64 per 1,000 live births in 2016 (UDHS). The infant mortality rate declined by 37%, from 86 to 43 per 1,000 live births in 2016 (UDHS). According to the reports from health facilities, malaria remains the leading cause of death among infants and the under-fives. In 2013/14, malaria was responsible for 20% of hospital-reported deaths among children under-five and 28% of under-five deaths in all inpatient facilities. The other leading causes of child mortality are pneumonia (12.4%), anaemia (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 336 in 2016 (UDHS). In 2013/14, the main causes of maternal deaths that occurred in health facilities were postpartum haemorrhage (26%), hypertension (15%), sepsis (14%), uterine rapture (11%), and abortion-related deaths (10%).

Uganda has experienced a generalised Human Immune Deficiency Virus (HIV/AIDS) epidemic for more than two decades. The country had impressive success controlling HIV during the late 1990s and early 2000s, 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. 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%. However, the UPHIA 2016 showed a reduction to 6%. To ensure further improvements, it is important to implement an appropriate balance of interventions to prevent and treat HIV/AIDS.

1.5 Health system organisation

Uganda uses a decentralised health system to deliver essential health services and ensure referral linkages. The health system is structured into national and regional referral hospitals, general or District hospitals, Health Centre (HC) IVs, HC IIIs, HC IIs, and VHTs (HC Is). The health system structure is as indicated in **Table 1**.

Table 1: Health sector structure			
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 (district) Hospital	Hospital, laboratory and X- ray	District	500,000
Regional Referral Hospital	Specialists services	Regional	2,000,000
National Referral Hospital	Advanced Tertiary Care	National	10,000,000

Source- Uganda Health Sector Strategic Plan 2010-2015

2.0 Global experiences implementing community health programmes

The 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. This crisis is even more critical in developing countries. Participation of CHWs in the provision and promotion of PHC has been scaled up all over the world for several decades. There is a body of supporting evidence proving CHWs significantly add to the efforts of improving the health of the population by acting as public health promoters, educators, and mobilisers, particularly in settings with the highest shortage of skilled, motivated, and capable health professionals.

With the overall aim of identifying and learning from country experiences in CHWs programmes in order to contextualise and adapt them within Uganda, a desk review of experiences from Latin America (Brazil), South East Asia (Bangladesh), and Sub-Saharan African countries (Kenya, Mail, Ethiopia, Malawi, and Uganda) was conducted. The focus was on key aspects of these programmes, encompassing typology of CHWs, selection, training, supervision, incentives/ motivation, and impact of their services. Among countries reviewed, a further detailed literature review was conducted to assess the Ethiopian Health Extension Programme for the purpose of learning their context before, during, and post implementation period. Ethiopia has a strong community-based health programme worthy to learn from and shares similarities with Uganda.

2.1 Experiences from Latin America

2.1.1 Community Health Agents Programme, Brazil

In 1988, the Brazilian Government launched the Unified Health System- UHC (Sistema Unico de Saúde), with the declared aim to provide universal health services to Brazilians, which evolved from the PHC-focused initiative (community Health Agents Programme) in the North-Eastern state of Ceará. The initial focus was on UHC but later on, during 1990s, the programme expanded its horizon into the Family Health Programme (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 agents.

Community health agents are responsible for conducting home visits, in which they collect demographic, epidemiological, and socio-economic information of each family, promote healthy practices, and link families to health services. Their activities work to ensure the implementation of a community component in the Integrated Management of Childhood Illness (IMCI).

The community health agents were recommended from the communities where the programme is implemented and their final selection was conducted by the programme. 95% of the community health agents are women and supervised by a nurse who also works full-time in the basic health unit, as part of the family health team. The programme uses a team approach for referrals of sick children. A unique operational aspect of the programme is that CHWs are paid health professionals. The state government pays the salaries of the community health agents on agreement that municipal governments provide salaries for the nurse supervisors. The Brazilian Community Health Agents Programme is organised as follows:

Education: Primary School

Training duration: 8 weeks residential course and 4 weeks field work

Refresher: Done Quarterly

Supervision of CHWs: Done by Nurses

Incentive: Regular salary

The Brazilian programme expanded dramatically from the 35 participating municipalities with 1,500 community health agents when it was initiated to 150 municipalities with 8,000 community health agents trained and deployed in communities in 1998. The initiative was expanded to include 'the family health program', a team approach to primary health and then adopted at the national level. In 2001, there were 13,000 family health programme 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 community health agents across the country, covering about half of the Brazilian population. The programme activities include vaccination, promotion of breastfeeding, increased use of oral rehydration salts, management of pneumonia, and growth monitoring. The extended coverage of the programme has been associated with declines in the infant mortality rate.

2.2 Experiences from South Asia

2.2.1 Building Resources Across Communities, Bangladesh

The organisation, Building Resources Across Communities (BRAC), was formed in 1972 in Bangladesh and has been supporting Bangladesh's CHW programme since 1977. BRAC trained CHWs in Bangladesh, known as Shasthya Shebika, and are responsible for treating common diseases: anaemia, cold, diarrhoea, dysentery, fever, goitre, intestinal worms, ringworm, scabies, and stomatitis. They sell medications for these ailments at 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 Shasthya Shebika work in many different programmes (treatment of tuberculosis cases through Directly Observed Therapy, control of diarrheal disease, immunisation, family planning and prevention of arsenic poisoning), encourage people to seek care at BRAC and government-run clinics, and provide assistance in satellite clinics that focus on antenatal care (ANC) and immunisation.

The Shasthya Shebika are comprised of women chosen by their communities and are members of the BRAC-sponsored village organisations. Shasthya Shebika are volunteers. They support themselves through the sale of commodities provided by BRAC, such as oral contraceptives, birth kits, iodised salt, condoms, essential medications, sanitary napkins, and vegetable seeds. The Shasthya Shebika use a system of verbal referral of cases. The Shasthya Shebika programme is organised as follows:

Education: Few years of schooling

Training duration: 18 days basic and 3 days TB management training

Refresher: One day each month

Supervision of CHWs: ShasthoKormi

Incentive: Money earned through sales of medication

BRAC has achieved extensive coverage through this programme, which has been associated with marked improvements in women and children's health. Oral rehydration therapy was first used clinically for diarrhoeal illness in Bangladesh. BRAC was the first organisation to implement a community-based programme 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 programme.

2.3 Experiences from Sub-Saharan Africa

2.3.1 Village Drug Kits, Bouzouki, Mali.

A village drug kit programme in southern Mali was implemented by the Malian government in 1990s in which CHWs (village drug kit managers) were trained to manage a kit containing eye ointment, paracetamol, oral rehydration salts (ORS), 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 an 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 clients and manage the drug kits. They are provided with visual aids to assist them to 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 programme is organised as follows:

Education: Usually illiterate

Training: 35 days literacy classes and one-week malaria treatment classes

Refresher: Once a month

A control study of this CHW initiative found that the drug kits were successful in increasing the availability of chloroquine at the village level. In household interviews with parents, it was reported that 42% of children in the intervention group were referred to the community health centre by the drug-kit managers as compared to 11% in the comparison group. This intervention is now implemented in all the village drug-kit programmes established by Save the Children in collaboration with the local health services (Global Health Workforce Alliance, 2010).

2.3.2 CARE community initiatives for child survival, Siaya, 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 programme with a wide-ranging intervention package aimed at improving child and maternal health in Siaya district. CHWs in this district were trained to treat many diseases in children by using simplified IMCI guidelines. Promotion of family planning, immunisation, 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 the programme was based on the Bamako Initiative¹. Community-based pharmacies were established to serve as re-

¹ The Bamako Initiative was a formal statement adopted in 1987 by African Health Leaders to increase availability of drugs and essential services.

supply points for the CHW drug kits. The CHWs sold the drugs to community members and used monies from sales to buy more drugs to restock their kits in a revolving funding scheme.

The CHWs were selected by the community and trained to use the IMCI guidelines to classify and treat malaria, pneumonia, and diarrhea/dehydration as well as use flow charts to assist in the application of these procedures. CHWs provided verbal referral. The referred cases took priority at the health facility to receive treatment. The Kenyan CHW programme was organised as follows:

Training duration: 3 weeks

Refresher: Once every week

Supervision of CHWs: Field staff

Incentive: No incentives provided

Every two years, the United States Center for Disease Control (CDC) evaluates the performance of CHWs. The recent evaluation of the Kenya CHW programme demonstrated that 85% of the cases the CHWs treated were correctly classified as malaria, acute lower respiratory infection, or diarrhoea. CHWs adequately treated 90.5% 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.

2.3.3 Health Surveillance Assistants, Malawi

In Malawi, the Health Surveillance Assistants (HSAs) are the main professional CHWs. The HSA programme was developed in response to Malawi's gap in human resources and is funded through a pooled funding mechanism known as the sector-wide approach (SWAP), which includes funding from the MOH, international donors, and NGOs. Malawi's HSA programme coordinates the delivery of primary care services at the community level including services for environmental health, family planning, maternal and child health, HIV/AIDS, IMCI, and sanitation. The HSAs do not necessarily originate from the communities they serve and may not reside directly in their catchment area. The Malawian CHWs programme is organised as follows:

Education: Completed primary school

Training duration: 12 weeks **Refresher**: Two weeks

Supervision of CHWs: Assistant Environmental Health Officer

Incentive: Receive regular salary

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 achieved MDG 4, with the HSA programme a strong contributor 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 64 per 1000 live births in 2015. 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.

2.3.4 Village Health Teams, Uganda

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

The VHTs are volunteers selected by their communities. The VHT programme 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, ICCM, HIV/AIDS, TB, reproductive health, immunisation, nutrition, and sanitation. Other activities the VHTs significantly contributed to are health education, community mobilisation, 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 improvements in hygiene and sanitation, increased immunisation uptake, increased number of patients seeking ANC and HIV services, and reduction of some preventable illnesses and deaths in the communities. The VHT programme is organised as follows:

Education: Able to read and write

Training duration: 5-7 days

Refresher: Ranging from 2-5 days, but not regulated

Supervision of CHWs: None

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 116 districts.

2.3.5 Health Extension Programme, Ethiopia

Ethiopia is located in the Horn of Africa and covers an area of approximately 1.14 million square kilometres. 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, characterised by top-down governance as well as uncoordinated planning and implementation. The health care system had eight specialised vertical programmes, which 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% 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. Health institutions were few compared to the size of the population, ill-equipped, and inequitably distributed. In 1994, roughly 50% of Ethiopia's health facilities were in urban areas with over 30% 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% (under 2% of GDP);
- 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 had an acute and chronic shortage of human resources coupled with poor community and private sector participation in service delivery and management; and
- The pattern of distribution of human resources for health was skewed toward urban centres, following the distribution of health facilities.

Voluntary CHWs of different types were introduced in the mid-1990s to deliver health promotion and prevention services and commodities, such as ANC, 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 poor ownership at the lower level government structures.

In 1993, the government published the country's first health policy in 50 years, articulating a vision for the development of health sector. The policy fully reorganised the health services delivery system as contributing positively to the country's overall socio-economic development efforts. Its major themes focused on:

- Democratisation and decentralisation of health system;
- Expanding the PHC system and emphasising preventive, promotional, and basic curative health services; and
- Encouraging partnerships and the participation of the community and non-governmental actors.

In pursuit of the health policy goals of improving the health status of the Ethiopian population and to implement the health policy, a HSDP was developed every five years beginning in 1997/98. HSDP II included the Health Extension Programme (HEP) focused on scaling up an institutionalised PHC 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 PHC 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, which 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 centres; 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.

Education: 10th grade education, knowledge of local language

Training duration: 1-year theoretical (25%) and field-based (75%) training

Refresher: Frequent

Supervision of CHWs: 1 supervisor per PHC unit (10 HEWs, 5 health posts)

Incentive: Local government pays salary

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% of households were within an hour's (5 km) distance from a health facility. HEP has enabled Ethiopia to increase PHC coverage from 76.9 % in 2005 to 98% in 2015.

Since its rollout, HEP has shown substantial improvement in outcomes in the areas related to disease prevention, family health, hygiene, and environmental sanitation. A case control study conducted of HEP and non–HEP villages during the introduction of the programme between 2005 and 2007 indicated that the proportion of households with access to improved sanitation reached 76% in the intervention villages (from 39% at baseline). In contrast, access to improved sanitation in the control villages increased from 27% at baseline to just 36 % 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% 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% to 46%) than in control villages (where it rose from 30% to 34%) (Centre for National Health and Development in Ethiopia, 2008).

The study also indicates that from roughly similar levels of coverage at baseline, ownership of nets increased more in HEP villages (87%) than in control villages (62%) 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% 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% of patients sought treatment under similar conditions (Bilal et al, 2011).

Although it is difficult to attribute improvements in health care directly to the rollout of 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 early. The achievements in child health are mostly attributable to large scale implementation of promotive, preventive, and curative PHC interventions. These include integrated community case management (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 programmes. The dramatic increase in immunisation 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 with an estimated 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 anaemia 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% to 40% and use of ITNs increased from 1.3% to 42%. 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 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 centralised, 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. PHC was poorly institutionalised, 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 that can inform the replication of similar programmes.

Ownership and leadership by the Government and local communities

HEP is a product of government ownership and leadership. The programme has been made part of the government development agenda at all levels. The roles and responsibilities of the Federal Ministry of Health of Ethiopia (FMOH), local governments, and communities are clearly defined and regularly monitored. Beneficiary communities are involved at all stages. The local village is in charge of providing material and labour 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.

Relevance, flexibility, and adaptability of the Health Extension Programme to various contexts

In selecting, designing, and implementing a national programme 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).

Capacity building and system-wide support

Innovative training strategy

Training more than 38,000 HEWs 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 centres for practical training. The FMOH provided training material and regional health bureaus provided the stipend and transportation services for the students. HEWs 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 programme, in-service trainings focused on identified skills gaps, and supportive supervision. Defining the HEP management structure was 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. HEWs continuously receive integrated refresher in-service training to strengthen their capacity.

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.

Accountability structure for Health Extension Workers

A supportive accountability mechanism was established to support HEWs. Supervisors were trained and deployed in 3,200 health centres. Each supervisor supports 10 HEWs in 5 satellite health posts, which together form a PHC unit.

Adequate supplies and equipment

Ensuring the continuous supply of logistics, contraceptives, vaccines, ITNs, delivery kits, and so forth is a crucial area of support to HEWs.

Information systems

Information systems that facilitate the collection, analysis, use, and dissemination of data were perceived to significantly improve 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 standardised HMIS contextualised to the Ethiopian setting. Family folders were developed based on the 16 packages of health interventions, and HEWs 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, ANC, immunisation, etc.) and the household in general (ownership and use of a latrine, clean water supply and use, waste disposal, etc.) in terms of completing the desired changes indicated in the HEP. The FMOH does the printing of the family folders to ensure that all households in Ethiopia have a formal medical record.

Stronger partnerships and increased investment in health

As a flagship of the HSDP, HEP is considered the major vehicle for delivering PHC 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 channelled from the partners to pay for medical equipment, drugs, supplies, and pre- and in-service training materials. The partners have also contributed technically and financially to the distribution of commodities and continuous evaluation of HEP to provide evidence for improving programme 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.

Mobilising financial support from development partners

The progressive increase in domestic resource allocation for priorities was key to ensuring sustainability. An agreement was reached between FMOH and regional health bureaus under which the ministry mobilises funds from development partners to provide support to the TVET institutions for printing the HEP training manuals and tools and for procuring and distributing essential supplies. Subnational governments allocate domestic resources for stipends to HEWs during training, pay their full salary on deployment, and cover the costs of building the health posts.

Since 2005, Ethiopia's HEP implemented 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. HEP demonstrates that instead of sticking to the traditional health provider and medication-oriented models, context-sensitive, and affordable functional models and approaches could be developed to expand PHC 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 PHC.

2.4 Lessons learnt and conclusions from global experiences

Evidence shows that human resources drives health system performances. Throughout history, periods of acceleration in health achievements have been sparked by popular mobilisation of workers in the societies. Higher worker density and better work quality improve population-based health and survival indicators. Many similarities are found across CHWs programmes with differences due to contextualisation to country-specific targets and goals. According to the evidence on functionality of CHW programmes, CHWs should be selected from the communities and preferably by their own community members. The selection must incorporate cultural and social considerations of age limits, sex, marital status, and occupational status.

Literature also shows that merely being a person from community is not enough to ensure that a CHW 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 easier in imparting knowledge and promoting healthy modifications in attitudes and practices.

Training is the most crucial element in the implementation of the CHWs programme. This is the phase where the transfer of knowledge from professionals to community representatives takes place. Though universal guidelines for the extent of training have not been established, it can be deduced that CHW training should be extensive, thorough, and complete. It should always be appraised by an exam or viva, so that it ensures their competency in working with the communities.

Furthermore, for a CHW programme to be effective, investment in provision of proper supervision, equipment and supplies, and linkages with the health system is required to complement training. Supervision has proven to be effective in improving the impact of CHW driven interventions. The

services from CHWs with proper skills and a handful of supplies can be further enhanced if they work hand in hand with the formal health system. The role of CHWs in the community would be incomplete if they work in isolation, without creating a link with the formal 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 programmes 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 achieved impressive health and social gains from their CHW programmes. However, these achievements are not exempt of challenges and difficulties.

- Most of the programmes 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 modules for CHW training needs to be tailored to a country's specific goals
 and targets. The curriculum may have allocated more time for theory than the practical skills
 needed.
- 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 CHW programmes do not have clearly instituted documentation and reporting systems.
- Weak referral systems and linkages with the formal health system as well as limited capacity of
 health systems to effectively provide support from the higher levels to the CHW programme
 create a big challenge. The necessary working and living conditions for CHWs are not catered for
 in most cases, which is compounded by a poor communication and transportation system plus
 long distances from health centres.

Commitment from the government to allocate adequate resources to support the training, procurement of supplies and equipment and payment of salaries, and conducting of regular supportive supervision is paramount to the success of any CHW programme.

3.0 The Community Health Extension Worker programme

3.1 Priority issues and challenges in the Uganda Village Health Team programme

In 2014/2015, a nationwide VHT assessment was conducted in 112 districts² to determine the functionality and sustainability of the programme towards achieving universal primary health coverage in Uganda. The assessment outlined major gaps in the implementation of the VHT programme. The gaps relate to composition of VHTs, training, retention and motivation, coordination, partnership and inter-

² At the time of the assessment, Uganda had only 112 districts.

sectorial collaboration, supervision, referral linkage, political commitment, and community perceptions. Additionally, the assessment recommended the need to redesign the VHT programme to make it more functional, sustainable, and responsive to the health services delivery system. **Table 2** below summarises the key findings of the VHT assessment.

Table 2: Summary of findings of VHTs programme implementation in Uganda		
Functionality criteria	Findings	
Recruitment	The VHTs ages range from 18 to 78 years. It was found the VHTs aged 50 and above have difficulty in report writing and swift movement during mobilisation activities.	
	The educational status of VHTs ranged from the illiterate up to tertiary level. The engagement of illiterate people in the VHT programme creates a challenge to provision of quality health services.	
	10% of the VHTs were not selected by their communities, but by community leaders and NGOs or joined on their own.	
	Some VHTs were found to be employed by NGOs, some are students, while others are local council members, all of which is inconsistent with the VHT selection guidelines.	
Initial/ basic training	30% of the 179,175 VHTs in Uganda did not undergo the required basic training and yet they are working as active 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 5-7 days due to financial limitations, but the curriculum was not adjusted to fit the shorter duration. The 5-7 days training of VHTs is inadequate to equip them with appropriate knowledge and skills needed to promote all health programmes and as well as to provide quality services to the communities.	
	Due to resource constraints, supervision has not been adequately provided to ensure training is consistent for all VHTs.	
	There are no training databases for the VHTs in the districts as well as at the national level.	
Ongoing/ refresher training	Programme specific trainings have been conducted by various implementing partners. These trainings lasted for 2-5 days, but are not harmonised in terms of standardised materials, content, duration, and methodology.	
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.	
Programme 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 formal system for tracking the different incentive packages and support given to the VHTs. The various motivation approaches were not	

Table 2: Summary of findings of VHTs programme implementation in Uganda		
Functionality criteria	Findings	
	uniform thus creating disharmony at the district level and among the VHTs.	
Referral system	Most VHTs referred clients to health facilities. However, many health workers do not respect 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 competent in disease management.	
Professional advancement	ent No system in place for professional advancement for the VHTs.	
Documentation and information system	VHT 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 programme and eventually in sustainability when partner projects end.	

3.1.1 Discussion and conclusion of the Village Health Team assessment

Based on the findings of VHT assessment and the gaps identified in the existing VHT programme and the services rendered, various recommendations were 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 programme 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 standardised incentive mechanisms, and career enhancement opportunities.

The national VHT assessment identified low educational levels of VHTs as a main factor that hindered their performance, which is similar with the findings of other studies. Setting up stringent post-primary or secondary education criteria as a pre-requisite for becoming a CHW 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, management of supplies, and record keeping. Moreover, CHWs who are involved in case management should be strictly scrutinised for their education level.

Issues such as 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 familiar areas so as to ensure maximum local engagement and ownership. It is widely acknowledged and emphasised in the literature that the success of CHW programmes hinges on regular and reliable support and supervision. CHW programmes without functioning supervision systems have shown gaps in programme functionality, specifically in terms of poor documentation and linkages with the overall health system.

Much of the literature, including the VHT strategy, tends to imply that volunteers are what CHW schemes aspire to achieve, and assumes there is a sufficient pool of willingness to conduct voluntary social services in rural areas and informal settlements. However, the reality is different. Most CHWs are poor people, living in poor communities, and require income or some monetary payment for their time.

Evidence shows that most programmes 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 the recruitment of CHWs as full-time employees, rather than part-time volunteers. They should also be given appropriate compensation if they work full-time, and those working as part-time should be at least provided incentives for their work. It is recommended that CHWs be paid adequate compensation commensurate with their work load and the time they put in.

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

The attitudes and interactions of health personnel in the formal health system with CHWs have an immediate impact on critical aspects of CHW programme management, such as selection, continued 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 VHT activities. 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 from the planning to the implementation of the CHW programme. CHWs should be properly linked and understand how to refer cases to health facilities as well as conduct required documentation in order to prevent duplication in reporting. Health facility personnel must also understand the reporting requirements of VHTs.

CHWs should be recruited for training on the basis of educational standards 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. Due to the low level of education of CHWs, programmes often develop or adapt training materials and activities specifically for such a group of CHWs rather than using standard training packages developed for the programme. Furthermore, continuous or refresher trainings are as important as initial training. If regular refresher training is not available, acquired skills and knowledge are quickly lost. Due to the diversity of interventions CHWs must deliver in communities, they should be provided with at least 4 months of classroom training and another 2 months hands-on-training. In addition, it is advisable to plan for professional advancement pathways for CHWs to ensure continued interest and enthusiasm.

Evidence confirms that CHW interventions or programmes are considered successful if they address diseases of public health importance, are owned and financed by the government (to ensure sustainability), fit into the country's conventional health system without creating parallel structures, flexible enough to be applied in different socioeconomic, cultural, and geographic settings, embraced and supported by development partners, nongovernmental organisations (NGOs), and other stakeholders, are delivered at low cost, and show concrete results in terms of improving health outcomes.

3.2 Rationale for establishing the Community Health Extension Worker programme

The use of CHWs to increase the reach of health services has been part of various health programmes in both developed and developing countries since the 1970s. As more countries face critical health workforce shortages, CHW programmes are increasingly being used as a strategy to address human resource gaps to improve health promotion and prevention. There have been many experiences throughout the world with community health programmes ranging from large scale national programmes

to small-scale community-based initiatives. The roles and activities of CHWs are enormously diverse throughout their history, within and across countries and programmes. CHW programmes have a role to play that can neither be fulfilled by the formal health care system nor by communities alone. Ideally, CHWs combine service and developmental functions that are not just in the field of health but are multisectoral. The most important developmental or promotional role of the CHW is to act as a bridge between the community and the formal health system in all aspects of health development. The cross-cutting activities of CHWs provide opportunities to increase effectiveness of curative and preventive services and more importantly, promote community involvement and ownership of health-related programmes.

CHWs 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 CHW is expected to perform a wide range of functions, which include home visits, environmental sanitation, safe water usage, first aid and treatment of simple and common ailments, health and nutrition education, disease surveillance, maternal, 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 CHWs are expected to be more appropriate to the health needs of populations than those of facility-based services, be less expensive, and foster self-reliance and local participation. Furthermore, CHWs are found to be more accessible and acceptable to clients in their communities. Particularly CHWs increase utilisation of available health services by poorer and more rural individuals and households. In short, CHW programmes improve 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 programme 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 realise the Alma Ata declaration. Despite the fact that the VHT programme seemingly had a strong potential to improve community health, the key health indicators at the community level remain 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 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 CHW programme to further bridge the gap between communities and health facilities. It should be noted though that CHW programmes are not cheap or easy to establish, but are nonetheless a good investment.

In conclusion, with political will, the Government of Uganda can adopt a more flexible approach by planning a Community Health Extension Workers (CHEWs) programme within the context of the overall existing health sector rather than as a separate activity. The successful implementation of the CHEWs program will contribute to improved health outcomes on major health interventions (such as maternal and child health, major communicable and non-communicable diseases, nutrition, and hygiene and sanitation). The CHEWs programme is in line with HSDP and is meant to provide a framework for strengthening the community health system and strategic partnerships for increased investments for the community health programme. The strategy will be implemented over a period of five years from 2018 to 2022, evaluated and reviewed thereafter.

4.0 Vision, mission, goal, guiding principles, and core values

4.1 Vision

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

4.2 Mission

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

4.3 Goal

To establish and strengthen a CHW programme as part of the national health system in order to bring services closer to the community and ensure equitable distribution of community and household centred health care services.4.4 Guiding principles

Integration: The CHEWs will be the focal point for community mobilisation to access and utilise 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: CHEWs will perform their roles in a transparent manner at all times addressing the needs of the local population. In executing their duties, CHEWs will be the link between the communities and the formal health care system and will be accountable to both parties.

Human rights: The CHEW strategy will apply the human rights-based approach to promoting health.

Gender equity: The CHEWs strategy will be responsive to equal opportunity in accessing and utilising the available health services. 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. CHEWs will always be gender sensitive and considerate during all activities.

Ownership and sustainability: The CHEWs strategy will actively promote community participation and involvement in the planning, delivery, utilisation, and ownership of health services.

Evidence-based/ interventions: The operationalisation of the CHEWs programme will be based on scientifically proven evidence.

4.5 Core values

Equity: The CHEW programme shall ensure equal and equitable access to quality care according to needs.

Accountability: A high level of efficiency and accountability shall be maintained across the various levels of implementation. The programme will be accountable for its performance to clients and communities as well as to political and technical leaders.

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

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

Honesty and transparency: The programme will be guided by adherence to the set implementation guidelines and honest reporting of outputs of the programme.

5.0 Objectives

5.1 General objective

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

5.2 Specific objectives

- 1. To initiate and strengthen the training, motivation, and performance management of CHEWs.
- 2. To develop the governance and leadership structures of CHEWs in line with the decentralised health care delivery system.
- 3. To mobilise financial resources for implementation of the CHEWs programme.
- 4. To improve community participation, engagement, and ownership of community health programmes.
- 5. To develop a framework for monitoring and evaluating CHEWs performance.

5.3 Discussion of objectives

5.3.1 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 CHEWs, including recruitment, retention, and performance management. The desired outcome of the strategic objective is an adequately trained, motivated, and committed CHEW ready to work and stay in the system.

Selection criteria for CHEWs training

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

- · Citizen of Uganda
- Resident of the parish and willing to work in that parish for at least 3-4 years
- 20-35 years old
- Have a minimum of Uganda Certificate of Education (Ordinary level, with a pass in English)
- Be able to communicate in the local language and English

Selection

Prior to conducting the selection of CHEW trainees, a series of meetings will be conducted at district, sub-county and parish levels to sensitize the leaders and communities about the CHEW Strategy and the selection process and criteria. The district health offices will coordinate the overall selection process. Primarily the community will recommend four potential CHEW candidates among whom two will be males and the other two females to the District Health Officer (DHO). The DHO will organize a meeting for the District Selection Committee to review, vet and finally select the two most suitable candidates for training (one male and one female). If the DHO or District Selection Committee feels the candidates selected by the community do not meet the selection criteria, the community will nominate 4 other candidates who will be subjected through the same procedure.

Training

CHEWs will be trained to plan, implement and manage community health activities, such as conducting home visits and outreach services to promote preventive health actions, refer cases to health centres, follow up on referrals, identify, train, and collaborate with volunteer community groups, and provide reports to the HCIII and parish chief. CHEWs will register households in the village using a standardised tool and map household population by age category. They will also prioritise health problems of the parish, set targets with respect to the packages of services, and draft an action plan for the year. The draft action plan is then submitted to the in-charge HCIII, Health Assistant, and parish chief, for their review and approval.

The overall training period for the CHEWs will be 6 months (with a 2-week holiday included). The training will include various approaches among which are theoretical, practical, field visits, and community attachments. Four months will be devoted to theoretical sessions and two for practical sessions. The training centre will be identified and selected by the Ministry of Health in collaboration with the National Coordination Committee for CHEWs. The training centre will be selected based on an analysis of quality, cost effectiveness, and learning and living environment.

The curriculum and training materials (including manuals and guidelines) will be developed by the Ministry of Health. Qualified tutors from nurse' training school/retirees will be oriented; and these will be selected from government and non-governmental organisations and identified by Ministry of Health and will be master-trained. The Tutors' Master will conduct a 3-week training of tutors for selected national tutors. The CHEWs will be trained on the following packages.

- Health promotion and education
- Human anatomy and physiology
- First aid
- Communicable diseases
- Non-communicable diseases
- Family and reproductive health
- Environmental health and personal and household hygiene, dental inclusive
- Neglected tropical diseases
- Essential medicines and supply chain management
- Community health services management
- Disaster and risk management
- Vital statistics and data management
- E-health

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 CHEW training per year of implementation				
Year	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
Number of CHEW trainees	1500	3000	6000	4500

Award

On completion of the six-month training, the successful trainees will be awarded an official certificate by the Ministry of Health for community health extension practice, signed by the Director General Health Services and the commissioner, Community Health Department. This certificate must be presented to the DHO upon completion.

Deployment

After completing the training, the trainees will be certified as CHEWs by the Ministry of Health and be deployed back to their parishes to serve their communities. The CHEW will report to the parish chief with the official appointment letter from the District Health Officer. The CHEWs will be stationed at HCIIs.

For those parishes that do not have HCIIs, the CHEWs will temporarily be stationed at HCIII while the parish chief, in consultation with the community, discuss and find/provide (within 3 months) the most appropriate location for the CHEWs to be stationed.

Each CHEW will be expected to serve a population of about 2,500 people or 500 households.

Continued knowledge and skills development for the Community Health Extension Workers

A series of needs based integrated refresher courses (IRCs) will be conducted to ensure continuous quality improvement in service delivery as well as to increase CHEW knowledge and skills on the services they provide to communities and households. The aim of IRC will be to provide a harmonised and standardised method of training CHEWs, CHEW supervisors, and community health armies in an integrated, cost effective, and sustainable way.

An IRC will be conducted every two years and will last two weeks. This course will be standardised by the Ministry of Health. The exact curriculum and timing of the IRC will be determined and coordinated by the Ministry of Health.

Motivation and retention

The Ministry of Health will employ CHEWs on a contract basis, where they will sign a commitment for three years upon completion of training. During training, they will receive an allowance to cater for their upkeep. After successful completion of training, they will be paid a consolidated allowance throughout the contract period. The consolidated allowance will be a standardised amount for all the CHEW's operation in rural settings. For CHEWs working in major urban areas like cities and big municipalities, their Consolidated allowance will also be standardized but at a higher rate to match their educational level.

In addition to consolidated allowance, a standardised non-financial package agreed upon nationally, by Ministry of Health and partners, and applied to all CHEWs will be put in place to motivate and retain CHEWs. It is essential that all CHEWs receive the Ministry of Health approved financial and non-financial incentive packages. No further incentives outside of the standardised packages may be provided to CHEWs by partners or any other organisation

To monitor each CHEW's performance, regular individual performance evaluation will be conducted annually based on an agreed plan and evaluation tool. A feedback mechanism and reward system will be based on individual CHEW performance.

5.3.2 To develop the governance and leadership structures of Community Health Extension Workers in Uganda in line with the decentralised health care delivery system

This strategic objective refers to planning, monitoring, evaluation, and partnerships in the implementation of the CHEW programme and also incorporate effective resource allocation and leadership development for the programme within the sector. The desired outcome of the objective is effective governance, leadership, and management structures of the programme that ensure community institutions are transparent and accountable.

A CHEW Division has been established under the Department of Community Health at the MOH, and will be headed by an Assistant Commissioner, who also serves as the CHEW Programme Coordinator/Program Manager. The CHEW Division will have principal and senior officers in charge of training, monitoring, and supervision, management of information systems (MIS, HMIS), logistics, and operations. To provide quality service and win community trust and satisfaction as well as engage the community in CHEW interventions, CHEW stations will be equipped with the following (equipment and supplies) as shown in Table 4 below.

CHEWs will be based at parish level however, they will meet at HCIIIs quarterly to share experiences and discuss areas for improvement.

Table 4: Basic Equipment and (medicine and health) supplies at the Health Centre II for the CHEWs to use		
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	
Immunisation	Cool box, ice box	
First aid care	Gowns, examination bed, stretcher, stethoscope, thermometer	
Health centre II (essential medicines and supplies)		
Service areas	Essential medicines and supplies	
Malaria	Coartem (ACT)	
Diarrhea	ORS, zinc	
Pneumonia	Amoxicillin	
Family planning	Short acting contraceptives	
Nutrition	Iron tablet, folic acid, vitamin A capsule	
Other	Analgesics - paracetamol, 1% tetracycline eye ointment	
General supplies	Syringes, needles, gloves, gauze, alcohol, savlon, iodine, gentian violet, disinfectants, cord ligatures (ties), RDT for malaria, condoms, respiratory timers	

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

To enhance partnerships, the MOH will bring together key actors in the sector to harmonise and align their actions and procedures with the national CHEW strategy. The MOH will establish a National CHEW Coordination Committee (NCCC).

5.3.3 To mobilise financial resources for implementation of the Community Health Extension Workers programme

This strategic objective includes a proactive approach in the mobilisation of resources from domestic and international sources through active negotiation with government agencies in order to increase government allocation to the CHEWs programme, strengthened international health partnerships, public-private partnerships, and maximise collaboration with national and international civic society organisations and NGOs. The capacity for management at all levels will be built to generate evidence-based plans to enable health managers use evidence for active negotiation with government to increase resource allocation to the health sector. To increase resources mobilised from domestic sources, different innovative financing mechanisms will be put in place. The management and utilisation of the resources for the CHEWs programme will be in line with the existing government financial management system.

CHEW consolidated allowance will be paid for by the Government of Uganda, while partners and Government will share the cost of CHEW training and refresher courses.

5.3.4 To improve community participation, engagement, and ownership on health

This involves creating awareness, transferring knowledge and skills to communities, and ensuring their ownership, participation, and engagement in planning, implementation, monitoring, and evaluation of health activities to be able to take charge of their own health. This will be accomplished through strong social mobilisation and implementation of the model household approach, which will be the key strategy for scaling up health prevention and promotion activities.

The CHEW's role in improving community participation, engagement, and ownership on health

Besides promoting the model household approach (discussed in detail in the following section), CHEWs also conduct house visits and interface with individuals. Through this, they train, carry out demonstrations, and educate families on topics ranging from common health 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, early marriage and screening for HIV, TB and sickle cell disease before marriage. The other function of the CHEWs is to organise the community for joint planning and interventions related to health such as environmental and water projects, and drainage of swampy areas.

CHEWs also work with communities through traditional associations, schools, women's associations, and youth associations. These institutions help communicate health messages and mobilise the community to help with environmental clean-up, HCII maintenance, and other efforts. CHEWs are encouraged to use all available opportunities to educate, sensitise, and mobilise communities to promote health and prevent diseases.

The CHEW is required to spend 60% of her/ his working time outside the HCII, dealing with model families, community groups or households. For the remainder of the 40%, they will provide services at HCIIs and supervise other volunteer groups. These include immunisation, health education, family planning, ANC, 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 centres play a crucial role in providing referral care and technical and practical support.

The CHEWs programme is designed to give services included in the health extension package at parish level. The following major areas are in the health extension package:

1. Prevention and control of communicable diseases

- Educate the community on early detection and prevention of communicable diseases (malaria, tuberculosis, HIV/AIDS, and NTDs).
- Carry out disease surveillance, and report any unusual occurrence, and follow up as necessary.

2. Prevention and control of non-communicable diseases

- Educate the community on healthy lifestyle practices 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 services and refer clients requiring further care to appropriate health centre.

3. Family and reproductive health services

- Provide basic nutrition information/ education to the client.
- Provide antenatal examination and information for a pregnant woman.

- Promote and encourage health facility delivery.
- Conduct home visits and refer pregnant women with risk factors.
- Provide health information for lactating mothers on proper infant care, nutrition, and exclusive breast feeding.
- Encourage family and community practices that promote child survival, growth and development
 activities (including breast feeding, complementary feeding, micronutrients, hygiene,
 immunisation, use of bed ITN for malaria prevention, psychosocial development, homecare of
 illness, home treatment for minor infections, health care seeking, compliance with advice and
 ANC).
- Assess and manage common childhood illnesses and refer children requiring further care (such as childhood diarrhea, malaria, and ARI).
- Educate the community on family planning options/ methods and provide simple family planning services.
- Promote adolescent and youth-friendly reproductive health services.

4. Hygiene and environmental sanitation

- Promote and provide education on personal hygiene practices such as frequent baths, teeth care, removal of jiggers, etc.
- Establish and demonstrate community-appropriate sanitation technologies.
- Provide education on environmental sanitation (excreta disposal, solid and liquid waste disposal, water supply safety measures, food hygiene and safety measures, healthy home environment, control of insects and rodents).

5. Health promotion, education, and communication

- Provide health promotion and education messages.
- Train model families.
- Perform advocacy for identified health interventions.
- Mobilise communities for identified health interventions.
- Participate in health campaigns.

6. Community health service management

- Plan, coordinate, and lead the community health programme at the parish level in collaboration with local government, the community, partners and other volunteers.
- Avail and manage inputs for implementation of the CHEWs programme.
- Strengthen the referral system.
- Ensure the availability of registers and forms and use them appropriately.
- Establish and strengthen the documentation and filing system.
- Request medicines and supplies in a timely manner by collecting them and recording in accordance with official guidelines.
- Manage supplies and equipment.

7. First aid

- Assess, identify client's condition, and provide first aid services.
- Refer client requiring further care to appropriate health centre.

8. Disaster and risk management

- Evaluate and apply essential first aid during disaster situations.
- Alert the relevant authorities in a timely manner.

9. Vital statistics and data management

- Collect information on vital events, including surveillance data.
- Prepare and submit reports.

The model household approach

The model household approach is a means of empowering selected households with information on personal and household hygiene and environmental sanitation, family and reproductive health, communicable and non-communicable diseases (NCD) prevention and control practices so that the model households are able to influence other households in their communities to adopt the same practices. Training of model households is one of the important CHEWs strategies and is adapted from the mass communication/ diffusion of innovations theory. The basic philosophy of the CHEWs programme is to transfer ownership and responsibility for maintaining health to individual households through transfer of health knowledge and skills. CHEWs will engage 60% 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, 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 behaviours by the rest of the community.

To become model households, household members are trained on the model family package in their own community setting. When implementing the training, priority is given to activities that are easy and inexpensive to implement and are not contradictory to the community's values. A CHEW supported by other community volunteers or VHTs from model households are expected to train about 60 model households a year. The community-based training lasts 96 hours, after which the household "graduates" and receives a certificate of recognition. The following are 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 user of family planning methods.

- Seeking urgent medical care for sick mothers and children.
- Use of oral rehydration salts for children with diarrhoea and providing them with adequate liquids and food.
- Prevention of harmful traditional practices.
- Pregnant women attend four ANC visits.
- Women are assisted by a midwife under the supervision of a skilled birth attendant and receive post-natal care services according to national guidelines.

Malaria prevention and control

- Consistent and proper use of long-lasting insecticide treated nets (LLINs).
- Seek treatment immediately during a malarial attack and proper use of anti-malarial drugs.
- Participate in environmental sanitation activities to prevent malaria in their communities.
- Allow indoor residual spraying (IRS) in their homes.

Personal and environmental hygiene

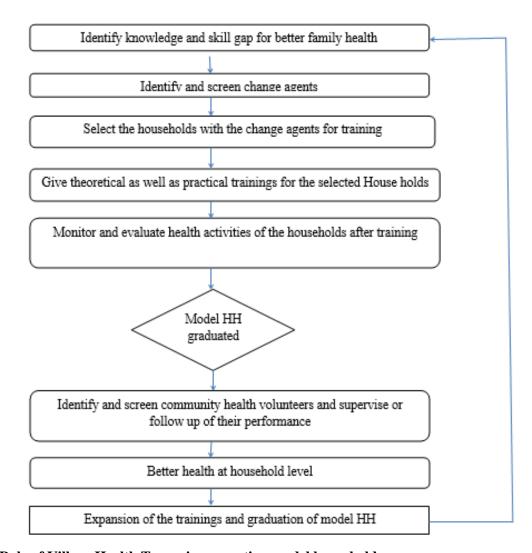
- Availability of hand washing facility near the latrine and washing hands with soap and water after latrine use.
- Construction of pit latrines and its regular use by all family members.
- Maintain clean houses.
- Availability and use of solid waste bin or use of solid waste for compost.
- Proper liquid waste disposal.
- Household feeding utensils cleaned, dried on a rack, and properly shelved.
- Use separate kitchen to prepare food.
- Use separate housing for domestic animals.
- Filter or boil drinking water if it is from an unprotected source.
- Practice hand washing during critical times (before preparing food, before eating and after toilet use, and after cleaning a child).
- Brushing of teeth at least twice a day (upon waking up and before going to bed).

HIV/AIDS, TB, and NCDs

- Understand and practice prevention measures for HIV/AIDS and TB.
- Practice healthy lifestyle including avoiding smoking and alcohol consumption, adhering to treatment, practicing good nutrition, and exercising.
- Do not discriminate or stigmatise.
- Seek timely health care for TB, HIV/AIDs, and NCDs.
- Regular follow up of TB, HIV/AIDS, and NCD treatment.

CHEWs will also mobilise and use community health volunteers to deliver messages and implement interventions. They are also expected to train such volunteers and use them as assistants and promoters of health interventions.

Figure 2- Model family training and graduation



Role of Village Health Teams in promoting model households

The current VHTs who fulfil the CHEW selection criteria and show interest will have an opportunity to be CHEWs. Those VHTs who will not be enrolled in the CHEWs programme will undergo the basic model household training in order to qualify as Community Health Volunteers. After they have graduated, they will be conducting the following activities:

- Continue community health promotion and prevention activities after they are trained to be role models for others.
- Gather every month for experience sharing.
- Report vital health events to the CHEWs and mobilise communities for health activities and influence their neighbours and relatives through diffusion of health messages to bring behavioural changes for improved health outcomes.
- Promote the practice of proper personal and household hygiene and environmental sanitation and provide basic environmental health information.

- Promote key messages on early detection and prevention of communicable and NCDs.
- Identify and refer suspected TB cases and follow up cases.
- Identify targets and provide information on family planning, ANC, health facility delivery, postnatal care, and immunisation.
- Identify and refer sick adults and children to the CHEWs.
- Support follow up for clients.

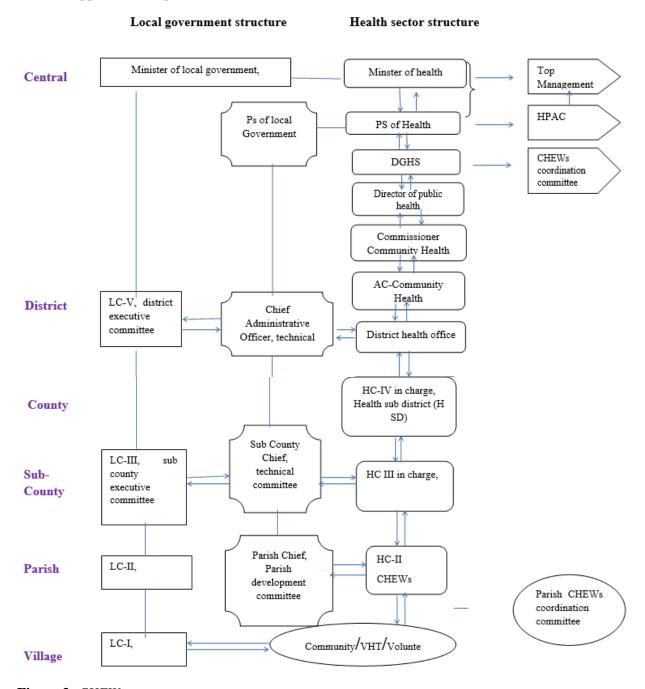


Figure 3- CHEW governance structure

5.3.5 To develop a performance monitoring and evaluation system

This strategic objective will support evidence-based decision making through integration of health programmes at CHEWs intervention level. It will comprehensively address the identification of CHEW

programme 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 performance at all levels of the health system.

Proper information flow and feedback mechanisms will be designed for CHEWs programme. Basic records will be kept by the CHEWs on cases seen or referred and items dispensed or used. HCII / CHEW performance reports will be prepared by CHEWs and sent to the HCIII. HCIII staff will compile all reports received from HCIIs in their catchment area and will then submit to the HCIV. HCIVs will submit their reports to the district. The district will compile all the reports received from HCIVs and send to the MOH headquarters. Finally, the MOH will input the reports into a database at national and district level to update CHEW performance data regularly. Timely feedback mechanisms will be established at each level.

The CHEWs programme performance evaluation will be conducted regularly to identify best practices to scale up as well as to make early corrective actions to activities that are not on track to accomplish the determined target or plan. Supportive supervision will be carried out regularly to provide feedback, mentoring, problem solving, skill development, and data review. HCIIIs will conduct supportive supervision to CHEWs on a monthly basis. District health offices will conduct supportive supervision at HCIIIs, IVs and general hospitals on a quarterly basis. The MOH will conduct integrated supportive supervision at district health offices, general hospitals, and HCIVs, and occasionally to a few selected HCIIIs, HCIIs / CHEW station, and communities for validation. CHEWs will receive strategic guidance from parish chiefs and technical support from HCIII. In general, to sustain the functionality of CHEWs programme, competent human resource, logistics, and governance structures will be put in place at all levels. The implementation guidelines clearly outline the specific governance structures for the CHEW programme.

5.4 Main strategies to achieve objectives

5.4.1 To initiate and strengthen the training, motivation, and performance management of Community Health Extension Workers

Design and conduct basic training of Community Health Extension Workers

- Develop guidelines for implementation of the CHEWs programme
- Develop standard curriculum
- Develop training materials for CHEWs basic training
- Select and accredit training centres
- Conduct TOT for master trainers
- Conduct training of tutors
- Conduct training for CHEWs

Design and conduct integrated refresher courses for Community Health Extension Workers

- Develop integrated refresher training materials and courses
- Orient master trainers for refresher training
- Conduct regular two-week refresher training for CHEWs

Establish individual performance evaluation, incentives, and opportunity for advancement for Community Health Extension Workers

- Institute a regular performance evaluation mechanism for CHEWs
- Prepare standardised performance appraisal tools and distribute to CHEWs supervisors

- Establish feedback and rewarding mechanism for CHEWs
- Develop standardised guideline for CHEWs financial and non-financial incentive packages in collaboration with all stakeholders

5.4.2 To develop the governance and leadership structures of Community Health Extension Workers in Uganda in line with the decentralised health care delivery system

Establish linkages of Community Health Extension Workers with Health Centre III

- Establish appropriate structural arrangement for HCIII to supervise 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 HCIII and CHEWs
- Prepare guideline on health centre III linkage to the CHEWs
- Conduct orientation for CHEWs and HCIII staff on the working relationship and governance structures
- Develop a joint plan to strengthen the linkages between CHEWs and HCIII and communicate the plan to all relevant stakeholders including community members
- Develop a work plan on how the HCIII professional staff will support the CHEWs

Strengthen partnerships with all stakeholders

- Collaborate with stakeholders (Government, NGOs, CBOs, private organisations, and international organisations) to strengthen the CHEW programme
- Establish coordination committees at national, district, sub district, and sub-county levels to monitor and give guidance on the CHEWs programmes, document, and disseminate best practices
- Develop and implement advocacy plans for resource mobilisation
- Orient partners on one plan, one budget, and one monitoring and evaluation (M&E) report
- Conduct joint planning and coordination meetings with stakeholders/ partners for CHEW programme at all levels
- Mobilise and harness political support and commitment for making the CHEW programme a top priority

Avail the required equipment and supplies

- Prepare and distribute job aides for CHEWs
- Procure required equipment and supplies for HCII
- Conduct a needs assessment for appropriate supplies and equipment regularly
- Establish a monitoring mechanism to verify stocks, expiry dates, and keep an inventory of all CHEW supplies and equipment
- Develop and distribute standard operating procedures to guide CHEWs on implementing key interventions

Design and strengthen the referral system

• Design a clear referral and feedback mechanism and communication mechanism with the CHEWs, health facility staff and community leaders

- Conduct orientation for CHEWs and health facility staff on the referral flow and feedback mechanisms
- Prepare standardised referral and feedback forms and distribute to CHEWs and health facilities

Define the role of the Community Health Extension Worker and create clarity on their roles among all stakeholders

- Prepare CHEW implementation guidelines, which includes the defined roles of the CHEWs and roles and responsibilities of other relevant actors in the implementation of the CHEWs programme
- Conduct consultation meetings at the appropriate levels to sensitise stakeholders on the role of CHEWs and build consensus
- Engage all stakeholders on the preparation of CHEW implementation guidelines to garner stakeholder ownership of the CHEWs programme as well as to avoid the creation of parallel services

Strengthen leadership and management of the health system

- Develop governance structures for CHEWs programme
- Recruit technical and administrative staff to coordinate the CHEWs programme at national level as per the MOH established structures
- 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 tools/ registers

5.4.3 To mobilise financial resources for implementation of the Community Health Extension Workers programme

Resource mobilisation and utilisation

- Integrate the CHEWs programme into the health sector development budget for funding by government
- Conduct advocacy meetings with political leaders at national, district, and sub-county levels regarding the benefit of CHEWs programme and the importance of sustainable government budget allocation for the successful implementation of the programme
- Increase mobilisation and utilisation of both local and external assistance
- Promote the participation of the private sector, NGOs, and CSOs in health care both in their own capacity as well as through greater public-private partnerships
- Encourage communities to participate in the financing and management of basic health services

5.4.4 To improve community participation, engagement, and ownership on health Identification and scale up of best practices

- Plan and conduct benchmarking visits for CHEWs and CHEW programme managers to best performing areas within or outside the country
- Document and disseminate best practices of CHEWs programme using various communication channels

- Sensitise and create awareness of the communities on basic skills and knowledge of CHEW packages as well as on the technique of skills transfer
- Conduct capacity building activities for programme managers on the identification and scale up of best practices for CHEWs programme
- Prepare guidelines on the identification and scale up of best practices for the CHEWs programme

Involve the community in the Community Health Extension Worker programme implementation

- Involve the community on the selection of CHEW trainees in their catchment area
- Establish community feedback mechanisms so the community is able to provide feedback to the CHEW on her/ his service performance
- Provide for the representation of the community in the monitoring and evaluation of CHEW performance
- Provide for the representation of the community in CHEW governance structures
- 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 where successes in the CHEWs programme are discussed, shared, and owned by the community
- Collaborate with other sectors as they share their experiences and programmes, which is essential to address community needs
- Celebrate CHEW success stories with the communities
- Conduct periodic monitoring and evaluation to identify the level of community participation

5.4.5 To develop a performance monitoring and evaluation plan

- Develop reporting tools, train, and distribute to CHEWs
- Conduct capacity building activities for CHEWs on how to collect and use data and write reports on information collected from the community
- Conduct programme evaluation of CHEW achievements against programme indicators
- Conduct operational research
- Develop standardised supervision guidelines and checklist and then disseminate to all levels of health system
- Encourage health programme integration during CHEWs supportive supervision
- Conduct capacity building for programme managers, technical staff, and supervisors on basic skills and knowledge to improve supervision of the CHEWs

6.0 Framework for the implementation of the Community Health Extension Worker programme

6.1 To initiate and strengthen the training, motivation, and performance management of Community Health Extension Workers

Strategy	Out put	2018	2019	2020	2021	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 centres 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	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

Strategy	Out put	2018	2019	2020	2021	Activities	Who is responsible
Establish individual	Individual		100%			Establish regular performance	MOH
performance evaluation,	performance					evaluation system for CHEWs	MOE
incentives and	evaluation					 Prepare standardised 	
opportunity for	mechanism in					performance appraisal format	DHO
advancement for CHEWs	place					and distributed for CHEWs	Development partners
				100%		supervisors	
	Incentive mechanism in place					• Establish Feedback and rewarding mechanism for CHEWs	
	Career path for CHEWs designed			100%		Develop standardised guideline for CHEWs financial and non-financial incentive packages in collaboration with all stakeholders	

6.2 To develop the governance and leadership of Community Health Extension Workers in Uganda in line with the decentralised health care delivery

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
Establish linkages of	Functional	-	10%	30%	70%	• Establish appropriate structural	MOH
CHEWs with HCIII	CHEWs to HCIII					arrangement of HC III to	DHO
	linkage in place					implement linkage with	
						CHEWs including assigning	HF
						personnel to manage and	CHEWs
						follow the system.	D 1
						Engine annual mode along an	Development partners
						Ensure annual work plans are	
						in place to guide working	
						arrangements between	
						professional staff at HCIII and	

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
						CHEWs • Prepare guideline on HCIII linkage to the CHEWs	
						 Conduct Orientation for CHEWs and HCIII staffs on the linkage Develop a joint comprehensive Plan to implement linkage between CHEWs and HCIII and communicate the plan to all relevant stakeholders including community members. 	
						• Develop a work plan on how the HCIII professional staff will support the CHEWs.	
Enhance partnership with all stakeholders	Functional national coordination mechanism in place	100%	100%	100%	100%	Collaborate with stakeholders (Government, NGOs, CBOs, Private organisations and International Organisations) to strengthen CHEW programme	MOH DHO HF CHEWs
	Joint planning and reporting in place	100%	100%	100%	100%	• Establish coordination committees at national, district, sub district and subcounty levels to follow implementation of CHEWs interventions and document and disseminate best practices	Development partners

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
Avail the required equipment and supplies including job aids	Availability of required job aides, equipment and supplies at HCII		100%	100%	100%	 Develop and implement advocacy plans for resource mobilisation Orient partners on one plan, one budget and one report Conduct joint planning and coordination meetings with stakeholders/partners for community health extension programme at all levels Promote political support and commitment for community health Extension as a top priority. Prepare and distribute job aides for CHEWs Equip HCII 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

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
Design and strengthen Referral System	Functional referral and feedback mechanism in place		10%	30%	70%	 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 standardised referral and feedback Form and distribute to CHEWs and health facilities 	MOH DHO Health facilities Development partners
Define the role of CHWs and create clarity on the role CHEWs among stakeholders	Availability of CHEWs implementation guideline which defines CHEWs role	100%				 Prepare CHEWs implementation guideline which includes defined roles of CHEWs, implementation strategy, roles and responsibilities 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 	MOH, development partners

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
						implementation guideline to create stakeholder ownership on CHEWs role as well as to avoid the creation of parallel services in CHEWs programme	
Strengthen leadership and management of the health system	A functional CHEWs governance structure in place CHEW databases Developed		100%			 Develop governance structures 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 database for CHEWs strategy and update regularly Develop and distribute appropriate reporting formats/registers 	MOH DHO Development partners

6.3 To mobilise financial resources for implementation of the Community Health Extension Workers programme

Allocated budget for CHEWs strategy by the	100%	100%	100%	100%	D 1	
government					 Develop mechanisms for better integration of community health extension programme with the health sector development programme budgetary process to be funded by government. Design and conduct advocacy 	MOH DHO Development partners
mobilised from stakeholders	50%	100%	100%	100%	meetings with political leaders regarding the benefit of community health extension programme for the community and sustainable government budget allocation for the successful implementation of the programme.	
					Increase mobilisation and utilisation of external assistance (loans and grants)	
					Promote the participation of private sector and non-governmental organisations in health care both in their own capacity as well as through greater public-private partnerships	
I	Resource nobilised from	Resource 50%	Resource 50% 100%	Resource 50% 100% 100%	Resource nobilised from 50% 100% 100% 100%	Resource mobilised from takeholders 100%

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
						participate in the financing and management of basic health services	

6.4 To improve community participation engagement and ownership on health

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
Identification and scale up of CHEWs strategy best practices	Best practice identified and scaled up				25%	 Conduct experience sharing visit for CHEWs and CHEWs programme managers at 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 community on the basic skills and knowledge of CHEWs packages as well as technique of skill transfer. Conduct capacity building activities for programme mangers on the identification and scale up of best practices for CHEWs strategy. 	MOH Development partners DHO HCs

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
						Prepare guideline on the identification and scale up of best practices for CHEWs programme	
Involve the Community in CHEWs strategy implementation	Community involvement and representatio n 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 CHEW 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 	DHO HC CHEWs

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
						discuss issues, where success in CHEWs strategy are discussed and success will be 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 stories with the community Conduct periodic monitoring and evaluation to identify the level of community participation.	

6.5 To develop a performance monitoring and evaluation plan

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
Strengthen	Supervision	100%	100%	100%	100%	Develop reporting format and	МОН
information	mechanism					distribute to CHEWs	DHO
management, supportive supervision, and performance evaluation of CHEWs programme	Programme performance				50%	Conduct capacity building activities for CHEWs on technique of information collection from the community, reporting and local use of information	HF Development partners

Strategy	Output	2018	2019	2020	2021	Activities	Who is responsible
	evaluation conducted					Conduct programme evaluation of CHWs achievements against programme indicators and outcomes	
						Develop Standardised supervision guideline and checklist and distribute at each level of health system	
						• Establish health programmes integration during CHEWs supportive supervision	
						Conduct capacity building activities for programme managers, technical staffs and supervisors on basic skills and knowledge on supervision	

7.0 Implementation arrangements

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

7.1 Roles and responsibilities of Ministry of Health

- Overall coordination of the CHEWs programme
- Develop overall programme concept, standards, and implementation guides
- Mobilise national and international resources
- Provide strategic leadership and guidance
- Provide communication tools and materials
- Procure medical equipment and supplies
- Set up the community health management system
- Provide technical and professional guidance and assistance
- Develop standardised continuous learning materials
- Organise and conduct capacity building forum
- Strengthen collaboration with other stakeholders
- Organise experience-sharing forums
- Develop standards for in-service training, further education, and career structures for CHEWs
- Develop standard data collection, reporting, and monitoring formats
- Develop national referral guidelines
- Develop guidelines on CHEW programme integration within the overall health system
- Develop and annually review formal commitments of CHEWs
- Carryout, coordinate, and sponsor research and development on the CHEW programme implementation
- Organise CHEW programme evaluation and review meetings
- Conduct integrated supportive supervision to districts and selected health facilities and communities

7.2 Roles and responsibilities of Local Government

- Manage and supervise CHEWs programme
- Approve CHEWs plans and budgets
- Mobilise and allocate resources
- Coordinate activities implemented by governmental and non-governmental bodies
- Monitor and evaluate CHEW programme

- Mobilise community organisations and community members for health action
- Strengthen community involvement and participation in decision making
- Promote inter-sectoral collaboration
- Ensure the availability of CHEW commodities and supplies
- Employ and deploy CHEWs

7.3 Roles and responsibilities of the District Health Office

The District Health Office is in charge of overseeing the implementation of the CHEW programme 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 HCII / CHEW station and HCIII and IV
- Strengthen the HMIS
- Ensure the CHEW programme and related issues are a top agenda priority
- Facilitate and coordinate the recruitment of CHEW trainees
- Create appropriate organisational and functional structures, and designate staff
- Provide technical support for the CHEWs programme for health facilities
- Organise experience sharing forums
- Collect, compile, and prepare periodic reports to submit to the MOH and local government
- Organise CHEW programme evaluation and review meetings
- Strengthen and promote intersectoral collaboration among stakeholders
- Organise and conduct capacity building forums, workshops, seminars, and training of trainers
- Mobilise and manage resources for CHEW programme
- Coordinate and lead supervision, monitoring, and evaluation
- Identify and prioritise the major health causes of morbidity, mortality, and disability in the district
- Coordinate and carryout small-scale research and development to inform CHEW implementation
- Ensure availability of essential resources, facilities, staff, materials, and vehicles
- Ensure adequate supplies and other commodities for CHEWs
- Provide supportive supervision of CHEWs and the overall management of health centres
- Plan and provide in service training to CHEWs, HCIII and District Health Office staff

7.4 Roles and responsibilities of the Health Centre IV

- Conduct integrated supportive supervision at HCIII
- Collect, compile, and prepare periodic reports and submit to the District Health Office and local government
- Provide technical support for CHEWs and HCIII staff
- Ensure the availability of appropriate logistics and supplies at HCIIs and HCIIIs

- Conduct capacity building activities for CHEWs and HCIII staff
- Strengthen referral linkages between HCII / CHEW station and HCIII as well as HCIII and HCIV

7.5 Roles and responsibilities of Health Centre III

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

- Plan, coordinate, monitor, and evaluate CHEWs programme
- Identify skill gaps in CHEWs, and plan and provide appropriate on the job capacity building activities
- Assign a staff from the HCIII to cover CHEW activities in the absence of the CHEW
- Support the preparation of CHEW annual plan
- Organise regular review meetings on CHEWs performance
- Ensure the implementation of the health extension packages as per national guidelines
- Organise and conduct regular community satisfaction surveys
- Develop a detailed plan to support CHEWs
- Conduct integrated supportive supervision at HCII and community levels
- Ensure appropriate resources are allocated and utilised to HCIIs
- Ensure cordial CHEW and local government work relationship
- Provide technical support for CHEWs
- Collect, compile, and prepare periodic reports and submit to the HCIV and local government in timely manner

7.5.1 Roles and responsibilities of the CHEW supervisor

CHEWs will be supervised by the HCIII in-charge.

- Document periodic plans of CHEWs under his/ her supervision
- Follow progress on the implementation of CHEW activities during regular supervision
- Provide onsite technical support and address any challenges and report any unaddressed issues 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 CHEW-related issues
- Work closely with LCI and parish chairpersons in supporting CHEWs
- Receive monthly reports, compile, and submit to the HCIII in charge
- Attend monthly CHEW meetings at sub-county level and provide input to consolidate the programme
- Participate in the performance evaluation of individual CHEWs within his/ her catchment
- Carry out periodic supportive supervision of CHEWs

7.6 Roles and responsibilities of Health Centre II/ Community Health Extension Worker CHEWs will be stationed at the HCII and will have the following duties and responsibilities.

- Conduct home visits and outreach services
- Provide referral services to HCIII 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 guidelines
- Collect, compile, and document the basic socio-demographic information
- Develop and implement the plan in collaboration with HCIII and local government
- Ensure the availability of necessary equipment, drugs, and supplies
- Implement the feedback given by the health professionals from health centres, 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, analyse, compile, and report progress on the health extension package to HCIII and local government
- Participate with other sectors' development workers in community-based development

7.7 Roles and responsibilities of the National Community Health Extension Worker Coordination Committee

- Act as an advisory unit overseeing and coordinating the CHEW programme's policy dialogues, consensus building, and information sharing platform for the MOH.
- Provide a consultative forum that can coordinate and monitor the CHEWs programme among government and NGOs
- Develop a common mechanism of support to the MOH
- Develop common and unified frameworks and tools, including curriculums, training manuals, implementation guidelines, packages, indicators, incentive packages, etc.
- Maintain regular exchange of information among member organisations, including information
 on best practices and factors constraining or facilitating CHEW programme delivery, to ensure
 complementarity of work and avoid duplication of efforts
- Provide a platform for members to find 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 organisations
- Review and discuss the current needs for strategic, programmatic, and technical operational coordination and support in the areas of CHEW programme
- Explore opportunities to undertake common and joint monitoring and evaluation of programmes and projects of member organisations
- Jointly explore opportunities and engage in dialogue with potential donors to seek additional resources for CHEWs programme
- 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 the CHEWs programme
- Support the MOH in creating and strengthening information, communication, and demand creation for CHEWs programme among all segments of the population
- Lead in distribution, implementation, review, and monitoring of the CHEWs programme
- 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 the CHEWs programme to facilitate better problem solving

7.8 Roles and responsibilities of the Coordination Committee at the Parish

The Parish Coordination Committee is a platform at community level that supports the coordination of CHEW interventions and also monitors the implementation of packages in the community. The committee members comprise of the LCI chairperson, parish chief, 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
- Organise and conduct regular meetings with community representatives in their respective parish to follow up, support, and assess implementation progress
- Collect, organise, and interpret information and data on model households and community health volunteers
- Mobilise community resources for the construction and renovation of HCII and residence for CHEWs
- Lead health development interventions in their respective parishes by mobilising and coordinating community efforts
- Follow up and supervise the work of the CHEWs

7.9 Roles and responsibilities of other ministries

- MOF to give priority to health, especially the CHEW programme in budget allocation
- MOE should review and integrate the CHEW programme in various school and pre-service curricula in collaboration with MOH
- MOPS to provide strategic and managerial leadership on institutionalising CHEWs in the health system
- MoGLSD to facilitate the establishment of community groups to support CHEW activities at all levels
- MoICT to promote information dissemination and educational programmes on mass media regarding community health programmes

7.10 Roles and responsibilities of development partners

- Provide technical and financial support to the CHEWs programme
- Advocate nationally and internationally about the CHEWs programme

- 7.11 Roles and responsibilities of civil society organisations and professional associations
 - Forge partnerships with different stakeholders, including political leaders to promote CHEWs
 - Complement government efforts in the provision of quality community health services by advocating for supportive polices and bylaws that allow CHEWs to perform optimally
 - Mobilise and allocate resources for implementation of the CHEWs programme
- 7.12 Roles and responsibilities of the private sector
 - Complement government efforts in the provision of quality CHEW services
 - Through Government, provide funds to procure commodities and supplies for CHEW interventions
- 7.13 Roles and responsibilities of training and research institutions
 - Undertake relevant community health programme research to provide evidence for policy directions and implementation guidance
 - Review and update curricula to ensure relevant community health programme issues are adequately addressed by training institutions
 - Provide technical advice and updates on current developments on community health strategies to policymakers

8.0 Monitoring and evaluation

The objectives of monitoring and evaluation are to improve the management and optimum use of resources of the CHEWs programme and to make timely decisions to resolve constraints and/ or problems faced during implementation. The sources of information for timely monitoring are routine service and administrative records compiled through the HMIS. Monitoring and supervision will happen regularly throughout the CHEWs programme, 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 the CHEWs programme. They are as follows:

- 1. Process/ output indicators
- 2. Outcome indicators
- 3. Impact indicators
- 8.1 Process / output indicators

No	Indicator	Baseline	Target	Source	Periodicity	Level of Data Collection
						Conection
1	National level CHEWs	0%	100%	MOH	Monthly/	MOH
	strategy developed			report	quarterly	
2	Proportion of parishes with	0 %	100%	МОН	Monthly/	District health
	trained CHEWs			report	quarterly	office
3	Proportion of CHEWs	0%	10%	МОН	Monthly/	District health
	trained with refresher trainings			report	quarterly	office

No	Indicator	Baseline	Target	Source	Periodicity	Level of Data Collection
4	Proportion of districts with functioning health extension package 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 resources allocated for the health extension programme	0%	100%	MOH report	Monthly/ quarterly	MOH, district health office
7	Existence of functional coordination committees	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, HCIII and II
9	Number of referrals received at HCIII and number of referral feedback reports received at HCII.	0%	100%	MOH report	Monthly/ quarterly	HCIII and II

8.2 Outcome Indicators

No	Indicator	Baseline	Target (2022)	Source	Periodicity	Level of Data Collection
1	ANC 4+ coverage	59.9%	70%	UDHS HMIS	Every 5years Monthly/Quarterly	Population All HFs
2	Contraceptive Prevalence Rate	39%	50%	UDHS HMIS	Every 5years Monthly/quarterly	Population All HFs
3	Measles coverage under 1 year	80%	95%	UDHS HMIS	Every 5years Monthly/Quarterly	Population All HFs
5	DPT3Hep + Hib coverage	79%	90%	UDHS HMIS	Every 5years Monthly/Quarterly	Population All HFs

No	Indicator	Baseline	Target (2022)	Source	Periodicity	Level of Data Collection
6	Under-five vitamin A second dose coverage	26.6%	66%	HMIS	Monthly/Quarterly	All HFs
7	Children below 5 years who are underweight	11%	5%	UDHS HMIS	Every 5years Monthly/Quarterly	Population 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 household trained and graduated	0%	38.2 %	HMIS	Monthly/Quarterly	Community

8.3 Impact indicators

No	Indicator	Baseline (2015)	(2022)	Source	Periodicity	Level of Data Collection
1	Maternal Mortality Ratio (per 100,000)	336 (UDHS 2016) 360 (WHS 2014)	280	UDHS	Every 5 years	population
2	Neonatal Mortality Rate (per 1,000)	27 (UDHS 2016) 23 (WHS 2014)	16	UDHS	Every 5 years	population
3	Infant Mortality Rate (per 1,000)	43 (UDHS 2016) 45 (WHS 2014)	35	UDHS	Every 5 years	population
4	Under five mortality rate (per 1,000)	64 (UDHS 2016) 69 (WHS 2014)	45	UDHS	Every 5 years	population
5	Children below 5 years who are stunted	29% (UDHS 2016)	20%	UDHS	Every 5 years	population
6	Total Fertility Rate	5.4 (UDHS 2016)	4.7	UDHS	Every 5 years	population
7	Adolescent Pregnancy Rate	25% (UDHS 2016)	14%	UDHS	Every 5 years	population

9.0 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 MOH will coordinate the 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 a country-level stakeholder meeting with the relevant key stakeholders that will also be involved in the implementation of the programme. 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 clear efforts to mobilise resources for the implementation of the CHEWs programme. Every opportunity will be taken to facilitate resource mobilisation and the buyin of key national and international partners. Advocacy activities will be increased to draw the commitment of government for sustainable budget allocation for CHEWs.

In order to increase advocacy for CHEWs and mobilise resources for its implementation, each stakeholder is expected to promote the strategy using all available means. To assist 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 programme strengths, weaknesses, and, if necessary, the need for adjustments. Furthermore, steps will be taken to ensure effective monitoring of services using the above-mentioned indicators. Mid-term reviews and end of implementation evaluation will be made in collaboration and with support of partners.

10.0 Conclusion

The programme is expected to advance Uganda's efforts in achieving UHC 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.

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

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

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

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

Fourth, all gaps of health system need to be addressed to make the programme a success. The CHEWs programme does not merely train and deploy CHEWs, significant investment shall be made in setting up and equipping HCIIs to serve as formal institutional hubs for the programme. A health information system shall be adopted and health facility staff shall be oriented on the programme to enhance supportive supervision and continuous improvement in quality of programme management and service delivery. Continuous assessment and in-service training should be conducted to fill the gap in capacity of CHEWs. 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 harmonisation of financing, programme implementation, monitoring, and evaluation, leading to further strengthening of the health system.

Sixth, the programme will be flexible and adaptable to various contexts. The CHEWs programme 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 programme (rural, urban, and pastoralist) to modify and fit key aspects of programme implementation in these widely varying contexts. This flexible nature of the programme provides key lessons that are unique to the different environments

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

11.0 References

- 1. Uganda demographic and health survey report. 2011.
- 2. Uganda demographic and health survey report. 2016.
- 3. UNICEF. Access to healthcare through community health workers in East and Southern Africa July 2014.
- 4. Declaration of Alma-Ata International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978.
- 5. WHO. Community health workers: What do we know about them? January 2007.
- 6. Uganda health system community and home based rehabilitation course. May 2011.
- 7. MOHE. Health service extension programme implementation guideline. 2005.
- 8. Uganda health care system profile, background, organisation, polices and challenges volume 1, May 2012.
- 9. How effective are community health workers, Johns Hopkins Bloomberg School of public health, September 2012.
- 10. Millennium development goals report for Uganda 2010.
- 11. Community Empowerment in Health Uganda Version 1, August 2009.
- 12. Millennium Development Goals Report for Uganda, 2013.
- 13. National village health team assessment in Uganda, 2015.
- 14. UNICEF. Country Programme Action Plan (CPAP) 2016-2020.
- 15. Situational analysis village health team in Uganda, 2009.
- 16. Operational guideline for establishment and scale up of village health teams. 2009.
- 17. Health System Profile for Uganda 2005.
- 18. Uganda national health policy, May 2009.
- 19. The Experience of Uganda Local Government's Role as a Partner in the Decentralisation Process to Strengthen Local Development September 2008.
- 20. National population and housing census 2014.
- 21. Global Health Workforce Alliance and WHO. Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals: A Systematic Review, Country Case Studies, and Recommendations for Integration into National Health Systems. 2010
- 22. Millennium Development Goals Report for Uganda 2015.
- 23. Health Extension Program: An Innovative Solution to Public Health Challenges of Ethiopia: A Case Study. HealthSystems20/20.
- 24. Nejmudin Kedir Bilal, Christopher H. Herbst, Feng Zhao, Agnes Soucat, and Christophe Lemiere. Health Extension Workers in Ethiopia: Improved Access and Coverage for the Rural Poor.
- 25. Netsanet W. Workie and Gandham NV Ramana. The Health Extension Programme in Ethiopia, the World Bank.
- 26. Health sector development plan 2015/16 2019/20, Uganda.
- 27. Center for National Health Development in Ethiopia. 2008. Ethiopia Health Extension Programme Evaluation Study, 2005–2007, vol. I. Household Health Survey. Addis Ababa.

Annex 1- Detailed cost of CHEWs strategy

Allilex 1- Detailed cost of	FY18/19	FY19/20	FY20 /21	FY21/22	Total
Programme component	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)
1. CHEW tools, equipment, and supply				_	_
Total costs	829,112	2,144,444	4,917,502	10,809,666	18,700,724
2. Training Costs					
Food	836,104	1,672,208	3,344,417	2,508,312	8,361,042
NALI Administrative Costs	75,843	151,686	303,373	227,530	758,432
Tutors orientation	12,127	24,253	48,506	36,380	121,266
Training equipment and maintenance	7,878	15,756	31,513	23,634	78,781
Stationery	35,890	71,779	143,558	107,669	358,895
Trainee Transportation and Facilitation	356,757	713,514	1,427,027	1,070,270	3,567,568
Tutors and administrative staff transport and facilitation fees	57,607	115,214	230,428	172,821	576,071
MOH/Central Team Supervision - Field and NALI	42,612	85,224	170,447	127,836	426,119
DHT supervision during field placement	22,945	45,890	91,780	68,835	229,450
Other costs	6,674	13,349	26,697	20,023	66,744
Total training costs	1,454,437	2,908,873	5,817,747	4,363,310	14,544,367
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,	100,000	-	-	-	100,000

Programme component	FY18/19 (US \$)	FY19/20 (US \$)	FY20 /21 (US \$)	FY21/22 (US \$)	Total (US \$)
supervision guideline and tools					
HCII / CHEW station capital costs (furniture)	435,334	896,788	1,847,383	1,427,103	4,606,608
HCII / CHEW station operational costs (stationery)	87,067	269,036	646,584	1,931,346	2,934,034
National coordination committee operational costs	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 consolidated allowance		T		ı	1
Rural CHEWs	1,404,213	4,339,018	10,428,107	31,148,756	47,320,094
Urban CHEWs	135,824	419,697	1,008,671	3,012,900	4,577,092
Total CHEW consolidated allowance	1,540,037	4,758,715	11,436,778	34,161,656	51,897,186
5. Electronic information systems deve	lopment and n	naintenance			
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	4,619,563	10,988,264	24,676,714	52,715,497	93,000,038