



## Uganda Virus Research Institute

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## Uganda Virus Research Institute

# Strategic and Development Plan 2020/21- 2024/25

***Repositioning the Institute as  
A World Class Centre of Excellence in Health Research***

## **FOREWORD**

This Strategic Plan 2020/21-2024/25 is a major milestone in the journey to re-position UVRI as a world class Centre of excellence in health research. Functions of UVRI have ably been portrayed in the PCR tests performed at the on-set of the COVID-19 Pandemic in March 2020. UVRI clearly demonstrated the research investments injected largely by our Development Partners and the Government of Uganda. A well-developed Research Institute is a central arm of the health sector and crucial component of any health system. Functions of research institutions range from research, diagnosis of disease conditions to national disease surveillance and control of disease outbreaks. During this period, UVRI conducted confirmatory tests for COVID-19 Measles rubella and conducted evaluation of the rapid testing kits used during outbreaks, provided the evidence based research for policy which has been progressively acknowledged by the MoH, partners and stakeholders. The challenges of health research institutions in Uganda remained: - the lack of a national research agenda, inadequate human resources in all research institutions, low government financial allocation to health research and lack of mechanisms for dialogue with partners in industrial sub sector. The solutions to the challenges are well articulated in the SDGS goal 3, the NDP III (2020/21-2024-25) program 16 and 17 National Health policy II 2016 and health HSDP III (2020/21-2024-25). This strategic plan is a tool for implementing the set targets in the Ugandan Vision 2040 national document.

To achieve the set targets research institutions must be well coordinated and funded. The Strategic Plan will provide a framework and guidance for implementation and investments at UVRI by the Government and partners. The Ministry of Health is committed to strengthening the coordination and use of evidence based research findings in the development and implementation of health policies and services. I call upon all stakeholders and partners to study the strategic plan find a niche in the health research environment to align their present and future research priorities and support the actualization of this plan.

**Hon. Dr Jane –Ruth Aceng**

Minister of Health

## **ACKNOWLEDGEMENT**

The development and finalization of this UVRI Strategic and Development Plan III is a result of dedicated efforts of the collaborative Research Institutions, Ministry of Health (MOH), several stakeholders, on-campus partners, and Staff. These stakeholders have been engaged in series of meetings, workshops and individual as well as institutional consultations to develop this plan for UVRI.

I would like to acknowledge and extend sincere appreciation to the UVRI strategic plan task force and Heads of Departments for spearheading the development process, on-Campus Programs and Partners for their support and cooperation towards this plan.

Special acknowledgement is extended to Dr Okware Sam (Director General UNHRO) for his overall guidance. Dr. Julius Lutwama (Deputy Director) and Mrs Birungi Rachel Asiimwe (Principal Assistant Secretary) who committed time and effort in steering the process of developing and finalizing this strategic plan. Special thanks go to the Heads of Departments, Dr. Kayondo Jonathan, Dr. Watera Christine, Prof. Alison Eliot, Dr. Lutalo Tom Dr Serwanga Jennifer, and Dr Bwogi Josephine for your technical input. The Strategic Plan Taskforce was composed of: Mr. Kwizera Charles, Mrs Emily Nyanzi Kabuye, Dr Patrice Mawa, Mr Rajab Lukwago, Mr Makko Musagara, Ms. Flavia Ayebazibwe, Mrs. Rachel Birungi Asiimwe and chaired by the Dr Julius Lutwama. We are indebted to the team for their dedicated efforts in organizing the preparatory and workshop sessions that yielded into the final document.

Finally, the Institute is grateful to the National Planning Authority and Ministry of Health and all those institutions and individuals who have not been specifically mentioned above, but who directly or indirectly contributed to the successful development and finalization of this Strategic Plan. The support and contributions from all departments of MOH are valued.

**Prof. Pontiano Kaleebu**

**DIRECTOR UVRI**

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## LIST OF ACRONYMS

ACP	AIDS Control Program
AU	African Union
CDC	Centers for Disease Control and Prevention
EAC	East African Community
EACCR	East-African Consortium for Clinical Research
EACR	European Association for Cancer Research
EAHC	East African High Commission
EAVRI	East African Virus Research Institute
EDCTP	European & Developing Countries Clinical Trials Partnership
EIA	Environmental Impact Assessment
EPI	Expanded Program on Immunization
ESD	Epidemiological Surveillance Division
FAO	Food and Agriculture Organization
FY	Financial Year
GCLP	Good Clinical Laboratory Practice
GCP	Good Clinical Practice
GLR	Great Lakes Region
GoU	Government of Uganda
HPV	Human Papilloma Virus
HRL	HIV Reference Laboratory
HSSIP	Health Sector Strategic and Investment Plan
IANPHI	International Association of National Public Health Institutes
IARC	International Agency for Research on Cancer
IAVI	International AIDS Vaccine Initiative
ICRF	Imperial Cancer Research Fund

ICT	Information Communication Technology
IHP+	International Health Partnerships and related Initiatives
KEMRI	Kenya Medical Research Institute
KRA	Key Result Areas
LIMS	Laboratory Information Management System
MDGs	Millennium Development Goals
MoH	Ministry of Health
MOU	Memorandum of Understanding
MRC-UK	Medical Research Council-UK
NACCAP	Netherlands-African Partnership for Capacity development and Clinical interventions Against Poverty-related Diseases
NCDs	Non-Communicable Diseases
NDP	National Development Plan
NHP II	the second National Health Policy
NIMR	National Institute for Medical Research, Nigeria
NRM	National Resistance Movement
OVI	Objectively Verifiable Indicators
QAC	Quality Assurance Committee
RHSP	Rakai Health Science Programs
SEC	Science and Ethics Committee
SIDA	Swedish International Development Agency
SOPs	Standard Operating Procedures
UAB	UVRI Advisory Board
UK	United Kingdom
UNEPI	Uganda National Expanded Program for Immunization
UNHRO	Uganda National Health Research Organization
USA	United States of America

UVRI	Uganda Virus Research Institute
VHF	Viral Hemorrhagic Fever
WHO	World Health Organization

## **EXECUTIVE SUMMARY**

UVRI continues to pursue its vision to become the World class Centre of excellence in health research and its mission of conducting scientific investigations on diseases, contribute to knowledge, policy, and practice; and engage in capacity development for improved public health indicators. For UVRI to realize its vision and mission, it will be guided by innovation, dedication, responsiveness, and accountability to its stakeholders. UVRI continues to uphold its guiding principles and core values in line with research ethics.

UVRI has contributed to the following achievements in research, surveillance, infrastructure, training, and capacity build over the last 5 years. Uganda is known to have over 80 arboviruses and the number keeps on increasing as new viruses are identified. Of the 80 Virus, 30 viruses were isolated at UVRI. Nine new viruses have been identified in Uganda in the last decade or so (Mbugo virus, Sosuga virus, Bukakata virus, Ogwapoke virus, Ntwetwe virus, Nakiwogo virus, Ebola Bundibujjo virus, Sunguru virus) and Adumi Virus. Of the 30 new viruses first isolated at UVRI, include West Nile, Zika ,o'nyong'nyong and Bunyamwera viruses. Other research findings include the risk factors for HIV transmission that were established; mosquito research with our scientists- Dr Mukwaya having a mosquito (Mukwaya) named after him). Other research findings involve the use of circumcision to reduce HIV transmission; contribution to vaccine development for HIV and Ebola; studies on polio virus including the vaccine strains; Provision of data on HIV incidences and prevalence in Uganda. Key source of information on the HIV strains circulating in Uganda and their characteristics has been established, shared with Ministry of Health and used to guide policy and practice.

The key achievements in research and innovation include the use of the dapvirine vaginal ring can reduce HIV infection in women and the use of Dolutegravir combination therapy in high levels of pre-treatment HIV drug resistance which led to a change of first line treatment of HIV. In addition, UVRI provided data on a high HIV incidence in fishing

communities and Female Sex Workers and provided evidence of HIV incidence reduction when scale up antiretroviral therapy (ART) and medical male circumcision. Additionally , UVRI provided Information on life expectancy in the era of (ART).

Under surveillance and reference activities, UVRI has contributed to the timely detection of viral hemorrhagic fever virus (VHF) in the region. The Labs offer VHF and arboviruses diagnostic services for countries like South Sudan Rwanda, Ethiopia, Somali and sometimes the Central African Republic (CAR) and the Democratic Republic of Congo (DRC). The HIV serology laboratory is accredited by the College of American Pathologists and supports quality assurance for HIV and related tests for the national HIV surveys and annual ANC sentinel surveillance for HIV and syphilis. UVRI was in 2018 designated as a WHO Yellow fever regional reference laboratory (Only 2 in Africa). UVRI was re-certified as a WHO Measles and Rubella Regional Reference laboratory and WHO international -Country Polio Laboratory serving 8 countries .UVRI continues to perform vaccine potency tests for polio and measles vaccines. UVRI continues to serve as the national reference laboratory for HIV diagnostics, and as the National Influenza Center, and a WHO influenza Collaborating laboratory

For Infrastructure capacity and development, UVRI hosts the largest basic science research laboratories in the country in the areas of immunology, virology and molecular biology. These are used for research to understand disease processes and to contribute to interventions such as vaccine discovery.

UVRI hosts the largest bioinformatics Center in the regional aimed at analysis of big genomics data. A high performance computing (HPC) and power stable cluster for performing bioinformatics related tasks. the cluster has a total of 2,048 cores and 16<sup>th</sup> of Ram

UVRI is about to complete the construction of largest arthropod containment Level 2 insectary in Uganda where state of art research in genetically modified mosquitoes for malaria vector control will be performed.

The five- year plan has been developed to ensure achievement of the functions of the public Health Research Institute as preserved in the UNHRO Act of 2009 and the mandate of vote 304 2015/2016. The national, regional, and international development frameworks have guided the context and the process of formulation of this plan. The plan is expected to contribute to Uganda Vision 2040 strategies, Programme 16 on human Capital Development and Programme 17 on Innovation, Technology Development and Transfer in the NDP III.

During the 5 years of implementation of the plan, UVRI aims to achieve the following objectives:- 1) enhance viral research and vector innovation to inform knowledge, policy, and practice for health 2) improve response to emerging and re-emerging viral diseases 3) enhance viral and vector surveillance to inform knowledge, policy and practice for health and 4) to improve operations, infrastructure and human resource capacity for improved service delivery. The four domesticated objectives will help UVRI to achieve the Key result areas that follow.

UVRI hopes to reduce the prevalence of viral diseases and increase the number of Research products put out there to improve the wellbeing of the population in Uganda in the next five years. In addition, UVRI desires to improve the uptake of research products for informed policy and practice for health, increase the number of UVRI led collaborative research projects undertaken in the five-year funding period, increase the number of publications in peer review journals and improve efficiency and effectiveness in service delivery. To support the research functions, UVRI will process international certification for the viral research and human resource facilities on campus and develop research infrastructure at UVRI. The available funding for the plan is Ugx billions 338,0676,500 from

the government of Uganda projected Midterm Expenditure framework (MTEF) -Ugx Bn 57.856,000 funding for the three years 2020/21- 2022/23 and Bn Ugx 280,220,500 from the development budget for the same years. The total funding required to implement the plan is Tn 26,545,446,000. The above objectives will only be achieved with increased funding from the Government of Uganda and Development partners.

## **SECTION ONE: INTRODUCTION**

### **1.1 BACKGROUND**

The Uganda Virus Research Institute (UVRI) was established in 1936 by the International Division of the Rockefeller Foundation of the United States of America. It was then called the Yellow Fever Institute, as its focus was on yellow fever epidemiology with emphasis laid on investigating the extent of spread of the yellow fever virus from West Africa eastwards. Over the years, several other, previously unknown, arboviruses were isolated, some of which proved to be of considerable medical importance.

By 1950, the Institute had gained regional recognition and became the East African Virus Research Institute (EAVRI) under the East Africa High Commission (EAHC). Due to the outstanding scientific contribution to the study of arboviruses, the Institute was designated as a World Health Organization (WHO) Regional Center for Arboviruses Reference and Research.

The Institute's scientific mission continued to be enriched through growing collaboration with re-known research institutions including the Imperial Cancer Research Fund (ICRF) of the United Kingdom and the International Agency for Research on Cancer (IARC) in Lyons, France on the aetiology of Burkitt's lymphoma. Following the arrival of a study team from the WHO in 1969, the Institute received enhanced status as a fully- fledged virus research laboratory capable of handling viral diseases deemed to be of public health significance. During subsequent years, extensive and valuable data on entero-and-respiratory viruses and the efficacy of vaccination with oral poliovirus vaccine and measles vaccine were accumulated.

Over the following years, the physical structures and human resource requirements to support surveillance activities were developed including a national serum repository. UVRI staff were trained in serology, data management, Immunology, and equipment management. In addition, facilities for cell culture and virus isolation were put back in place including a new P2/3 Laboratory, and a Liquid Nitrogen plant.

In the 1990's HIV/AIDS activities continued to drive the recovery of the Institute through collaborative research projects with Medical Research Council (MRC-UK), Columbia University, John Hopkins University, Cambridge Biotech, WHO/Global Performance on AIDs (GPA), the World Laboratory and the National Cancer Institute-Naples, and the Centers for Disease Control and Prevention (CDC) laboratories, USA, Wellcome Trust and International AIDS Vaccine Initiative (IAVI), Rakai Health Sciences Programme (RHSP).

In 2016 UVRI received vote status which makes it self-accounting and independent a commitment of Government support to the Institute. Whilst UVRI's programmatic and institutional development has gathered impressive pace over the years, it has become imperative for the Institute to anchor this growth and development within the framework of a clear and dynamic Strategic Plan.

## **1.2 MANDATE**

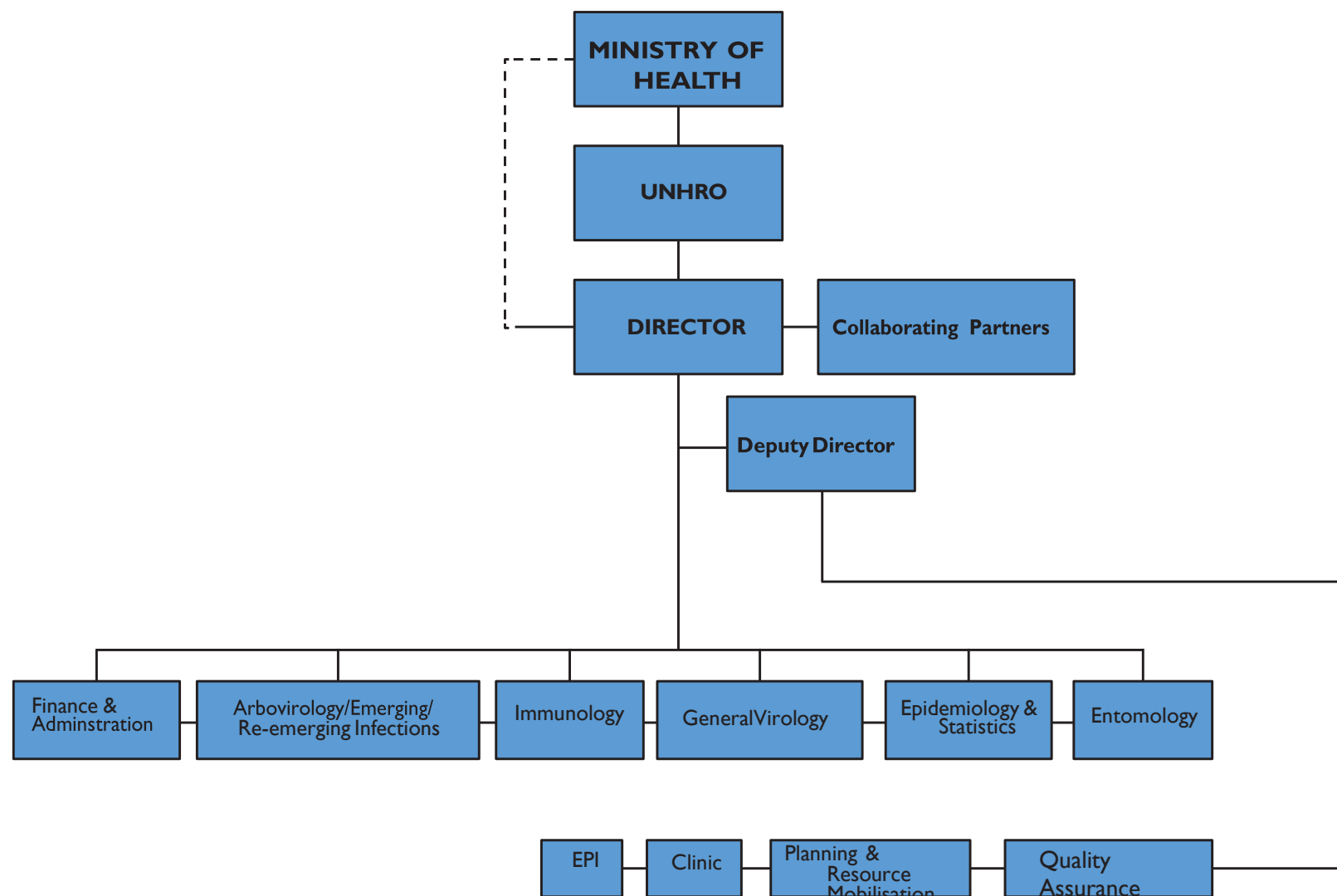
UVRI is one of the constituent research institutes under the UNHRO Act of 2009 (Section 19). UVRI is mandated to conduct health research pertaining to human infections and disease processes associated with or linked to viral aetiology and provides capacity building to target beneficiaries.

## **1.3 GOVERNANCE AND ORGANISATIONAL STRUCTURES**

The current structure of UVRI as shown below was approved in 2011 after a restructuring process conducted by the Ministry of Public Service. It comprises of six major Research departments. Over the years, due to the growing dynamic nature of research and

capacity building for research institutions, this structure has become inadequate. Henceforth, the top management of UVRI has started the process of reviewing the current structure, as reflected in organogram below

**Figure 1 ORGANISATIONAL STRUCTURE FOR UVRI**





#### **1.4 ALIGNMENT TO NATIONAL PROGRAMMES AND SUB PROGRAMMES**

In 2016 UVRI received vote status which makes it self-accounting, independent and a commitment for Government support to the Institute to conduct health research.

- 1) UVRI implements the public finance management act 2015 and uses a grant tracker developed by the MOFPED for programme-based budgeting and the result-oriented frame works used for fund application and reporting to GoU. The UVRI falls under two programmes in NDP III : 1) Human capital programme-coordinated by the MoES, and 2) the Innovation, Technology Development and Transfer programme is coordinated by the MoSTI. UVRI is divided into 3 thematic areas namely: 1) Health Research 2) Governance and Management [Finance & Admin; and Internal audit]. The departments to contribute to these areas are outlined as follows: Health Research: 7 research departments will contribute to this result area namely:

- a) Arbovirology Emerging and Re-Emerging Infectious Diseases.
- b) Epidemiology
- c) General Virology
- d) Immunology
- e) Immunisable Diseases Unit
- f) Entomology and
- g) The Research Unit/ Clinic

#### **2) GOVERNANCE , MANAGEMENT AND INTERNAL AUDIT.**

Two departments will contribute to this thematic area namely:- Finance and Administration and the internal Audit. This result area ensures a conducive working environment for health research through strengthening the operations of the programs of the different departments, partners and collaborators at the institute. The Finance and Administration department is further divided into the following:

- a) Accounts and Finance

- b) Procurement and Disposal of public Assets unit (PDU)
- c) Human Resources and capacity building
- d) Planning
- e) Information Technology & communications
- f) Stores
- g) Administration, operations and maintenance

**Internal Audit.** This department provides independent assurance that UVRI's risk management, governance and internal control processes are operating effectively. It is a department which ensures that projects, programs and government, receive value for money on all transactions. This department works closely with external auditors from the Auditor General's office.

## **1.5 NATIONAL, LEGAL AND POLICY CONTEXT**

This strategic plan has been developed to ensure achievement of the of the public Health Research Institute functions as preserved in the UNHRO Act of 2009 and the mandate of vote 304 2015/2016. The national, regional and international development frameworks have guided the context and the process of formulation of this plan. In the long run, it is expected to contribute to the following frameworks

### **A UGANDA VISION 2040.**

The Uganda National Vision 2040 aspires to have a transformed society from peasantry to a modern and prosperous country through a multi-pronged approach to economic and social development. The vision sets specific health targets from 2010 baseline to 2040, including life expectancy, maternal, infant, and

under 5 child mortality, child stunting, and fertility rates which the UVRI contributes to. This is in line with UVRI's Vision of becoming a world class centre of excellence in Health Research

## **B THE THIRD NATIONAL DEVELOPMENT PLAN, 2020/21 – 2024/25 (NDP III).**

According to the Third National Development Plan (NDP III), 18 Programmes have been developed, out of which Uganda Virus Research Institute identified two Programmes where the Institute can make the greatest contribution, that is:

- i) Programme 16-Human Capital Development.
- ii) Programme 17- Innovation, Technology Development and Transfer.

### **i) HUMAN CAPITAL DEVELOPMENT**

The Institute plans to contribute to the Population Health, Safety and Management sub-programme under the Human Capital Development programme. Specifically, The Institute will contribute to objective 4, "To improve population health, safety and management" through UVRI's involvement in research and surveillance of viral diseases of public health importance including their link to non-communicable diseases; and providing expert advice and guidelines for policy and practice. UVRI will also participate in human capital development through training and capacity building

### **ii) INNOVATION, TECHNOLOGY DEVELOPMENT AND TRANSFER**

The Institute plans to contribute to following sub-programmes: Science Research and Development; Biosciences Development; Innovation and Technopreneurship; Science Technology Engineering and Innovation (STEI) Institutional and Human Resource Capacity Development; and Institutional Coordination. Specifically, towards the following objectives:

#### **Objective 1: Develop requisite STEI Infrastructure**

Under this objective UVRI plans to establish and operationalize:-

- i) a multipurpose virus research building.

- ii) specialized Bio-Bank
- iii) a specialized biosafety level 4 Laboratory.
- iv) a Large capacity incinerator
- v) a liquid nitrogen plant

### **Objective 2: Build Institutional and Human Resource Capacity in STEI**

Under this objective UVRI plans to develop intellectual properties capacity including patent examination, patent drafting and processing.

### **Objective 3: Strengthen R&D capacities and application**

Under this objective UVRI plans to:

- i) develop and implement additional research projects/programmes
- ii) participate in collaborative research and innovation projects through joint applications

### **Objective 4: Strengthen the mechanisms and processes for technology development, transfer, adoption and nurture the national innovation potential**

Under this objective UVRI plans to develop and commercialize diagnostics, vaccines and therapeutics production

### **Objective 6: Strengthen Governance and management**

Under this objective UVRI plans to:

- i) improve the human resource capacities over the next 5 years
- ii) widen the financial resource base
- iii) Strengthen operations, implementation, and coordination of programmes at the Institute

## **C THE MINISTRY OF HEALTH STRATEGIC PLAN (2020/21/2024/25)**

The goal of the HSDP III is to accelerate movement towards Universal Health Coverage with focus on Primary Health Care and improved population health safety and management by 2025. UVRI is a research

department under the MoH and will contribute to the attainment of this goal like the previous annual contributions. The HSDP II mission stressed the need to facilitate the attainment of a good standard of health, nutrition, and wellbeing for all people of Uganda to promote a healthy and productive life. UVRI through its mission of providing knowledge, practice, policy, and expert advice will continue to contribute to this mission. Specifically, UVRI will contribute to the reduction of the burden of preventable diseases and conditions including malnutrition across all age groups and geographic area, which is objective 1 of the HSDP III.

## **D REGIONAL, CONTINENTAL, AND INTERNATIONAL FRAMEWORKS/SUSTAINABLE DEVELOPMENT GOALS**

The SDGs specifically goal 3, target 3.b identify research and development for vaccines and medicine amongst the critical means of implementation for the management of communicable and non-communicable diseases. At the continental/regional level, the Africa Agenda 2063 strategizes to develop / implement programmes for health research and surveillance to contribute to the achievement of targets under Goal 3 - Healthy and well-nourished citizens. Through the implementation of this plan, the role of UVRI therefore in providing timely and accurate data will be strengthened to contribute towards these health-based development goals.

### **1.6 PURPOSE OF THE UVRI STRATEGIC PLAN 2020/21-2024/25)**

The purpose of the plan is to provide a roadmap for the institute to build on previous achievements in the strategic plan I (2012-2015) and II (2018–2020-gauge strengths and values, as well as tackle the challenges like (COVID-19) and new developments like (the emerging new technologies) in the next 5 years. Specifically, the plan serves the following related purposes:

- i. Provide clarity on the overall goal of UVRI which will result in increased visibility, organizational effectiveness, and efficiency.
- ii. To develop a comprehensive strategic pathway that is well aligned to the SDGs, National Vision 2040 NDP III, the Health Sector Development and Strategic Plan

2020/21-2024/25, Second National Health Policy of July 2010, and the core functions of public health institutions.

- iii. To ensure that the recent developments in the country are captured in the mission and core values of UVRI.
- iv. To articulate UVRI's strategic focus and the corresponding objectives and strategies for addressing issues, and the emerging health research agenda for the period 2020/21-2024/25
- v. Provide a framework for Investment, financing, implementation, monitoring and evaluation of the institute's activities.
- vi. To address the structural and implementation challenges that affect the overall performance of the UVRI.

## **1.7 THE PROCESS OF DEVELOPING THE STRATEGIC PLAN**

The Strategic Plan was developed through a consultative process that involved desk and performance reviews of the previous plans I (2012-2015) and II (2018-2020), several working meetings with the Task Force, planning-retreats by UVRI management, staff, and representatives from Uganda's Ministry of Health, National Planning Authority, representatives from UNHRO and some of the Institute's on-campus partners. The process started with an assessment of the achievements and challenges registered by all departments and a critical analysis of the environment required for research to formulate the SWOT. Overall, the development of the plan was guided by the strategic direction of the SDGs, Vision 2040, NDP III and the HSDP III. The Plan was submitted to NPA for quality assurance and approval.

## **1.8 ORGANIZATION OF THE STRATEGIC PLAN**

The plan is organized in 9 Sections described below:

Section one provides a background to UVRI, legal and policy context, purpose of the plan and process of developing the plan.

Section Two presents the situational analysis including the status of research on Viruses in Uganda and globally. The section also covers an evaluation of past performance of UVRI in the recent 5 years, an analysis of internal and external environments, and a stakeholder analysis.

Section Three presents the strategic direction. It covers the Vision, Mission, Core values, Objectives, and interventions.

Section Four presents the financing framework and strategy.

Section Five covers the Institutional Arrangements for Implementing the Plan

Section Six presents the Communication Strategy of the plan.

Section Seven covers the Risk Management profile of UVRI ,

Section Eight covers the Monitoring and Evaluation Framework and;

Section Nine covers Project Profiles

## **SECTION TWO: SITUATION ANALYSIS**

### **2.1 INTRODUCTION**

The World Health Organization classifies the health status of Ugandans as “poor” and states that “this is mainly due to infectious and parasitic diseases, most of which are preventable and/or treatable.” However, there are many viral infections and some of these are not readily preventable.

This section discusses the status of major viral diseases in Uganda and globally. It also provides an assessment of the past performance of the previous UVRI strategic plan.

### **2.2 STATUS OF VIRAL DISEASE AND HEALTH RESEARCH IN UGANDA**

#### **Key viral infection facts in Uganda**

- The most common viral disease Uganda faces is the HIV virus. In 2019, it was estimated that 1.5 million Ugandans are living with HIV, 53,000 new infections and 21,000 AIDS related death (UNAIDS, 2020).
- Other common viral infections in Uganda are Hepatitis A, Hepatitis E, Dengue Fever, Yellow Fever, Crimean Congo Hemorrhagic Fever, Rift Valley Fever, Chikungunya, O’nyongonyong, West Nile, Rabies, Zika, Ebola and Marburg, etc.
- Measles-Rubella diseases are common in Uganda and many districts are usually affected at a time necessitating vaccination campaigns. Uganda is also at high risk of importation of Polio. In mid-2019, 62 districts were experiencing a Measles outbreak while 25 were affected by Rubella. A national vaccination campaign against Measles - Rubella and Polio took place on 25-29, September 2019 to stop the spread.
- Influenza and influenza like viruses cause disease throughout the year in Uganda with two major peaks of outbreaks. Children less than 5 years have the highest

incidence of ILI. The burden of influenza-associated pneumonia hospitalizations is substantial in Uganda,

- Uganda is known to have over 80 arboviruses and the number keeps on increasing as new viruses are identified. Nine new viruses have been identified in Uganda in the last decade or so (Mbugo virus, Ssuga virus, Bukakata virus, Ogwapoke virus, Ntvetwe virus, Nakiwogo virus, Ebola Bundibugyo virus, Sunguru virus) and Adumi Virus.
- In the last twenty years, Uganda has experienced many outbreaks of Viral Hemorrhagic fevers (Ebola Sudan = 2; Ebola Bundibugyo = 1; Marburg = 4; CCHF = 8; Rift Valley Fever = 5). Uganda is an emergent biodiversity hot spot area.
- More recently, the WHO declared a pandemic of a new Coronavirus disease. The Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was first identified in December 2019 in Wuhan, Hubei, China, and has resulted in an ongoing pandemic. In Uganda, as of July 2021 more than 92,795 people have been affected with COVID19, 78415 recovered and the disease has so far caused more than 25900 mortalities.

### **Key viral infections facts globally**

- 38.0 million [31.6 million–44.5 million] people globally were living with HIV in 2019.
- 1.7 million [1.2 million–2.2 million] people became newly infected with HIV in 2019.
- 690 000 [500 000–970 000] people died from AIDS-related illnesses in 2019.
- 75.7 million [55.9 million–100 million] people have become infected with HIV since the start of the epidemic.
- 32.7 million [24.8 million–42.2 million] people have died from AIDS-related illnesses since the start of the epidemic.
- In 2019, there were 38.0 million [31.6 million–44.5 million] people living with HIV.

- About 81% [68–95%] of all people living with HIV knew their HIV status.
  - About 7.1 million people did not know that they were living with HIV.
- More than 100 arboviruses are known to cause disease in humans. A significant subset, including members of the Flaviviridae, Bunyaviridae, and Togaviridae families, are transmitted widely in different areas of the world.
  - The burden of arboviral diseases has devastating socioeconomic and health impacts by causing the loss of human and domesticated animals, and reductions in economic production in endemic countries. Unfortunately, the risk, distribution, and global burden of arboviruses is increasing and is predicted to worsen in the future unless serious actions are taken
  - As threats to public health, Arboviruses are best known for their propensity to cause encephalitis and/or viral hemorrhagic fever (VHF) syndromes.
  - Arboviruses are also considered to be emerging pathogens based on their geographic spread and their increasing impact on susceptible human populations.
- The disease burden caused by Respiratory Viral Infections (RVI) like Influenza and Influenza like disease is enormous and encompasses the contributions of the primary infections, secondary bacterial ones, and extrapulmonary complications often related to underlying conditions (e.g., ischemic heart disease, congestive heart failure, cerebrovascular disease, and diabetes) and results in substantial morbidity and mortality globally.
  - Other than the Influenza viruses, there are more than 200 different types of other respiratory viruses (picornaviruses, paramyxoviruses, CoVs, adenoviruses and bocavirus) whose burden often outweighs that of influenza.
  - While RVI morbidity and mortality in children is high in developing countries, older adults typically have the highest mortality in well-resourced countries.
  - Worldwide, the Corona Virus pandemic (COVID-19), as of 6 September 2020, more than 26.8 million cases have been reported across 188 countries and territories with more than 879,000 deaths; more than 17.9 million people have recovered. The number of confirmed cases of COVID-19 from 55 African countries has reached 1 284 440. The case numbers and the fatalities in Africa continue steadily rising as most countries have lifted restrictions and lockdowns. They are likely to rise further before flattening, as these countries continue opening their borders, schools, universities, and colleges for

normal activities. Even then, the case count may not really be the true situation on the ground. Some countries stopped testing and reporting because of lack of resources.

- Unfortunately, there is no therapeutic, no vaccine, and there appears to be poor development of long-lasting immunity to the COVID-19 disease.

## **2.3 PERFORMANCE REVIEW OF THE PREVIOUS STRATEGIC PLAN (2015/16 – 2019/20)**

This section presents an analysis of UVRI's performance considering the goal and objectives that the institute set out to achieve during implementation of the second strategic plan (2015/16 – 2019/2020). These were structured around improvement in delivery of research and UVRI's institutional capacity in terms of human resources and financial performance. The section summarizes the key achievements and challenges and emerging issues.

### **2.3.1 PERFORMANCE OF THE GOAL**

The overall strategic objective was "To re -position UVRI into a dynamic, internationally competitive research institution that contributes to knowledge generation for informed policy and practice towards improved quality of life. The institute contributes to the shared vision of the Ministry of Health and to the global challenges of addressing communicable diseases to achieve the SDGS and contribute to economic growth and development knowledge."

UVRI continues to contribute and provide expert knowledge for preparedness and response to emerging and re-emerging viral outbreaks in the country including COVID 19, Ebola, Influenza, Murburg, etc. The UVRI laboratories including Arbovirology, EPI and General virology are regional and national reference laboratories for emerging and re-emerging infections. This has made UVRI a unique research institution in the region.

### 2.3.2 PERFORMANCE OF THE STRATEGIC OBJECTIVES

In reviewing the performance of UVRI for the past 5 years, it is important to note, that most of the performance indicators and targets were based on having the best research that contributes to knowledge, practice and policy.

**Table 1: Summary of Uganda Virus Research Institute Performance by Objective**

Objective	Performance (Average Weighted Score)	Status	Remarks
<b>Objective 1:</b> To Increase and expand UVRI's involvement in research and surveillance of viral diseases of public health importance including their link to non- communicable diseases	65	Good	<p>UVRI's implemented a number of health research awareness campaigns and outreaches and increased laboratory surveillance for more diseases like COVID-19, Crimean Congo Hemorrhagic Fever (CCHF) and a number of cross-sectional surveillance studies have been conducted</p> <p>UVRI has also participated in disease control and surveillance at both regional and national levels regarding control hemorrhagic fever, measles, polio, rubella, yellow fever, HIV and is helping the Ministry of Health (MOH) examine trends over time for viral diseases</p> <p>However, there is need for a research science block to accommodate the increased health research at the institute</p>

Objective	Performance (Average Weighted Score)	Status	Remarks
<b>Objective 2:</b> To expand the knowledge and skills base for public health research	55	Good	Staff upgraded through in service-training; Scholarships being provided to staff. However more funding is needed to support training activities
<b>Objective Three:</b> To widen the financial resource base, and improve efficiency and effectiveness in the use of the available resources.	60	Good	<p>Funding from G.O.U to the Institute greatly increased from 1.661B between FY 2015/16 to 9.085B in FY 2018/19.</p> <p>The Institute is in the process of establishing a strong Grants and Research support office that will increase Internationally supported grants and collaborations</p> <p>There is still need for integrating activities to ensure efficient use of resources to achieve the set goal.</p> <p>The Institute is also in the process of developing a business model strategy to widen its financial base</p>
<b>Objective Four:</b> To develop a centralized, accessible and reliable sample repository system.	15	Poor	Not yet started. Lack of funds to develop and construct a national bio bank. Lack of enough room and space for sample repository system. However there is need to establish a lab information management system, develop an efficient national bio- bank, ensure sufficient central storage space and reliable power backup system
<b>Objective Five:</b> To improve coordination of programmes and core functions	45	Fair	There is improved information and resource sharing, centralized administration of core projects and programs. The Institute has stepped up relationships with partners and collaborators especially information and resource sharing.

Objective	Performance (Average Weighted Score)	Status	Remarks
<b>Objective Six:</b> To improve the infrastructural and human resource capacity at UVRI	45	Fair	<p>The architectural plans and (Bills of Quantities (B.O.Qs) for construction of the science block have been developed. UVRI will request MOFPED to prioritize this activity in the UVRI development budget for the coming financial year.</p> <p>UVRI with guidance from HSC must fill most positions in the approved structure.</p> <p>The Institute would like to upgrade the existing Incinerator and construct a new state of the art Incinerator. There is continued need to renovate the leaking roofs of the W.H.O lab, and the Entomology laboratories and the Rockefeller building.</p>

### Key

Performance range	Ranking
85 and above	Excellent
70 - 84	Very Good
55 - 69	Good
40 - 54	Fair
0 - 39	Poor

## **2.2.4 STATE OF CROSS CUTTING ISSUES RELEVANT TO UVRI**

### **A) GENDER**

UVRI serves and conducts health research services with all stakeholders regardless of age or gender. The aim of gender equality at workplaces is to achieve equal outcomes for all ages including women and men. UVRI provides awareness, expert knowledge, and policy guidance in an equitable and accessible manner to all through among others open days the support supervision to up country research sites in Rakai, Masaka, Kyamulibwa and West Nile districts. For example, between FY 2017/18 and FY 2018/19, UVRI interested 1000 students and teachers in secondary and tertiary institutions to the science career (550 males and 450 females). In the same period, 70 children were admitted on the UVRI internship program where awards equitably won irrespective of the sex after the 3 months' period. UVRI under the Wellcome Trust program has a disability grant in which 2 physically challenged students are given chance to practice and gain skills for a period of 6 months. UVRI is also an equal opportunity employer and recruitment of staff and research participants is done equitably.

### **B) HIV/AIDS**

The major challenge at the institute while providing care to patients is the accidental injuries from needle or instrument pricks. This puts both the staff and patients at risk of infection. UVRI has put in place mechanisms to control the transmission of the virus by

Creating awareness to all staff to keep positive through positive living campaigns, support to get the necessary medication and they have been encouraged to embrace the ABCC strategies. The institute ensures the availability of the required protective gears , provides adequate SOPs and regular training for staff to keep up date with required latest knowledge on HIV treatment and testing techniques. The institute working closely with

Uganda Aids Information Centre (UIC) and Uganda Blood Transfusion, TASO Entebbe conducted routine screening of its staff and patients in FY 2018/19 and linked several staff to care. UVRI also conducted an awareness campaign in a charity walk in Entebbe town on November 30<sup>th</sup> 2019.

### **C) ENVIRONMENT**

In order to promote a clean and hygienic environment required for health research and other stakeholders, the institute undertakes regular training of all staff in Bio-Safety and Bio Security where staff are taken through the various SOPs for use in laboratories and outside. UVRI is also involved in several activities to reduce infection of support staff including security personnel, guests, and staff. Other activities include continuous training on waste management from laboratories, disinfection and sterilization waste, separation into recyclable and non-recyclable waste to improve medical waste disposal, encouraging improvements in cleaning and sanitation and ensuring the availability of appropriate disposal collection bags for each of the categories. The institute conducts regular fire drill training for all staff at campus and management has preserved existing trees and planted new ones on UVRI campus. The wastewater and sewerage are disposed in a contained system separate from NWSC. The objective is to minimize the exposure of the environment to negative effects that may arise from the activities of UVRI

UVRI is in charge of the Zika forest reserve on Entebbe-Kampala highway. The forest is used to harbor mosquitos used in research at UVRI. UVRI working closely with Wakiso District and Local Authorities conducted awareness on dangers of settlement and reclaiming land near the forest in FY 2018/19. The forest is also visited by schools for learning purposes

### **2.2.5 KEY ACHIEVEMENTS AND CHALLENGES**

## **A) KEY ACHIEVEMENTS OF UVRI**

1. UVRI was the first research centre in Uganda to test COVID-19 Patients at the on-set of the disease in March 2020. UVRI has staff and PCR equipment used to test the pandemic and conducted training for other regional centres to be able to test COVID-19.
2. Participated in disease control and surveillance at both regional and national levels in regard to control hemorrhagic fever, measles, polio, rubella, yellow fever, HIV and is helping the Ministry of Health (MOH) examine trends over time for viral diseases
3. A key source of expertise for many of the country's viral infectious disease functions, including monitoring and investigating outbreaks, clinical trials, scientific research and laboratory science.
4. The Institute has grown considerably in the last decade with new positions including research officers, grants support staff, and, laboratory assistants.
5. The Institute has grown considerably in the last decade with new positions including research officers, grants support staff, and, laboratory assistants. Its staff hold honorary appointments with Makerere University, among whom are PhD and post-doc supervisors. Some of UVRI's staff supervise students who come to UVRI for apprenticeships.
6. Interested young people in science careers, UVRI held an Open day in 2016 for 1,000 Primary School Pupils and Science Teachers. UVRI has some of its staff on master's, PhD and post-doc scholarships to attend Makerere University, the London School of Hygiene and Tropical Medicine and South African universities.
7. A secretariat for the newly constituted Eastern-African Consortium for Clinical Research (EACCR 2), a network of 23 regional institutions from six countries and eight northern partners. The Network focuses on workforce development, health

infrastructure upgrades, project management strengthening, and development and implementation of north-south and south to south collaborative efforts in support of communicable disease control.

8. Strong partnerships with Wellcome Trust-UK, European and Developing Countries Clinical Trials Partnership (EDCTP), Rakai Health Sciences Program/NIH, THRiVE, MUII-Plus and Makerere University among many others (e.g CDC, IAVI, WHO, London School of Hygiene and Tropical Medicine).
9. The EPI laboratory was fully accredited for polio diagnosis by WHO in 1999 and has continued to be fully accredited annually. The laboratory was also designated as a Measles Regional Reference Laboratory in 2000, initially serving Eastern and Southern African region. Currently, the laboratory serves seven countries from the Eastern and Central WHO AFRO region.
10. UVRI was designated by WHO as a National Influenza Center and Arbovirology Reference Laboratory.
11. Two phase 1 HIV vaccine candidates were successfully evaluated for safety and immunogenicity. Evaluation of HIV induced antibodies in HPTN 027 vaccine trial has also been completed.
12. Completed the first phase of new HIV rapid kits for use in a new national rapid HIV testing algorithm.
13. Capacity for performing HIV molecular biology has been developed, a centralized molecular laboratory has been set up.
14. Capacity for performing neutralization assays has been established and staff have been trained in partnership with MRC and IAVI, capacity for flow cytometry assays has been set up and development has expanded the scope of activities for the HIV Reference Laboratory (HRL) and established a National HIV Quality Assurance/Quality Control project.

15. National and Reference Laboratory for HIV Drug Resistance Genotyping was certified by WHO.
16. UVRI conducted the Uganda Population based HIV Impact Assessment (UPHIA) HIV/AIDS indicator surveys (2016/2017 and the UPHIA 2 2019/20 survey is ongoing.
17. In collaboration with its partners, UVRI has published over 500 peer-review publications in the past five years
18. UVRI has also experienced notable infrastructural developments in the past five years. These include: construction of a new influenza laboratory with support from the World Bank; a new training Centre with support from the Wellcome Trust-UK Unit and MRC-UK; a new 250 KVA generator with support from IANPHI and CDC; a boosted of information technology with an e-library, website, teleconference and video conference facilities with support from Wellcome Trust, THRIVE-2, EDCTP and IANPHI , road pavements by MRC and enhancing security by building the perimeter wall with support from CDC.

**B) Key Challenges**

1. Lack of an enabling National Research agenda to guide research .
1. Absence of a liquid Nitrogen plant
2. Lack of a central sample reception area
3. Lack of sample collection vans
4. Lack of a research science block to house a central sample repository and laboratories
5. Inadequate power back up supply. There is a need upgrade from the current 220 KVA to 1000KVA generator.

6. Inadequate funding to expand the research portfolio to Non communicable diseases (NCDs) of viral etiology, hepatitis and Rota virus research.
7. Squatters on Kamwanyi land.
8. Unfenced institute land.
9. Currently, due to lack of office space, staff sit in laboratories, this poses a great threat to the officers.
10. Old dilapidated housing structures which is a safety problem to staff staying in these houses: Inadequate storage space for supplies.

### **C) SUMMARY OF EMERGING ISSUES**

Several issues have emerged from the implementation and review of the previous strategic plan (2014/2015-2019/2020). Below is a summary of key issues that will have to be addressed in the next plan period:

1. There is need for a centralized and accessible sample repository system, to ensure proper sample management and utilization
2. There is need for a central sample reception area
3. There is need to recruit more staff at UVRI
4. There is need for more funding for UVRI in order to deliver its mandate and mission
5. Recruit more health research workforce at the institute
6. Renovation of staff houses and construct a new science research block which will accommodate all research activities
7. There is need for coordination of programs, projects and core departments in order to efficiently and effectively utilize the available resources

8. There is need for dissemination and utilization of UVRI research findings, in order to contribute to evidence based policy formulation and practice.
9. There is need for storage space for supplies


#### **2.2.6 UVRI'S CURRENT SWOT PROFILE**

During the meeting and retreat at Lake heights hotel in April 2020, UVRI staff and the collaborating partners identified the key external and internal factors or drivers likely to impact the successful implementation of the Institute's Strategic and Development Plan. These drivers-opportunities, threats, strengths and weaknesses-are presented in the matrix below.

**Table 2 Showing UVRI's Current SWOT Profile**

<b>Strengths:</b>	<b>Opportunities</b>
<ul style="list-style-type: none"> <li>✚ Contribution to effective and rapid epidemic response and containment</li> <li>✚ A well-established research programs and research Laboratories enjoying international status</li> <li>✚ A track record in viral pathogen discovery</li> <li>✚ Good national and international partnerships and collaborations</li> <li>✚ A strong track record of scientific findings, information generation, dissemination and translating research into policy.</li> <li>✚ A strong team of highly skilled competent scientists and support team</li> <li>✚ A well maintained infrastructure of buildings and other physical assets that support research.</li> <li>✚ Strategically located near Entebbe International Airport</li> <li>✚ Competent management</li> <li>✚ Credible and positive relations with the local communities where the Institute conducts its activities</li> <li>✚ Track record in community engagement.</li> </ul>	<ul style="list-style-type: none"> <li>✚ Strong linkages with and interest by national and international research and academic institutions</li> <li>✚ Institutional competencies in line with the SDG goal No. 3 &amp; 17</li> <li>✚ Strong health policy support at various levels of government</li> <li>✚ Strong interest by funders to collaborate with UVRI</li> <li>✚ Strong National and International recognition as a research institute</li> <li>✚ Demand for specialized consulting, testing and training services by stakeholders</li> <li>✚ Located near the Equator with the conducive climate in a bio diverse hotspot.</li> <li>✚ Uganda enjoys significant international interest and respect for its success in health research especially in HIV/AIDS and other emerging and re-emerging diseases</li> <li>✚ Government of Uganda is a signatory to the Abuja Declaration</li> <li>✚ Growing regional cooperation and integration (EAC, AU)</li> </ul>

<ul style="list-style-type: none"> <li>✚ Track record of human capacity development</li> <li>✚ Credibility in resource mobilization and management</li> <li>✚ UVRI is a semi-autonomous Institution under vote 304</li> <li>✚ Availability of land and institutional staff houses for all cadres</li> <li>✚ Existing Bio repositories</li> <li>✚ Field Research Stations in Arua, Kyamulibwa, Masaka and Zika Forest and study Cohorts</li> <li>✚ Good Physical Security</li> <li>✚ Good Bio-Safety and Bio-Security</li> </ul>	<ul style="list-style-type: none"> <li>✚ Continued macro-economic growth and favorable fiscal policy</li> <li>✚ Increasing community interest and support including community leaders</li> <li>✚ Interest in evaluating emerging technologies</li> <li>✚ Improved security in Uganda</li> </ul>
<p><b>Weaknesses:</b></p> <ul style="list-style-type: none"> <li>✚ Absence of a Nitrogen Plant</li> <li>✚ Lack of a central repository facility</li> <li>✚ inadequate reliable power back up system</li> <li>✚ inadequate waste disposal and incineration facility</li> <li>✚ Most of the research and publications are on HIV/AIDS</li> <li>✚ Inadequate staffing at most levels</li> <li>✚ Limited corporate visibility at national, regional and international level</li> <li>✚ Fragmentation of the different departments</li> <li>✚ Limited infrastructure and the available is old and dilapidated</li> <li>✚ Lack of a statutory instrument to Legalize UVRI as an autonomous Institution</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>✚ High dependency on donor support</li> <li>✚ Changing research priorities</li> <li>✚ Lack of a legal status required to support timely decision making</li> <li>✚ Weak supervision and coordination by UNHRO secretariat</li> <li>✚ Global financial uncertainties influences funding</li> <li>✚ Rapidly changing technologies</li> <li>✚ The agenda created by industrialized countries/donors which largely influences the nature of research</li> <li>✚ Growing competition for resources within a globalized world</li> <li>✚ Emerging inflationary trend compounded by volatile energy costs in Uganda and globally</li> <li>✚ Political interference</li> </ul>

	 Potential conflict in some parts of the Great Lakes region
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## 2.2.7 STRATEGIC ISSUES AND A STRATEGIC FOCI STATEMENT

### A) Strategic Issues –Emerging Issues

A strategic analysis of UVRI revealed seven strategic issues that, if not addressed, will fundamentally impact on UVRI’s delivery of her mandate and mission and, consequently, plight her profile among her key stakeholders. Details regarding stakeholders are in table

4. The strategic issues are:

1. There is inadequate middle level scientific and technical capacity at UVRI, which poses a threat to its growth;
2. There is inadequate funding for UVRI which constrains the delivery of its mandate and mission;
3. There is currently no centralized and accessible centralised sample repository system, which has constrained proper sample management and utilization;
4. There is inadequate dissemination and utilization of its research findings, which constrains its contribution to evidence based policy formulation and practice;
5. There is inadequate coordination of programs, projects and core departments leading to replication thereby causing resource wastage and dilution of impact to the population;
6. There is inadequate health research workforce in the country and region, which hampers evidence based policy, practice and interventions; and
7. There is insufficient infrastructure and human resource, which hold back the ability of UVRI to deliver on her mission.

## CHAPTER THREE: STRATEGIC DIRECTION

### 3.1 INTRODUCTION

UVRI's strategic direction is defined by its mandate, vision, mission, core values, core competences, key results areas, and the strategic objectives.

This section therefore highlights the Mandate, Vision, Mission and Core values of UVRI upon which the strategic direction is based.

### 3.2 VISION:

A world class Centre of excellence in health research.

### 3.3 MISSION:

To conduct scientific investigations on diseases, contribute to knowledge, policy and practice; and engage in capacity development for improved public health.

### Value Statement

In order for the UVRI to realise its Vision and Mission, it will be guided by the following value statement: ***"Innovation, Dedication, responsiveness and accountability to our stakeholders."***

### 3.4 CORE VALUES

To support the achievement of the Vision and Mission, UVRI is guided by values. These serve as guiding principles that are shared and practiced by staff and stakeholders. The core values of UVRI have been developed in line with research Ethics.

The core values of UVRI are:

- i. Professionalism;
- ii. Integrity
- iii. Responsiveness

- iv. Effectiveness & efficiency
- v. Team work & collaboration
- vi. Innovativeness
- vii. Biosafety and biosecurity

### **1. Ethics and Integrity**

This includes upholding generally accepted high standards of social and ethical behavior and demonstrating acceptable levels of transparency and accountability in use of resources entrusted to the individual either by the organization or on behalf of the public served.

### **2. Effectiveness and Efficiency**

These are essential demonstrable elements of the professionalism that are expected from staff at all levels of the organizational structure. Effectiveness and efficiency call for a thorough knowledge of the research environment, one's work, skillful work behavior, respect for others and commitment to high standards of quality assurance and control in achievement of the Institute's objectives, and timeliness.

### **3. Teamwork and Collaboration**

The Institute recognizes that sustainable success is a collective endeavor based on mutual trust, complementary effort and shared objectives by all staff and partners. We attach great importance to professional and institutional collaboration as a major strategy for achieving the Institute's mission and objectives.

### **4. Innovativeness**

UVRI is a learning institution that takes pride in the ability and willingness of its staff to initiate innovative approaches that add value to the institutional mandate and work relationships resulting in improved public health.

## **5. Biosafety and biosecurity**

UVRI is a responsible corporate institution that seeks to avoid, or otherwise minimize, the potential adverse effects of its activities on individuals, communities and the environment in general.

## **6. Productivity and quality**

UVRI aspires in all its undertakings to generate tangible results in terms of expert knowledge, services and products which must be of high quality to its clients.

### **3.5 UVRI'S CORE COMPETENCES**

In accordance with the stated core functions of the National Public Health Institutions UVRI embeds its competences in the following areas:

- I. Public Health Research and Innovation (in the National Development Plan) with deliverables of peer-review publications, research reports, scientific presentations and policy briefs.
- II. Public Health Surveillance (diseases & bio-risks) with deliverables of documented outbreaks investigated and controlled plus bio-risks averted.
- III. Reference & Specialized Testing Proficiency with deliverables of evaluated and validated testing algorithms and standard operating procedures (SOPs).
- IV. Health promotion and environmental health linked to cluster I in the MOH, Health Sector Strategic & Investment Plan.
- V. Disease prevention & control linked to the MOH clusters in its Health Sector Strategic & Investment Plan: Maternal and Child Health (cluster II); Communicable Diseases (cluster III) and Non-Communicable Diseases (cluster IV).

- VI. Human Resource and Capacity Development with deliverables of scientist's trained/mentored, trainees handled through internships and staff retention plus motivation.
- VII. Research governance and quality assurance measurable through policy contributions, number of grants, infrastructural developments, number of partnerships/collaborations, number of quality assurance schemes and resources mobilized.

### **3.6 GOAL, OBJECTIVES AND STRATEGIC INTERVENTIONS**

#### **3.6.1 Goal**

Contribute to reduction of the major viral disease burden through scientific investigations.

#### **3.6.2 Objectives**

Objective 1: To enhance viral and vector research to lead to vector innovations and to inform knowledge, policy and practice for improved health

Objective 2: To enhance viral and vector surveillance to inform knowledge, policy and practice for better health

Objective 3: To improve response to emerging and re-emerging viral diseases

Objective 4: To strengthen and improve operations, infrastructure and human resource capacity for improved service delivery

#### **3.6.3 Key Priorities**

A few issues have emerged from the implementation and review of the previous strategic plan (2014/2015-2019/2020). Below is a summary of key issues that will have to be addressed in the next plan period:

1. There is need for a centralized and accessible sample repository system, to ensure proper sample management and utilization
2. There is need for a central sample reception area
3. There is need to recruit more staff at UVRI
4. There is need for more funding for UVRI in order to deliver its mandate and mission
5. Recruit more health research workforce at the institute
6. Renovation of staff houses and construct a new science research block which will accommodate all research activities
7. There is need for coordination of programs, projects and core departments in order to efficiently and effectively utilize the available resources
8. There is need for dissemination and utilization of UVRI research findings, in order to contribute to evidence based policy formulation and practice.
9. There is need for storage space for supplies

### 3.7. KEY OUTCOME LEVEL RESULTS

**Table 3: Key Outcome Level Results**

GOAL AND OBJECTIVES	Outcome	INDICATORS	BASELINES (2018/19)	2024/25
<b>Goal:</b>  <b>Contribute to reduction of the major viral disease burden through scientific investigations</b>	Prevalence of viral diseases reduced	HIV/AIDs prevalence rate	6.2% (UPHIA 2016-17)	
		Hepatitis B	4.1% (UPHIA2016/17)	
		Influenza		
		SARS-COV-2		
		Yellow Fever		
		Measles		
<b>Objective 1: To enhance viral and vector research to lead to vector innovations and to inform knowledge, policy and practice for improved health</b>	Research products increased	Number of research products		
	Uptake of research products for informed policy and practice for health	Proportion of informed research policy and guidelines	25	
	UVRI led and Collaborative research projects undertaken	Number of UVRI led and collaborative research projects		

GOAL AND OBJECTIVES	Outcome	INDICATORS	BASELINES (2018/19)	2024/25
	Publications in peer review journals	Number of Publications in peer review journals		
	Viral research facilities and human resource internationally certified and maintained	Number of Viral research facilities and human resource internationally certified and maintained		
<b>Objective 2: To enhance viral and vector surveillance to inform knowledge, policy and practice for health</b>	Surveillance coverage increased	% of coverage of surveillance activities in Uganda	25%	10%
	Uptake of surveillance evidence for informed policy, practice, and knowledge management for health	i. Proportion of surveillance activities that informed policy (WHO & National) and guidelines  2. Proportion of surveillance activities that informed policy and guidelines implemented	25%	
	UVRI led and Collaborative surveillance activities undertaken	Number of UVRI led and collaborative surveillance activities conducted	7	30
	Publications on surveillance activities in peer review journals	Number of Publications on surveillance in peer review journals	100	20
	Surveillance facilities and human resource internationally certified and maintained	Number of research facilities internationally certified and maintained	5	1

GOAL AND OBJECTIVES	Outcome	INDICATORS	BASELINES (2018/19)	2024/25
		Proportion of laboratory staff internationally certified and maintained	60%	100%
<b>Objective 3:</b> To improve response to emerging and re-emerging viral diseases	Improved efficiency in maintaining the 48 hours turnaround time	Number of viral infections /diseases detected	5	5
		Number of viral infections detected within 48 Hrs	5	5
		Number of viral infections responded to within 48 Hrs	5	5
<b>Objective 4: To improve operations, infrastructure and human resource capacity for improved service delivery</b>	Enhance HR Management and development	Number of Human resources manuals developed (Finance management, Fleet management, Procurement, QCQA, HR)	1	1
	Train Staff	% of Staff trained	50	75
	Strengthen Institutional infrastructure	Number of research infrastructures developed	1	
	Develop & improve the Institutional Master plan	An approved master plan	0	1
	Implement Routine maintenance & Retooling	% of offices and Laboratories retooled & maintained	20%	

GOAL AND OBJECTIVES	Outcome	INDICATORS	BASELINES (2018/19)	2024/25
				100
	Equip, install, & upgrade the state-of-the-art machinery and equipment	% of facilities equipped	25%	30%
	Draft a communications strategy	An approved Communications strategy	0	1
	Conduct science open days	Number of science open days conducted	2	1
	Conduct perception surveys	Perception survey carried out	2	1
	Conduct Tv & radio talk shows	number of tv talk & radio talk shows conducted	3	2
	Publish online blogs	number of online blogs published	3	2
	Publish print media pull-outs	number of print media pull-outs published	3	2
	Produce documentaries	number of documentaries produced	1	1
	Publish newsletters	Number of newsletters published	2	

GOAL AND OBJECTIVES	Outcome	INDICATORS	BASELINES (2018/19)	2024/25
				2

### 3.8 Key Priority Projects.

Below are the key priority projects for UVRI in the next five years

**Table 4 Summary of the key projects for UVRI 2021/22-2024-25**

PROJECT	2020/21	2021/22	2022/23	2023/24	2024/25	Sub-Total
	UVRI Infrastructure Development project					
Construction of 64 staff houses in Soweto		2,100,000,000	2,205,000,000	3,150,000,000	3,472,875,000	10,927,875,000
Renovation of staff houses in Senior Quarters			1,000,000,000	1,105,000,000	1,157,625,000	3,262,625,000
Construction of a Science Research Block	19,822,794,215	42,139,894,920				61,962,689,135
Construction and equipping of the Science Research Block with the Bio Safety level 4 laboratory and other research equipment			37,755,964,793	95,281,346,072	50,000,000,000	183,037,310,865
Construction of a large capacity incinerator		3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000	12,000,000,000
	Retooling of UVRI					
Office equipment and supplies	30,000,000	30,000,000	30,000,000	40,000,000	40,000,000	1,700,000,000
Machinery & Equipment	150,000,000	150,000,000	150,000,000	150,000,000	150,000,000	750,000,000
Specialized Machinery & Equipment		3,790,000,000	3,790,000,000	4,000,000,000	4,000,000,000	15,580,000,000

PROJECT	2020/21	2021/22	2022/23	2023/24	2024/25	Sub-Total
	UVRI Infrastructure Development project					
Construction of 64 staff houses in Soweto		2,100,000,000	2,205,000,000	3,150,000,000	3,472,875,000	10,927,875,000
Renovation of staff houses in Senior Quarters			1,000,000,000	1,105,000,000	1,157,625,000	3,262,625,000
Construction of a Science Research Block	19,822,794,215	42,139,894,920				61,962,689,135
Construction and equipping of the Science Research Block with the Bio Safety level 4 laboratory and other research equipment			37,755,964,793	95,281,346,072	50,000,000,000	183,037,310,865
Construction of a large capacity incinerator		3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000	12,000,000,000
<b>Sub Total</b>	20,002,794,215	51,209,894,920	47,930,964,793	106,726,346,072	61,820,500,000	280,220,500,000

### 3.9 Programmes Relevant to UVRI

**Table 5 Table Programmes Relevant to UVRI**

Sub programme	Objective	Intervention	Output	Programme Level action(s)	Lead
Programme: - Innovation, Technology Development and Transfer					

Sub programme	Objective	Intervention	Output	Programme Level action(s)	Lead
Innovation and Technopreneurship	4: Strengthen the mechanisms and processes for technology development, transfer, adoption and nurture the national innovation potential	4.3 Support development and commercialization of commodities and other products from enterprises and innovations	Identified commodities commercialized	Develop and commercialize diagnostics, Vaccines and therapeutics	UVRI
Research and Development	3: Strengthen R&D capacities and applications	3.5 Establish research collaborations at local, regional and international level	Increased STEI collaborations at the different levels	Establish collaborations for virus research between local Research Institutions, Universities, and global partners	UVRI
Biosciences	1. Develop requisite STEI infrastructure	1.1 Support the establishment and operations of Technology & Business incubators and Technology Transfer centres	R & D laboratories (centres of excellence) established	Establish specialized biosafety level 4 lab.	UVRI
		1.3 Support academia and research institutions to acquire R&D infrastructure	Virus research Infrastructure developed	Establish and operationalize a multipurpose virus research building	UVRI
				Establish and operationalize specialised virus Bio-Bank	UVRI

Sub programme	Objective	Intervention	Output	Programme Level action(s)	Lead
				Establish and operationalize a Large capacity incinerator	UVRI
				Establish and operationalize a liquid nitrogen plant	UVRI
	3: Strengthen R&D capacities and applications	3.6 Develop, oversee and implement programmes in new and emerging areas of space, marine, Biosciences, Virology, nuclear, data and climate science, nanotechnology, bio-technology among others	Increased R&D in new emerging and re-emerging areas	Undertake country wide surveillance of selected viruses	UVRI
				Develop and implement additional Virus research projects	UVRI
				Establish and fund collaborative research and innovation projects through publication of joint calls	MOSTI, UVRI, UNCST
STEI Human Resource and Institutional Capacity	Build Institutional and human resource capacity in STEI	2.4 Design and implement special Academic programmes for Nano technology, space exploration, nuclear technology, bio sciences, virus research, engineering and others	Special academic programs in emerging areas of Science and technology developed and implemented	Develop and implement tailor made post graduate courses and internship programmes in virus research, and training	UVRI

<b>Sub programme</b>	<b>Objective</b>	<b>Intervention</b>	<b>Output</b>	<b>Programme Level action(s)</b>	<b>Lead</b>
Institutional Coordination	6: Strengthen Programme Governance, implementation and coordination	6.1 Strengthen the capacity of the programme key implementers to deliver effectively	Programme administrative and operational costs met	Provide for Programme wages, salaries, gratuity and NSSF	MOSTI, UIRI, UVRI
				Provide for programme utility costs, office rent and transport equipment, maintenance and operations	MOSTI, UIRI, UVRI
				Provide for programme retooling and transport related costs	MOSTI, UIRI, UVRI

### 3.5.3 Strategic Interventions

**Table 6 Key Output Level Results**

OBJECTIVES	INTERVENTIONS	OUTPUTS	ACTIONS	DEPARTMENT/UNIT
<b>Objective 1: To enhance viral and vector research to lead to vector innovations and to inform knowledge, policy and practice for improved health</b>	Increase the number of institutional led research projects	Institutional led research projects implemented	Implement the existing UVRI led research projects	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology and Statistics, Expanded Programme on Immunization, Finance and Administration
			Initiate at least 4 new externally funded research projects	
			Establish and operationalize a research support office	
			Train, attract and retain competent mid-level scientists	
	Enhance local and international research collaborations and partnerships	Collaborative research projects implemented	Implement the existing collaborative research projects	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology and Statistics, Expanded Programme on Immunization and Finance and Administration
			Initiate at least 10 new partner led research projects	
		SOPs in place and implemented	Streamline the signing of MOUs (developing SOPs, standards, guidelines etc)	
	Strengthen product research and development	New viral detection tools developed	Lead and collaborate in the research and development of 3 new viral detection tools	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology

OBJECTIVES	INTERVENTIONS	OUTPUTS	ACTIONS	DEPARTMENT/UNIT
		Viral vaccines developed	Lead and collaborate in the research and development of 4 viral vaccines	
		Therapeutic interventions developed	Lead and collaborate in therapeutic development and discovery	
		Vector control tools developed	Lead and collaborate in research and development of new vector control tools	
		Pathogens and vectors characterized	Characterize pathogens and vectors for intervention	
	Strengthen the translation of research evidence and knowledge management	Research papers published and disseminated	Publish at least 500 research papers in peer review journals	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology and Statistics, Expanded Programme on Immunization and Finance and Administration
			Disseminate Research findings in at least 50 national and international scientific meeting	
		Annual viral research exhibition conducted	Conduct an annual viral research exhibition	
		Research publication inventory developed	Develop the research publication inventory	
		Research guidelines developed	Contribute to the review and or development of at least 3 research guidelines in order to inform policy	

OBJECTIVES	INTERVENTIONS	OUTPUTS	ACTIONS	DEPARTMENT/UNIT
			Developed policy briefs	
		National and International Technical Committees advised	Provide expert advice to at least 5 National and Regional agencies technical committees	
<b>Objective 2: To enhance viral and vector surveillance to inform knowledge, policy and practice for better health</b>	Increase the coverage of institutional led surveillance activities	Institutional led surveillance activities conducted	1. Conduct field sampling to establish viral and vector distribution.	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology and Statistics, Expanded Programme on Immunization and Finance and Administration
			2. Laboratory sample processing and data analysis	
			3. Training and capacity building for skills upgrade	
			4. Stakeholder engagement for surveillance activity uptake	
			5. Construct a centralized sample repository, update viral and vector reference collection	
	Enhance local and international Surveillance collaborations and partnerships	Local and international Surveillance collaborations and partnerships enhanced	1. Conduct conferences national and international to facilitate knowledge exchange	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology and Statistics, Expanded Programme

OBJECTIVES	INTERVENTIONS	OUTPUTS	ACTIONS	DEPARTMENT/UNIT
				on Immunization and Finance and Administration
	Support evaluation of new surveillance tools and techniques	New surveillance tools and techniques evaluated	<ol style="list-style-type: none"> <li>1. Field and laboratory led sampling</li> <li>2. Sample processing to test new tools and techniques</li> <li>3. Training in use of new tools and techniques</li> <li>4. Implement the existing surveillance activities</li> </ol>	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology and Finance and Administration
	Strengthen the translation of Surveillance evidence for practice, policy and knowledge management.	<ol style="list-style-type: none"> <li>1. Policy briefs, Research papers published and disseminated.</li> <li>2. An Institutional Surveillance inventory/Database developed</li> </ol>	<ol style="list-style-type: none"> <li>1. Data analysis and write ups</li> <li>2. Publish at least 100 research papers in peer reviewed journals</li> <li>3. Disseminate surveillance evidence in at least 100 National and International scientific meetings</li> </ol>	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology and Statistics, Expanded Programme on Immunization and Finance and Administration
				Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology and Finance and Administration
<b>Objective 3: To improve response to emerging and re-</b>	Specialized training in new viral diseases diagnosis	Timely detection of suspected viral infections	Improve on existing diagnostic techniques for viral infections	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology

<b>OBJECTIVES</b>	<b>INTERVENTIONS</b>	<b>OUTPUTS</b>	<b>ACTIONS</b>	<b>DEPARTMENT/UNIT</b>
<b>emerging viral diseases</b>		Increased number of viral infection that can be detected	Training in new techniques Acquiring reagents & new equipment	Arbovirology; Immunology; General virology; Entomology; UVRI clinic & Epidemiology
	Equipment, diagnostic tools and consumables	Identified viruses characterized	Explore use of and embrace new technologies	Arbovirology; Immunology; General virology; Entomology; UVRI clinic; Epidemiology and Finance and Administration
<b>Objective 4: To improve operations, infrastructure and human resource capacity for improved service delivery</b>	Enhance HR Management and development	HR Management and development enhanced	Fill up the established human resource structure to at least 70% at UVRI in the next 5 years  Recruit and retain high calibre scientists  Develop more than 5 internal policies & guidelines (human resource manual, Data and information management policy, procurement policy, fleet management policy, risk management policy, ).	Finance and Administration

OBJECTIVES	INTERVENTIONS	OUTPUTS	ACTIONS	DEPARTMENT/UNIT
	Strengthen Career development	Career strengthened development	<p>Enhance collaborative partnerships between UVRI and at least 3 other tertiary training Institutions for PhD, MSc and undergraduate programs in the next 5 years</p> <p>Attach junior scientists to senior scientists for mentoring</p> <p>Diversify the training portfolio for health research to include new training technologies</p> <p>Conduct specialised training</p> <p>Strengthen coordination of training and internship program and sign at least 3 MoUs</p> <p>Develop and operationalize quality assurance system for training</p> <p>Increase awareness of science among the students on internship and placement program</p> <p>Encourage exchange and sabbatical programs</p>	Finance and Administration ( Training and capacity Building Division)

OBJECTIVES	INTERVENTIONS	OUTPUTS	ACTIONS	DEPARTMENT/UNIT
	To improve the research infrastructure over the next 5 years	Physical infrastructure enhanced ICT infrastructure enhanced Research and laboratory equipment procured	Construction, and equipping of a science block to house a level 4 laboratory , level 3 and level 2 laboratories, sample repositories, cold chain facilities, stores and conferencing facilities .  Construction and Development of a Large capacity incinerator  Procurement of a liquid nitrogen plant  Construction of Office facilities at Zika research forest  Development of a Breastfeeding, nursing and day care centre  Expansion of the Institute Research Clinic  Strengthen the Security and surveillance system  (Fence off UVRI Land, Installation of solar lights, expand and manage CCTV surveillance system)  Set up a central data processing facility	Finance and Administration

OBJECTIVES	INTERVENTIONS	OUTPUTS	ACTIONS	DEPARTMENT/UNIT
			<p>Set up a central data storage facility</p> <p>Enhance and maintain the power backup system of up to 50% a day in the next 5 years</p> <p>Ensure efficient data capturing and storage of 98% error free/magnitude on final research finding in the next 5 years</p>	
	Implement Routine Retooling and maintenance	Routine Retooling and maintenance implemented	<p>Retool 6 Institute laboratories and offices</p> <p>Retool 7 UVRI departments with vehicles and machinery (field vehicles, cold chain vehicles, )</p>	Finance and Administration
	Equipping, installing, upgrading with state-of-the-art machinery and equipment	State of the art machinery and equipment acquired, installed and upgraded	<p>Upgrade laboratories with state-of-the-art equipment</p> <p>Equip the biorepository (freezers, liquid nitrogen tanks, Laboratory Information Management Systems, temperature monitoring systems)</p>	Finance and Administration

OBJECTIVES	INTERVENTIONS	OUTPUTS	ACTIONS	DEPARTMENT/UNIT
			<p>DNA Sequencing instruments</p> <p>(Flow cytometer and other major lab equipment)</p> <p>Develop data and information management system</p>	
	To widen the financial resource base at UVRI	Financial sustainability of UVRI enhanced	<p>Enhance Non-tax revenue at source</p> <p>Enforce accountability of used resources</p> <p>Create and operationalize the Research and Grants Support Office</p> <p>Lobby Government for increased funding to at least 70% of the UVRI budget</p> <p>Develop a business model strategy for the coming 5 years</p> <p>Create an enabling environment to attract more donors</p> <p>Strengthen the standard operating procedures and regulations on use of overheads</p> <p>Ensure effective and efficient budgeting for both G.OU and project</p>	Finance and Administration.

OBJECTIVES	INTERVENTIONS	OUTPUTS	ACTIONS	DEPARTMENT/UNIT
	Strengthen the operations of departments and programs at the Institute	Operations of departments and programs at Institute Strengthened.	<p>Strengthen Internal controls and ensuring financial, administrative and human resource procedures, regulations and standards are adhered to.</p> <p>Enhance communication and Public engagement at the Institute.</p> <p>Operationalize monitoring and evaluation at the Institute</p> <p>Create a conducive working environment at the Institute through retooling.</p> <p>Strengthen Collaborations and partnerships (Cost effective and legally approved MOUs, collaborative agreements and provision of services agreements signed)</p>	Finance and Administration

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The planned budget for the five years is UGX Nineteen Trillion Five hundred Forty Five Billion, Four Forty-Six Million only (19,545,446,000/=). This projection includes funding from Government of Uganda and Development partners, including the estimated wage, non-wage recurrent and development expenditures of the UVRI over the period. The Development Budget comprises of 20% and the recurrent budget comprises of 67%. The wage budget comprises of 13% of the total budget.

## 4.2 SUMMARY OF THE STRATEGIC PLAN BUDGET (FY2020/21–2024/25)

**Table 7 Strategic Plan Budget**

Table 7 : total budget cost for the plan 2020/21-2024-25														
S . N		F.Y 2020/21		F.Y 2021/22		F.Y 2022/23		F.Y 2023/24		F.Y 2024/25		Total	Total percent age. G.O.U	Total percentage. O.B .S
	BUDG ET ITEM	G.O . U	Off Budge t Suppo rt	G.O .U	Off Budge t Suppo rt	G.O. U	Off Budget Suppor t	G.O. U	Off Budge t Suppo rt	G.O. U	Off Bud get Sup port		Total percent age. G.O.U	Total percentage. O.B .S
1	Wage	1.541	0	1.541	0	1.541	0	1.541	0	1.541	0	7.705		
2	Non-Wage	5.207	20.816	6.249	21.316	7.499	21.816	8.998	22.316	10.798	22.816	125.015		
	Total Recurre nt													
3	Total Develo pment	2.28	0	2.28	0	2.28	0	2.28	0	2.28	0	11.4		
	G.O.U Total Budget	9.028	20.816	10.07	21.316	11.32	21.816	12.819	22.316	14.619	22.816	166.936		
	Percent age	5%	12%	6%	13%	7%	13%	8%	13%	9%	14 %	100%	35%	65%
	Total Budget													26,545,446.000

	(Ugx Tn													
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### Budget projections for 2020/21-2024/25

The summary of the budget projections over the five years, by classification is presented in Table 9 below.

**Table 8 Budget for UVRI Strategic Plan (FY2020/21–2024/25)**

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UVRI MTEF Budget Projections “000,000”							
S.N	BUDGET ITEM	F.Y 2020/21	F.Y 2021/22	F.Y 2022/23	F.Y 2023/24	F.Y 2024/25	Total
1	Wage	1.541	1.541	1.541	1.541	1.541	7.705
2	Non- Wage	5.207	6.249	7.499	8.998	10.798	38.751
	Total Recurrent						
3	Total Development	2.28	2.28	2.28	2.28	2.28	11.4
	G.O.U Total Budget	9.028	10.07	11.32	12.819	14.619	57.856

### Funding gap

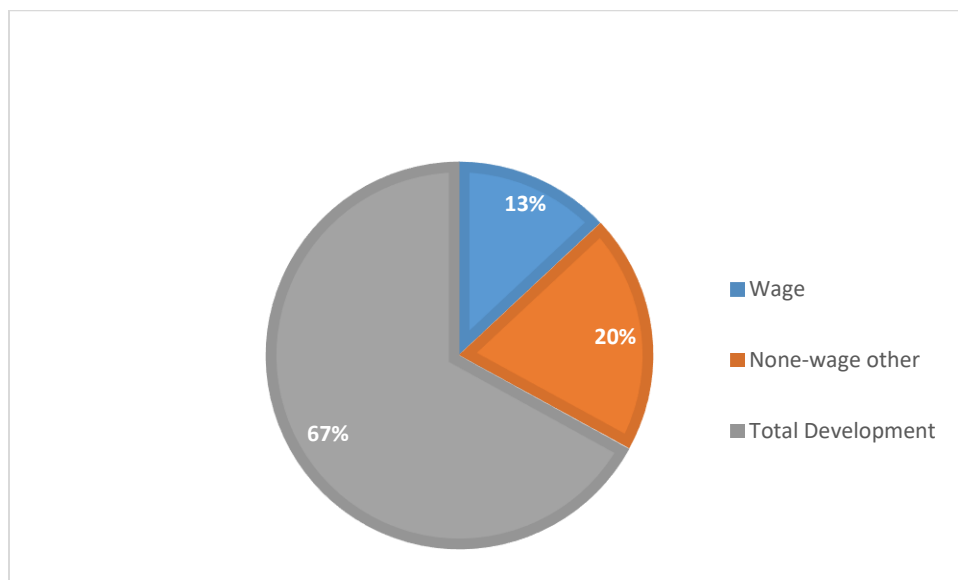
The available funding for the plan is Ugx billions 338,0676,500 from the government of Uganda projected Midterm Expenditure framework (MTEF) -Ugx Bn 57.856,000 funding for the three years 2020/21- 2022/23. Of this 13% is allocated to wage, 66.9 % is allocated to Non- wage and 19.7% allocated to the development budget for the coming there years and Bn Ugx 280,220,500 from the development budget to fund infrastructural upgrades and re-tooling funds for the same years . The total funding required to implement the plan is Tn 26,545,446,000.

## The Major cost drivers

The budget has been determined in consideration of the priorities outlined in the strategic direction of the plan. The focus of the plan will be towards building a center of excellence in Health research.

The major cost drivers of the plan are indicated in the pie-chart below Figure 2: Pie-chart

Figure 2: showing the cost Drivers for UVRI



The key cost drivers over the planning period include; the state of the art Science building for UVRI, expanded scope of services, staff training /development , capacity building and research in the development budget. These are explained below:-

- i. Construction and equipping of the Science block: During the implementation of this plan, construction and equipping of the UVRI Science building will be the highest cost driver. Overall, this intervention will cost approximately UGX 26 billion. This constitutes about 65% the total strategic plan budget.
- ii. Up grading the design of the liquid Nitrogen Plan and procuring a new liquid Nitrogen Plant Equipment.
- iii. Upgrading the Institute Incinerator

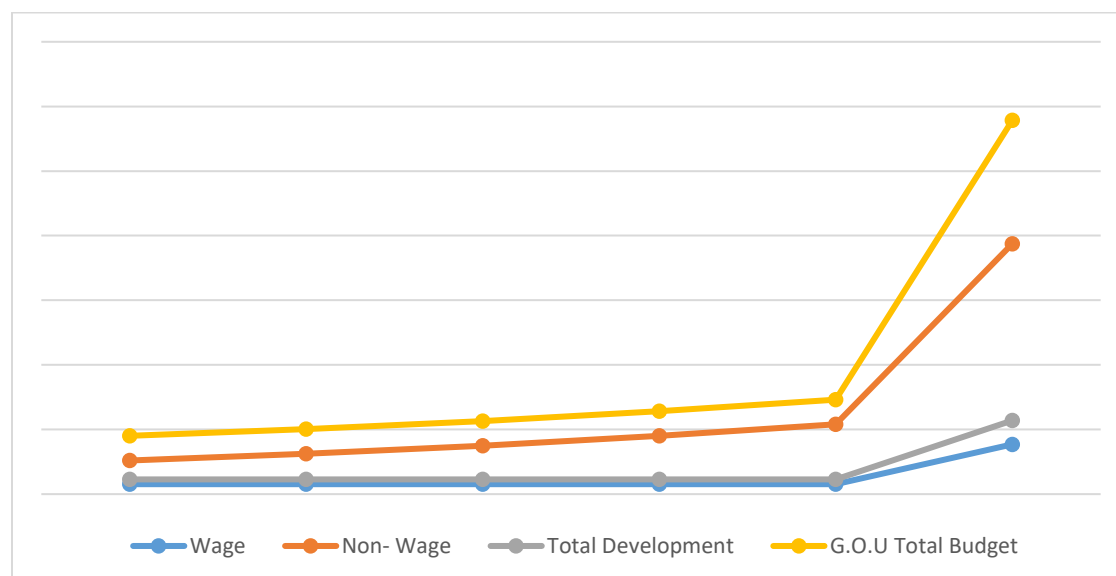
- iv. Operationalizing the research support and Research administration office/grants office to enable scientists acquire more grants
- v. Build and construction of a state of Art sample reception
- vi. Construction of 42 staff houses that support Laboratory Assistants, janitors and support staff in Soweto housing Estate at UVRI
- vii. Removal of Asbestos and renovation of Senior staff quarters in Johannesburg
- viii. Upgrading the Institute website
- ix. Affiliation with Makerere University
- x. Construction of the UVRI Museum/achieves
- xi. Bringing more partners on Campus e.g. IAVI head office, AFENET etc.
- xii. Construction of recreation Centre to eliminate lifestyle diseases
- xiii. Construction of a childcare Centre at UVRI for breastfeeding mothers
- xiv. Restructuring of the UVRI old structure that was last restructured in 2011
- xv. Strong power back up. Procuring a 1000KVA generator for power stability and eliminate power flicks
- xvi. Upgrade the water system at the Institute to eliminate water shortages
- xvii. Construct a state-of-the-Art bio bank
- xviii. Take on a business model strategy for the Institute
- xix. Subscribe to high impact scientific and research administration journals and
- xx. Servicing and maintenance of equipment at the institute, establish a gold level servicing centre at the Institute
- xxi. Increase the internet band width at the Institute

#### **4.3 STRATEGIC PLAN FINANCING BY SOURCE**

It is anticipated that the GOU will directly finance an average 35% of the budget for the Plan period, donor support will be an average 65% of the budget for the five years. Figure 8 shows the trend of the Plan financing by source. It is expected that the major funding

will be required in the first three years (FY 2020/21 - 2022/23) to kickstart the construction of the UVRI Science building.

**Figure 3 The trend in UVRI financing over the plan period**



#### 4.4 RESOURCE MOBILIZATION STRATEGIES AND THE QUICK WINS

Overall, it is notable that UVRI is expected to increase the efforts for resource mobilization. In particular, extra efforts are required to increase the share of Donor resources in the budget while also consolidating the efforts for mobilizing GoU resources to finance the Strategic Plan priorities. Therefore, given the substantial resources required to support the growing demand for service delivery, there is need for a resource mobilization strategy as well as more robust resource sustainability strategy.

The Institute will mainly depend on the GoU resources financing for the implementation of the Plan. However, the strategic plan budget projections place Government funding at

an average of 35%. This means that UVRI will invest extra effort in lobbying Government for the upward review of the MTEF funding allocations to substantially cover the budget gaps. Even without construction of the UVRI Science building, an average funding gap of about UGX 20 Billion will need to be mobilised in order to efficiently and effectively achieve the UVRI Mandate.

The MTEF resources will be complemented with external resource mobilisation, which will finance about 50% of the budget over the five (5) years. UVRI will commence external resource mobilization initiatives directed to specific programmes to ensure adequate funding for the Plan. As a result, UVRI shall develop a resource mobilization strategy to guide mobilization of adequate resources for the Plan.

#### **4.5 FINANCIAL PLANNING AND MANAGEMENT ARRANGEMENTS**

The implementation of this Strategic plan will primarily be aligned to the standard Government MTEF determination and allocations as the core and assured funding source. It is important to note that while the investment costs in this Strategic Plan are beyond the MTEF projections, the MTEF is the baseline for resourcing the Plan. The Institute will endeavor to solicit funding beyond the MTEF provisions to ensure the Plan is adequately resourced and implemented.

The funds flow system will follow the standard Government on-budget and off-budget modalities and project funding provisions. The financial reporting, procurement, accounting and audit systems shall similarly follow Government procedures and any additional project-specific financial management, accounting and reporting systems and procedures. UVRI will endeavour to capture all external financing within the budget and planning process in order to minimise the size of off-budget support.



## SECTION FIVE: INSTITUTIONAL ARRANGEMENTS FOR IMPLEMENTING THE PLAN

### 5.1 COORDINATION OF THE IMPLEMENTATION PROCESS

Coordination and implementation of the strategic plan to yield results will be done in the existing 7 departments, committees and existing partnerships with other stakeholders including stakeholders in program 16 (Human Capital Development and Program 17 (Innovation, Technology, Development and Transfer) of NDP III.

#### 5.1.1 Roles and Responsibilities of UVRI

The Uganda Virus Research Institute takes the leadership role of coordinating the 5-year strategic plan. Table 4 summarizes the roles and assignments for the major players at the Uganda Virus Research Institute.

*Table 9 : Roles and Responsibilities of Departments and committees at UVRI*

Responsible Person	Roles and Responsibilities
The Director's Advisory Committee	<ul style="list-style-type: none"><li>• Provide general direction and supervision of the plan.</li><li>• Provide oversight for the operation of the plan.</li><li>• Lobbying for financing</li></ul>
Senior Staff Committee	<ul style="list-style-type: none"><li>• Provide technical guidance</li><li>• Implement policies and programmes of the plan</li><li>• Responsible for management of the plan</li><li>• Review and make recommendations</li><li>• Provide accountability</li></ul>

Responsible Person	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>• Implementation of the plan</li> <li>• Review and make recommendations</li> </ul>
Monitoring and Evaluation Committee	<ul style="list-style-type: none"> <li>• Evaluate and monitor the progress of the plan</li> <li>• Review and compile annual reports on the progress of the plan</li> <li>• Make the necessary recommendations</li> </ul>
Finance committee	<ul style="list-style-type: none"> <li>• Coordinate resource mobilisation for implementation of the Plan</li> <li>• Ensure that funds provided are utilised according to the plan and are properly accounted for</li> <li>• Approve funds required in the implementation of the activities/programmes</li> </ul>
Estates and Housing Committee	<ul style="list-style-type: none"> <li>• Provide technical guidance structural developments</li> <li>• Review and make recommendations</li> <li>• Evaluate and monitor the progress of the plan</li> <li>• Make the necessary recommendations</li> </ul>
HIV AIDS committee	<ul style="list-style-type: none"> <li>• Support UVRI Management in the implementation of the policy on HIV-at workplace</li> <li>• Create awareness on issues of HIV at the institute</li> <li>• Encourage UVRI staff to stay Negative and create an environment for the positive living strategies for staff</li> </ul>
Bio-safety and Bio security committee	<ul style="list-style-type: none"> <li>• Develop and evaluate SOPs on Biosafety and security at the Institute</li> <li>• Evaluate and monitor the issues of bio-safety and security at UVRI and provide technical guidance to management</li> <li>• Create awareness on issues of Bio-safety and security</li> <li>• Make the necessary recommendations</li> </ul>
Research Ethics committee	<ul style="list-style-type: none"> <li>• Link to National ethics committees</li> <li>• Evaluate and oversee the conduct of health research on humans and animals</li> <li>• Develop and evaluate SOPs on human research</li> <li>• Make the necessary recommendations</li> </ul>

### **5.1.2 Roles and Responsibilities of Other Stakeholders**

The stakeholders relevant to the successful implementation of the UVRI's strategic plan and their roles are identified in the table below.



Table 10 : Mapping of the relevant for UVRI

Stakeholder	Stakeholder relationship and Role	Performance criteria	UVRI performance according to criteria	What UVRI should do to improve performance	Expectations of UVRI from stakeholders	What UVRI should do to realize its expectations from stakeholders
Staff	<ul style="list-style-type: none"> <li>- Employees Lead, investigate and implement organizational objectives</li> <li>- Designers and implementer of activities</li> </ul>	<ul style="list-style-type: none"> <li>• Regular staff appraisals</li> <li>• Developed protocols</li> <li>• Funded protocols</li> <li>• Reports and Publications</li> <li>• How well staff perform according to job description</li> </ul>	Targets set	<ul style="list-style-type: none"> <li>• Capacity building of staff</li> <li>• Provide appropriate terms and conditions of service(incentives)</li> <li>• Conduct regular staff appraisals</li> <li>• Staff should be informed regularly</li> </ul> <p>In service training, good remuneration package, provide equipment and other protective gear , office space</p>	<p>Embrace the vision, mission and uphold core values</p> <ul style="list-style-type: none"> <li>• To perform and meet targets</li> </ul> <p>Dedication</p>	<p>Create a beneficial working environment for conducting health research</p> <p>Institute annual performance agreements</p> <p>Conducting regular reviews and performance appraisals</p>

<b>Stakeholder</b>	<b>Stakeholder relationship and Role</b>	<b>Performance criteria</b>	<b>UVRI performance according to criteria</b>	<b>What UVRI should do to improve performance</b>	<b>Expectations of UVRI from stakeholders</b>	<b>What UVRI should do to realize its expectations from stakeholders</b>
On campus collaborators	Providing funds and they are co implementers	Level of funding Research output Level of capacity building met	Level of funding Research outputs	Maintain cordial mutually beneficial relationship	Full cooperation and focus on capacity building of staff and infrastructure	Scaling up joint research  Improved communication and  Visibility of UVRI
UNHRO	Oversight coordinating & supervision role for health research	Funds raised and guidance provided	UVRI Strategic and Development Plan is in line with UNHRO one	Be responsive to UNHRO research agenda and perform within the provision of the UNHRO Act 2011	Funding from GoU support for grants, MOU and constituencies	Implementing research agenda  Adherence to/policies and guidelines
MOH	Provision of resources, setting policy and standards	Funds and other resources provided  Policies and standards developed	Priority research conducted; other functions of public health institutions implemented	Dialogue with policy makers to conduct relevant research participate in outbreak investigations, develop appropriate interventions/innovations	Required resources provided, political and support supervision provided	Conduct business in accordance with UHRO Strategic and Development Plan, NH policy, HSSIP and NDP, collaborate and support other health institutions

<b>Stakeholder</b>	<b>Stakeholder relationship and Role</b>	<b>Performance criteria</b>	<b>UVRI performance according to criteria</b>	<b>What UVRI should do to improve performance</b>	<b>Expectations of UVRI from stakeholders</b>	<b>What UVRI should do to realize its expectations from stakeholders</b>
MFPEd  UNCST	Implement Abuja declaration, collaboration with UNHRO in providing oversight	UVRI funded adequately, research conducted according to national Guidelines		Through UNHRO continue lobbying for funds; Active member of UNCST	Adequate funding;  Support for research conducted	Using funds as expected; Produce high quality research
Other ministries & Government Departments	Collaborate and provide conducive environment	Collaborate research to improve public health	Multisectoral research with multiple impact	Maintain good working relationship	Tap UVRI expertise in various fields	Develop joint research proposals
Academia	-Collaborate with UVRI,  -Provide honorary appointments	Collaborative research conducted  Number of staff with honorary appointment	Joint grants obtained  Number of staff appointed	Effective MOU share equipment;  Exchange visit;  Provide expertise where needed	Efficient collaboration; Critical mass of scientists  Utilization facilities reasonable	Mutual respect; Open door policy to use of facility not available at their campus Joint mentorship and supervision Joint application for funds;

<b>Stakeholder</b>	<b>Stakeholder relationship and Role</b>	<b>Performance criteria</b>	<b>UVRI performance according to criteria</b>	<b>What UVRI should do to improve performance</b>	<b>Expectations of UVRI from stakeholders</b>	<b>What UVRI should do to realize its expectations from stakeholders</b>
	-Supervision of PhD, post-doctoral and master's students	Number of students co-supervised	Number of students jointly supervised			Complementarity rather than competition

- i. Government of Uganda:** The Government adopts and is a signatory to the SDGs, and the HIV/AIDS (UNAIDS) shared Vision of zero new infections, zero discrimination and zero Aids-related deaths by 2030 and Vision 2040 declarations which are major measures to implement the economic and social policy of Uganda. As part of its powers, it is entitled to adopt legislation which might also contribute to the improvement of wellbeing and reduce poverty levels for its population and address concerns of the health research sector. Among the most significant regulations that should be operationalized is the UNHRO Act 2009 This regulation requires decentralization of health research and operationalizing the UNHRO structures.
- ii. Ministry of Health: UVRI is a research department under** MOH is the central administrative body responsible for health care. UVRI is a member of the NTF that manages and contains outbreaks. The MoH proposals of strategic aims and priorities of development of health care policy, professional guidance on provision of health care, need for the health research agenda, coordination of research activities in health care, management, and control of the flow of research evidence and provision of health education, supervision and management of research results and communication to stakeholders during outbreaks
- iii. Uganda National Health Research Organisation:** The Uganda National Health Research Organisation is Uganda's umbrella organisation for health research coordination. UNHRO works to coordinate, promote, and provide guidance for health research and development.
- iv. Ministry of Finance, Planning and Economic Development:** the mandate of MoFPED is to formulate sound economic and fiscal policies, mobilize resources for the implementation of government programmes, disburse public resources as appropriated by Parliament, and account for their use in accordance with national laws and international best practices. UVRI has got a vote with MoFPED.
- v. Training Institutions:** UVRI serves as a center for training and education. UVRI has partnerships with local and international Universities such The Makerere University – Uganda Virus Research Institute (UVRI) Centre of Excellence for Infection & Immunity Research and Training (MUII-plus), a collaborative

capacity-building and research programme supporting excellence in Infection and Immunity. The MRC/UVRI and London School of Hygiene and Tropical Medicine Uganda Research Unit is a partnership boosting research capacity into some of the current and emerging health issues in Africa and the world. The universities have a vested interest in enabling their students to be trained.

- vi. Research Institutions:** UVRI on a routine basis cooperates with many research institutions nationally, regionally, and internationally. Current international research collaborations include Rotary International, McMaster University Canada among others.
- vii. Healthcare Providers:** UVRI will cooperate with other health care providers for purposes of providing quick diagnostics, therapeutics, vaccines and outbreak control, expert advice for enhancing comprehensive health care.

## **5.2 SUSTAINABILITY ARRANGEMENTS**

UVRI sustainability arrangements include financial arrangements and Institutional Sustainability Arrangements listed below

### **5.2.1 Financial Sustainability Arrangements**

- I.** Lobby for More Government Funding. Currently, UVRI GOU budget stands at 20% of the total budget required to implement research and administrative activities. The remaining part of the budget is financed through partnerships and writing grants with different partners. The institute will lobby for more funding from the government to enable continuity of projects and studies even when donor funds decrease.
- II. Resource mobilization:** The Institute will sustain the plan through strengthening the resource mobilization component. This will involve continuing to give expert advice on say evaluation of new testing kits, expansion and commercialization of the liquid nitrogen plant. The institute hopes to innovate products for testing. The institute will install a plant that is capable of producing a large amount of liquid nitrogen (50litres per hour), construction of a modern incinerator where all users shall be charged.

### **III. Diversification of training model**

UVRI will continue the enhancement of training and offering apprentice and internship placement for students from tertiary institutions in Uganda, the region and outside Africa.

### **IV. Grants and proposal writing.** Since the institute obtains its major funds through external grants, Scientists will be encouraged to write research grants. The institute will continue to collaborate with external funders and encourage them to bring studies to the institute.

## **5.2.2 Institutional Sustainability Arrangements**

### **1. Information Technology, Communication and Technology Advancement:**

UVRI will use the existing technology; reliable internet bandwidth to ensure that the technology used is up to date and meets international standards. The bid data reserves currently and genomic laboratories can be used to write fundable and competitive proposals. The reliable internet helps scientists to search for most update technology for use in the laboratories. the Institute shall prioritize maintenance of modern equipment procured to reduce on equipment breakage so as to enable continued quality service delivery Training of staff on the use of modern equipment and technologies will also be a priority to promote efficiency and effectiveness When procuring equipment, our focus will be on latest technology as well as compatibility with existing technology in order to reduce redundancy

### **2. UVRI Land space:**

UVRI has enough land (72 acres) to implement the Plan.

3.Laboratories: UVRI has a number of **biosafety level (BSL)**<sup>1</sup> up to **BSL 4**, with biocontainment precautions required to isolate ordinary and dangerous biological agents insecure laboratory facilities. The Institute also has a Field Station in Arua with an advanced Laboratory to handle Plague and viral infections.

### **4. Business model concept**

UVRI wishes to expand its business model to offer consultancy services to the research world and produce items like the new test kits and supplies for sale to the market

#### **5.Partnerships and collaborations on the UVRI campus.**

What makes UVRI different from many research institutions in the country is the presence several collaborating partners on its main campus at Entebbe. These partners include the MRC/UVRI/LSHTM, CDC Uganda, IAVI, NIH, MUII and the Rakai Health Sciences Program. Shared work, experiences, and collaborations will help sustain the 5-year Plan.

#### **6.Residential Houses for staff.**

Another aspect that makes UVRI different from other research institutions in the country is the ownership of a total of 140 institutional residential units for its staff. These quarters are located near its main campus at Entebbe and simplify work, especially for staff.

#### **7. Adequate physical security**

UVRI has adequate security arrangements to enable the implementation of the 5-year Plan.

#### **8. Adequate water reserves.**

The Institute has a reservoir of 80,000 litres of water to enable uninterrupted supply to all its facilities.

#### **9. Information and Communication:**

The Institute has already got an information and communication policy that will facilitate the implementation of the 5-year Plan



## CHAPTER SIX: COMMUNICATION STRATEGY FOR THE STRATEGIC PLAN

### **6.1 COMMUNICATION STRATEGY FOR THE STRATEGIC PLAN**

This section highlights the communication priorities and activities during the implementation of the Uganda Virus Research Institute (UVRI) Strategic Plan. Communication is a critical component of the strategic direction of the Institute as it seeks to engage all her relevant stakeholders actively and continuously. Its purpose is to rally all stakeholders towards supporting the efficient and effective implementation of the priorities set out in this strategic plan. Indeed, this section briefly highlights the key communication priorities and emphasizes the need for development of an independent and comprehensive communication strategy that will expound on the interventions underscored in this strategic plan.

Departmental Goal	Enabling partnerships and communication	
Strategic aims	Objectives	Activity
1.Build a robust internal communications system that promotes active involvement and sharing of information	<ul style="list-style-type: none"> <li>- Provide timely updates of ongoing activities, research and events within UVRI to promote informed decision making and sense of belonging</li> </ul>	<ul style="list-style-type: none"> <li>- Build staff capacity to use the different communication platforms</li> <li>- Make communications platforms available and accessible to staff</li> </ul>
2.Promote general public awareness, understanding, involvement in and support for UVRI's work	<ul style="list-style-type: none"> <li>- Increase stakeholder appreciation and support for UVRI</li> <li>- To increase and extend engagement with the stakeholders working in research beyond the dissemination of study results to support translation of the Institute research into policy and practice</li> </ul>	<ul style="list-style-type: none"> <li>- Develop and maintain a suite of tools and channels that enable the institute to reach target audiences with key messages in an effective and timely manner</li> <li>- Support Departments/projects to develop communications and engagement activities that are specific to their areas of interest</li> <li>- Translation of research outputs into a lay language that is easily understood by non-scientific audiences</li> <li>- Brand promotion e.g. through customized templates (E.g. PowerPoint slides, stationery etc.) signage, vehicle branding, corporate wear</li> <li>- Promoting co-production of engagement materials with members of the public whenever possible</li> </ul>
3. Increase the Institute's capacity to demonstrate the value and relevance of its research to non-science audiences.	<ul style="list-style-type: none"> <li>- Build appreciation and support for public engagement within the institute</li> <li>- Generate funding for public engagement activities</li> </ul>	<ul style="list-style-type: none"> <li>- Public engagement capacity building for researchers</li> <li>- Creating opportunities for UVRI staff to participate in public engagement e.g. Festivals, open days etc.</li> </ul>
4.Contribute to the policy agenda in the various areas of UVRI research practice	<ul style="list-style-type: none"> <li>- Contribute to the translation of UVRI research into policy and practice at national, regional and international levels</li> </ul>	<ul style="list-style-type: none"> <li>- Timely provision of scientific information and evidence to policy makers in a format and language that is accessible to them to support the process of policy discussion and formulation.</li> </ul>

Departmental Goal	Enabling partnerships and communication	
Strategic aims	Objectives	Activity
		<ul style="list-style-type: none"> <li>- Creation of platforms that promote interaction between researchers and policy makers</li> </ul>

## CHAPTER SEVEN: RISK MANAGEMENT STRATEGIES FOR THE PLAN

### 7.1 RISK MANAGEMENT

The purpose of this section is to provide an overview of the risk management processes within Uganda Virus Research Institute (UVRI) and to provide practical guidance for the identification and management of risks within the departments and programs at UVRI

#### 1. Risk Categories

When a risk has been identified, it can be classified into one of the categories below which can help ensure that any common, significant risks can be escalated and reported in an appropriate manner. The table below provides a list of the risk categories used at UVRI and some examples of the types of risks that could be classified under each heading:

Risk profile for UVRI

**Table 11 Risk profile for UVRI**

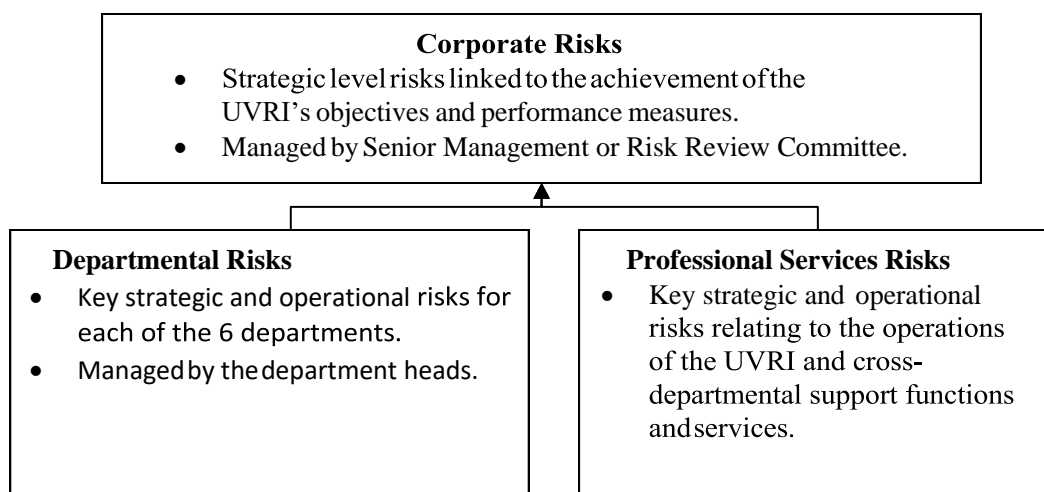
S/N	Risk category	Risk	Risk factor	Risk level	Mitigation strategy	Department /unit Responsible
1	Research & Innovation	Sustainability of Research funding Ethical research issues Intellectual property rights and patents	Lack of awareness in ethics for research	High	Create awareness on ethics for research	REC

S/N	Risk category	Risk	Risk factor	Risk level	Mitigation strategy	Department /unit Responsible
2	Staffing & Human Resources	<ul style="list-style-type: none"> <li>Staff turn over</li> </ul>	Insufficient human resource planning	Low	<ul style="list-style-type: none"> <li>Staff recruitment and retention</li> <li>Succession planning</li> <li>Staff management</li> <li>Exit management</li> </ul>	
3	Financial	<ul style="list-style-type: none"> <li>Sustainability of funds</li> </ul>	Inadequate/ delays in funds	Medium	<ul style="list-style-type: none"> <li>Lobby for more funds from donors</li> </ul>	Finance & Administration
4	Estates, Infrastructure & IT	<ul style="list-style-type: none"> <li>Quality and availability of estates</li> </ul>	<ul style="list-style-type: none"> <li>Damages</li> <li>Fires</li> <li>Natural disasters</li> </ul>	High	<ul style="list-style-type: none"> <li>Investing more in Estates, Infrastructure, and IT</li> </ul>	
5	External Relations & Partnerships	<ul style="list-style-type: none"> <li>Collaborating with other research organizations</li> </ul>	<ul style="list-style-type: none"> <li>Security risks</li> </ul>		<ul style="list-style-type: none"> <li>Creating linkages and relationships with Other external bodies</li> </ul>	
6	Service Quality	<ul style="list-style-type: none"> <li>Customer satisfaction</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>		<ul style="list-style-type: none"> <li></li> </ul>	

S/N	Risk category	Risk	Risk factor	Risk level	Mitigation strategy	Department /unit Responsible
7	Organizational Development & Strategy	•			•	

## 2. The UVRI Risk Management Cycle and the Reporting of Risk

Risks across the UVRI are managed under the following hierarchy:



The different levels of risk within the hierarchy are interrelated.

- The corporate risks are linked to the UVRI's strategic plan and most significant risks to meeting the objectives within this plan. These risks are reviewed and agreed by the Senior Management or delegated to a Risk Review Committee (RRC).
- Risks within the department risk registers are linked to strategic plans of the department and ultimately align to the corporate objectives. These risks are managed by the department

heads and reviewed and agreed by the Senior Management or Risk Review Committee. The Professional Services risks are the significant risks to the operation of the UVRI relating to cross-departmental support functions and services. The risks within both the departments and operating risk registers may be escalated to a corporate level if they impact across a number of departments or on UVRI's ability to achieve its objectives. These risks are managed by the Senior Management Committee.



## CHAPTER EIGHT: MONITORING AND EVALUATION

### 8.1 MONITORING AND EVALUATION ARRANGEMENTS

To successfully implement this Plan, an adequate Monitoring and Evaluation (M&E) framework has been developed as shown in Annex Two. The monitoring and evaluation framework will enable UVRI to measure performance against set standards so as to ensure effective implementation of the set goals and objectives.

The monitoring and evaluation process will involve preparation of annual work plans by each Department, Program and Units at UVRI. The work plans will be linked to the goals and objectives documented in the costed implementation matrix. In addition, the work plans will be split to the department and unit work plans which will then be linked to the UVRI's performance management system. The following actions will be undertaken to ensure successful implementation of the Plan:

- i. Management will create an M & E implementation committee to monitor and report on the implementation of the Plan
- ii. The M & E implementation committee will report quarterly to the Finance Committee and Director UVRI showing the progress of the implementation plan
- iii. Heads of Department will hold monthly meetings, to review the status of implementation of the Plan as it relates to their respective departments in addition to identifying calling for change of strategy. Heads of Departments will then prepare and submit quarterly reports to the M & E implementation committee on the progress made with the implementation of the Plan
- iv. The Director will present to the Ministry of Health the updates on implementation of the Plan on a quarterly basis
- v. There will be an annual, mid and end of term review of the Plan to ensure that it is updated in line with changes at UVRI and its research environment.

**Progress Reporting**

Quarterly progress reporting will be undertaken under the coordination of the M& E committee and the planning Department. All heads of Department will be expected to produce quarterly progress reports and submit to the committee through planning department for consolidation and further analysis.

**Annual Performance Review**

Annual performance reviews will be undertaken, and reports produced to inform implementation. The reports will feed into the Health Sector annual performance reports.

**Mid -term Evaluation**

The Institute will undertake an independent mid-term (2 and a half years) review of the performance of the Strategic Plan to establish if the Institute is on track in attaining its set goals and targets.

**End of Term Evaluation**

An end of term independent evaluation will be undertaken at the end of the five years to assess progress of implementation and attainment of the targets.

**CHAPTER NINE: PROJECT PROFILES.**

The institute desires to improve its visibility and strengthen its mandate of conducting and harnessing research for evidence informed policy in Uganda.

The use of laboratories as offices is very dangerous to the employees' health since these research offices are within the infectious disease management areas and to some extent next to laboratories like those for T.B, Influenza, Ebola and Marburg Laboratories.

The laboratory workers are at high risk of combined physical, chemical and microbial hazards. This conflicts with section 13 of Occupational Safety and Health Act, 2006 and Laboratory Biosafety Manual of 2004 by the World Health Organization.

Unsafe working practices, working environments, disposable waste products and chemicals in clinical laboratories contribute to infectious and non-infectious hazards implying that the staff, community, and patients weren't safe and vulnerable to infections and other side effects.

The situation is expected to exacerbate as the institute implements its new structure that was approved by the Ministry of Public Service. In the new structure, over 120 posts (scientists) were created and declared vacant in the 8 operational sectors.

This therefore calls for a new Modern Science Research Support Office Block that is cognizant of all local and international Health Safety Protocols, Acts, Regulations and Laws, to accommodate staff, repositories, laboratories and other health research facilities and equipment. This will increase health research capacity of UVRI and safety of staff and community just in case of a spill or an outbreak.

The proposed Science Research block will house modern laboratories (BSL 2, 3 & 4), research offices for directors and heads of departments, research offices for visiting scientists and programs that are growing in size and enrolment, repositories, state of the art conference room, stores etc.

The Institute has grown to broaden its research activities to investigate viral and other diseases to contribute to knowledge, policy and practice and engage in capacity development for improved public health.

The Institute intends to venture into product development like development and production of vaccines, testing kits and other items, apply for patents, to improve

Uganda's Global Innovation Index and number of International Intellectual Property Rights.

As a result of this, the existing scientists and research administrators are unable to work proficiently.

The institute desires to improve its visibility and strengthen its mandate of conducting and harnessing research for evidence informed policy in Uganda.

The use of laboratories as offices is very dangerous to the employees' health since these research offices are within the infectious disease management areas and to some extent next to laboratories like those for T.B, Influenza, Ebola and Marburg Laboratories.

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The proposed Science Research block will house modern laboratories (BSL 2, 3 & 4), research offices for directors and heads of departments, research offices for visiting

scientists and programs that are growing and enrolment, repositories, state of the art conference room, stores etc.

Rehabilitation of the research laboratories and the asbestos roofed houses will improve the working environment and motivation for research scientists

**Table 12 Project profiles for UVRI 2020/21-2024/25**

PROJECT	2020/21	2021/22	2022/23	2023/24	2024/25	Sub-Total
	UVRI Infrastructure Development project					
Construction of 64 staff houses in Soweto		2,100,000,000	2,205,000,000	3,150,000,000	3,472,875,000	10,927,875,000
Renovation of staff houses in Senior Quarters			1,000,000,000	1,105,000,000	1,157,625,000	3,262,625,000
Construction of a Science Research Block	19,822,794,215	42,139,894,920				61,962,689,135
Construction and equipping of the Science Research Block with the Bio Safety level 4 laboratory and other research equipment			37,755,964,793	95,281,346,072	50,000,000,000	183,037,310,865
Construction of a large capacity incinerator		3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000	12,000,000,000
	Retooling of UVRI					
Office equipment and supplies	30,000,000	30,000,000	30,000,000	40,000,000	40,000,000	1,700,000,000
Machinery & Equipment	150,000,000	150,000,000	150,000,000	150,000,000	150,000,000	750,000,000
Specialized Machinery & Equipment		3,790,000,000	3,790,000,000	4,000,000,000	4,000,000,000	15,580,000,000

PROJECT	2020/21	2021/22	2022/23	2023/24	2024/25	Sub-Total
	UVRI Infrastructure Development project					
Construction of 64 staff houses in Soweto		2,100,000,000	2,205,000,000	3,150,000,000	3,472,875,000	10,927,875,000
Renovation of staff houses in Senior Quarters			1,000,000,000	1,105,000,000	1,157,625,000	3,262,625,000
Construction of a Science Research Block	19,822,794,215	42,139,894,920				61,962,689,135
Construction and equipping of the Science Research Block with the Bio Safety level 4 laboratory and other research equipment			37,755,964,793	95,281,346,072	50,000,000,000	183,037,310,865
Construction of a large capacity incinerator		3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000	12,000,000,000
<b>Sub Total</b>	20,002,794,215	51,209,894,920	47,930,964,793	106,726,346,072	61,820,500,000	280,220,500,000

## ANNEXES

## Annex 1: Cost Implications of the UVRI Strategic Plan 2020/21- 2024/25

Objective	Intervention	Output	Indicators	Baseline FY2017/18	Annualised costs (Billions) 000,000s					Total	Financing Source		
					2020/21	2021/22	2022/23	2023/24	2024/25		GOU	DPs	Other
<b>Goal:</b> Contribute to reduction of the major viral and vector disease burden through scientific investigations		Outcome: Prevalence of Viral diseases reduced									50%	50%	In -Kind support
<b>Objective:1</b> <b>To enhance viral and vector research in order to lead to and vector innovations and to inform</b>	1.1 Increase the Number of institutional led research projects	institutional led research projects Implemented	Number of Research products	10							20%	80%	
	1.2 Enhance local and international research	1.Collaborations research projects implemented	Number of UVRI led & collaborative research projects	10	100,000	100,000	200,000	200,000	250,000	850,000	50%	50%	0

Objective	Intervention	Output	Indicators	Baseline FY2017/18	Annualised costs (Billions) 000,000s					Total	Financing Source		
					2020/21	2021/22	2022/23	2023/24	2024/25		GOU	DPs	Other
knowledge, policy and practice for improved health	collaborations and partnerships	ii. SOPs in place and implemented	Number of SOPs Implemented	20	50,000	50,000	10,000	10,000	10,000	130,000	50%	50%	0
	1.3 Strengthen product research and development	i. New viral and vector detection tools developed	Number of new viral/vector detection tools developed	3	120,000	650,000	700,000	750,000	600,000	2,820,000	20%	80	0
		ii. Viral vaccines developed	Number of Viral vaccines	4	160,000	165,000	165,000	170,000	170,000	830,000	50%	50%	0
		iii. Therapeutic interventions developed	Number of Therapeutic interventions discovered and developed	3	120,000	650,000	700,000	750,000	600,000	2,820,000	50%	50%	0
		iv. Vector control tools developed	Number of Vector control tools developed	4	150,000	155,000	155,000	155,000	156,000	771,000	20%	50%	
		v. Pathogens and Vectors characterised	Number of pathogens and vectors characterised	5	250,000	300,000	300,000	300,000	300,000	1,450,000	20%	80%	
	1.4 Strengthen the translation of	I. Research papers published and disseminated	i. Number of research papers published in peer review journals	500	17,500	17,500	17,500	17,500	17,500	87,500	40%	50%	10%

Objective	Intervention	Output	Indicators	Baseline FY2017/18	Annualised costs (Billions) 000,000s					Total	Financing Source		
					2020/21	2021/22	2022/23	2023/24	2024/25		GOU	DPs	Other
	research evidence and knowledge management		ii. Number dissemination (National& international) participated in	2	450,000	550,000	500,000	450,000	450,000	2,400,000	30%	60%	10%
		ii. Annual viral and vector research exhibition conducted	I. Number of viral and vector research exhibition conducted	1	500000	500000	500000	500000	500000	2,500,000	40%	50%	10%
		iii. Research publication inventory developed	Research publication inventory operationalised	1	100,000	100,000	100,000	100,000	100,000	500,000	40%	50%	10%
		iv. Research guidelines developed	I. Number of research guidelines contributed to ii) Number of policy briefs developed	3	150,000	150,000	150,000	150,000	150,000	750,000	50%	30%	20%
		National and international technical committees advised	Number of National and international committees advised	5	0	0	0	0	0	0	50%	50%	
			i. Viral and vector distribution established	2	400,000	450,000	500,000	500,000		1,850,000	50%	50%	
		Institutional led surveillance activities conducted	ii) Number of trainings for skills up grade conducted	4	100	100	100	100	100	500	50%	40%	10%

Objective	Intervention	Output	Indicators	Baseline FY2017/18	Annualised costs (Billions) 000,000s					Total	Financing Source		
					2020/21	2021/22	2022/23	2023/24	2024/25		GOU	DPs	Other
<b>Objective 2: To enhance viral and vector surveillance to inform knowledge, policy and practice for better health</b>	2.1. Increase the coverage of institutional led surveillance activities		iii) Number of stakeholder surveillance meetings conducted	5	800	800	800	800	800	4,000	50%	40%	10%
	2.2 Enhance local and international surveillance collaborations and partnerships	Local and international surveillance collaborations and partnerships enhanced	No. of Local and international surveillance MoUs	5	0	0	0	0	0	0	50%	50%	0
	2.3. Support evaluation of new surveillance tools and techniques	Evaluation of new surveillance tools and techniques supported	No. of new surveillance tools / techniques supported	5	400	400	400	400	400	2,000	50%	50%	0
	2.4 Strengthen the translation of surveillance evidence for practice, policy and knowledge management	i. Policy briefs, Research papers published and disseminated	i. Number of surveillance research papers published in peer review journals	100	70	70	70	70	70	350	50%	40%	10%
		ii. Institutional surveillance inventory/databases developed	ii. Disseminate surveillance evidence in at least 100 national and international scientific meetings	20	800	800	800	800	800	4,000	50%	30%	10%

Objective	Intervention	Output	Indicators	Baseline FY2017/18	Annualised costs (Billions) 000,000s					Total	Financing Source		
					2020/21	2021/22	2022/23	2023/24	2024/25		GOU	DPs	Other
		i. Timely detection of suspected viral infections	No. of existing diagnostic techniques for viral infections improved	3	400	400	400	400	400	2,000	50%	50%	0
	i.Specialized training in new viral diseases diagnosis	ii.Increased number of viral infection that can be detected	i.No. of training in new techniques conducted	4	120	120	120	120	120	600	50%	40%	10%
<b>Objective 3: To improve response to emerging and re-emerging viral diseases</b>			ii.No. New equipment acquired	10	600,000	600,000	600,000	600,000	600,000	3,000,000	30%	60%	10%
	ii.Equipment, diagnostic tools and consumables	Identified viruses characterized	i. No. of new technologies embraced	3	160	160	150	165	170	805	50%	50%	
<b>Objective 4: To strengthen and improve operations, infrastructure and human resource capacity for improved service delivery</b>	Enhance HR Management and development	HR Management and development enhanced	Number of internal policies & guidelines developed (Finance management, Fleet management, Procurement, QCQA, HR)	3	60	60	60	60	60	300	100%		

Objective	Intervention	Output	Indicators	Baseline FY2017/18	Annualised costs (Billions) 000,000s					Total	Financing Source		
					2020/21	2021/22	2022/23	2023/24	2024/25		GOU	DPs	Other
			Number of new staff recruited	33	190	190	200	200	250	1030	50%	50%	
	Strengthen Career development	Career development strengthened	Number of Human Resources supervised/mentored	50	0	0	0	0	0				In-Kind
			% of Staff trained	50	100	100	100	100	100	500	60%	30%	10%
	Strengthen Institutional infrastructure	Physical infrastructure enhanced ICT infrastructure enhanced Research and laboratory equipment procured	Number of research infrastructures developed	1	600	150	150	150	150	1200	40%	50%	10%
	Develop & improve the Institutional Master plan	Developed and Approved Institutional master plan	An approved master plan	0									

Objective	Intervention	Output	Indicators	Baseline FY2017/18	Annualised costs (Billions) 000,000s					Total	Financing Source		
					2020/21	2021/22	2022/23	2023/24	2024/25		GOU	DPs	Other
	Implement Routine maintenance & Retooling	Research infrastructure retooled & maintenance	% of offices and Laboratories retooled & maintained	20									
	Equip, install, & upgrade the state-of-the-art machinery and equipment	State of the art machinery and equipment acquired, installed and upgraded	% of facilities equipped	25									
	Enhance communication and public engagement of the institution	enhanced awareness among stakeholders	Number of science open days conducted	2	300		300		300	900	50%	50%	
			Perception survey carried out	2	250			250		500	50%	50%	
			number of tv talk & radiotalk shows conducted	3	10	10	10	10	10	50	50%	50%	
			number of online blogs published	3	0	0							
			number of print media pullouts published	3	50	50	50	50	50	250			
			number of documentaries produced	1	20	20	20	20	20	100	100%		

Objective	Intervention	Output	Indicators	Baseline FY2017/18	Annualised costs (Billions) 000,000s					Total	Financing Source		
					2020/21	2021/22	2022/23	2023/24	2024/25		GOU	DPs	Other
			Number of news letters published	2	15	15	15	15	15	75	100%		
	Operationalize monitoring and evaluation at the institute	UVRI's planning monitoring, evaluation and learning strengthened	<b>M&amp;E plan for the UVRI developed</b>	1	0	0	0	0	0	0			
			<b>online M&amp; E system developed and operationalised</b>	1	0	0	0	0	0	0			
			Quarterly M &E report produced	4	0	0	0	0	0	0			
			Mid term review carried out by 2023	1	300	300	300	300	300	1500	100%		
			End of term review	1	300	300	300	300	300	1500	100%		
			Fourth strategic plan developed	1	250						100%		
	Strengthen collaborations and partnerships.	Collaborative agreements and Services provision	Number of services agreements signed	1	0	0	0	0	0	0			In-kind

Objective	Intervention	Output	Indicators	Baseline FY2017/18	Annualised costs (Billions) 000,000s					Total	Financing Source		
					2020/21	2021/22	2022/23	2023/24	2024/25		GOU	DPs	Other
		agreements signed	No of collaborative agreements signed	3	0	0	0	0	0				In-kind
Total GOU (000,000,) Trillions												7,487,648	
Total DPs (000,000,000) Trillions												12,057,798	

## Annex 2: Outcome and Output Results frameworks

GOAL AND OBJECTIVES	Outcome &Output	INDICATORS	BASELINES (2018/19)	2020/21	2021/22	2022/23	2023/24	2024/25
<b>Goal:</b>  <b>Contribute to reduction of the major viral disease burden through scientific investigations</b>	Prevalence of viral diseases reduced	HIV/AIDs prevalence rate	6.2% (UPHIA 2016-17)					
		Hepatitis B	4.1% (UPHIA2016/17)					
		Influenza						
		SARS-COV-2						
		Yellow Fever						
		Measles						
<b>Objective 1: To enhance viral and vector research to lead to vector innovations and to inform knowledge, policy and practice for improved health</b>	Research products increased	Number of research products						
	Uptake of research products for informed policy and practice for health	Proportion of informed research policy and guidelines	25					
	UVRI led and Collaborative research projects undertaken	Number of UVRI led and collaborative research projects						
	Publications in peer review journals	Number of Publications in peer review journals						
	Viral research facilities and human	Number of Viral research facilities						

GOAL AND OBJECTIVES	Outcome &Output	INDICATORS	BASELINES (2018/19)	2020/21	2021/22	2022/23	2023/24	2024/25
	resource internationally certified and maintained	and human resource internationally certified and maintained						
<b>Objective 2: To enhance viral and vector surveillance to inform knowledge, policy and practice for health</b>	Surveillance coverage increased	% of coverage of surveillance activities in Uganda	25%	10%	10%	10%	10%	10%
	Uptake of surveillance evidence for informed policy, practice, and knowledge management for health	i. Proportion of surveillance activities that informed policy (WHO & National) and guidelines  2. Proportion of surveillance activities that informed policy and guidelines implemented	25%		30%		35%	
	UVRI led and Collaborative surveillance activities undertaken	Number of UVRI led and collaborative surveillance activities conducted	7	12	17	21	26	30
	Publications on surveillance activities in peer review journals	Number of Publications on surveillance in peer review journals	100	20	20	20	20	20

GOAL AND OBJECTIVES	Outcome &Output	INDICATORS	BASELINES (2018/19)	2020/21	2021/22	2022/23	2023/24	2024/25
	Surveillance facilities and human resource internationally certified and maintained	Number of research facilities internationally certified and maintained	5	1	0	1	0	1
		Proportion of laboratory staff internationally certified and maintained	60%	100%	100%	100%	100%	100%
<b>Objective 3: To improve response to emerging and re-emerging viral diseases</b>	Improved efficiency in maintaining the 48 hours turnaround time	Number of viral infections /diseases detected	5	5	5	5	5	5
		Number of viral infections detected within 48 Hrs	5	5	5	5	5	5
		Number of viral infections responded to within 48 Hrs	5	5	5	5	5	5
<b>Objective 4: To improve operations, infrastructure and human resource capacity for improved service delivery</b>	Enhance HR Management and development	Number of Human resources manuals developed (Finance management, Fleet management, Procurement, QCQA, HR)	1	1		1		1
	Train Staff	% of Staff trained	50	55	60	65	70	75

GOAL AND OBJECTIVES	Outcome &Output	INDICATORS	BASELINES (2018/19)	2020/21	2021/22	2022/23	2023/24	2024/25
	Strengthen Institutional infrastructure	Number of research infrastructures developed	1		1		1	
	Develop & improve the Institutional Master plan	An approved master plan	0		1		1	1
	Implement Routine maintenance & Retooling	% of offices and Laboratories retooled & maintained	20%	25	25	50	70	100
	Equip, install, & upgrade the state-of-the-art machinery and equipment	% of facilities equipped	25%	10%	10%	10%	25%	30%
	Draft a communications strategy	An approved Communications strategy	0	1		1		1
	Conduct science open days	Number of science open days conducted	2	1		1		1
	Conduct perception surveys	Perception survey carried out	2	1		1		1
	Conduct Tv & radio talk shows	number of tv talk & radio talk shows conducted	3	2	2	2	2	2

GOAL AND OBJECTIVES	Outcome &Output	INDICATORS	BASELINES (2018/19)	2020/21	2021/22	2022/23	2023/24	2024/25
	Publish online blogs	number of online blogs published	3	2	2	2	2	2
	Publish print media pull-outs	number of print media pull-outs published	3	2	2	2	2	2
	Produce documentaries	number of documentaries produced	1	1	1	1	1	1
	Publish newsletters	Number of newsletters published	2	2	2	2	2	2

**Annex 3: Staff establishment and recruitment plan**

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
FINANCE AND ADMINISTRATION						
DIRECTOR	1	1	0	5,500,000	66,000,000	Filled
Senior Personal Secretary	1	0	1	0	-	Vacant
Office Attendant	1	1	0	209,859	2,518,308	Filled
Driver	1	0	1	0	-	Vacant
Personal Secretary	1	1	0	723,868	8,686,416	Filled
Office Attendant	1	1	0	0	-	Vacant
Driver	1	1	0	209,859	2,518,308	Filled
Principal Assistant Secretary	1	1	0	1,235,852	14,830,224	Filled
Senior Assistant Secretary	1	0	1	0	-	Vacant

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Assistant Secretary	2	0	2	601,341	7,216,092	Filled
Office Supervisor	1	0	1	0	-	Vacant
Telephone Operator	2	0	2	0	-	Vacant
Pool Stenographer	4	0	4	0	-	Vacant
Assistant Inventory Management (AIM)	1	1	0	495,032	5,940,384	Filled
Stores Assistant	2	0	2	0	-	Vacant
Office Typist 1	2	3	-1	377,781	4,533,372	Filled
Office Typist 2	0	0	0	369,419	4,433,028	Filled
Office Typist 3	0	0	0	316,393	3,796,716	Filled
Incinerator Attendant	2	0	2	0	-	Vacant
Driver	4	1	3	209,859	2,518,308	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Askari	6	1	5	187,660	2,251,920	Filled
Dhobi	4	0	4	0	-	Vacant
Office Attendant	2	3	-1	209,859	2,518,308	Filled
Office Attendant	0	0	0	228,316	2,739,792	Filled
Office Attendant	0	0	0	209,859	2,518,308	Filled
Principal Human Resource Officer	1	1	0	1,201,688	14,420,256	Filled
Senior Human Resource Officer	1	0	1	0	-	Vacant
Human Resource Officer	1	0	1	700,306	8,403,672	Filled
Assistant Records Officer	1	0	1	0	-	Vacant
Records Assistant	2	1	1	340,282	4,083,384	Filled
Office Attendant	2	2	0	313,832	3,765,984	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Office Attendant	0	0	0	313,832	3,765,984	Filled
Senior Accountant	1	0	1	0	-	Vacant
Accountant	2	1	1	934,922	11,219,064	Filled
Senior Accounts Asst.	2	0	2	0	-	Vacant
Accounts Assistant	1	1	0	377,781	4,533,372	Filled
Senior Procurement Officer	1	1	0	979,805	11,757,660	Filled
Procurement Officer	1	1	0	934,922	11,219,064	Filled
Public Relations Officer	1					Vacant
INTERNAL AUDIT						
Internal Auditor	1	1	0	934,922	11,219,067	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
PLANNING AND RESOURCE MOBILIZATION						
Principal Economist	1	0	1	0	-	Vacant
Senior Economist	1	0	1	0	-	Vacant
Resource Mobilization Officer	2	0	2	0	-	Vacant
Budget Officer/Economist	2	0	2	0	-	Vacant
Infrastructure & Maintenance						
Bio Medical Engineer	1	0	1	0	-	Vacant
Technician	5	0	5	0	-	Vacant
Plumber	1	1	0	268,143	3,217,716	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
International Relations & Training						
Principal Training Officer	1	0	1	0	-	Vacant
Senior Training Officer	1	0	1	0	-	Vacant
Training Officer	1	1	0	623,063	7,476,756	Filled
IT & Corporate Affairs						
Principal Officer	1	0	1	0	-	Vacant
Senior Officer	1	0	1	0	-	Vacant
Network Administrator	1	1	0	2,200,000	26,400,000	Filled
Information Scientist	2	2	0	2,200,000	26,400,000	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Information Scientist	0	0	0	2,200,000	26,400,000	Filled
Senior Asst. Librarian	2	0	2	0	-	Vacant
Assistant Network Administrator	2	0	2	0	-	Vacant
Arbovirology Emerging & Re emerging						
Assistant Director of Research (ADR)	1	0	1	0	-	Vacant
Senior Principal Research Officer (SPRO)	1	1	0	2,400,000	28,800,000	Filled
Principal Research Officer (PRO)	2	0	2	0	-	Vacant
Senior Research Officer (SRO)	3	0	3	0	-	Vacant
Research Officer (RO)	4	1	3	2,200,000	26,400,000	Filled
Senior Laboratory Technologist	1	1	0	2,200,000	26,400,000	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Laboratory Technologist	3	0	3	0	-	Vacant
Laboratory Assistant	12	2	10	613,158	7,357,896	Filled
Laboratory Assistant	0	0	0	613,158	7,357,896	Filled
Ecology/ Zoology						
Assistant Director of Research (ADR)	1	0	1	0	-	Vacant
Senior Principal Research Officer (SPRO)	1	0	1	0	-	Vacant
Principal Research Officer (PRO)	1	0	1	0	-	Vacant
Senior Research Officer (SRO)	2	0	2	0	-	Vacant
Research Officer (RO)	4	2	2	2,200,000	26,400,000	Filled
Research Officer (RO)	0	0	0	2,200,000	26,400,000	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Senior Laboratory Technologist	1	1	0	2,200,000	26,400,000	Filled
Laboratory Technologist	2	0	2	0	-	Vacant
Laboratory Assistant	7	1	6	613,158	7,357,896	Filled
Entomology/ Vector Biology						
Assistant Director of Research (ADR)	1	0	1			Vacant
Senior Principal Research Officer (SPRO)	1	1	0	2,400,000	28,800,000	Filled
Principal Research Officer (PRO)	1	0	1	0	-	Vacant
Senior Research Officer (SRO)	2	1	1	2,300,000	27,600,000	Filled
Research Officer (RO)	6	0	6	0	-	Vacant
Senior Laboratory Technologist	1	1	0	2,200,000	26,400,000	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Laboratory Technologist	4	1	3	1,200,000	14,400,000	Filled
Laboratory Assistant	4	1	3	613,158	7,357,896	Filled
General Virology						
Assistant Director of Research (ADR)	1	0	1	0	-	Vacant
Senior Principal Research Officer (SPRO)	1	0	1	0	-	Vacant
Principal Research Officer (PRO)	1	1	0	2,400,000	28,800,000	Filled
Senior Research Officer (SRO)	2	1	1	2,300,000	27,600,000	Filled
Research Officer (RO)	4	3	1	2,200,000	26,400,000	Filled
Research Officer (RO)	0	0	0	2,200,000	26,400,000	Filled
Research Officer (RO)	0	0	0	2,200,000	26,400,000	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Laboratory Technologist	2	0	2	0	-	Vacant
Laboratory Assistant	8	3	5	613,158	7,357,896	Filled
Laboratory Assistant	0	0	0	613,158	7,357,896	Filled
Immunology						
Assistant Director of Research (ADR)	1	0	1	0	-	Vacant
Senior Principal Research Officer (SPRO)	1	0	1	0	-	Vacant
Principal Research Officer (PRO)	1	1	0	2,400,000	28,800,000	Filled
Senior Research Officer (SRO)	3	1	2	2,300,000	27,600,000	Filled
Research Officer (RO)	4	2	2	2,200,000	26,400,000	Filled
Research Officer (RO)	0	0	0	2,200,000	26,400,000	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Laboratory Technologist	4	1	3	1,200,000	14,400,000	Filled
Laboratory Assistant	2	2	0	613,158	7,357,896	Filled
Laboratory Assistant	0	0	0	613,158	7,357,896	Filled
Immunisable Diseases Unit (IDU/EPI)						
Senior Principal Research Officer (SPRO)	1	0	1	0	-	Vacant
Principal Research Officer (PRO)	1	0	1	0	-	Vacant
Senior Research Officer (SRO)	2	0	2	0	-	Vacant
Research Officer (RO)	4	4	0	2,200,000	26,400,000	Filled
Research Officer (RO)	0	0	0	2,200,000	26,400,000	Filled
Research Officer (RO)	0	0	0	2,200,000	26,400,000	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Research Officer (RO)	0	0	0	2,200,000	26,400,000	Filled
Senior Laboratory Technologist	2	0	2	0	-	Vacant
Laboratory Technologist	4	0	4	0	-	Vacant
Laboratory Assistant	4	4	0	613,158	7,357,896	Filled
Laboratory Assistant	0	0	0	613,158	7,357,896	Filled
Laboratory Assistant	0	0	0	613,158	7,357,896	Filled
Laboratory Assistant	0	0	0	613,158	7,357,896	Filled
Epidemiology Unit						
Senior Principal Research Officer (SPRO)	1	0	1	0	-	Vacant
Principal Research Officer (PRO)	3	1	2	2,400,000	28,800,000	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Senior Research Officer (SRO)	1	0	1	0	-	Vacant
Senior Bio Statistician	2	0	2	0	-	Vacant
Senior Epidemiologist	1	0	1	0	-	Vacant
Senior Social Scientist	2	0	2	0	-	Vacant
Clinical Unit for Research (CUR/ Clinic)						
Principal Research Officer (PRO)	1	0	1	0	-	Vacant
Senior Research Officer (SRO)	1	0	1	0	-	Vacant
Research Officer/ Medical Officer (RO/MO)	2	0	2	0	-	Vacant
Senior Social Worker	1	0	1	0	-	Vacant
Social Worker	2	0	2	0	-	Vacant

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Laboratory Technologist	1	0	1	0	-	Vacant
Laboratory Assistant	2	2	0	613,158	7,357,896	Filled
Laboratory Assistant	0	0	0	613,158	7,357,896	Filled
Senior Nursing Officer	1	1	0	2,200,000	26,400,000	Filled
Nursing Officer	1	2	-1	1,200,000	14,400,000	Filled
Nursing Officer	0	0	0	1,200,000	14,400,000	Filled
Enrolled Nurse/ Midwife	2	2	0	613,158	7,357,896	Filled
Enrolled Nurse/ Midwife	0	0	0	613,158	7,357,896	Filled
Nursing Assistant	1	5	-4	313,832	3,765,984	Filled
Nursing Assistant	0	0	0	313,832	3,765,984	Filled
Nursing Assistant	0	0	0	313,832	3,765,984	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Nursing Assistant	0	0	0	313,832	3,765,984	Filled
Nursing Assistant	0	0	0	313,832	3,765,984	Filled
Quality Assurance Unit (QAU)						
Principal QA Officer	1	0	1	0	-	Vacant
Senior QA Officer	2	0	2	0	-	Vacant
CLINICAL STAFF						
Sen. Clinical Officer	1	1	0	2,200,000	26,400,000	Filled
Clinical Officers (5)	5	5	0	1,200,000	14,400,000	Filled
Clinical Officer	0	0	0	1,200,000	14,400,000	Filled

Staff Establishment and Recruitment Plan	APPROVED POSTS	CURRENT	PROPOSED POSTS	SALARY PER MONTH	SALARY PER ANNUM	COMMENT
Clinical Officer	0	0	0	1,200,000	14,400,000	Filled
Clinical Officer	0	0	0	1,200,000	14,400,000	Filled
Clinical Officer	0	0	0	1,200,000	14,400,000	Filled

#### Annex 4 Recruitment plan

S/N	Post Title	Salary Scale	No. of Vacant Posts	Salary Per Month	Salary Per Annum	Total Salary Per Annum	Anticipated Date of Submission to the Service Commissions
(A)	<b>Finance &amp; Administration</b>						
1	Public Relations Officer	U4	1(One)	601341	7216092	7216092	September 30,2019
2	Senior Accountant	U3	1(One)	979805	11757660	11757660	September 30,2019
3	Senior Economist	U3	1 (One)	979805	11757660	11757660	September 30 , 2019
4	Senior Training Officer	U3	1(One)	902612	10831344	10831344	September 30, 2019
5	Senior Network Administrator	U3	1(One)	979805	11757660	11757660	September 30, 2019
6	Bio Medical Engineer	U4 (SC)	1(One)	2200000	26400000	26000000	September 30, 2019
7	Pool Stenographer	U6	1 (One)	386972	4643664	4643664	September 30,2019
8	Receptionist	U7	1 (One)	289361	3472332	3472332	September 30, 2019
9	Driver	U8	2(Two)	209859	2518308	5036616	September 30, 2019
10	Dhobi	U8	1(One)	187660	2251920	2251.92	September 30, 2019
(B)	<b>Arbovirology Emerging &amp; Re- emerging</b>						
1	Principal Research Officer	U2(SC)	1 (One)	2400000	28800000	28800000	September 30, 2019
2	Senior Research Officer	U3(Sc)	1 (One)	2300000	27600000	27600000	September 30, 2019
3	Laboratory Technologist	U5 (SC)	3(Three)	613158	7357896	22073688	September 30, 2019
4	Research Officer	U4 (SC)	2 (Two)	2200000	26400000	52800000	September 30,2019
(C)	<b>Ecology/Zoology</b>						

S/N	Post Title	Salary Scale	No. of Vacant Posts	Salary Per Month	Salary Per Annum	Total Salary Per Annum	Anticipated Date of Submission to the Service Commissions
1	Laboratory Technologist	U5 (SC)	2(Two)	1200000	14400000	28800000	September 30, 2019
2	Research Officer	U4 (SC)	2 (Two)	2200000	26400000	52800000	September 30, 2019
(D)	Entomology/Vector Biology						
1	Principal Research Officer	U2(Sc)	1(One)	2400000	28800000	28800000	September 30, 2019
2	Senior Research Officer	U3(Sc)	1(One)	2300000	27600000	27600000	September 30, 2019
3	Senior Laboratory Technologist	U4(sc)	1(One)	2400000	26400000	26400000	September 30, 2019
4	Laboratory Technologist	U5 (SC)	4(Four)	1200000	14400000	57600000	September 30, 2019
5	Research Officer	U4 (SC)	6(Six)	2200000	26400000	158400000	September 30,2019
6	Laboratory Assistant	U7(Upper) Med	3(Three)	613158	7357896	22073688	September 30, 2019
(E)	<b>General Virology</b>						
1	Principal Research Officer	U2(Sc)	1(One)	2400000	28800000	28800000	September 30, 2019
2	Senior Research Officer	U3(Sc)	2(Two)	2300000	27600000	55200000	September 30, 2019
3	Senior Laboratory Technologist	(4(Sc)	1(One)	2200000	26400000	26400000	September 30, 2019
4	Laboratory Technologist	U5 (SC)	2(Two)	1200000	14400000	28800000	September 30, 2018
(F)	<b>Immunology</b>						
1	Principal Research officer	U2(Sc)	1(One)	2400000	28800000	28800000	September 30, 2019
2	Senior Research Officer	U3(Sc)	1(One)	2300000	27600000	27600000	September 30, 2019
3	Research Officer	U4(Sc)	2(Two)	2200000	26400000	52800000	September 30,2019
4	Senior Laboratory Technologist	(4(Sc)	1(One)	2200000	26400000	26400000	September 30, 2019
5	Laboratory Technologist	U5(SC)	1(One)	1200000	14400000	14400000	September 30, 2019

S/N	Post Title	Salary Scale	No. of Vacant Posts	Salary Per Month	Salary Per Annum	Total Salary Per Annum	Anticipated Date of Submission to the Service Commissions
(G)	<b>Immunisable Diseases Unit</b>						
1	Senior Research Officer	U3(Sc)	2(Two)	2300000	27600000	55200000	September 30, 2019
2	Research Officer	U4(SC)	2(Two)	2200000	26400000	52800000	September 30, 2019
3	Senior Laboratory Technologist	U4(SC)	1(One)	2200000	26400000	26400000	September 30, 2019
4	Laboratory Technologist	U5 (SC)	3(Three)	1200000	14400000	43200000	September 30, 2019
5	Laboratory Assistants		3(Three)	613158	7357896	22073688	September 30, 2019
(H)	<b>Epidemiology Unit</b>						
1	Senior Bio Statistician	U3 (SC)	1(One)	2300000	27600000	27600000	September 30, 2019
2	Senior Epidemiologist	U3(SC)	1(One)	2300000	27300000	27600000	September 30, 2019
3	Research Officer	U4(SC)	1(one)	2200000	26400000	26400000	September 30, 2019
	Grand Total		63	63456691	758480328	1170146012	