Republic of Rwanda

Six Year Strategic Plan for The Epidemic Infectious Diseases Division 2012-2018

Ministry of Health
Rwanda Biomedical Center
Institute of HIV/AIDS, Disease Prevention and Control
Epidemic Infectious Diseases Division

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Executive summary

Communicable diseases still remain the leading cause of morbidity and mortality in Rwanda. With the gains made in the fight against HIV/AIDS, Malaria and Tuberculosis, epidemic infectious diseases are likely to become the leading public health threat in the country. This threat is made more eminent by the emerging and re-emerging diseases in the region and globally such as SARS, Ebola and other viral haemorrhagic fever and rickettsial infections. The changing climatic conditions, growing regional and international travels are another factor that increases the exposure of the Rwandan population to new and hitherto unknown infections. In addition, successful disease control programs as those seen in Rwanda in the case of malaria and measles control bear the unwarranted effect of reducing the herd immunity of the population to the particular infection thus increasing the risk of epidemic outbreak should an importation of such a disease occur or the environment setting change in favour of accentuated transition. Human movement due to natural and manmade causes also increases the risk of epidemic outbreaks.

While the health system is currently well prepared and equipped to manage cases of diseases that may occur and offer adequate care to those affected, epidemic outbreaks pose their own challenges. By virtue of the high infectivity, they tend to be accompanied by high morbidity and mortality rates. A timely detection, preparedness and appropriate response are vital to limit the loss of human life and the accompanying negative impact on the health system. Moreover because the factors predisposing to epidemics are multifactorial, they require a multisectoral preparedness and response strategy.

The necessary ground work has already been set for the adequate management of epidemic prone diseases and epidemics. The setting up of a ministry in charge of disasters and inclusion of the Ministry of Health in the disaster management committee is one of the key steps in ensuring the necessary intersectoral collaboration. Close collaboration between the Ministry of Health and those in charge of water, the environment and animal health will definitely lead to a more comprehensive plan for the prevention of water and environment related diseases as well as zoonoses.

This strategic plan, developed through the joint collaboration of all stakeholders in the different sectors is aimed at harnessing and bringing together all the stakeholders who have a role in the prevention, detection and management of epidemic and infectious diseases in the country. The plan describes the common epidemic and infectious diseases, the measures that need to be undertaken to ensure their control, the key partners and their roles and sets out milestones to monitor progress.

The success of this plan will depend not only on the rigor of the Ministry of Health but of all the stakeholders. The health facilities and health personnel will be prepared to ensure proper diagnosis and management of diseases. It is, however, important that the local administration and the community are capable of recognising the diseases in question, seek health care in time, notify any unusual events or diseases in their midst and apply recommended preventive measures particular personal hygiene.

Communication between different Ministries and entities will facilitate the early detection of risk factors such as water shortages and/or contamination, outbreaks of zoonoses in animal and the implementation of adequate measure to prevent the transmission of disease between animals, the environment and humans.

This strategic plan, prepared and developed on the basis of the One Health principles, serves as a call to action for all stakeholders at all levels to act in order to eliminate the threat of epidemic infectious diseases in Rwanda.

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Minister of Health

Abbreviations

AIDS:	Acquired Immunodeficiency Syndrome
CDC:	Center for Disease Control and Prevention
DH:	District Hospital
DHIS-2:	District Health Information System 2
EID Division:	Epidemic and Infectious Disease Division
EID:	Epidemic and Infectious Disease
E-IDSR:	electronic-Integrated Disease Surveillance and Response
EMR:	Electronic Medical Records
EPI:	Expanded program of Immunization
FELTP:	Field Epidemiology Laboratory Training Program
HC:	Health Center
HIV:	Human Immune Virus
HMIS:	Health management Information System
HSSP III:	Health Sector Strategic Plan III
IDSR:	Integrated Disease Surveillance and Response
IHR:	International Health Regulation
MDG:	Millennium Development Goal
MIDIMAR:	Ministry of Disaster Management and Refugee Affairs
MoH:	Ministry of Heath
NRL:	National Reference Laboratory
RBC:	Rwanda Biomedical Center
RDHS:	Rwanda Demographic Health Survey
TRAC:	Treatment Research Aids Center
TRAC plus:	Treatment Research Aids Center (Plus Malaria, Tuberculosis and other epidemic diseases
WHO:	World Health Organization
WHO/AFRO:	World Health Organization/Africa region

1. Background

Infectious diseases remain the leading cause of illness and death in Rwanda, and non-communicable diseases are emerging as a public health threat in many African countries including Rwanda. Many of these diseases are largely preventable and benefit from well-known, available, and efficacious responses. Linking these life-saving interventions with the populations that need them requires a strong disease surveillance system for the timely detection and response to these public health threats. Public health surveillance is the ongoing, systematic collection, analysis, interpretation, and dissemination of data regarding health-related events. Surveillance information is used for taking public health action for reducing morbidity, mortality and disability thus leading to improved health of the population. Surveillance data and information are also essential health services for guiding preparedness and response to outbreaks, and for preventing and controlling wider transmission.

In 1998, a surveillance system for infectious disease and response was implemented by MOH in Rwanda. The system was evaluated in 2000 following the guidelines of the WHO/AFRO Integrated Disease Surveillance and Response (IDSR) strategy (WHO, 2003). Following on the evaluation, a plan of action for the period 2002 to 2007 was developed pointing out 19 diseases which should be addressed at district level. Priority areas identified for strengthening in order to support districts in enhancing the surveillance of infectious diseases (MOH, 2002) were the following:

- Definition of focal points in the community,
- Establishment of communication and feed-back cycles between community, health facilities and districts,
- Definition of thresholds for intervention for each disease,
- Definitions of minimal data set to be transmitted with the notification, and
- Updating of report formats.

In 2006, the responsibility for the IDSR was transferred from the MOH to The Center for Treatment and Research on AIDS (TRAC) (TRAC, Annual report 2006). At that time, data were collected and compiled at the health center level (HC) using standardized forms to collect aggregated data on priority diseases. The HCs sent their data to their corresponding District Health Hospital (DH). The DHs compiled all reports from their catchment areas, as well as their own data, and channeled it to TRAC through a weekly phone call, SMS, paper sheet or email. Reports were required to be submitted to TRAC every Tuesday by 12:00 hours; the phone number to submit the reports was not a toll-free number. The weekly epidemiological bulletin was normally published on Wednesdays. However, the bulletins were not published regularly because TRAC did not have staff assigned to this task (the transfer of the responsibility for the system was done without the allocation of additional staff for TRAC). Moreover, the completeness and timeliness of the weekly reports from the DHs were very low impeding the production of the weekly bulletin, and therefore a proper and reliable picture of the epidemiological situation was very difficult to provide.

During the 2007 health sector reform, TRAC was changed to TRAC Plus. TRAC Plus comprised four diseases specific divisions including the Other Epidemic Infectious Diseases Division (EID Division) which received in its mandate the IDSR program.

2. Situation analysis

2.1 Demographic and health context

As of August 15, 2012, the population of Rwanda was 10,537,222 with 43% of the population under the age of 15 [NISR 2012[1]]. Nearly 80% of the population lives in rural areas.

Over the last decade, Rwanda has seen significant improvements in its health status indicators. Infant mortality is now 50 deaths per 1,000 live births (RDHS, 2010) compared to 107 deaths in t2000 (RDHS, 2000). Deaths in children less than 5 years of age have also seen a decrease in the same period from 100 deaths per 1,000 live births to 76 per 1,000 live births.

Factors such as urban, rural and education level of mothers continue to influence family health indicators when viewed by province, but the national efforts to improve child health outcomes have achieved remarkable results. For example, the 2010 Demographic Health Survey reports 90.1% complete coverage of recommended childhood vaccines for Rwandan children age 12 to 23 months.

Maternal mortality remains high at 487 deaths per 100,000 live births (RDHS,2010), although considerable progress has been achieved in the last 10 years (1,071 deaths per 100,000 live births in the year 2000 and 750 deaths per 100,000 live births in 2005). More than 50% of the births are attended by a skilled birth attendant thus contributing to the decrease in maternal mortality rates.

2.2 Epidemiologic context

In Rwanda, communicable diseases constitute 90% of all reported medical consultations in health facilities. Malaria, respiratory tract infections, diarrheal diseases and parasitic infections are the most predominant, and hence are considered to be of public health concern.

Infectious diseases are the primary cause of outpatient morbidity in health centers: ARI, intestinal parasites and malaria account for well over half of the outpatient morbidity (57%) with diarrheal diseases also presenting as a cause of death in all age groups. The country has often faced epidemics including emerging and re-emerging infectious diseases such as Influenza A (H1N1), cholera, epidemic typhus and meningitis.

The priority diseases, syndromes and conditions under surveillance through the IDSR system include:

1. Cholera	13. Malaria above 5
2. Bloody diarrhea	14. Influenza-like illness
3. Epidemic typhus	15. Severe pneumonia in under 5
4. Meningitis	16. Pertussis
5. Plague	17. Diptheria
6. Typhoid fever	18. Acute flaccid paralysis (AFP/polio)

[1] http://www.statistics.gov.rw/publications/2012-population-and-housing-census-provisional-results. Downloaded on December 03, 2012

7. Rabies 8. Viral hemorrhagic fevers 9. Yellow fever 10. Non-bloody diarrhea under 5 11. Non-bloody diarrhea above 5 12. Malaria under 5	19. Measles 20. Neonatal tetanus 21. Rubella 22. Viral conjunctivitis 23. Chicken pox 24. Mumps

2.3 Laboratory context

Building laboratory capacity including networking at national and the sub-national levels is an important component of the Integrated Disease Surveillance and Response strategy (IDSR). The goal of IDSR is to provide for early detection and response to leading causes of illness, death and disability that afflict Rwandan communities and to use data as a rational basis for decision-making in implementation of public health interventions for control of the priority public health threats. As such, laboratory testing serves a critical role in confirming suspected events and identifying the most relevant, cost effective and appropriate treatment and response.

The laboratory activities in support of surveillance in Rwanda are defined for each level. The national laboratory network follows the pyramidal structure with the central referral laboratories at the top and the health center-based laboratory at the bottom. The referral system for samples and reporting of data follows a pyramidal structure. The health center laboratories link to the district while the district laboratories report to the central referral laboratories and the National Reference Laboratory (NRL).

Because suspected cases and outbreaks should be laboratory confirmed, having access to laboratory services is essential for a well performing surveillance system. The NRL provides referral laboratory services and plays a key role in coordination of the laboratory network for disease control activities. Laboratory capacity for diagnosis for HIV, TB and Malaria is well developed and there is capacity as well for testing of bacterial pathogens specifically for cholera, *Salmonella typhi*, *Shigella dysenteriae*, bacterial meningitis and other pathogens at regional, university teaching hospitals and reference laboratories. The NRL networks with other external laboratories and WHO Collaborating Centers for quality assurance and specialized testing. The EID Division liaises with the NRL and other tier of laboratory networks to collect specimens for confirmation. This strategic plan addresses the need for ongoing collaboration with the NRL to closely link epidemiologic and laboratory data and improve the availability of timely laboratory results for confirming public health events.

2.4 *Current health information system*

The Rwanda health information system encompasses three layers including the health centers, the district hospitals and the national level (Ministry of Health). Paper-based and electronic systems co-exist and constitute the backbone of the Rwanda information system. Efforts are underway to shift the whole health information system to the use of electronic systems. Since 2009, an E-Health strategic plan was implemented. The plan lays out the ground for a progressive shift from a paper-based system to an electronic system as appropriate.

The current landscape of electronic systems includes two types that respectively collect routine aggregated data and patient level information. There are two national systems that present special interest for disease surveillance: the District Health Information System (DHIS-2) and the TRACnet system. The DHIS-2 has been adopted as the national routine information system. The DHIS-2 is a web-based reporting system that has the capability to be used offline allowing health facilities without internet connection to operate. It has been developed and is being rolled out across the country. Data collected covered all program areas (excepted HIV program) as well as administrative information. All health facilities report their achievements on a monthly basis. All diseases selected for the IDSR are also monitored through the DHIS-2.

The TRACnet system is a phone and web-based reporting system that initially was developed to ensure proper reporting and monitoring of HIV AIDS programs. It is used widely by all health facilities providing HIV/AIDS. The system has been subsequently expanded to host the disease surveillance system (e-IDSR). The TRACnet system is a national repository of HIV AIDS data and will play the same role for the disease surveillance system.

As for patient level information system, the Ministry of Health is engaged in an extensive design and implementation of an electronic medical record (EMR). Currently there are 30 health facilities that are using the system and the plan is to roll it out to all health facilities by the end of 2013. The EMR in the medium term will be the entry point for disease surveillance when proper linkage is built with the electronic IDSR (e-IDSR). The interface between the two systems will contribute to improve the accuracy and timeliness of the data collected at the individual level by the health care providers.

The Ministry of Health has also implemented a national data warehouse that will host the subset of data from the various databases and non-health sector data. Consequently, the e-IDSR will be linked to the national data warehouse.

2.5 Description of the current disease surveillance system

In the spirit of improving the national surveillance system, recently some changes were made requiring DHs to submit HC data disaggregated using an Excel spreadsheet, also facilitating analysis at District level. The IDSR guideline was reviewed, training modules were developed and DHs were trained in IDSR. Reporting channels follow the administrative structures of the country's health system such that health centre and district hospital surveillance data are reported to and coordinated by the district hospitals that analyze and aggregate the data for submission to the EID Division at central level through email. Laboratory data is transmitted through the national public health laboratory network coordinated by the NRL and feedback is provided to districts hospitals through a surveillance weekly report sent by mail.

There are other surveillance systems in the country ranging from the Health Management Information System (HMIS/GESIS) to some sentinel surveillance systems focused on specific diseases such as Malaria, HIV AIDS, Tuberculosis and Expanded Program on Immunization (EPI).

Although efforts were made to strengthen the surveillance system, the system has failed to capture some major outbreaks, partly due to late reporting and inefficient communication among the different

actors of the surveillance system. Based on the experience with TRACnet system that collects real-time HIV AIDS data, the EID Division wants to move from paper-based system to an electronic Integrated Disease Surveillance and Response (e-IDSR) system which should contribute to improve all function of the surveillance system. It is in this regards that e-IDSR was developed and piloted in five DHs and 72 HCs located in the catchment areas of these DHs. Findings from the pilot phase are promising and the roll out is planned in coming months. This EID Division strategic plan includes activities and indicators for strengthening and maintaining IDSR at all health systems during the next 5 years.

The figure on the following page illustrates the flow of IDSR data showing that data is reported from peripheral to district and national levels and feedback also takes place from central to reporting sites.

2.5.1 Components of the EID Division

The EID Division is one of the organizational units in the Rwanda Biomedical Center (RBC) under the Ministry of Health and as such has a key cross-cutting role in the area of surveillance and response. Because of the very nature of infectious diseases and the interaction between environment, animal health and human health, the EID Division often has a role to play with other Ministries and organizations including those across the national borders. The EID Division has developed a set of core functions to be able to address the surveillance and response needs of Rwanda presently and in the near future. The core functions address public health threats and the collaborative and cooperative requirements needed for surveillance and response nationally and regionally. The EID Division provides, since 2006, services to the health sector for detecting and responding to emerging and other epidemic and infectious threats. In 2011, the EID Division was restructured to improve the efficiency and effectiveness of early detection, confirmation and response to leading but largely preventable public health threats in Rwanda.

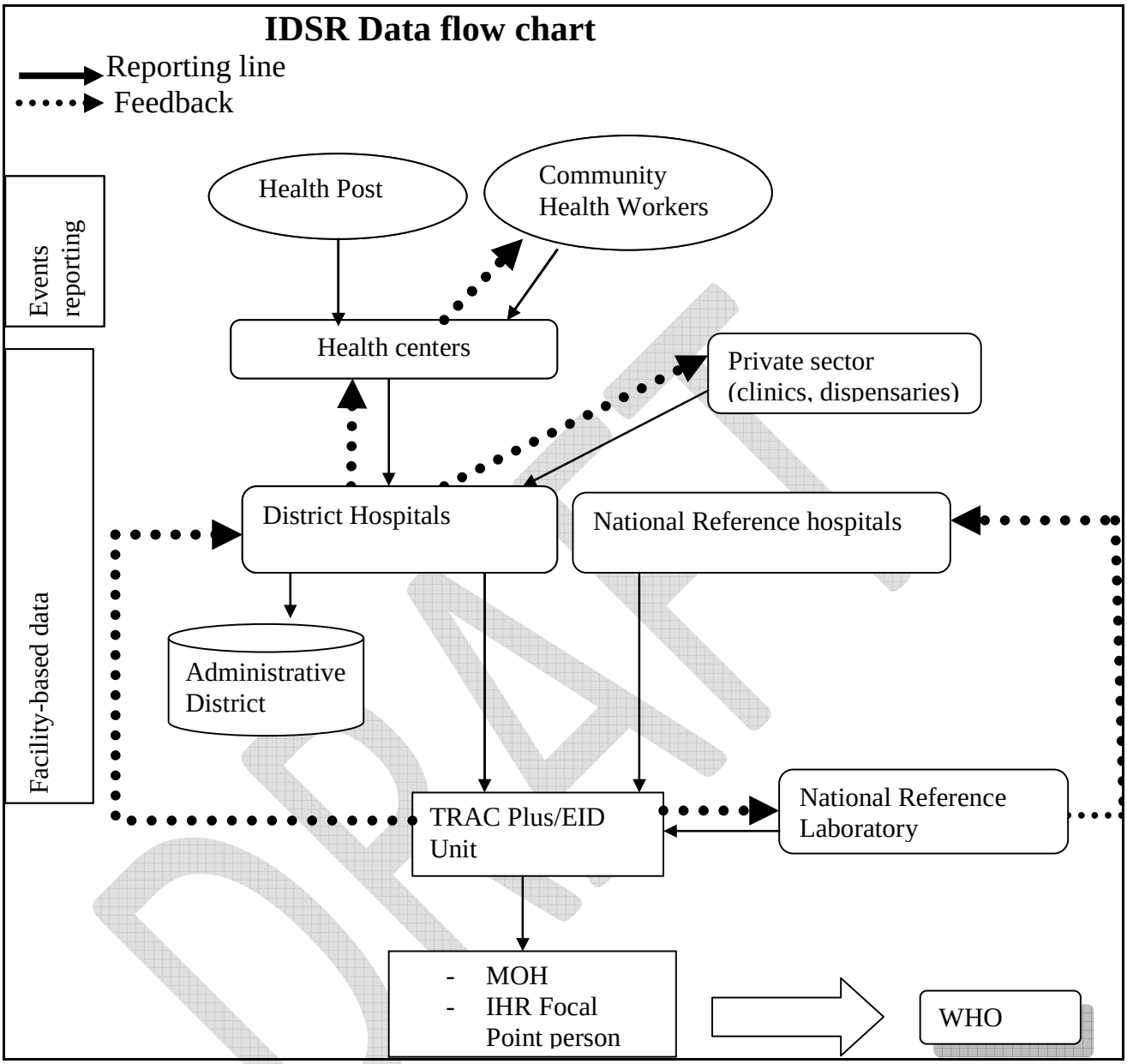
2.5.2 Role of and linkages with allied agencies and institutions

The EID Division understands the need to work across programs within the Rwanda Biomedical Center, with other Ministries and organizations and with the East African Community. The IDSR system helps to establish the linkages as do the requirements of the International Health Regulations (IHR). The functional statements for the EID Division explicitly state that the Ministry of Agriculture and Animal Resources and the Rwanda Development Board are key agencies to implement the One Health approach. Additionally, the East African Community secretariat and other international organizations are key to improved regional health.

The units in the EID Division have clear strategies, interventions and activities together with results and outputs that address intersectoral and cross boarder collaboration and plan for mechanisms to foster the relationships and monitor progress against indicators. The EID Division works closely with the School of Public Health, the Expanded Program of Immunization, the Ministry of Agriculture and Animal Resources, the Ministry of Disaster Management and Refugee Affairs, the U.S. Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO) and other partners in order to coordinate information and interventions to address outbreak prevention, response and containment in view of reducing morbidity, mortality and disability due to epidemic-prone diseases and other diseases of public health importance.

2.5.3 Roles of district hospitals and health centers

The role of district hospitals and health centers in the epidemic and infectious disease control and management is crucial in terms of disease surveillance and response to outbreak. The role of the Health Centers is to compile data using a standardized form to collect aggregated data on the priority diseases under surveillance. The Health Centers send their data to their corresponding District Hospital which compiles all reports from their catchment area by using an Excel sheet and channel it to RBC/IHDPC by e-mail. The weekly epidemiological bulletin is normally published on Wednesdays on RBC's website (www.rbc.gov.rw). Moreover, the completeness and timeliness of the weekly reports from the DHs are very low impeding the production of the weekly bulletin, and therefore a proper and reliable picture of the current epidemiological situation is very difficult to provide.



2.6 Challenges and opportunities

2.6.1 Challenges

The main challenges faced by the EID Division are related to the lack of sufficient resources to achieve its mission and vision. Financial resources are heavily dependent of external sources although the government of Rwanda has made substantial efforts to support this newly created division. The EID Division, as other Ministry of Health entities, is facing the lack of sufficient human resources. This is more pronounced at the peripheral level with high turnover comprising the efforts made to implement and maintain a reliable and timely surveillance system.There is a problem of attrition of qualified and experienced staff although several strategies have been identified and

implemented to contain the problem. These include performance based performance (PBF), scholarships, access to soft loans from banks under Ministry's guarantees, and other training opportunities, etc. The capacity of the laboratory to confirm priority diseases is still weak and needs improvement. The need for multisectoral disease surveillance and the need for regional coordination and integration of surveillance activities are becoming more and more crucial in this era of emerging diseases. Other challenges have been identified in the area of research where there are still weaknesses in the area of human expertise as well as research facilitation.

2.6.2 Opportunities

The Ministry of Health has placed disease surveillance on the health sector agenda. Disease surveillance activities were not well defined in the current Health Sector Strategic Plan II (HSSP II) and steps have been taken to remedy that. The creation of the EID Division under RBC to coordinate the control and prevention of emerging and re-emerging infectious diseases represents a major paradigm shift in the Rwanda disease surveillance system. To strengthen the public health workforce together with the National University of Rwanda School of Public Health and the Ministry of Health, the EID Division manages the Rwanda Field Epidemiology and Laboratory Training Program (FELTP). This program provides the Government of Rwanda with skilled human resources to manage public health programs. The FELTP program helps fortify the bridges between clinical and laboratory surveillance as well as inter-sectoral collaboration. In fact, the FELTP program has brought the animal and human health together for better prevention and control of diseases in Rwanda. Partners in country support the implementation of disease surveillance activities and are open to provide more resources. The Rwanda health system is well decentralized up to the community level. In addition to the health facility-based reporting system, there is a community-based information system that can be leveraged to support the reporting of unusual events that may occur at the community level. The community health worker network plays an important role in disaster management in collaboration with the district authorities (administrative and disaster management committee). The EID Division also aims to build the disease surveillance system using the health information technology infrastructure that the government of Rwanda is putting in place.

At the regional and international level, the East African Community (EAC) treaty on trans-boundary human and animal diseases prevention and control (Art.108 &118) and the World Bank project create linkages between EAC countries to support the growing interest in disease detection, prevention and treatment.

At the local level, the use of a single common language, the existence of Rwanda communication center and the health sector behavior communication for change (BCC) plan are opportunities to use in the sensitization and raising of awareness of infectious and epidemic disease prevention, detection and management measures among the population.

During the strategic planning process, a number of opportunities that could serve as critical for the fruition of the EID Division's contributions to the HSSP III were identified as being currently in place and the EID unit will have to leverage on them to achieve the goals and objectives of EID control, prevention and management. These can be summarized as the:

1. Decentralization of health activities
2. Existence of disaster management steering committee
3. Partnerships with districts, divisions, units, and sectors

4. Involvement of EID Division in Health Sector Strategic Plan III
5. Existence of laboratory network
6. Existence of Policies, laws, and regulations
7. Existence of FELTP and IDSR training
8. Existence of global guidelines
9. Strong Leadership and Country ownership
10. Existence of TRACnet

3. The context and purpose of this strategic plan

3.1 The context

This plan is linked with the government of Rwanda's Vision 2020 which articulates the goals and objectives to be achieved by the year 2020. These include achieving middle-income status, decreasing the percentage of the population living in poverty, increasing life expectancy to 55 years of age and reducing aid dependency. These goals are closely allied with expected achievements from the health sector and further elaborated in the HSSP III. The HSSP III guides the health sector contributions to the continuing improvement of the health of the Rwandan population. Because the EID Division will function to provide epidemiologic surveillance and response for important causes of illness, death and disability, and also contribute to strengthening the capacity for outbreak preparedness and response, this strategic plan closely corresponds with the goals of Vision 2020 and the HSSP III. The EID Division Strategic Plan elaborates the Rwanda Biomedical Center strategic directions for decreasing the burden of disease due to emerging and infectious conditions as well ensuring close articulation with the Ministry of Health's HSSP III

This EID Strategic Plan provides details for meeting the goals and objectives of the epidemiologic surveillance capacities in the country for improved detection, assessment, preparedness and response to health events in accordance with national policy and related capacities for meeting international policies such as the International Health Regulations (2005) and achieving the targets of the United Nations Millennium Development Goals.

Through the strategic planning process, priority areas and strategies areas were developed to support the vision and mission. The priorities serve as a means to establish action plans along with indicators and target measures. There are four priority areas of activity:

1. To develop and implement an effective and efficient national disease surveillance and response system.
2. To increase workforce and health system capacity for surveillance, preparedness, and outbreak response.
3. To expand operational research to inform policy, advocacy, and best practices.
4. To monitor and evaluate standards and quality measures for the surveillance and response system.

3.2 Process for developing the strategic plan

The EID Division embarked on a strategic planning process in late 2011. An EID Strategic Planning Committee was formed composed of EID Division staff, staff from other unit of RBC, stakeholders from other Ministries, and civil society organizations. By December 2011 a process was initiated with the strategic planning committee to determine the strengths (S), weaknesses (W), opportunities (O), and threats (T) for the recently formed EID Division. The analysis of the SWOT information set the stage to develop strategic direction statements such as the vision, mission, and guiding principles.

In early February 2012 the EID Strategic Planning Committee was convened to review the direction setting statements and to develop priorities, strategies, and results/outputs for the Division. These items were submitted to the HSSPIII development team, setting the direction for the EID Division for the next five years.

The steps following the initial strategic planning are to develop an action plan that provides operational guidance for the immediate steps for 2012. Action steps for the subsequent years will be a set of sequenced activities designed to achieve the stated outputs. All action steps will be established to provide data to measure progress on the indicators and measures established in the HSSPIII.

3.3 Epidemic and Infectious Diseases Division (EID Division) Mission, Vision, and Priorities

The EID Division has set its course by establishing a series of statements; vision, mission, and guiding principles. These strategic statements flow from the Rwanda Biomedical Center and Ministry of Health's guiding principles, mission, and vision. EID Division's goals and objectives also serve to focus their efforts and are designed to strategically guide the ongoing enhancement of the EID Division's functions and to maintain the focus on the vision of a Rwandan population free from epidemic-prone diseases and other public health threats.

The EID Division is further guided by the following vision, mission and guiding:

> **VISION**: A Rwandan population free from epidemic prone diseases and other public health threats
>
> **Mission**: To prevent and control epidemic diseases and other public health emergencies in Rwanda through the implementation of an effective and efficient national epidemiological surveillance system.
> **Guiding Principles**: Gender respect, equity, ethics, partnership, intersectorial collaboration, community participation, decentralization, and skills

The core functions of the EID Division are to:

1. Conduct surveillance and respond to public health threats
2. Conduct and coordinate research in matters relating to prevention and response to epidemic prone diseases and other diseases of public health importance.
3. Develop policies and guidelines in relation to Epidemic and Infectious Diseases
4. Mobilize resources for preparedness and response activities
5. Build capacity for preparing and responding to epidemic prone disease within the health sector and in other public health institutions
6. Participate in implementation of the International Health Regulations (2005)
7. Collaborate with the Ministry of Agriculture and Animal Resources and the Rwanda Development Board with a view towards implementing the One Health Approach
8. Collaborate with the EAC secretariat to improve regional preparedness and response
9. Establish relations and collaboration with other international organizations carrying out similar responsibilities.

The EID Division is comprised of four units: Surveillance; Avian Influenza and Highly Pathogenic Diseases; Food and Waterborne Diseases; and outbreak Preparedness and Response. Each unit has a specific role in disease detection and response.

Disease Surveillance Unit

- Develop and update technical documents
- Plan, organize and implement trainings for disease surveillance focal points from District Hospitals
- Develop and implement e-IDSR module
- Supervise peripheral levels to ensure appropriate implementation of surveillance activities
- Ensure weekly publications of the epidemiological bulletin to inform public and provide feedback to peripheral levels involved in disease surveillance
- Identify needs and priorities for the integrated disease surveillance system
- Generate situation reports based on disease surveillance data analyses
- Advise the division on public health action to be taken with regards to diseases of public health importance
- Conduct research based on data available in the integrated disease surveillance data
- Oversee diseases surveillance research publication

Water and Food borne Diseases Unit

- Provide policies and guidelines in control and Prevention of Food and Water Borne Disease's
- Provide information/data from field on important Food and Water Borne Disease such as cholera, typhoid fever, hepatitis A, Salmonellosis, Shigellosis, other food poisoning and others emerging food and water borne diseases
- Develop and update technical documents
- Plan and Manage a strategic stock of medical supplies related to food and Water Borne Diseases
- Plan, organize and implement intervention activities in case of Food and Water Borne Disease outbreaks and supervise peripheral level for program activities implementation

- Develop and conduct operational research related to water and food borne diseases

Airborne and Highly Pathogenic Diseases Unit

- Organize activities in Avian influenza surveillance
- Supervise peripheral levels to ensure appropriate implementation of sentinel site surveillance activities
- Plan, organize and implement intervention activities in case of outbreaks of Avian Influenza and other highly pathogenic influenza pandemics.
- Update and develop Avian influenza technical documents
- Plan, organize and implement trainings for Sentinel Surveillance officers and Focal points
- Identify needs and priorities for the Avian Influenza
- Assist and conduct research based on available Influenza Data
- Overseeing Avian Influenza research publication

Outbreak Preparedness and Response Unit

- Develop and update technical documents
- Provide assistance in:
  - Outbreak management at central and peripheral levels
  - Emergency preparedness and response
  - Disseminate findings (field reports) at all concerned levels
- Plan for a strategic buffer stock
- Organize training of trainers in FELTP (short courses)
- Organize regular meetings with rapid response teams at District Level
- Publish findings from collected data

4. Logical framework[2]

The EID Division Strategic Plan for 2012-2018 provides a systematic plan that includes prioritized goals, objectives, activities, outputs and indicators for monitoring performance and evaluating the quality of the programs within the EID control.

Using the logical framework approach, activities were identified that would be able to contribute to the achievement of the set objectives, outcomes and goals. A set of objectively verifiable indicators were then identified to monitor outputs as well as outcomes of the activities that are planned under this strategic plan. Performance goals (targets) were identified for each indicator, based on the baseline status as of the date of development of the strategic plan, method and frequency of data collection. Depending on the data sources and data collection methods, targets for indicators whose data is obtained from administrative reports e.g monthly data or activity reports was set for quarterly collection; whereas those that require particular surveys e.g. DHS were set to the expected dates of the surveys in question.

To ensure logic and reality in the budget, unit costs were set in accordance with the approved Government rates as of July 2012. A 6% inflation rate was set on the other costs to cover for the annual inflation. Supervision and training costs were based on the Government's perdiem rates for different cadres of staff; vehicle hire was based on the existing costs of hiring private four wheel drive vehicles as set out by the Rwanda Public Procurement Agency (RPPA).

[2] Year 1 of this strategic plan is 1st July 2012 to 30th June 2012.

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
Outcome 1:To develop and implement an effective and efficient national disease prevention, surveillance and response system	Output 1.1. All public and private Health facilities and the Community are integrated into IDSR												
		Activity 1.1.1 Train staff from public health facilities on IDSR (n =	# of staff from public health facilities trained on IDSR **(N=1221)**	417	513	291	0	0	0	0	0	0	
			# of public health facilities with at least 3 people trained on IDSR **(N=523)**	139	171	97	0	0	0	0	0	0	248,656,720
		Activity 1.1.2 Train staff from private health facilities on IDSR	# staff from private health facilities trained on IDSR **(N=398)**	0	0	0	0	398	0	0	0	0	
			# of private health facilities trained on IDSR **(N=199)**	0	0	0	0	199	0	0	0	0	67,775,860
		Activity 1.1.3 Produce and Distribute IDSR tools	% Private Health Facilities with prescribed IDSR guidelines and reporting forms	0.0	0.0	0.0	0.0	100	100	100	100	100	
			% Public Health Facilities with prescribed IDSR guidelines and reporting forms	48.8	81.5	100	100	100	100	100	100	100	20,970,000
		Activity 1.1.4 Train CHW on IDSR	# CHW trained (‘000)	0	0	0	0	0	10	10	10	10	196,808,552
		Activity 1.1.5 Conduct quarterly formative supervision of DH by central level	# DH supervised by central level in accordance with the norms	0	4	16	22	42	42	42	42	42	
			# of supervision visits carried out by Central level to DH	0	4	16	22	84	84	84	84	84	114,462,658

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
		Activity 1.1.6 Conduct quarterly formative supervision of HC by DH	# HC supervised by DH in accordance with the norms	0	40	160	220	476	476	476	476	476	
			# of supervisions visits carried out by DH to HC	0	40	160	220	1904	1904	1904	1904	1904	334,117,758
		Activity 1.1.7 Conduct annual formative supervision of private health facilities	# Private Health Facilities supervised by District Hospitals	0	0	0	0	0	199	199	199	199	
			# of supervisions visits carried out by DH to private health facilities	0	0	0	0	0	398	398	398	398	13,880,884
													996,672,432
	Output 1.2. Availability of Intersectoral collaboration framework to implement ONE HEALTH approach	Activity 1.2.1 Conduct a partner's workshop on One Health approach	# of Workshops conducted	0	0	1	1	1	1	1	1	1	369,000
		Activity 1.2.2 Set up a national coordination committee of the one health approach	# meetings of the coordination committee	0	0	1	1	1	1	1	1	1	90,679
		Activity 1.2.3 Develop a joint action plan (JAP)	# of Action plans available	0	0	0	1	1	1	1	1	1	4,530,000

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
		Activity 1.2.4 Organize a validation meeting	# of Action plans validated	0	0	0	1	1	1	1	1	1	369,000
		Activity 1.2.5 Conduct resource mobilization meeting with stakeholders	% of financed budget mobilized through one health approach	0	0	0	20 %	60%	100 %	100 %	100 %	100%	0
		Activity 1.2.6 Develop and Implement activities in the JAP	% of planned activities implemented	0	0	0	90 %	90%	100 %	100 %	100 %	100%	408,056
			# of coordination meetings organized	0	0	0	0	4	4	4	4	4	
													5,766,735
	Output 1.3. Intersectoral disaster management technical committee (DMTC) at national level is set up and functional	Activity 1.3.1 Develop Terms of reference for the intersectoral committees	TOR available	1									0
		Activity 1.3.2 Conduct quarterly meetings of coordination committee to discuss events of public health concern	# of meetings of coordination committee held	1	1	1	1	4	4	4	4	4	
			# of meetings of the TwG held	1	1	1	1	4	4	4	4	4	0
													0

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
	Output 1.4. A framework for Cross border collaboration with partner states with regards to integrated disease surveillance and response exists and is implemented:	Activity 1.4.1. Operationalize the national surveillance technical working group (STWG)	# of meetings of STWG organized	1	1	1	1	4	4	4	4	4	0
		Activity 1.4.2. Organize/participate in cross border meetings on IDSR with neighboring countries, or districts	% of trans-border meetings on IDSR in which Rwanda participates	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100%	18,547,721
		Activity 1.4.3 Implement cross-border meeting recommendations	% of Rwanda surveillance specific recommendations implemented				50 %	65%	70 %	75 %	80 %	100%	0
													18,547,721
	Output 1.5. New emerging diseases and public health	Activity 1.5.1 Conduct annual review of IDSR priority diseases	# of Annual review report available	1	0	0	0	1	1	1	1	1	36,271,656

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
	threats are promptly integrated into IDSR	Activity 1.5.2. Develop case definitions and adhoc guidelines on the management of emerging and remerging diseases and events	% of new emerging and/or reemerging diseases and events with guidelines on management, prevention and reporting	100%	100%	100%	100%	100%	100%	100%	100%	100%	47,623,987
		1.5.3. Establish and manage sentinel surveillance systems for emerging and re-emerging diseases	% of target disease that have a sentinel surveillance system	100%	100%	100%	100%	100%	100%	100%	100%	100%	891,330,048
													975,225,692
	Output 1.6. Laws and regulations on public health surveillance are up to date	Activity 1.6.1 Conduct inventory of and assemble existing laws and regulations on disease surveillance	# of Report on existing laws and regulation available	0	0	0	1	0	0	0	0	0	0

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
		Activity 1.6.2 Organize meetings to disseminate findings on existing laws and regulations	# of Dissemination meeting reports	0	0	0	0	4	0	0	0	0	9,060,000
		Activity 1.6.3 Review existing laws and regulations and identify gaps	# of Review report	0	0	0	0	0	1	0	0	0	90,679
		Activity 1.6.4 Develop/review /update laws and regulations	Report on appropriate new laws and regulation developed						x	x			54,415,120
		Activity 1.6.5 Disseminate updated and new laws and regulations	% DH and HC that are aware of new laws and regulation on public health surveillance								523	523	0
													63,565,799

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
	Output 1.7. District epidemic management committee (DEPMC) and DH Rapid Response Teams (RRT) are set up and operational	Activity 1.7.1. Review ToR of epidemic management committees (EMC) and integrate them into ToR of existing disaster management committees (DMC)	ToR of EMC are integrated into ToR of DMC	1									0
		Activity 1.7.2 Conduct orientation for DEMC in all districts	% of districts with members of DEMCs oriented on diseases surveillance and response			100 %	100 %	100 %	100 %	100 %	100 %	100%	5,694,000
		Activity 1.7.3 Organize DEMC semestrial meetings	# of DEMC meetings organized			30	30	60	60	60	60	60	56,248,969
		Activity 1.7.4 Support development of district epidemic preparedness and response plans (DEPRP)	% of district with epidemic preparedness and response plan				100 %	100 %	100 %	100 %	100 %	100%	20,466,000
		Activity 1.7.5.Train district hospital	TOR of RRT available	1									11,373,560

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
		rapid response teams on IDSR	% of DH with updated TOR	100%									
			# of DH with trained RRTs			42	42	42	42	42	42	42	
													93,782,529
	Output 1.8. Public health guidelines and tools are produced and updated as necessary	Activity 1.8.1 Maintain and upgrade e-IDSR as needed	Number of days without service outage	90	90	90	90	365	365	365	365	365	0
		Activity 1.8.2 Review and update where necessary IDSR guideline and tools	Report of the review meeting for the IDSR guidelines and tools						1				
			% health facilities with updated IDSR guideline and tools				100%	100%	100%	100%	100%	100%	52,000
													52,000
	Output 1.9 Surveillance data collection, analysis and use at all levels is strengthened	Activity 1.9.1 Train IDSR focal persons on data analysis	# of DH and referral hospitals with trained IDSR focal persons	42	42	47	47	47	47	47	47	47	12,791,740
		Activity 1.9.2 Produce and disseminate weekly and annual bulletins	# weekly bulletins produced	12	12	12	12	52	52	52	52	52	
			# annual bulletins produced			1		1	1	1	1	1	
			% weekly bulletins shared through Email	100%	100%	100%	100%	100%	100%	100%	100%	100%	
			# annual bulletins shared through Email				1	1	1	1	1	1	0

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
		Activity 1.9.3 Analyze data and establish trends for priority IDSR diseases and events	% of DH with trend graphs on all common diseases in their catchment area	100%	100%	100%	100%	100%	100%	100%	100%	100%	
			% of HC with trend graphs on all common diseases in their catchment area	100%	100%	100%	100%	100%	100%	100%	100%	100%	1,345,170
													14,136,910
	Output 1.10. District laboratories have the capacity for public health surveillance	Activity 1.10.1 Train Lab technicians on IDSR	# of lab technicians trained on IDSR	255	171	97	0	0	0	0	0	0	14,909,280
		Activity 1.10.2 Procure and distribute disease specific laboratory outbreak response kits to DH	# of disease specific kits procured	5	4		38	47	47	47	47	47	
			% of DH and Ref Hospitals with the all the required disease specific lab kits	11%	19%		100%	100%	100%	100%	100%	100%	62,777,867
		Activity 1.10.3 Conduct technical monthly meetings with NRL and EPI	# of meetings held	3	3	3	3	12	12	12	12	12	1,088,150

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
		Activity 1.10.4. Establish an emergency stock of lab supplies, reagents and media for outbreak investigations and management	Availability of emergency lab supplies at national level **(MPDD)**	1	1	1	1	1	1	1	1	1	147,179,221
													225,954,518
	Output 1.11. IHR plan is available and implemented	Activity 1.11.1. Set a IHR steering committee	Ministerial instruction nominating IHR steering committee members		1								0
		Activity 1.11.2. Conduct IHR core capability assessment	Availability of assessment report		1								7,550,000
		Activity 1.11.3. Develop a IHR plan	IHR AP is available				1						4,530,000
		Activity 1.11.4. Implement activities in IHR Plan	% of activities in IHR that are implemented					80%	80 %	90 %	90 %	90%	
													12,080,000

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
	Output 1.12.Public is aware of the mode of transmission and prevention of epidemic prone diseases	Activity 1.12.1.Develop appropriate BCC messages	# of priority diseases with BCC messages		9	18	23	23	23	23	23	23	0
		Activity 1.12.2.Organize awareness campaign on targeted diseases	% of awareness campaign conducted for targeted diseases		100%	100%	100%	100%	100%	100%	100%	100%	353,769,438
		Activity 1.12.3.Manage risk communication	% of suspected outbreak first announced through official ministry channel	100%	100%	100%	100%	100%	100%	100%	100%	100%	0
		Activity1.12.4. Disseminate BCC message	% of priority diseases with appropriate BCC messages disseminated		39%	78%	100%	100%	100%	100%	100%	100%	154,261,015
		Activity 1.12.5.Evaluate the effectiveness of different communication strategies	Report of evaluation					1					2,500,000
													510,530,454

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
	Output 1.13. Disease outbreaks and other events of public health importance are appropriately managed	Activity 1.13.1Constitute a stock of appropriate materials for effective outbreak investigation and managements (PPE,)	# Of hospitals with a stock of PPEs and other appropriate materials for the investigation of outbreaks.		47	47	47	47	47	47	47	47	0
		Activity 1.13.2 Investigate suspected outbreaks	% of epidemic alerts investigated within **48** hours of notification	100%	100%	100%	100%	100%	100%	100%	100%	100%	31,075,149
		Activity 1.13.3.Provide appropriate materials, supplies and drugs and vaccines for prevention and management during outbreaks	% of epidemic outbreaks in which adequate and appropriate materials, drugs, vaccines and supplies were provided to health facilities for the free-of-cost management of cases,	100%	100%	100%	100%	100%	100%	100%	100%	100%	672,181,091
													703,256,240
Outcome 2. To increase workforce and health system capacity for	Output 2.1. Selected IDSR performance indicators integrated into	Activity 2.1.1.Identify and integrate IDSR performance	Availability of document describing, defining and justifying IDSR indicators selected to be included in PBF	1									32,400

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
surveillance, preparedness, and outbreak response	PBF	indicators in PBF	Availability of IDSR indicators in national PBF document as payable indicators			x							
			Proportion of necessary funds mobilized			100%	100%	100%	100%	100%	100%	100%	
			% of Meetings of PBF steering committee in which EID staff participated	100%	100%	100%	100%	100%	100%	100%	100%	100%	
													32,400
	Output 2.2. Curriculum for IDSR is introduced into pre service training	Activity 2.2.1 Conduct meetings with Deans and directors of pre-service training institutions	# of heads of pre-service training institutions meet with			7							0
		Activity 2.2.2 Organize meetings/Workshop to review, adopt and validate the IDSR curriculum for pre service training schools	IDSR curriculum is adopted					x					68,434
													68,434
	Output 2.3. RFELTP program	Activity 2.3. 1 Involve FELTP residents in	# of FELTP residents participating in outbreak investigation	3	4	4	4	15	15	15	15	15	37,248,201

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
	supported to conduct the long courses	outbreak investigations	% of outbreak investigation which FELTP residents participated	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100%	
		Activity 2.3.2. Disseminate findings from scientific activities of FELTP residents	# of national seminars organized for FELTP residents			1		1	1	1	1	1	
			# number of abstract accepted for national conference and seminars			7		8	7	8	7	8	
			# of FELTP residents participating in international conferences and seminars					15		15		15	
			# of abstract accepted in international conferences					15		15		15	
			# of FELTP resident with at least on publication in a peer reviewed journal			7		8	7	8	7	8	110,445,658
													147,693,859
	Output 2.4. RFELTP supported to conduct short courses for district health care providers	Activity 2.4.1 Support FELTP residents to conduct short course trainings for Health care workers	# of HW trained on FELTP short course		60	81							931,500

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
		Activity 2.4.2 Facilitate FELTP residents to supervise the field work of short course trainees	# of FELTP short course trainees supervised by FELTP residents			60	81	141	141	141	141	141	4,917,600
		Activity 2.4.3 Organize a seminar for Dissemination of field work findings from short course trainees	# of seminars organized to disseminate field work findings from FELTP short course trainees			1	1	1	1	1	1	1	26,141,401
													31,990,501
	Output 2.5.EID division has adequate and well motivated Human and material Resources	Activity 2.5.1 Recruit and maintain adequate staffing in the EID Division	% of established positions in the EID Division that are filled	100 %	100 %	100 %	100 %	100%	100 %	100 %	100 %	100%	**1,630,991,880**
		Activity 2.5.2 Provide necessary office materials and equipment to EID staff	% of EID with appropriate office materials and equipment	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100%	**257,130,725**
													1,888,122,605

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
Outcome 3: To expand operational research to inform policies, advocacy and best practices	Output 3.1:Capacity built for conducting operational research among EID staff	Activity 3.1.1 Organize monthly in-house training sessions on epidemiological surveillance, manuscript writing etc under the auspices of Continuous Professional Training (CPT)	# of in house training sessions conducted	3	3	3	3	12	12	12	12		0
		Activity 3.1.2 Organize short course training on OR in collaboration with Research Institutions, under the auspices of Continuous Professional Training (CPT)	# of EID staff and IDSR DH focal persons trained on OR					11	21	21			19,309,083
		Activity 3.1.3 Subscribe to international scientific journals	# of international scientific journal to which EID Division is subscribed				2	4	4	4	4	4	4,185,191
		Activity 3.1.4 Participate in local and	#of IDSR staff who participate in research conferences				11	11	11	11	11	11	41,851,911

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
		international research conferences, meetings symposia etc.	# of Oral presentations made at conferences				2	3	4	5	5	5	
			# of Poster presentations made at conferences				3	3	4	5	5	5	
													65,346,185
	Output 3.2: Operational research agenda prioritized	Activity 3.2.1 Identify priority areas of interest for research	A research plan for IDSR related research is available			1							0
		Activity 3.2.2 Develop study protocols for identified research priorities	# of study protocol developed and approved by RNEC	See research plan for details									
			% of priority studies with RNEC approved protocols				50 %	100 %	100 %	100 %	100 %	100 %	6,899,821
		Activity 3.2.3 Conduct research projects and disseminate findings	# of IDSR related studies (including surveys and evaluations) conducted			2		1	1	1	1	1	
			# of studies with written and approved reports					1	1	1	1	1	
			# of studies with results disseminated at national level					1	1	1	1	1	118,189,427
													125,089,248
	Output 3.3: System for monitoring use	Activity 3.3.1 Set up a system for monitoring	A database to accommodate research recommendations is available		1								0

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
	of recommendations from research studies established	recommendations from studies (database, of recommendations, with regular updates on status)	% of recommendations in database with updated status on implementation				50 %	100 %	100 %	100 %	100 %	100 %	
		Activity 3.3.2 Develop supervision plan and conduct coordination meetings to monitor implementation of study recommendations	# of coordination meetings held to monitor implementation of recommendations		1		1	2	2	2	2	2	77,679
													77,679
Outcome 4:To monitor and evaluate standards and quality measures for the National surveillance and response system	Output 4.1. IDSR standards and quality measures for the Rwanda disease surveillance and priorities are reviewed and adapted	Activity 4.1.1: Review and adapt IDSR standards and quality measures for surveillance and response	National IDSR standards for quality measures at each level are available	x									
			% of DH with National IDSR standards for quality measures	12 %	25 %	50 %	75 %	100 %	100 %	100 %	100 %	100 %	
			% of HC with National IDSR standards for quality measures	12 %	25 %	50 %	75 %	100 %	100 %	100 %	100 %	100 %	77,679

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
													77,679
	Output 4.2. Quality measures are monitored regularly	Activity 4.2.1 Regularly monitor the performance of surveillance and response system and use result to improve quality of surveillance	% of district hospitals in which a current trend analysis (line graph or histogram) is available for priority diseases	12 %	25 %	50 %	75 %	100 %	100 %	100 %	100 %	100 %	
			% of cases of priority diseases that were reported to district hospitals according to IDSR guideline norms	12 %	25 %	50 %	75 %	100 %	100 %	100 %	100 %	100 %	
			% of district hospitals in which a current trend analysis (line graph or histogram) is available for all IDSR quality indicators	12 %	25 %	50 %	75 %	100 %	100 %	100 %	100 %	100 %	
			% of investigated outbreaks with laboratory results *This only refers to diseases eligible for lab confirmation	12 %	25 %	50 %	75 %	100 %	100 %	100 %	100 %	100 %	
			Supervision plan available to guide central level supervisions to the DH	1				1	1	1	1	1	
			# of district hospitals with quarterly supervision plan (shared with central level)	5	10	21	32	42	42	42	42	42	
			% of planned supervisions conducted	80 %	80 %	80 %	80 %	100 %	100 %	100 %	100 %	100 %	61,210,931

OUTCOME	OUTPUT	ACTIVITIES	INDICATORS	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	BUDGET
			# of IDSR performance review meetings held				1	2	2	2	2	2	
													61,210,931
	Output 4.3. Annual evaluation conducted	Activity 4.3.1. Conduct internal and external evaluation of the surveillance and response system and disseminate results	Evaluation protocol available and approved by RNEC				1						
			Number of evaluations conducted				1		1		1		
			# of dissemination workshops conducted				1		1		1		
			% of recommendations implemented					100 %		100 %			
			# of external evaluations conducted					1		1		1	
			# of dissemination workshops conducted					1		1		1	
			% of recommendations implemented						90 %		90 %		77,571,820
													77,571,820
Grand Total													**6,016,852,370**

5. The implementation framework

This strategic plan shall be implemented through the entire health sector, through a multisectoral and intersectoral approach with the intervention of different actors and partners at different levels of the health system. A coordination mechanism shall be set up and strengthened to ensure optimum participation of all key actors and the effective and effective utilization of the available resources (human, information, logistics and finance). The EID division in RBC shall be responsible for the overall coordination and oversight regarding the implementation of this plan.

5.1 Roles and responsibilities of different stakeholders

The EID Division has the overall responsibility for monitoring the implementation of this strategic plan. It will undertake measures to ensure the effective participation of different stakeholders and sectors in the implementation of IDSR and this strategic plan and establish a forum for ensuring that different interveners integrate activities from this strategic plan into their annual plans and regularly remind different stakeholders on their roles and organize semiannual and annual reviews of the plan and disseminate the status of implementation. It will also organize the mid-term review of the plan.

The EID division will ensure that this strategic plan is available and known to all stakeholders. Each stakeholder has the responsibility of ensuring the timely implementation of the activities and deliverables for which he is responsible in the implementation (or action) plan (see Appendix 1)

The detailed roles and responsibilities of each stakeholder in IDSR are defined in the national IDSR guidelines (available online on the Ministry's website - www.moh.gov.rw). The EID Division will ensure that the national guidelines are available and disseminated to all stakeholders and that each stakeholders, each level of the health system and member of the intersectoral and multisectoral teams knows, understands and adequately fulfills his/her role and responsibilities.

Different stakeholders are primarily responsible for implementing the activities and achieving the deliverables for which they are responsible under this strategic plan. Each stakeholder shall ensure that such activities are implemented in a timely manner and results communicated to the coordination structures accordingly.

5.2 Coordination

This strategic plan will be implemented under the spirit of the One Health, recognizing the importance of inter-sectoral, multi-sectoral and cross boarder collaboration; and the fact that all available resources are essential in its success. Under the leadership of the EID Division, a strategic steering committee shall meet regularly to review progress in the implementation of the strategic plan, discuss challenges and recommend remedial measures.

5.3 *Resource mobilization*

The Ministry of Health shall ensure the availability of adequate resources for the implementation of this strategic plan. Traditional and nontraditional partners and stakeholders in disease surveillance shall be mobilized to support activities under this strategic plan. Progress on resource mobilization shall be part of the progress report provided by the EID unit at the annual review meetings.

5.4 Monitoring and Evaluation

An implementation plan that includes activities, and key indicators and milestones has been developed and is part of this strategic plan. Annual plans to operationalize this implementation plan shall be drawn developed by each intervener and outputs collected and compiled by the EID division. On a semiannual basis, the EID Division shall compare accomplishments against targets and review strategies for improving performance where necessary.

6. List of appendices

Appendix 1: Detailed five year activity plan and annual budget
Appendix 2:

6.1 Appendix 1: Detailed five year activity plan and annual budget

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
Outcome 1:To develop and implement an effective and efficient national disease surveillance and response system	Output 1.1. All public and private Health facilities and the Community are integrated into IDSR									
		Activity 1.1.1 Train staff from public health facilities on IDSR	Preparing training materials		0	0	0	0	0	**0**
			Distribute training material		0	0	0	0	0	**0**
			Transfer of funds to DH (24)		0	0	0	0	0	**0**
			Training supervision by central level (10)	248,656,720	0	0	0	0	0	**248,656,720**
		Activity 1.1.2 Train staff from private health facilities on IDSR	Preparing training materials		0	0	0	0	0	**0**
			Distribute training material		0	0	0	0	0	**0**
			Prepare training package (training room, accommodation, perdiem, transport, stationeries,…)	0	67,775,860	0	0	0	0	**67,775,860**
		Activity 1.1.3 Produce and distribute IDSR guidelines and reporting tools	Produce IDSR reporting tools		0	0	0	0	0	**0**
			Distribute IDSR reporting tools to public facilities		0	0	0	0	0	**0**
			Distribute IDSR reporting tools to private facilities	20,970,000	0	0	0	0	0	**20,970,000**
		Activity 1.1.4 Train CHW on IDSR	Develop simplified abridged training module and tools for CHW	0	0	0	0	0	0	**0**
			Multiply modules and tools	0	0	0	0	0	0	**0**
			Conduct training of CHW	0	0	47,000,000	49,820,000	49,989,200	49,999,352	**196,808,552**
		Activity 1.1.5 Conduct quarterly formative	Develop supervision plan		0	0	0	0		**0**
			Print supervision tools	104,850	209,700	222,282	235,619	249,756	264,741	**1,286,949**
			Conduct field supervision	17,052,0	17,052,0	18,075,1	19,159,6	20,309,2	21,527,7	**113,175,7**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
		supervision of DH by central level	Transport, perdiem,…)	00	00	20	27	05	57	**09**
			Write supervision report		0	0	0	0	0	**0**
			Analyze supervision report		0	0	0	0	0	**0**
			Implement recommendations	0	0	0	0	0	0	**0**
		Activity 1.1.6 Conduct quarterly formative supervision of HC by DH	Assist DH to develop supervision plan		0	0	0	0	0	**0**
			Distribute supervision tools to DH		0	0	0	0	0	**0**
			Provide feedback on supervision report from DH	47,900,000	50,774,000	53,820,440	57,049,666	60,472,646	64,101,005	**334,117,758**
		Activity 1.1.7 Conduct annual formative supervision of private health facilities	Develop a joint supervision plan (DH, central level)		0	0	0	0	0	**0**
			Conduct field supervision (transport, perdiem,…)		0	0	0	0	0	**0**
			Write field supervision report		0	0	0	0	0	**0**
			Follow up implementation of recommendations	1,990,000	2,109,400	2,235,964	2,370,122	2,512,329	2,663,069	**13,880,884**
										996,672,432
	Output 1.2. Availability of Intersectoral collaboration framework to implement ONE HEALTH	Activity 1.2.1 Conduct a partner's workshop on One Health approach	Conduct preparatory meetings: to Identify key partners, key topics and key presenters and Elaboration of Meeting agenda, writing invitations, meeting hosting place		0	0	0	0	0	**0**
			Request OH facilitation (ToR to be developed)		0	0	0	0	0	**0**
			Prepare conference package		0	0	0	0	0	**0**
			Conduct the meeting		0	0	0	0	0	**0**
			Write the report		0	0	0	0	0	**0**
			Implement meeting	369,000	0	0	0	0	0	**0**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
	approach		recommendations							
			Follow up implementation of recommendations		0	0	0	0	0	**369,000**
		Activity 1.2.2 Set up a national coordination committee of the one health approach	Convene Steering Committee meeting to review ToR and set up a OH technical committee	13,000	13,780	14,607	15,483	16,412	17,397	**90,679**
		Activity 1.2.3 Develop a joint strategic plan (JSP) for the one health approach	Elaborate consultant ToR	0	0	0	0	0	0	**0**
			Hire a consultant (recruitment process)	4,530,000	0	0	0	0	0	**4,530,000**
			Organize meetings with partners and stakeholders for the consultant	0	0	0	0	0	0	**0**
			Review JSP draft form the consultant and provide inputs	0	0	0	0	0	0	**0**
		Activity 1.2.4 Organize a validation meeting	Prepare conference package (conference room, perdiem,…)		0	0	0	0	0	**0**
			Prepare conference materials(working documents, draft of JSP and reference documents		0	0	0	0	0	**0**
			Prepare concept note for the validation meeting,		0	0	0	0	0	**0**
			Sending out invitations		0	0	0	0	0	**0**
			Prepare conference report		0	0	0	0	0	**0**
			Finalize the JSP based on recommendations and inputs from the meeting	369,000	0	0	0	0	0	**369,000**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
		Activity 1.2.5 Conduct resource mobilization meeting with stakeholders	Conduct a preparatory meeting to indentify key partners, meeting agenda,		0	0	0	0	0	**0**
			Organize a meeting with potential donor to solicit for funding		0	0	0	0	0	**0**
			Follow up donor commitments	0	0	0	0	0	0	**0**
		Activity 1.2.6 Develop and Implement activities in the JAP	Coordinate development of JAP		0	0	0	0	0	**0**
			Organize a meeting to develop a JAP (Meeting room, perdiem, accommodation, transport,…)		0	0	0	0	0	**0**
			Share JAP with key stakeholders		0	0	0	0	0	**0**
			Organize quarterly meeting of committee to review progress on the JAP	58,500	62,010	65,731	69,674	73,855	78,286	**408,056**
										5,766,735
	Output 1.3. Intersectoral disaster management technical committee (DMTC) at national level is set up and functional	Activity 1.3.1 Develop Terms of reference for the intersectoral disaster management technical committees (DMTC)	Review and finalize the ToR for national DMTC		0	0	0	0	0	**0**
			Nominate members to the national DMTC	0	0	0	0	0	0	**0**
		Activity 1.3.2 Conduct quarterly meetings of coordination committee to	Prepare status report on health event to be discussed during the meeting		0	0	0	0	0	**0**
			Participate in DMTC meetings	0	0	0	0	0	0	**0**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
		discuss events of public health concern								
										0
	Output 1.4. A framework for Cross boarder collaboration with partner states with regards to integrated disease surveillance and response exists and is implemented:	Activity 1.4.1. Operationalize the national surveillance technical working group(STWG)	Develop ToR for STWG		0	0	0	0	0	**0**
			Nominate members		0	0	0	0	0	**0**
			Organize meetings of the STWG	0	0	0	0	0	0	**0**
		Activity 1.4.2. Organize/participate in cross border meetings on IDSR with neighboring countries, or districts	Prepare working material for the meetings		0	0	0	0	0	**0**
			Organize cross-border meeting to be held in Rwanda	2,659,050	2,818,593	2,987,709	3,166,971	3,356,989	3,558,409	**18,547,721**
		Activity 1.4.3 Implement cross-border meetings recommendations	Develop database for recommendations		0	0	0	0	0	**0**
			Monitor implementation and provide quarterly update to MoH	0	0	0	0	0	0	**0**
										18,547,721
	Output 1.5. New emerging diseases and public health	Activity 1.5.1 Conduct annual review of IDSR priority diseases	Monitor unusual events diseases and death at national and international scene	0	0	0	0	0	0	**0**
			Investigate and confirm the etiology of unusual events diseases and death in the country	5,200,000	5,512,000	5,842,720	6,193,283	6,564,880	6,958,773	**36,271,656.4**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
	threats are promptly integrated into IDSR		Assess the public health threat of the diseases	0	0	0	0	0	0	**0.0**
		Activity 1.5.2. Develop case definitions and adhoc guidelines on the management of emerging and remerging diseases and events	Develop case definitions, guidelines(detection, treatment, prevention)	0	0	0	0	0	0	**0.0**
			Train health care providers on the detection, management, prevention and surveillance of diseases	6,827,500	7,237,150	7,671,379	8,131,662	8,619,561	9,136,735	**47,623,987.3**
			Integrate into national surveillance system	0	0	0	0	0	0	**0.0**
										83,895,643.7
		1.5.3. Establish and manage a sentinel surveillance for emerging and re-emerging diseases	Implement the avian flu surveillance plan	241,600,000	193,280,000	154,624,000	123,699,200	98,959,360	79,167,488	**891,330,048.0**
			Support the functioning of heamophilus surveillance sites	9,060,000	9,603,600	10,179,816	10,790,605	11,438,041	12,124,324	**72,256,386**
			Support the functioning of pneumococcus surveillance sites	9,060,000	9,603,600	10,179,816	10,790,605	11,438,041	12,124,324	**72,256,386**
			Support the functioning of rotavirus surveillance sites	400,000	424,000	449,440	476,406	504,991	535,290	**3,190,127**
			Support the functioning of malaria surveillance sites	180,000,000	190,800,000	202,248,000	214,382,880	227,245,853	240,880,604	**1,435,557,337**
			Support the functioning of NNT surveillance sites	0	0	0	0	0	0	**0**
										2,474,590,284.1
	Output 1.6. Laws and regulations	Activity 1.6.1 Conduct inventory of and	Identify and assemble existing national laws and regulations related to diseases surveillance	0	0	0	0	0	0	**0**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
	on public health surveillance are up to date	assemble existing laws and regulations on disease surveillance	Identify and assemble existing international treaties, conventions and regulations related to diseases surveillance	0	0	0	0	0	0	**0**
		Activity 1.6.2 Organize meetings to disseminate findings on existing laws and regulations	Recruit consultant to compile and summarize existing laws		0	0	0	0	0	**9,060,000**
			Organize meeting to share info on existing laws and regulations	9,060,000	0	0	0	0	0	**0**
		Activity 1.6.3 Review existing laws and regulations and identify gaps	Organize meetings of the surveillance technical working group to review existing laws and identify gaps	13,000	13,780	14,607	15,483	16,412	17,397	**90,679**
		Activity 1.6.4 Develop, review, update laws and regulations	Recruit team of consultants to review and update laws and regulations	0	54,360,000	0	0	0	0	**54,360,000**
			Supervise the work of the consultants	0	0	0	0	0	0	**0**
			Organize meetings of the technical working groups to review the draft from consultants	0	55,120	0	0	0	0	**55,120**
		Activity 1.6.5 Disseminate updated and new laws and regulations	Disseminate updated laws and regulations	0	0	0	0	0	0	**0**
										63,565,799

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
	Output 1.7. District epidemic management committee (DEPMC) and DH Rapid Response Teams (RRT) are set up and operational	Activity 1.7.1. Review ToR of epidemic management committees (EMC) and integrate them into ToR of existing disaster management committees (DMC)	Review ToRs	0	0	0	0	0	0	**0**
			Integrate ToRs of EMCs into ToRs of DMCs	0	0	0	0	0	0	**0**
		Activity 1.7.2 Conduct orientation for DEMC in all districts	Disseminate revised ToRs to all DEMCs	0	0	0	0	0	0	**0**
			Organize one day orientation meeting for all DEMCs	5,694,000	0	0	0	0	0	**5,694,000**
		Activity 1.7.3 Organize DEMC semestrial meetings	Develop ToRs for semestrial meetings	0	0	0	0	0	0	**0**
			Provide technical and financial support to districts organize DEMC meetings	8,064,000	8,547,840	9,060,710	9,604,353	10,180,614	10,791,451	**56,248,969**
		Activity 1.7.4 Support development of district epidemic preparedness and response plans (DEPRP)	Develop format for DEPRP	0	0	0	0	0	0	**0**
			Provide technical and financial support to districts to develop DEPRP	20,466,000	0	0	0	0	0	**20,466,000**
		Activity 1.7.5.Train district hospital rapid response	Review and disseminate ToR of RRT	0	0	0	0	0	0	**0**
			Prepare training tools	11,373,560	0	0	0	0	0	**0**
			Prepare training package and		0	0	0	0	0	**0**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
		teams on IDSR	transfer of funds							
			Train members of RRT		0	0	0	0	0	**11,373,560**
										93,782,529
	Output 1.8. Public health guidelines and tools are produced and updated as necessary	Activity 1.8.1 Maintain and upgrade e- IDSR as needed	Recruit 1 administrator and 1 IT technical staff for e-IDSR	0	0	0	0	0	0	**0**
			Train 2 EID staff to maintain and upgrade e-IDSR	0	0	0	0	0	0	**0**
			Maintain Trance	0	0	0	0	0	0	**0**
		Activity 1.8.2 Review and update where necessary and disseminate IDSR guideline and tools	Review and update guidelines and tools		0	0	0	0	0	**52,000**
			Distribute updated IDSR guideline and tools	52,000	0	0	0	0	0	**0**
										52,000
	Output 1.9 Surveillance data collection, analysis and use at all levels is strengthened	Activity 1.9.1 Train IDSR focal persons on data analysis	Prepare training module		0	0	0	0	0	**0**
			Prepare training package		0	0	0	0	0	**0**
			Conduct training		0	0	0	0	0	**12,791,740**
			Prepare training report	12,791,740	0	0	0	0	0	**0**
		!.9.2 Produce and disseminate weekly and annual bulletins	Develop/review format for the bulletins		0	0	0	0	0	**0**
			Analyze data		0	0	0	0	0	**0**
			Prepare bulletins		0	0	0	0	0	**0**
			Disseminate bulletins		0	0	0	0	0	**0**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
		Activity 1.9.3 Analyze data and establish trends for priority IDSR diseases and events	Train EID staff on advanced data analysis (SPSS, STATA)		0	0	0	0	0	**0**
			Analyze epidemiologic data	1,345,170	0	0	0	0	0	**1,345,170**
										14,136,910
	Output 1.10. District laboratories have the capacity for public health surveillance	Activity 1.10.1 Train Lab technicians on IDSR	Conduct trainings for (84) lab technicians on IDSR	14,909,280	0	0	0	0	0	**14,909,280**
		Activity 1.10.2 Procure and distribute disease specific laboratory outbreak response kits to DH	Define disease specific laboratory outbreak response kit for district hospitals	0	0	0	0	0	0	**0**
			Determine the national needs in lab kits	0	0	0	0	0	0	**0**
			Develop the technical specifications of the lab kits	0	0	0	0	0	0	**0**
			Procure and distribute the kits	9,000,000	9,540,000	10,112,400	10,719,144	11,362,293	12,044,030	**62,777,867**
		Activity 1.10.3 Conduct technical monthly meetings with NRL and EPI	Develop ToR for the monthly meeting	0	0	0	0	0	0	**0**
			Conduct meetings	156,000	165,360	175,282	185,798	196,946	208,763	**1,088,150**
		Activity 1.10.4. Establish an	Determine the national needs in lab commodities	0	0	0	0	0	0	**0**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
		emergency stock of lab supplies, reagents and media for outbreak investigations and management	Develop the technical specifications of the lab commodities	0	0	0	0	0	0	**0**
			Procure and manage lab commodities	21,100,000	22,366,000	23,707,960	25,130,438	26,638,264	28,236,560	**147,179,221**
										225,954,518
	Output 1.11. IHR plan is available and implemented	Activity 1.11.1. Set up an IHR steering committee	Develop ToR for IHR steering Committee	0	0	0	0	0	0	**0**
			Nominate members the steering Committee	0	0	0	0	0	0	**0**
		Activity 1.11.2. Conduct IHR core capability assessment	Develop ToR for consultant	0	0	0	0	0	0	**0**
			Recruit consultant	7,550,000	0	0	0	0	0	**7,550,000**
			Organize workshop	0	0	0	0	0	0	**0**
			Review and approve capability assessment report	0	0	0	0	0	0	**0**
		Activity 1.11.3. Develop a IHR plan	Develop ToR for consultant	0	0	0	0	0	0	**0**
			Recruit consultant	4,530,000	0	0	0	0	0	**4,530,000**
			Organize meetings of the IHR committee to review plan	0	0	0	0	0	0	**0**
			Adopt and share the IHR plan	0	0	0	0	0	0	**0**
		Activity 1.11.4. Implement activities in the IHR plan								
										12,080,000

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
	Output 1.12: The Public is aware of the mode of transmission and prevention of epidemic prone diseases	Activity 1.12.1.Develop appropriate BCC messages	Identify targeted diseases	0	0	0	0	0	0	**0**
			Develop messages	0	0	0	0	0	0	**0**
			Pilot test messages for appropriateness	0	0	0	0	0	0	**0**
			Finalize messages	0	0	0	0	0	0	**0**
		Activity 1.12.2.Organize awareness campaign on targeted diseases	Identify targeted diseases for the campaign	0	0	0	0	0	0	**0.0**
			Establish technical team to organize the campaign	41,640	44,138	46,787	49,594	52,570	55,724	**290,452.3**
			Draw detailed plan and budget for the campaign	0	0	0	0	0	0	**0.0**
			Mobilize fund	0	0	0	0	0	0	**0.0**
			Organize the campaign	78,000,000	78,000,000	62,400,000	49,920,000	39,936,000	31,948,800	**340,204,800.0**
			Prepare the campaign report	0	0	0	0	0	0	**0.0**
			Evaluate the campaign	2,000,000	2,000,000	2,120,000	2,247,200	2,382,032	2,524,954	**13,274,185.9**
		Activity 1.12.3.Manage risk communication	Identify a technical focal person at each level mandated to communicate on outbreak	0	0	0	0	0	0	**0.0**
			Establish an appropriate channel of communication of outbreak	0	0	0	0	0	0	**0.0**
			Prepare Press releases and information update for the public	0	0	0	0	0	0	**0.0**
		Activity1.12.4.Disseminate BCC message	Identify appropriate channels for disseminate messages	0	0	0	0	0	0	**0.0**
			Organize meetings with the press	650,100	689,106	730,452	730,452	730,452	730,452	**4,261,015.4**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
			Disseminate messages through different communication channels	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	**150,000,000.0**
		Activity1.12.5.Evaluate the effectiveness of different communication strategies	Develop evaluation protocol and tools	0	0	0	0	0	0	**0**
			Conduct evaluation	0	2,500,000	0	0	0	0	**2,500,000**
										510,530,454
	Output 1.13: Disease outbreaks and other events of public health importance are appropriately managed	Activity 1.13.1. Constitute a security stock for effective outbreak investigation and management	Procure personal protective equipments	0	0	0	0	0	0	**0**
		Activity 1.13.2 Investigate suspected outbreaks	Conduct field investigation for all suspected outbreaks	4,455,015	4,722,316	5,005,655	5,305,994	5,624,354	5,961,815	**31,075,149**
		1.13.3 Provide appropriate materials, supplies, drugs and vaccines for prevention and management during outbreaks	Procure body bags	6,000,000	6,360,000	6,741,600	7,146,096	7,574,862	8,029,353	**41,851,911**
			Procure vaccines for meningitis	90,365,648	95,787,587	101,534,842	107,626,933	114,084,549	120,929,621	**630,329,180**
										703,256,240

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Outcome 2. To increase workforce and health system capacity for surveillance, preparedness, and outbreak response	Output 2.1. Selected IDSR performance indicators integrated into PBF	Activity 2.1.1.Identify and integrate IDSR performance indicators in PBF	Conduct a meeting for identifying indicators	32,400	0	0	0	0	0	**32,400**
			Share and discuss IDSR indicators with the health financing team for adoption, validation and inclusion into PBF	0	0	0	0	0	0	**0**
			Mobilize necessary funds to finance the IDSR indicators in PBF	0	0	0	0	0	0	**0**
			Participate in PBF national and sub-national steering committee	0	0	0	0	0	0	**0**
										32,400
	Output 2.2. Curriculum for IDSR is introduced into pre service training	Activity 2.2.1 Conduct meetings with Deans and directors of pre-service training institutions	Prepare concept note for integration of IDSR in the curriculum	0	0	0	0	0	0	**0**
			Convene meeting with deans and directors	0	0	0	0	0	0	**0**
			Establish/set up a technical teams to develop the curriculum contents	0	0	0	0	0	0	**0**
		Activity 2.2.2 Organize meetings/Worksh op to review, adopt and validate the IDSR curriculum for pre service training schools	Assemble source documents	0	0	0	0	0	0	**0**
			Organize working sessions to develop the curriculum	0	0	0	0	0	0	**0**
			Validate the technical document	0	68,434	0	0	0	0	**68,434**
										68,434
	Output 2.3. RFELTP	Activity 2.3.1.Involve	Involve FELTP residents in outbreak investigations	1,410,000	1,494,600	1,584,276	1,679,333	1,780,093	1,886,898	**9,835,199**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
	program supported to conduct the long courses	FELPT residents in IDSR activities	Involve FELTP residents in training of DH	705,000	747,300	792,138	839,666	890,046	943,449	**4,917,600**
			Involve FELTP residents in surveillance system evaluation	3,225,000	3,418,500	3,623,610	3,841,027	4,071,488	4,315,777	**22,495,402**
		Activity 2.3.2. Disseminate findings from scientific activities of FELTP residents	Organize seminars for FELTP residents	0	6,600,000	6,996,000	7,415,760	7,860,706	8,332,348	**37,204,814**
			Facilitate participation of FELTP residents in international scientific conferences and seminars	10,500,000	11,130,000	11,797,800	12,505,668	13,256,008	14,051,369	**73,240,845**
			Mentor FELTP resident on scientific publications	0	0	0	0	0	0	**0**
										147,693,859
	Output 2.4. RFELTP supported to conduct short courses for district health care providers	Activity 2.4.1.Support FELTP resident to conduct short course trainings for Health care workers	Identify participants	0	0	0	0	0	0	**0**
			Prepare training package	0	0	0	0	0	0	**0**
			Invite participants	0	0	0	0	0	0	**0**
			Conduct training	931,500	0	0	0	0	0	**931,500**
		Activity 2.4.2.FELTP residents supervise the field work of short course trainees	Develop supervision plan	0	0	0	0	0	0	**0**
			Organize supervision	705,000	747,300	792,138	839,666	890,046	943,449	**4,917,600**
			Prepare supervision report	0	0	0	0	0	0	**0**
		Activity 2.4.3.Organize a seminar for Dissemination of field work	Prepare meeting package (logistic, transport, perdiem, certificates,…)		3,972,562	4,210,916	4,463,571	4,731,385	5,015,268	**0**
			Set up meeting agenda/panel	3,747,700	0	0	0	0	0	**0**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
		findings from short course trainees	Conduct the seminar		0	0	0	0	0	**26,141,401**
			Prepare seminar report	0	0	0	0	0	0	**0**
										31,990,501
	Output 2.5: EID has adequate and well motivated Human and material resources	Activity 2.5.1 Recruit and maintain adequate staff	Fill all vacant positions	0	0	0	0	0	0	**0**
			Provide on job training and mentorship for new staff	0	0	0	0	0	0	**0**
			Remunerate staff	271,831,980	271,831,980	271,831,980	271,831,980	271,831,980	271,831,980	**1,630,991,880**
		Activity 2.5.2 Provide necessary office materials and equipments to EID staff	Provide office workstations and computers for staff	7,006,400	7,426,784	7,872,391	8,344,735	8,845,419	9,376,144	**48,871,872**
			Provide mobile internet connections for staff	7,450,944	7,898,001	8,371,881	8,874,194	9,406,645	9,971,044	**51,972,708**
			Procure vehicle for outbreak investigation	31,999,920	0	0	0	0	0	**31,999,920**
			Provide running costs and office consumables for EID unit	17,818,000	18,887,080	20,020,305	21,221,523	22,494,814	23,844,503	**124,286,226**
										1,888,122,605
Outcome 3: To expand operatio	Output 3.1:Capacity built for conducting	Activity 3.1.1 Organize monthly in-house training sessions	Develop training plan	0	0	0	0	0	0	**0**
			Prepare training materials	0	0	0	0	0	0	**0**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
nal research to inform policies, advocacy and best practices	operational research among EID staff	on epidemiological surveillance, manuscript writing etc under the auspices of Continuous Professional Training (CPT)	Implement the training plan	0	0	0	0	0	0	**0**
		Activity 3.1.2 Organize short course training on OR in collaboration with Research Institutions, under the auspices of Continuous Professional Training (CPT)	Identify trainers/training institution to provide OR training	0	3,597,608	7,626,929	8,084,545	0	0	**19,309,083**
		Activity 3.1.3 Subscribe to international scientific journals	Identify international scientific journal of interest	0	0	0	0	0	0	**0**
			Subscribe to selected journals	600,000	636,000	674,160	714,610	757,486	802,935	**4,185,191**
		Activity 3.1.4 Participate in local and international research conferences, meetings symposia etc.	Identify and participate in international conference of interest	6,000,000	6,360,000	6,741,600	7,146,096	7,574,862	8,029,353	**41,851,911**
			Develop abstracts	0	0	0	0	0	0	**0**
			Submit abstracts	0	0	0	0	0	0	**0**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
										65,346,185
	Output 3.2: Operational research agenda prioritized	Activity 3.2.1 Identify priority areas of interest for research	Identify areas of research interest and integrate them into EID research plan	0	0	0	0	0	0	**0**
		Activity 3.2.2 Develop study protocols for identified research priorities	Develop at least 3 research protocols	0	0	0	0	0	0	**0**
			Submit protocols to RNEC tor IRB review	1,820,800	901,000	955,060	1,012,364	1,073,105	1,137,492	**6,899,821**
		Activity 3.2.3 Conduct research projects	Conduct yellow fever risk assessment in Rwanda	50,093,344	0	0	0	0	0	**50,093,344**
			Conduct study to determine the etiological causes of diarrhea in Rwanda	0	12,080,000	0	0	0	0	**12,080,000**
			Conduct at least one study per year		0	12,804,800	13,573,088	14,387,473	15,250,722	**56,016,083**
										125,089,248
	Output 3.3: System for monitoring use of recommendations from research studies established	Activity 3.3.1 Set up a system for monitoring recommendations from studies (database, of recommendations, with regular updates on status)	Develop/update database for recommendations	0	0	0	0	0	0	**0**
			Update status of implementation	0	0	0	0	0	0	**0**
			Conduct coordination meetings to monitor implementation of studies recommendations	0	13,780	14,607	15,483	16,412	17,397	**77,679**

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
										77,679
Outcome 4:To monitor and evaluate standards and quality measures for surveillance and response system	Output 4.1. IDSR standards and quality measures for the Rwanda disease surveillance and priorities are reviewed and adapted	Activity 4.1.1 :Review, adapt and disseminate IDSR standards and quality measures for surveillance and response	|Conduct work sessions to update quality indicators and set standards for IDSR	0	13,780	14,607	15,483	16,412	17,397	**77,679**
			Disseminate national IDSR standards and quality measures to all health facilities	0	0	0	0	0	0	**0**
										77,679
	Output 4.2. Quality measures are monitored regularly	Activity 4.2.1 Regularly monitor the performance of system and use result to improve quality of surveillance	Develop a SOP to monitor indicators of quality	0	0	0	0	0	0	**0**
			Conduct quality performance monitoring	0	0	0	0	0	0	**0**
			Organize semestrial IDSR performance review meetings with DH IDSR focal persons	6,745,360	7,150,082	7,579,086	8,033,832	8,515,862	9,026,813	**47,051,035**
			Organize adhoc field visits to address issues and mentor on quality improvement	2,030,000	2,151,800	2,280,908	2,417,762	2,562,828	2,716,598	**14,159,897**
										61,210,931

OUTCOME	OUTPUT	ACTIVITIES	Sub-activities	Estimated budget (in Frw)						
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
	Output 4.3. Annual evaluation conducted	Activity 4.3.1.Conduct internal evaluation of the surveillance and response system	Develop evaluation protocol	0	0	0	0	0	0	**0**
			Conduct evaluation of the IDSR system	9,060,000	9,603,600	10,179,816	10,790,605	11,438,041	12,124,324	**63,196,386**
			Disseminate results from the annual IDSR evaluation	2,060,900	2,184,554	2,315,627	2,454,565	2,601,839	2,757,949	**14,375,434**
										77,571,820
Grand Total				1,565,211,021	1,246,341,684	1,151,347,953	1,146,148,844	1,140,533,419	1,152,009,684	**7,401,592,605**