



Regional Disease Surveillance Enhancement Project - Phase I

Mid-Term Review (MTR)

Final Report

DRAFT

November 2020

TABLE OF CONTENTS

I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES	4
1.1 Context at Appraisal.....	4
1.2 Significant Changes during Implementation.....	7
II. OUTCOME	9
2.1. Relevance of PDOs	9
2.2 Results Framework.....	11
2.3 Achievement of the PDOs (efficacy)	12
2.4 Efficiency	16
2.5 Justification of Overall Outcome Rating	18
2.6 Other Outcomes and Impacts (if any).....	18
III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME	21
3.1 Key Factors during Preparation	21
3.2 Key Factors during Implementation.....	23
3.3 Implementation Progress by Component.....	24
IV. PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME.....	29
4.1 Quality of Monitoring and Evaluation.....	29
4.2 Environmental, Social, and Fiduciary Compliance and Issues	30
4.3 Bank Performance.....	32
4.4 WAHO Performance.....	33
4.5 Risk to Development Outcome	34
V. LESSONS AND RECOMMENDATIONS.....	35

List of Acronyms

AFENET	African Field Epidemiology Network
AMR	Antimicrobial Resistance
AWPB	Annual Work Plan and Budget
CCISD	Centre for International Cooperation in Health and Development
CDC	United States Centers for Disease Control and Prevention
CES	Centers for Epidemiologic Surveillance
CERC	Contingence Emergency Response Component
CPF	Country Partnership Framework
CPS	Country Partnership Strategy
DHIS-2	District Health Information Software 2
ECOWAS	Economic Community of West African States
EOC	Emergency Operations Center
FAO	Food and Agriculture Organization
FETP	Field Epidemiology Training Program
FELTP	Field Epidemiology and Laboratory Training Program
FMx	Fondation Merieux
GHS	Global Health Security
IDSR	Integrated Disease Surveillance and Response
IRI	Intermediate Result indicators
IHR	International Health Regulation
JEE	Joint External Evaluation
MDTF	Multi-Donor Trust Fund
M&E	Monitoring and Evaluation
MTR	Mid-Term Review
NAPHS	National Action Plan for Health Security
OIE	World Organisation for Animal Health
PAD	Project Appraisal Document
PIU	Project Implementation Unit
PDO	Project Development Objectives
PVS	Performance of Veterinary Services Pathway
RAHC	Regional Animal Health Center
REDISSE	Regional Disease Surveillance Systems Enhancement Program
REDISSE I	Regional Disease Surveillance Systems Enhancement Project – Phase I
RF	Results Framework
RCSDC	Regional Centre for Surveillance and Disease Control
SMIR	Integrated Disease Surveillance and Response
SPAR	State Party Self-Assessment Annual Reporting
STEP	Systematic Tracking of Exchanges for Procurement
TOR	Terms of Reference
TTL	Task Team Leaders
USAID	United States Agency for International Development
WAHO	West African Health Organization
WB	World Bank
WHO	World Health Organization

REGIONAL DISEASE SURVEILLANCE ENHANCEMENT PROJECT - PHASE I
Mid-Term Review (MTR)
Final Report

I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

1.1 Context at Appraisal

1. *Context.* The Ebola Virus Disease epidemic in West Africa has confirmed the critical importance of strengthening national disease surveillance systems and inter-country collaboration in order to detect disease outbreaks earlier and respond more swiftly and effectively, such that the loss of human lives and economic costs are minimized. The West Africa Ebola outbreak also demonstrated that there can be rapid spread and large spill-over effects of a disease that can transcend local and national boundaries. Ebola emerged in a remote rural area of Guinea, but spread rapidly not only to densely populated urban centers within the country, but also to neighboring nations given the interconnected communities along their borders (Liberia, Sierra Leone), within the broader sub-region (Mali, Nigeria, Senegal), and then to other parts of the globe given the interconnectedness of today's commerce and transport systems. The concept of the Regional Disease Surveillance Systems Enhancement Program (REDISSE) is thus linked to the commitment that the global community has made to the countries of West Africa in light of the huge human and economic costs of Ebola, to strengthen weak human health, animal health, and disaster response systems to improve the preparedness of the region to handle future epidemics, and thereby minimize the national, regional, and potential global effects of such disease outbreaks.
2. The benefits and positive externalities of effective regional disease surveillance and response are substantial. Collective action and cross-border collaboration are essential and emphasized throughout the Project: (i) the Project supports countries' efforts to harmonize policies and procedures; (ii) countries are empowered to engage in joint planning, implementation and evaluation of program activities across borders at regional, national and district levels, and; (iii) the Project promotes resource sharing of high-cost specialized assets such as reference laboratories, training centers and difficult to access commodities. The surveillance and response capacity of the regional system depends on the strength of the individual national systems and the front-line or community-level capacities that need to be in place throughout the countries. In other words, a regional disease surveillance network functions from global to local and is only as strong as its weakest link. The REDISSE thus proposes to strengthen the full "value-chain" of disease surveillance across community, national, and regional institutions.
3. It is estimated that communicable diseases account for more than one third of the global disease burden and that most of this burden falls on the countries of West Africa. Countries in this region are at high-risk for infectious disease outbreaks including those of animal origin (zoonotic diseases). The World Health Organization (WHO) has documented at the time of REDISSE preparation that of the 55 disease outbreaks that were reported in Africa over the last decade, 42 took place in West Africa. Some common outbreaks in the region include cholera, dysentery, hemorrhagic fevers (e.g. Ebola virus disease, Rift Valley fever, Crimean-Congo hemorrhagic fever, Lassa fever, and Yellow fever), and meningococcal meningitis. West Africa also bears a disproportionate burden of malaria, tuberculosis,

acquired immunodeficiency syndrome (HIV/AIDS) and neglected tropical diseases, many of which are at risk of resurgence due to drug and insecticide resistance.

4. Over the last four decades, the world has witnessed one to three newly emerging infectious diseases annually. Of infectious diseases in humans, the majority has its origin in animals, with more than 70 percent of emerging zoonotic infectious diseases coming from wildlife. Since the beginning of the century, outbreaks such as COVID-19, Ebola viral disease, H5N1 H1N1 and H7N9 influenza, Middle East respiratory syndrome (MERS-CoV), Marburg virus, Nipah virus infection provide abundant evidence of the catastrophic health and economic effects of emerging and re-emerging zoonotic diseases. In this West Africa, emerging and re-emerging infectious diseases at the human-animal ecosystems interface are occurring with increased frequency, driven by land use changes, forest fragmentation, urbanization among other factors. As evidenced by the 2014-2016 Ebola outbreak in Guinea, Sierra Leone, and Liberia, and the re-occurrence and spread of H5N1 highly pathogenic avian influenza (HPAI), highly contagious diseases can easily cross borders in the region through the movements of people, animals and goods.
5. The ongoing COVID-19 pandemic has been spreading rapidly across the world since December 2019, following the diagnosis of the initial cases in Wuhan, Hubei Province of China. Since the beginning of March 2020, the number of cases outside China has increased thirteenfold and the number of affected countries has tripled. On March 11, 2020, the WHO declared a global pandemic as the coronavirus rapidly spreads across the world. As of November 5, 2020, there have been globally 47,930,397 confirmed cases of COVID-19, including 1,221,781 deaths, reported to WHO. In the ECOWAS region, as of November 4th, nearly 200,000 COVID-19 cases have been diagnosed and more than 2,700 deaths reported to WAHO.¹
6. The impacts of infectious disease outbreaks can be devastating to the fragile social and economic situation of countries. The World Bank (WB) estimates a global cost of US\$ 3 trillion in the event of a severe global pandemic such as the 1918 Spanish Flu. This is comparable to the impact of the 2008 global financial crisis. The World Economic Forum COVID-19 Action Platform recently put the cost of fighting COVID-19 at 500 times as much as pandemic prevention measures, projecting that the global economy could lose up to \$21.8 trillion in 2020. In the West Africa region, the EVD outbreak clearly eroded hard-won gains in the fight against poverty, including gains in human development and economic growth in Guinea, Liberia and Sierra Leone and the region as a whole. In these three countries, the estimated forgone output reached US\$ 1.6 billion, which represents over 12 percent of the countries' combined outputs. The outbreak also resulted in school closure for at least six months in the three countries and over 16,600 children lost one or both parents to the epidemic. Overall, the estimated loss in Gross Domestic Product (GDP) for the 15 countries in the Economic Community of West African States (ECOWAS) region was approximately US\$ 1.8 billion in 2014, US\$ 3.4 billion in 2015 and US\$ 4.7 billion in 2016 respectively. These economic losses were over and above the day to day burden that endemic human and animal diseases, including zoonoses, inflict on the people of West Africa.
7. Animal health is critical to public health and to the sustainable growth of the livestock sector. Livestock farming plays an important role in the ECOWAS region, contributing an average of 44 percent to its agricultural GDP. Livestock farming concerns virtually all rural households are important assets for vulnerable communities which rely on animals for food, income, and as a store of wealth, collateral

¹ <https://data.wahooas.org/outbreaks/#/>

or safety net in times of needs. Locally, livestock are key to social cohesion and stability, in both sedentary and pastoralist communities, and a crucial factor in combating rural poverty. ECOWAS has a trade deficit in animal products, which is particularly acute in the coastal countries. Demand for livestock products is expected to continue to grow significantly in the next decades, based on demographic trends, and propelled by increased urbanization and incomes. This evolution implies higher risks of occurrence of disease (frequency and/or severity), and higher impact of these diseases. In addition, food insecurity and other vulnerabilities increase further risk of emerging infectious diseases. The harvest of wildlife for human consumption is globally valued at several billion dollars annually and provides an essential source of meat for hundreds of millions of rural people living in poverty. Food insecurity is often a corollary to increased use of wildlife as a source for food, increasing contamination and spillover risks through contact with infected wild animals. Hence the importance of animal health, both domestic and wildlife.

8. *Project Development Objectives.* The objectives of the Project are: (i) to strengthen national and regional cross-sectoral capacity for collaborative disease surveillance and epidemic preparedness in West Africa; and (ii) in the event of an eligible crisis or emergency, to provide immediate and effective response to said eligible crisis or emergency.
9. *Components.* The project has five components listed and summarized below:
 - *C1. Surveillance and Information Systems (US\$ 27.91 million).* The component supports the enhancement of national surveillance and reporting systems and their interoperability at the different tiers of the health systems. This component is supporting national and regional efforts in the surveillance of priority diseases (including emerging, re-emerging and endemic diseases) and the timely reporting of human public health and animal health emergencies in line with the International Health Regulations (IHR -2005) and the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code. Based on in-depth disease surveillance systems assessments carried out during the first months of implementation, activities under this component are supporting (i) the establishment of appropriate linkages between national animal health and human health surveillance information systems, and between national systems to regional/international disease surveillance and reporting systems; (ii) cross-border collaboration in surveillance (including active/event based, passive and syndromic surveillance) for the early detection of cases; (iii) timely reporting by community-level surveillance agents as well as district health and veterinary facilities, and minimization of turnaround time from specimen collection to laboratory confirmation and reporting; (iv) the use of surveillance data for risk analysis (assessment, management and communication) to implement appropriate outbreaks prevention and control interventions across the sub-region.
 - *C2. Strengthening of Laboratory Capacity (US\$ 17.03 million).* The objective of this component is to establish networks of efficient, high quality, accessible public health, veterinary and private laboratories for the diagnosis of infectious human and animal diseases, and to establish a regional networking platform to improve collaboration for laboratory investigation. The project seeks to address critical laboratory systems weaknesses across countries, fostering cross-country and cross-sectoral (at national and regional levels) collaboration. It aims to do this through effective public health and animal health laboratory networks which would follow regionally harmonized policies, strategies, and protocols, aligned with internationally recognized practices, to ensure prompt and high-quality results.

- *C3. Preparedness and Emergency Response (US\$ 25.96 million)*. This component supports national and regional efforts to enhance infectious disease outbreak preparedness and response capacity. Activities under this component are supporting the (i) updating and/or development of cross-sectoral emergency preparedness and response plans (national and regional) for priority diseases, and ensuring their integration into the broader national all-hazards disaster risk management framework; (ii) regular testing, assessment, and improvements of plans; (iii) expansion of the health system surge capacity including the allocation and utilization of existing pre-identified structures and resources (at the national and regional level) for emergency response, infection prevention and control (IPC).
- *C4. Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness (US\$ 14.10 million)*. This component is crosscutting given that animal and human health workers form the backbone of Disease Surveillance (Component 1), Laboratories (Component 2) and Preparedness and Response (Component 3) and a strong, trained and motivated workforce is key to the implementation of surveillance activities and is essential for timely response to disease outbreaks. Effective human resource management aims at bringing the right people with the right skills to the right place at the right time. The project is providing support to the development of institutional capacity for planning and managing continuing workforce training, leveraging on existing training structures and programs across countries in the region.
- *C5. Institutional Capacity Building, Project Management, Coordination, and Advocacy (US\$ 29.06 million)*. This component focuses on all aspects related to project management, including fiduciary aspects (financial management and procurement), monitoring and evaluation (M&E), knowledge generation and management, communication, and management (capacity building, M&E) of social and environmental safeguard mitigation measures. It also provides for critical cross-cutting institutional support, meeting capacity-building and training needs identified. In technical terms, it supports the routine external independent assessment of critical animal health and human health capacities of national systems using reference tools (such as World Organization for Animal Health - OIE Performance of Veterinary Services (PVS) pathway and the Joint External Evaluation - JEE) of IHR core capacities to identify weaknesses and monitor progress. And in institutional terms, it supports the establishment of national and regional One-Health coordination platforms for the purpose of developing synergies, joint planning, implementation and communication.

1.2 Significant Changes during Implementation

10. The Regional Disease Surveillance Systems Enhancement Program - Phase I (REDISSE I) was approved by the Executive Directors on June 28, 2016 for an amount of US\$ 114.06 million equivalent to support the regional disease surveillance and response systems in West Africa. This amount includes an IDA credit of US\$ 70 million, an IDA grant of US\$ 40 million, and a Multi-Donor Trust Fund (MDTF) of US\$ 4.06 million from the government of Canada to strengthen the cross-sectoral and regional capacity for integrated disease surveillance and response in West Africa. REDISSE I became effective on December 2, 2016 and the closing date of the project is January 31, 2023.

Table 1: REDISSE I - Original funding allocation in US\$ million

	IDA Grant	IDA Credit	MDTF	Total
WAHO	20.00	-	4.06	24.06
Guinea	10.00	20.00	-	30.00

Senegal	-	30.00	-	30.00
Sierra Leone	10.00	20.00	-	30.00
Total	40.00	70.00	4.06	114.06

11. A Project restructuring was carried out in November 2019 to introduce changes to the results framework as follows: (i) incorporate revised baseline data and targets for project indicators based on JEE scores; (ii) eliminate inconsistencies between the regional and country targets; (iii) remove indicators that did not provide useful information; and (iv) add an indicator to monitor access by men and women to training opportunities financed by the project at regional and country level.
12. *Other Changes.* The restructuring also included additional financing (AF) to ECOWAS from the REDISSE MDTF in the amount of US\$ 9.07 million. These funds have been made available to WAHO and are being used to complete the program of work agreed with the Government of Canada under the REDISSE MDTF. This amount covers recipient executed activities only and is allocated to setting up an additional 100 Centers for Epidemiologic Surveillance (CES) bringing the total number of CES to 147 in selected ECOWAS countries. The AF became effective on 17 March 2020 and contracts were signed with the Centre for International Cooperation in Health and Development (CCISD) and Fondation Merieux (FMx) to implement the next phase of the work (53 CES²).

Table 2: REDISSE I - Funding distribution as of MTR³ in US\$ million

Country	Comp. 1	Comp. 2	Comp. 3	Comp. 4	Comp. 5	Total
Guinea	11.70	6.80	3.89	4.11	3.50	30
Senegal	6.82	7.45	8.14	4.83	2.46	30
Sierra Leone	5.33	2.48	13.93	5.16	3.10	30
WAHO	4.06	-	-	-	35.50	39.56
Total	27.91	17.03	25.96	14.10	44.56	129.56

13. In responding to the COVID-19 pandemic crisis, all implementation parties of REDISSE I have reallocated funding without activating the Contingence Emergency Response Component (CERC) since the project design has allowed for surveillance, preparedness and emergency response activities to take place. The total reallocation amounts to US\$ 16.72 million. Table 3 present the distribution among implementation parties.

Table 3: REDISSE I – Reallocation funding to COVID-19 response in US\$ million

Country	Amount reallocated	Activities financed
Guinea	12.50	Supported (i) Strengthening of surveillance at points of entry; (ii) reinforcing laboratory capacity for testing including essential equipment; and (iii) risk communication and community engagement; support for case detection and management including procurement of essential equipment and supplies.
Senegal	7.00	Supported (i) Procurement of logistics equipment for infection prevention and control, biomedical waste management equipment

² The distribution of CES among countries is Benin (10), Mali (10), Mauritania (10), Niger (10) and Nigeria (13).

³ Total funding amount includes original project allocation and 2019 additional financial

		and medicines for case management; (ii) risk communication and community engagement; (iii) laboratory diagnosis
Sierra Leone	6.05	REDISSE funds supported activities across the six pillars of the National Corona Virus Immediate Preparedness Plan (January 2020): surveillance and points of entry, laboratory diagnosis, infection prevention and control, IPC, case management, risk communication; and coordination.
WAHO	1.28	Contributed to ECOWAS regional strategy to (i) provide 15 ECOWAS member states with full capacity and resources to ensure biological diagnosis of COVID-19; and (ii) ensure that each member state has at least one intensive care unit specifically dedicated to the treatment of critical cases of COVID-19. Funds used for the procurement and distribution of extraction and testing kits, viral transport media and ventilators.
Total	26.83	

14. *Rationale for changes and their implication.* The changes introduced at restructuring allowed a better follow-up of the project's performance through revised results framework indicators and introduced one gender dimension in the project metrics, as well as consolidated the expansion of CES, a key surveillance structure that that have been valued to countries during COVID-19 early response effort. Furthermore, continued adjustments that have been introduced during the life of the project to date have improved its implementation, including a better description of countries performance and cross-analysis based on harmonized progress reports templates, as well as a close follow up with implementation partner organizations for training and technical support activities. All of these have impacted positively in the achievement of project yearly targets, both at national and regional levels.
15. Repurposing funds from Components 1, 2 and 3 to respond to COVID-19 has been carried out by updating the 2020 Annual Work Plan and Budget (AWPB) and procurement plans. The COVID-19 emergency response activities mostly concentrated on the provision of services and goods as described in Table 3 above. To date, some procurement process is still ongoing. This reallocation has impacted negatively the implementation of planned project activities, thus, if replenishment funding is not available a Level II restructuring shall be carried out to reflect changes on indicators' targets.

II. OUTCOME

2.1. Relevance of PDOs

16. The Project Development Objectives (PDOs) continue to be extremely relevant. REDISSE program was established on a post-Ebola context in order to strengthen West African national and regional capacity for disease surveillance and epidemic preparedness. Since REDISSE Phase I became effective in December 2016, the region has experienced multiple disease outbreaks for which the capacity to respond often remained sub-optimal. The current COVID-19 pandemic has further highlighted the relevance of the REDISSE program investments in disease surveillance and epidemic preparedness.
17. Despite REDISSE's investment in Health Security in the region, the WHO Global Health Security (GHS) index scores for the West Africa region still lag in comparison to other regions. The GHS Index Report 2019 highlighted that the average score for capacity for surveillance, epidemic preparedness and

response in ECOWAS and Mauritania is 32.29/100, while the average score of all the 195 countries evaluated is 40.83/100, which by itself is far from being sufficient to preparedness and response. Severe weaknesses in capacity to detect and respond to health emergencies were highlighted for the region, including gaps in health systems, vulnerabilities to political, socio-economic and environmental risks that can confound outbreak preparedness and response, and a poor adherence to international norms, such as the International Health Regulations (IHR) and the OIE standards on animal welfare.

18. National public health capabilities and infrastructures, including disease-surveillance systems and laboratory networks, as well as human capacity (e.g., training in surveillance, epidemic response, and diagnostic) remain at the core of global health security, as they are the first line of defense in infectious disease emergencies. Since REDISSE program inception, the region has experienced many outbreaks, including Lassa fever, Poliomyelitis, Dengue fever, Meningitis, Hepatitis E, Rift Valley fever and COVID-19, and the Project has contributed to address them by coordinating and strengthening surveillance and response activities, including: supporting active surveillance, field investigation and contract tracing; laboratory diagnostics; case management and infection prevention and control; social mobilization and sensitization of community and health workers to improve awareness, preparedness and general response activities. Furthermore, the project contributed to a new cadre of Field Epidemiology and Laboratory Training Program (FELTP) graduates from the three Tiers of the Program (Frontline, Intermediate and Advanced, who have proved essential in the strengthening of outbreak prevention, detection and response activities.
19. *Rating.* Considering the above, the Relevance of PDOs is rated using a four-point scale “High, Substantial, Modest, and Negligible”, according to the following criteria:

High	There were no shortcomings or at most minor shortcomings in the relevance to the current Bank CPF/CPS ⁴ . The operation provided clear evidence of the alignment of the PDOs to the current CPF/CPS objectives. Or, if circumstances changed, the PDOs were changed accordingly to keep objectives fully relevant.
Substantial	There were moderate shortcomings in the relevance of the operation’s development objectives to the current Bank CPF/CPS. The operation provided generally sufficient information to show the alignment of the PDOs with the current CPF/CPS objectives. Or, if circumstances changed, the PDOs were changed accordingly to keep objectives fully relevant.
Modest	There were significant shortcomings in the relevance of the operation’s development objectives to the current CPF/CPS objectives. The operation provided limited information to assess the alignment of the PDOs with the current CPF/CPS objectives. Or, if circumstances changed, the PDOs were not changed accordingly to keep objectives fully relevant.
Negligible	There were severe shortcomings in the relevance of the operation’s development objectives to the current Bank CPF/CPS. The operation differed from the current CPF/CPS objectives or did not provide any information to assess the alignment of the PDOs with the CPF/CPS development objectives.

20. The relevance of PDOs is rated *High* as there were no shortcomings in the relevance to the current Bank Country Partnership Framework (CPF) / Country Partnership Strategy (CPS) for REDISSE I countries, as well as clear alignment of objectives. More importantly, the relevance of the project

⁴ The Country Partnership Framework (CPF) / Country Partnership Strategy (CPS) are country engagement public disclosed documents prepared by the Bank in association with the government and informs the strategic investments for five years.

objective came to the fore with various outbreaks and the unexpected (in geographic spread and scope) COVID-19 pandemic as the Project afforded countries and WAHO the ability to prepare for and to provide an immediate and effective response to the outbreak when transmission in West Africa started.

2.2 Results Framework

21. The Project Results Framework (RF) set at the Project Appraisal Document (PAD) comprised of twenty indicators, out of which six relate to the PDO with the remaining being Intermediate Result indicators (IRI). Most of the indicators (13/18) are linked with the JEE⁵ of core capacities of countries in implementing the International Health Regulations (IHR).
22. Shortcomings on the RF as proposed originally at the PAD were noted and discussed at the Third Regional Technical Meeting held in Lagos on October 15-17, 2018. These included (i) the disparity in the countries RF indicators reference and target's scores sources, (ii) the inconsistency between countries and regional RF indicators' targets, (iii) the inadequacy of some indicators definitions, leading to disparities in calculation method, and (iv) the design of the regional result framework that related to the sum of countries' performance rather than the region.
23. A workshop to align country and regional indicators organized by the WB and WAHO in Dakar from November 12 to 14, 2018, addressed these deficiencies, and a project restructuring was carried out. These changes include: (i) the deletion of "IRI-14: Turnaround time from date of specimen collection to date of results returned for priority diseases: number of countries with a turnaround time of 3 days or less" and "IRI 16: Total number of project beneficiaries and percent female"; (ii) harmonization of countries result framework indicators and yearly targets scores based on the first JEE scores as the reference-scores; (iii) alignment of countries and regional result framework; (iv) provision of clearer definition to the indicator "Community participation to the project management and implementation" and its assessment method; (v) disaggregation of the Field Epidemiology and Laboratory Training Program (FELTP) training indicator (IRI-6) to capture following aspects: types of training (Advanced, Intermediate and Frontline), gender distribution of training beneficiaries, training provider and funding sources; and (vi) adoption of new timeline for WAHO Project progress reporting (Mid yearly Progress Report: 15 September, and Annual Progress Report: 15 March).
24. Countries have indicated that the use of indicators based on JEE scores, as these indicators measure country capacity that results from an array of activities in a specific technical area, poses the challenge of measuring if progress on the indicators reflect investments by REDISSE or from multiple stakeholders including government and other development partners, or a combination of both.
25. The current RF summarizes well the project intervention logic and makes it possible to assess the achievement of project's outputs in a standardized and comparable fashion, however some challenges must be addressed, including revision and/or adoption of additional indicators to:
 - Properly measure the real contribution of the REDISSE Project under JEE-related indicators;

⁵ The JEE is conducted every two years and a self-evaluation is carried out during the intermediate years.

- Capture results of regional coordination and harmonization activities such as drug and vaccine management, research on public health emergencies, regional rapid response team performance, laboratory networking, and cross-border collaboration;
- Measure the progress of activities to prevent the emergence and spread of Antimicrobial Resistance (AMR), which poses a substantial and evolving threat to disease control and health security related;
- Measure continuity of essential services during emergencies, as resilient health services minimize indirect impact of public health emergencies
- Allow countries to identify key gender dimensions that hamper the achievement REDISSE PDOs; capture already-occurring activities that address gender dimensions but are not reported under current indicators; and ensure that all data collected, analyzed and reported under current indicators is sex-disaggregated.
- Update the RF in the context of new SPAR tool adopted by WHO, as well as, revise indicator - IRI1 “Real-time, interoperable, interconnected, electronic reporting system (number of countries with JEE score ≥ 4)”, as the interoperability portion of the indicator has been removed from the JEE 2nd edition;

2.3 Achievement of the PDOs (efficacy)

Assessment of Achievement of each Objective or Outcome

26. The analysis carried out by each Project implementation party has indicated that REDISSE I is on course to achieve its development objectives. As the Project seeks to strengthen national and regional cross-sectoral capacity for collaborative disease surveillance and epidemic preparedness in West Africa, it has been noted that this agenda is shared with other development partners. Coordination of efforts to avoid duplication has been an issue, therefore when moving forward streamlining of partner and donor investments around NAPHS is warranted to ensure maximization of impact and achievement of the PDO. This streamlining could help overcome the current challenge in differentiating attribution from contribution to promote the regional health security agenda. Nevertheless, Project activities have secured concrete progress evidenced by the recent response to COVID-19.
27. *PDO indicator 1: Progress towards establishing an active functional One-Health platform.* Through the project, countries have moved from having no capacity at baseline to having a governance structure established and endorsed. The project supported establishment of One-Health inter-ministerial committees and One-Health (OH) technical committees with different technical working groups. in terms of achievements at the country level, it is important to highlight:
- A regional “One Health” platform has been established in 2017 as ECOWAS’s human, animal and environmental health sectors political decision-making body. A OH roadmap was validated by the three sectoral ministries in member states. The regional technical meetings of the multisectoral platform enabled all concerned countries to share their respective experiences in terms of harmonizing and coordinating interventions between the human, animal and environmental health sectors for epidemic preparedness and response;

- WAHO has provided, under REDISSE, support to operationalize the Regional Animal Health Center (RAHC), the ECOWAS agency responsible for animal health, which should play a key role supporting One Health in the region. Nevertheless, it has faced challenges to become fully operational;
- Guinea has developed a National Strategic OH Plan (2019-2023) and a governance manual that allowed the establishment of the One Health Platform, decentralized to provincial and district levels;
- Senegal is currently implementing the One-Health Global Health Security National Action Plan (2019-2021) with the contribution of development partners including the Food and Agriculture Organization (FAO), United States Centers for Disease Control and Prevention (CDC), United States Agency for International Development (USAID), WHO, and WB (where REDISSE AWPB activities are linked to this plan);
- Further support was provided by the Project to mainstream One-Health agenda in Sierra Leone, where the platform has also been launched at the district level, however challenges to facilitate community involvement and ownership are still present.

28. *PDO Indicator 2: Laboratory testing capacity for detection of priority diseases.* With the support from the Project, national laboratory systems across REDISSE countries have been strengthened, and among the main achievements:

- A network of fifteen regional reference laboratories of both human and animal health laboratories, including two Research Institutes (Pasteur Institute in Dakar and Abidjan), has been established;
- A regional observatory to monitor antimicrobial resistance and a biobank in Abidjan have been established with support from WAHO in collaboration with Africa CDC, FAO, USAID, and WHO. Furthermore, the service contracts and action plans for the twinning program between national reference laboratories and three regional laboratory centers of excellence (Noguchi in Ghana, MRC in the Gambia, IPD in Senegal) are validated and regional strategic laboratory policy documents were made available. In addition, a reference laboratory accreditation program to support regional reference laboratories toward accreditation ISO/ 15189 using Stepwise Laboratory Improvement Process towards Accreditation (SLIPTA) approach has been established;
- In Guinea, with the support of REDISSE and other partners (Expertise France, USAID/IDDS/FAO and AFD/LABOGUI), the laboratory system's capacities have significantly improved in the detection and surveillance of priority diseases. Presently, the national veterinary laboratory can test for all priority zoonotic diseases, including COVID-19;
- REDISSE in Senegal has supported the setting up of the laboratory network and the equipment of the National Public Health Laboratory and the National Livestock and Veterinary Research Laboratory;

- National laboratory systems across REDISSE I countries are performing core tests for human health priority diseases, including Measles, Yellow fever, Cholera, Influenza, PCR, and HIV, in addition to regional labs that detects Ebola, Lassa fever, Zika and Monkey pox. Nevertheless, animal health laboratory and testing capacity across countries remains modest and requires to be strengthened.

29. *PDO Indicator 3: Progress in establishing indicator and event-based surveillance systems.* In terms of surveillance REDISSE has contributed largely to strengthen national and regional systems. Assessing the activities and results to date, it is important to indicate:

- WAHO, in collaboration with WHO and University of Oslo has established regional computerized database, the District Health Information Software 2 (DHIS-2) which is interconnected with the national databases. The harmonization of the automatic data transfer processes between WAHO and countries is still in progress. In terms of COVID-19 data management, WAHO has established a dashboard that has been key in monitoring the epidemic surveillance despite some data discrepancies with the WHO Situational Reports. The dashboard should be expanded for all epidemic prone diseases to strengthening the surveillance system in the region.
- REDISSE supported Senegal with (i) the development of the 3rd edition of the Technical Guidelines for Integrated Disease Surveillance and Response in the African Region (Surveillance Intégrée des Maladies et Riposte- SIMR/ Integrated Disease Surveillance and Response Guideline - IDSR), (ii) support activities (training, supervision, and quarterly coordination meeting), (iii) establishment of surveillance focal points throughout the country's health pyramid, and (iv) development of the national technical guide for the operationalization of community-based surveillance of priority diseases and zoonoses under One-Health approach;
- Sierra Leone with the support from REDISSE and other partners now has demonstrated capacity as both indicator and event-based surveillance systems to detect public health threats are in place. This is also seen in the progress made in terms of intermediate indicator tracking surveillance systems for priority zoonotic diseases or pathogens with the country moving from a JEE score of 1.5 at baseline to 3 for both animal and human health
- In Guinea, REDISSE project supported: (i) The training of national trainers on IDSR, managers and community health agents on human, animal and environmental health; (ii) joint quarterly supervision missions (human, animal and environmental health); (iii) construction Border Inspection Posts; (iv) the development of surveillance protocols for priority diseases including zoonoses in slaughterhouses;

30. *PDO Indicator 4: Availability of human resources to implement IHR core capacity requirements.* A series of training activities have been made available to countries to strengthen human resources needed to manage health security interventions. In terms of achievements, the following are highlighted:

- WAHO has coordinated the training of the heads of CES and associated laboratories with CCISD and FMx as implementing partners, and supported countries in terms of FELTP frontline training of national epidemiology and laboratory trainers and technicians. In relation to the FELTP-Advanced training, one hundred human and animal health professionals have been recruited

under REDISSE funding to attend the program in Ouagadougou and Ghana, of which the first cohort of 50 participants will conclude training by the end of 2020, and the second cohort by the end of 2021.

- In Guinea, REDISSE has supported the short term training of two National Directorate of Endemic Diseases Control managers in M&E in France, four National Lab Directorate managers in Morocco in quality assurance, four national trainers on SIMR/IDSR in Lomé, four laboratory equipment maintenance technicians in Cotonou and four Central Veterinary Diagnostic Laboratory managers in Dakar in bacteriology, virology and parasitology (PCR technique). A training of the 7th cohort of 34 agents in field epidemiology is underway through an agreement with the African Field Epidemiology Network (AFENET) that initially would end in March 2020 but due to COVID-19, it will end in November 2020.
- In Senegal, REDISSE project contributed to strengthen IHR core capacity of maritime health personnel, train public and private agents on National Epidemiological Surveillance System for Animal Diseases (SNSE), provide master level training in Public Health to military doctors and training of officers from the National Hygiene Service on vector control techniques and chemicals management as well as DSPV officers on food safety;
- In Sierra Leone, REDISSE project REDISSE has supported MAF in: increasing the availability of human resources needed to implement IHR core capacity by hiring Lab Manager and Lab Technicians for the Central Veterinary Laboratory at Teko; hiring data manager and assistant for the Epidemiological Unit (compiling weekly surveillance report) at MAF; enrolling students in the veterinary medicine program at Kwame Nkrumah University of Science and Technology ,Kumasi, Ghana and at Makerere University in Uganda.

31. *PDO Indicator 5: Multi-hazard national public health emergency preparedness and response plan is developed and implemented.* REDISSE has effectively supported national and regional efforts to enhance infectious disease outbreak preparedness and response capacity, which was evidenced by aligning all project activities with each country's National Action Plan for Health Security (NAPHS) and through the quality of countries and WAHO response to COVID-19. In terms of achievements, the following are highlighted:

- WAHO has developed a regional strategic preparedness and response plan for public health emergencies 2020-2024 to build regional capacities for disease surveillance, prevention, and response. The plan was presented at the National Coordinating Institutions meeting in December 2018 in Abuja and validated at the 20th Ordinary Assembly of Health Ministers of ECOWAS in 2019. The Regional Rapid Response Team has been established and the Manual of standard operating procedures developed and validated in 2018. Nevertheless, the Regional Centre for Surveillance and Disease Control (RCSDC) is still not fully staffed and therefore not fully operational.
- In Guinea, REDISSE has supported strengthening the coordination of responses and multi-sectoral collaboration in preparing for and responding to public health emergencies.
- Annual emergency and disaster simulation exercises have been carried out to test national multi-risk plans in Senegal with the contribution of the REDISSE project and other partners.

- With support from REDISSE project, Sierra Leone now has an “All Hazard Plan”, well-coordinated and is usually periodically updated to address all forms of hazards including flooding, land/mudslide, fire outbreaks, disease outbreaks

32. *PDO Indicator 6: Progress on cross-border collaboration and exchange of information across countries.* The Regional One-Health Platform has enabled all concerned countries to share their respective experiences in terms of harmonizing interventions between the human, animal and environmental health sectors for epidemic preparedness and response. Notwithstanding progress, there are still challenges among countries to formalize data sharing contribution and setting up of formal networks to facilitate collaboration in terms of disease surveillance. This mixed results situation indicates that further work needs to be carried out by WAHO and countries to strengthen cross-border collaboration. In terms of achievements, the following is highlighted:

- WAHO has facilitated the training of human and animal surveillance data managers in the regional platform for data sharing. REDISSE has permitted WAHO to support countries with the JEE and PVS of their capacities to implement the IHR.
- Since Project inception, all three countries have ad hoc and informal information exchange practices with neighboring countries for outbreak response, particularly during the COVID-19 pandemic.

Justification of Rating for Overall Efficacy

33. Overall Efficacy (extent of achievement of the PDOs) is rated using a four-point scale “High, Substantial, Modest, and Negligible”, according to the following criteria:

High	The project exceeded or fully achieved its objectives (intended outcomes) or is likely to do so.
Substantial	The project almost fully achieved its objectives (intended outcomes) or is likely to do so.
Modest	The project partly achieved (or is expected to partly achieve) its objectives (intended outcomes).
Negligible	The project barely achieved or did not achieve (minimal achievement, if any) its objectives (intended outcomes).

34. The project’s efficacy is rated *Substantial* as the project is on course to achieve its intended outcomes. PDO and IRI indicators have been almost fully achieved when considering the mid-term goals. However, there are still some challenges to be addressed in terms of coordination among countries’ governmental agencies, development partners and stakeholders. This situation exacerbates the need for establishing formal networks to facilitate collaboration in terms of cross-border disease surveillance. Furthermore, important regional agencies like RCSDC and RAHC are still not fully operational, which hinders project outcomes both in epidemic preparedness and response as well as in the sphere of animal health and overall “One Health”.

2.4 Efficiency

Assigning a Rating for Efficiency

35. *Economic efficiency.* Conducting an economic analysis to assess efficiency in a regional project poses some challenges, particularly when projected costs of activities are absent in the PAD and other supplemental documents. An alternative solution could be carrying out a comparative cost analysis with similar designed national projects, however none is available in the WB Health portfolio. Thus, discussing efficiency in terms of cost-effectiveness needs to be centered in the estimated/perceived economic gains with regards to Project interventions.
36. The promotion of One-Health approach in the region embedded in REDISSE design has brought an unexpected positive externality. By promoting the health security agenda and sharing resources among and within countries and partners better planning and greater transparency with the use of resources are observed, which ultimately enhance economic efficiency and reduce financial losses by duplication of interventions.
37. In terms of Project activities impact, according to Jonas *et al*⁶ the annual potential economic losses due to pandemics are high, at least, US\$ 30 billion. Even if a proper economic analysis has not been carried on the COVID-19 response to measure the impact of REDISSE investments and early regional and national preparedness activities it is safe to assume that economic losses in the region could have been greater if the Project had not been effective.
38. Regarding animal health, the OIE estimates that around 10 percent of animal production is lost through diseases in countries with poorly performing Veterinary Services. Infectious diseases in animals have significant impacts on their health and welfare. They impose direct costs on animal productions, as a result of reduced productivity, deaths, and cost of disease control. A small number of diseases only are responsible for nearly US\$ 9 billion losses a year in Africa, of which 87% mostly due to death of animals. Most of these diseases could be prevented and/or controlled in a cost-efficient manner. REDISSE brought the animal health issues with the One-Health agenda in West Africa, established regional and national One-Health platforms, and contracted OIE to support countries in strengthening animal health services through assessments and gap analysis. The project also has been supporting RAHC to become a coordination leader in the region with the aim to decrease loss of animal production.
39. *Implementation efficiency.* As the Project became effective within four months of board approval, the actual implementation started on average 10 months after approval due to delays in setting up the Project Implementation Units (PIU) and preparation of work plans. REDISSE countries in the first three years of implementation had proposed overly ambitious and poorly prioritized AWPB leading to very low completion rate for proposed activities. The consequence is that most activities are being rolled over from year to year. In addition, the AWPBs have been submitted for approval late, thus in the first three years WB approval has been granted on average in March leaving solely 9 months for the implementation of an annual work plan. There was also a challenge with the quality of the proposals/concept notes submitted for WB no objection leading to back and forth before getting approved, which directly relates to challenges with producing quality inputs (terms of reference and technical specifications) that would facilitate the procurement process.
40. An additional factor affecting the operational efficiency is that working conditions are non-conducive to staff motivation and retention in some PIUs. Staff turnover coupled with a slow and long

⁶ The World Bank. Pandemic Risk.

https://www.worldbank.org/content/dam/Worldbank/document/HDN/Health/WDR14_bp_Pandemic_Risk_Jonas.pdf

replacement process impact negatively on Project performance due to the increase of workload of interim staff, who are not specialized on the tasks they are filling for. Staff loss is also a loss of a wealth of knowledge and expertise in implementing a complex Program as REDISSE. Further to this situation, new staff replacement learn on the job WB processes and procedures, which is not optimal and may lead to avoidable delays in project implementation.

41. Efficiency is assigned an overall rating based on a four-point scale “High, Substantial, Modest, and Negligible”, according to the following criteria:

High	Efficiency exceeds expectations.
Substantial	Efficiency is what would be expected in the project’s sector.
Modest	Efficiency is below expectations in the project’s sector.
Negligible	Efficiency is very low in comparison with both the benefits (if any) and with recognized norms in the project’s sector.

42. The project’s efficiency is rated *Modest*. Project investments have allowed countries to make considerable economic savings vis-à-vis the potential negative impact of an outbreak, evidenced by the response to COVID-19. However, issues related to quality of AWPB planning, implementation challenges with activity approval and implementation, and staff retention lead to poor performance in terms of efficiency.

2.5 Justification of Overall Outcome Rating

43. The overall Outcome rating is derived by combining the assessments of Relevance, Efficacy, and Efficiency, using a six-point scale according to the following criteria:

Highly Satisfactory	There were no shortcomings in the project’s achievement of its objectives, in its efficiency, or in its relevance.
Satisfactory	There were minor shortcomings in the project’s achievement of its objectives, in its efficiency, or in its relevance.
Moderately Satisfactory	There were moderate shortcomings in the project’s achievement of its objectives, in its efficiency, or in its relevance.
Moderately Unsatisfactory	There were significant shortcomings in the project’s achievement of its objectives, in its efficiency, or in its relevance.
Unsatisfactory	There were major shortcomings in the project’s achievement of its objectives, in its efficiency, or in its relevance.
Highly Unsatisfactory	There were severe shortcomings in the project’s achievement of its objectives, in its efficiency, or in its relevance.

44. The overall rating for the Project's development objective is *Moderately Satisfactory*, justified by the combination of ratings for relevance of PDO (high), effectiveness (substantial), and efficiency (modest) in carrying out Project activities from 2018 to 2020. There were moderate shortcomings in terms of efficiency that must be addressed in order to improve Project performance.

2.6 Other Outcomes and Impacts (if any)

Gender

45. REDISSE is a project for strengthening surveillance of diseases with potential of epidemic outbreaks, and its original design does not present greater gender sensitivity as the whole population was perceived as the final beneficiary. Notwithstanding this initial limitation, in 2019 the project restructuring introduced four intermediate indicators to capture gender differences in project results. These indicators track progress on the extent to which women participate in the flagship intervention for improving human resources capacity for IHR, the Field Epidemiology Training Program (FETP), at frontline, intermediate and advanced levels. However, these capture only one of many gender dimensions relevant for the Project. The Project currently does not include indicators to identify and address other gender dimensions in Project activities planning, implementation and reporting. Furthermore, there is also the need to address the lack of sex desegregation of the data that is collected as per the RF, which hinders identification and analysis of possible gender differences in health events, symptoms, syndromes and other patterns of disease surveillance measured by REDISSE's surveillance systems. This, in turn, does not allow health emergency response to be adequately tailored to address identified gender differences.
46. In terms of positive impact, the project has integrated gender dimension in training programs provided at the CES and FELTP, where sex desegregated data can be capture and analyzed to document gender disparities among trainees. The 2019-2021 advanced level FELTP in Ouagadougou and Ghana Universities registered 30 percent of women participation. In addition, the human resource mapping supported by REDISSE in Sierra Leone has indicated that although 68 percent are females, most do not possess higher education that qualify them for advanced education programs or top-level positions. This might be one of the factors that explain the lower female participation in advanced FELTP courses; however it is important to note that since this is the first time FELTP recruitment by sex has been reported, the reasons for low women's participation have not yet been analyzed and thus the factors responsible are not yet understood.
47. In Sierra Leone, for surveillance activities, before engaging in any activity at community level, there are consultations with traditional leaders and community stakeholders including women's group and Mamie queens. These consultations aim to increase awareness and participation of women in the implementation of the project activities. Priorities are also given to women when training people to conduct surveillance activities. However, there are as of now no specific indicators in the RF to assess these important activities.
48. There remain many challenges to identify and address key gender dimensions of health emergency preparedness and response within REDISSE. One key challenge is that the main frameworks of the SPAR and JEE do not include any explicit gender-related indicators, making it harder to embed gender into REDISSE. Nonetheless, the MTR-1 discussions illustrated that REDISSE-1 countries and WAHO, as well as the REDISSE core team, appreciate the importance of addressing the gender dimensions of health security, and are enthusiastic to address it as far as is feasible, given existing constraints and that the countries are midway through their Projects.

Institutional strengthening

49. REDISSE has been pivotal for the establishment of regional and national One-Health platforms to harmonize surveillance, preparedness and response interventions of human, animal and environmental health sectors. Furthermore, the Project has contributed to the reinforcement of the capacities of the WAHO and governmental agencies in terms of provision of logistical means, office automation and training. Among the main achievements, it is important to highlight:

- Through its role of regional coordination unit WAHO has been strengthened in terms of effectively becoming the regional lead agency for disease surveillance and response, furthering the investment made by the West Africa Regional Disease Surveillance Project (WARDS). Evidence of WAHO's growth are its support to ECOWAS countries in developing regional strategic documents, supporting the establishment of regional laboratory network, setting up an information sharing platform, facilitating human resource capacity development, and carrying out advocacy. Furthermore, the WAHO has partnered with the WB for coordination of additional regional projects (1. Sahel Women's Empowerment and Demographic Dividend Project-SWEDD; 2. Sahel Malarial and Neglected Tropical Diseases-SMNTD; and 3. West African Medicines Regulatory Harmonization-PharmHarm) and with other development partners for complementary technical and financial support;
- REDISSE has contributed to strengthening the National Health Security Agency (ANSS) in Guinea, who is the technical coordinating agency in One Health and played a key role in responding to disease outbreaks, including foot and mouth disease and most recently COVID-19;
- In Senegal, REDISSE has contributed to the process of elaboration, validation and implementation of the NAPHS, which is a multi-year program. The Project supports the implementation of specific NAPHS activities and has strongly contributed to strengthening human resources technical skills of sectors involved in this process;
- REDISSE has been providing support to the activities of the EOC in Sierra Leone. With the review of the Public Health Ordinance Act supported by REDISSE, the EOC will serve as a precursor to the National Public Health Agency which will be established in line with the provision of the Act. The REDISSE project will also provide support to the agency when established.

Poverty reduction and shared prosperity

50. WHO has stated that poor health is both a cause and a consequence of poverty⁷. Illness can undermine a family's savings, diminish learning capacity, reduce productivity and compromise quality of life - thus creating or perpetuating poverty. Conversely, the poor are exposed to greater individual and environmental risks, are less well nourished, less well informed, and have less access to health benefits. As a result, they are at greater risk of disease and disability. Better health can prevent poverty or provide a way out of poverty. Evidence now shows that health generates greater and more equitably distributed wealth to the extent that it contributes to the accumulation of human and social capital and to increased productivity. When children are healthy, they are better able to learn, and adults are better able to work and provide for their families. The conclusion is clear: breaking this vicious cycle requires a focus on improving and protecting the health of the poor.
51. There is a strong economic case for investing in integrated disease surveillance and response systems. Preventing and controlling zoonotic disease outbreaks yields large economic benefits⁸, and the benefits of disease surveillance go well beyond the health benefits as it reduces the number of

⁷ *Poverty and health. Report by the Director-General to the Executive Board.* Geneva, World Health Organization, 1999 (document reference EB105/5)

⁸ In the economic analysis of People Pathogens and our Planet, the Bank estimated an 86% of Return of Investment. (<https://openknowledge.worldbank.org/handle/10986/11892>)

infections, reducing mortality and morbidity, and health care costs. Disease outbreaks affect the economy by (i) decreasing demand (as personal income, investment, and exports fall), (ii) decreasing supply (as agriculture production falls and businesses in many sectors close), and (iii) reducing labor, capital, and productivity, which are the major components of economic growth. Figure 1 succinctly presents the linkages of cause/effect of an outbreak in terms of poverty impact.

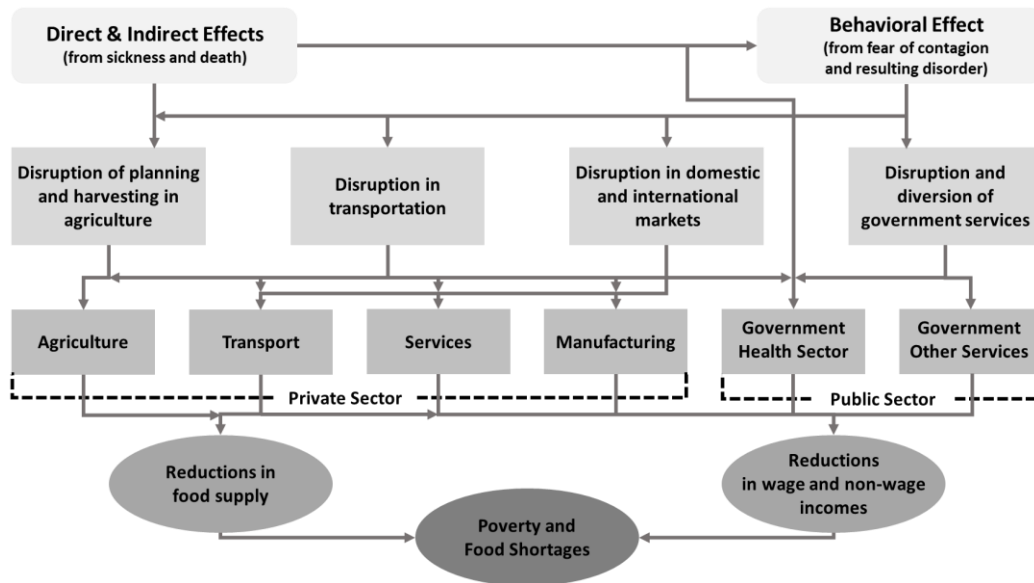


Figure 1. Impact of an outbreak on the poor

52. The rationale for a publicly provided regional approach to disease surveillance and response network in West Africa lays in three aspects. The first is the overwhelming economic burden that infectious diseases, individually and collectively, place on the region. The second rests on the status of a disease surveillance system as a global public good, which is both non-rival and non-exclusive, and the benefits are spread across individuals and countries as there is no practical way to restrict them. And finally, the third is based on the sharing of resources to enhance efficiency.
53. REDISSE's focus on enhancing the capacity of the country to rapidly detect, prepare and respond to disease outbreaks, which safekeep the health status of the general population and reduce health care burdens, contributes to poverty reduction indirectly by supporting the continuity of socioeconomic activities and livelihood. It may also contribute directly by enabling people to spend less than they would otherwise on care for sickness if disease outbreaks were not controlled to the extent that they are by REDISSE activities.

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

3.1 Key Factors during Preparation

54. The preparation of REDISSE Program was conducted in a participatory process with a multisectoral approach. It is the culmination of a long process that started in 2016 and is based on the existing situation, the Ebola outbreak of 2014-2016. The project was developed with the intention to strengthen regional, national and sub-national capacity for disease surveillance, preparedness and

response to disease outbreaks. Guinea, Liberia, and Sierra Leone were the three most affected West African countries, which led to the development of health system recovery and strengthening of response plans for at least the next five years following the outbreak. Building up a resilient health system to effectively respond to health emergencies was universally accepted as smart investments to be made against future disease outbreaks.

55. REDISSE I was developed in six months, initially as an emergency project, with financial support from Bill and Melinda Gates Foundation (BMGF) of US\$ 0.95 million and technical support from CDC. At the WB's Regional Operations Committee (ROC) decision meeting, it was decided that since the EVD crisis was controlled the project was recategorized as regular, and safeguards assessments need to be prepared approval. The original design included Nigeria and Liberia, who at negotiations stage decided to postpone their participation, and currently they are participating in REDISSE Phase II.
56. In terms of key factors during the preparation stage or issues related to quality at entry that affected implementation and outcomes, the following factors are highlighted:
 - *Results Framework.* The results' framework was logically formulated with both intermediate and outcome indicators linked to the PDO. The PDO is realistic and relevant with two clearly defined objectives. The indicators are well aligned with the JEE indicators with baseline and appropriate targets set. An annual self-assessment of the country's IHR core capacities using the JEE/State Party Self-Assessment Annual Reporting (SPAR) tool was designed to track progress on the indicators. However, while the indicators are well aligned with JEE indicators, the frequent revision of the JEE indicators by WHO (which was not envisaged at project preparation), as was the case in 2019, poses a challenge to consistent tracking of the indicators. Moreover, as there was no gender expert on the team, the Results Framework did not include attention to gender dimensions;
 - *Project risks.* The project team appropriately identified key risks that could potentially affect implementation. The overall risk rating for the project at appraisal was substantial. The overall rating is based on an assessment of component risks in which the risk was rated as substantial in six categories: (i) Political and Governance; (ii) Macroeconomic; (iii) Technical Design; (iv) Fiduciary (v) Environment and Social, and (vi) Stakeholders. Sector Strategies and Policies was rated moderate while institutional capacity for implementation and sustainability was rated high. Key mitigation measures designed at implementation include provision for strengthening of institutional capacity, inclusion of technical assistance in the project to build the capacity in financial management, procurement, and M&E. To address environmental and social risks, Environmental and Social Management Plans (ESMP) and Waste Management Plans were prepared, consulted upon and disclosed;
 - *Lessons learned from ongoing health and agriculture projects.* The preparation of the project benefited from the ongoing in the countries. These lessons include (i) involvement of appropriate stakeholders, government and partners; (ii) setting of realistic targets; and (iii) effective implementation arrangement;
 - *Readiness for Implementation.* The choice for institutional arrangements for project implementation has proven to be right. At regional WAHO has hosted the regional secretariat of the project and technically supported countries, facilitating coordination among implementing agencies and development partners. In terms of in-country institutional arrangements, the PIUs

have been chosen to be housed at the Ministry of Health, which also doubles as the chair of the One-Health national platform facilitating the coordination with other sector ministries for project implementation.

3.2 Key Factors during Implementation

Factors subject to the control of government and/or implementing entities

57. In terms of institutional arrangements, governance, coordination and engagement, with clear roles and responsibilities of different stakeholders to avoid administrative barriers or structures that slow implementation, the Project overall has been performing well despite initial challenges with coordination among government agencies. Countries have put forward under the One-Health platform, who serves as the Project Steering Committee, a sub-structure of technical working groups to facilitate the preparation of sector planning, activities concept notes, and inputs for procurement (Terms of Reference-TOR and technical specifications). However, intersectoral collaboration still needs to be strengthened through high-level advocacy of from strategic actors. There is also a need to advocate for additional resources to strengthen the animal health sector, including wildlife, and even more so the environment sector.
58. Regarding human resources and organizational capacity, largely countries PIU are staffed with qualified personnel according to financing agreements. Some PIUs, like Guinea, have benefited with the stability of the Project staff that has accumulated experience with other WB projects, some other has faced limitations to fill and retain staff. Nevertheless, what is most concerning is the lack of qualified technical staff in some governmental agencies, which translates in deficiencies on preparation of AWPB and other technical documents leading to delays in approval processes and activity implementation.
59. In terms of legislation and regulations, the Project complies with all requirement, including the Project's Operations Manual, financial and accounting procedures and the World Bank's procurement code and directives. This framework provides a legal environment conducive to the implementation of the project activities.
60. Regarding governance and transparency, the administrative and financial management autonomy of the PIUs are respected and political influences are negligible.
61. Concerning the level of progress of the Project, quarterly, half-yearly and annual activity reports are prepared and submitted to the WB. Likewise, fiduciary reporting is submitted by the PIUs.

Factors subject to World Bank control

62. The WB has been supportive in terms of supervisions, with appropriate follow-up and resolution of implementation issues, appropriate adaptation to changing conditions, and appropriate recommendations and support to M&E.
63. The WB has also been providing technical assistance from the REDISSE Washington-based core team and increased the frequency and quality of supervision, which largely has been supported by the MDTF and Resolve to Save Lives (RTSL) funds that supplement Project Work Program Agreements (WPA).

64. In terms of reporting, the report template has been updated along to some indicators to demonstrate linkage of activities to the RF and the NAPHS, deadlines for reports submission have been reviewed, seeking to improve the quality of supervision and the response turnaround to issues raised by the PIUs.
65. With regards to supporting technical review of terms of reference (TORs) and technical specifications, the WB has been responsive to PIUs requests for human health related activities. Nevertheless, animal health related technical documents have not being subjected to the same treatment. There is limited engagement of WB agriculture and livestock technical staff with the Project.
66. The WB provided immediate support and approval to PIUs for using Project funds to COVID-19 response.

Factors outside the control of government and/or implementing entities

67. Natural disasters (floods), and man-made disasters (conflicts, unrests, insecurity and terrorism) have negatively impacted project implementation by disrupting the ecosystem bringing outbreaks, increasing the competition for resources to address the needs.
68. Reallocation of Project funding to respond to COVID-19 has led to the postponing key activities that might impact negatively project outcome.
69. Socio-political crises in Guinea in 2018, 2019 and 2020 have led to disruptions in Project activities implementation.
70. Exchange rate fluctuation has led to a net loss of US\$ 0.5 million in project funds in Sierra Leone.

3.3 Implementation Progress by Component

C.1: Surveillance and Information Systems

71. The main expected result of this component is the generation, sharing and use of quality information to improve the timely detection of priority diseases (including emerging, re-emerging and endemic diseases), zoonotic diseases and other unusual public health events. This component provides support to strengthening the human and animal disease surveillance systems of Guinea, Senegal, and Sierra Leone, and the development of regional interconnected human and animal data sharing platforms to promote collective action, cross-border and cross-sectoral collaboration in surveillance. The main achievements include:
 - National priority zoonotic diseases have been updated, data collection and management protocols and tools have been developed and shared to strengthen disease surveillance systems in both human and animal health sectors;
 - For the Human Health Surveillance System, the IDSR Technical Guidelines have been mainstreamed regionally as standards on surveillance and DHIS2 is being established in health districts across the REDISSE I countries. A regional DHIS-2 database has been set up to inter-

connect systems in ECOWAS, however, the harmonization of the automatic data transfer processes between WAHO and countries is still not yet optimal;

- Forty-seven Centers of Epidemiological Surveillance have been established and are operational in five ECOWAS countries, including Guinea and Sierra Leone, and have demonstrated a real performance in the completeness and promptness in the collection, processing, analysis, transmission and local use of epidemiological data. Guinea has improved early detection of unusual health events in the communities and the reporting of real-time surveillance data, as evidenced by early detection of cases of foot-and-mouth disease, rabies, Lassa fever and the resurgence of measles;
- Sierra Leone has enhanced surveillance and reporting systems and its interoperability at the different levels of the health systems (National, district and community level) for the early detection of cases and timely reporting by community/district-level surveillance officers as well as district health and veterinary facilities.

72. There is also some progress in improving the animal health surveillance system, except for wildlife and the environmental health sector. In Guinea and Sierra Leone, REDISSE supported training of a District Livestock Officers and Community Animal Health Workers on Syndromic disease surveillance and provided electronic hardware and software to strengthen animal surveillance system from the community to central level. In Guinea, 300 smartphones and 34 computers and 38 multifunction printers were made available to the Regional Livestock Departments and Districts as part of the effort to improve event-based surveillance deployment at community level. REDISSE also supported the installation of the EMPRES-OH Platform, in order to analyze and report monitoring animal health data in real time. The main challenges faced by the Project implementing this component are summarized as follow:

- Despite the progress made in improving human and animal disease surveillance systems, the interoperability of the two systems in line with the One-Health approach is still a challenge. The harmonization of One-Health electronic surveillance systems is key to smooth information exchange among sectors. A regional sub-contract between WAHO and the University of Oslo was postponed due to reallocation COVID-19 response. More efforts are needed towards facilitating the inter-operability of surveillance software systems for human and animal health (DHIS2, SORMAS, ENPRESS, etc.);
- Cross-border collaboration in surveillance (including active/event based, passive and syndromic surveillance) for the early detection of cases remains challenging without formal and legally binding agreements having been signed.

C.2: Strengthening of Laboratory Capacity

73. The laboratory system plays an essential role in the surveillance and timely detection of priority known and previously unknown diseases of public health importance. This component seeks to strengthen existing networks of efficient, high quality, accessible public health and veterinary laboratories for the diagnosis of human and animal diseases that can potentially be considered public health threats, and to establish a regional networking platform to improve collaboration for laboratory investigation. The main achievements include:

- Positive changes in the laboratory-related result framework indicators (i.e. PDO2, PDO4 / IR2, IR3, IR5 and IR9);
- The 47 laboratories associated with the 47 CESs in five ECOWAS countries, including those in Guinea and Sierra Leone, are operational and capable to provide field sample collection and bio-confirmatory testing in case of any outbreak;
- A network of fifteen regional reference laboratories of both human and animal health laboratories, including Research Institutes (the Pasteur Institutes of Dakar and Abidjan) has been set up. The network has been instrumental in supporting the response to the COVID-19 emergency response. The veterinary laboratories have provided surge capacity for testing for COVID-19;
- A regional biobank in Abidjan was established. The region can store samples and use as a network, both physical and virtual. The biobank is currently working on the regional catalog of COVID-19 (many strains in the region);

74. The main challenges faced by the Project implementing this component is:

- The Laboratory Systems, especially in Guinea, present a number of shortcomings, including the need for strengthening multisectoral coordination, further improvement of laboratory capacities in terms of equipment and staff training, finalization of the development of harmonized procedures for sample transportation, establishment of a system for the supply of consumables and reagents, and securing the maintenance of laboratory equipment;

C.3: Preparedness and Emergency Response

75. Multisectoral coordination and collaboration in preparedness is critical to ensure timely and effective One-Health response to public health emergencies This component supports national and regional efforts to enhance the One-Health approach to infectious disease outbreak preparedness and response capacity by improving local, national and regional capacities to prepare for impending epidemics in humans and animals, and to effectively respond to disease outbreak threats including the mitigation resulting mortality risks and socio-economic impacts posed by infectious diseases. The main achievements include:

- The core capacities of countries to implement the IHR, including the aspects of preparedness and response to priority zoonotic diseases, have been regularly monitored within the context of REDISSE implementation with the technical support of WHO and OIE;
- The development of multi-hazard and/or disease specific preparedness and response plans, technical guidelines, and standard operating procedures have been established after the definition of the list of priority zoonotic diseases. Simulation exercises have been conducted in country and at regional level to test preparedness and readiness to respond to some of the priority zoonotic diseases⁹.

⁹ Okunromade et al. *Health Security, Volume 17, Number 6, 2019* Mary Ann Liebert, Inc. DOI: 10.1089/hs.2019.0048

- An ECOWAS Regional Rapid Response Team has been established and the Manual of standard operating procedures developed and validated in 2018;
- Sierra Leone's Emergency Preparedness and Response is now coordinated through a Public Health Emergency Operation Centre at National and Districts level. The EOC integrates traditional public health services into an emergency management model and has been effective in responding to disease outbreaks.

76. The main challenges faced by the Project implementing this component are:

- The RCSDC was established in Abuja, however it is not fully operational as it does not have adequate staffing. Nevertheless, WAHO indicated that its commitment to have the center fully staffed by the end of Q1 2021.
- Because of weak capacities of the animal health sector and the environmental sector, organizing One-Health simulation exercises at all levels is still a challenge.

C.4: Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness

77. Component 4 is crosscutting given that animal and human health workers form the backbone of Disease Surveillance (Component 1), Laboratories (Component 2) and Preparedness and Response (Component 3). A strong, trained and motivated workforce is key to the implementation of surveillance activities and is essential for timely response to disease outbreaks. Effective human resource management can bring the right people with the right skills to the right place at the right time and ensure that inputs translate into actual services delivered. The main achievements include:

- REDISSE has contributed to improving the availability of human resources capable of implementing disease surveillance, preparedness and response activities;
- Regional training included FELTP frontline training of 10 national trainers, 64 district heads of CES, FELTP-Master training of 100 human and animal health professionals (under the same program) and laboratory capacity strengthening of 11 national Lab trainers and 174 Lab technicians;
- Sierra Leone has conducted mapping of health security workforce and, as a result, allocation of number of candidates is based on existing gaps and on achieving gender balance;
- Training of 210 Community Animal Health Workers in Sierra Leone has doubled the number of para-veterinarians, and therefore the veterinary workforce, on the ground;
- As result of investment in FETP training surveillance workforce in Sierra Leone was strengthened. The frontline workforce deployed to respond to COVID-19 was entirely national, as opposed to previous outbreaks when the country relied heavily on expatriate staff deployed by development partners.

78. The main challenges faced by the Project implementing this component are:

- WAHO has not yet been able to develop a Regional Strategy for Workforce Development as per the recommendations of the FETP Consultation Workshop held in 2019. Such a strategy is envisioned to include guidance to ensure FETP standards and quality are met across the region.
- In Guinea, despite the needs and the support from REDISSE, it has not been possible to recruit locally the staff as the Ministry of Livestock has not provided guarantees that they will be integrated into the civil service at the end of the Project;
- There is a chronic shortage in the number of veterinary doctors in Sierra Leone. The training supported by REDISSE of the veterinarians in Ghana planned to begin in 2016 suffered substantial delays, and it is possible the students will not complete the program before the end of the Project. It is therefore important to find a solution to avoid the disruption of the training;
- The pool of animal health and environmental health workers eligible as candidates, especially female health workers for the intermediate and advanced FELTP is limited in some of the REDISSE I countries

C.5: Institutional Capacity Building, Project Management, Coordination and Advocacy

79. This component focuses on all aspects related to project management, coordination by WAHO as well as support to enhancing the capacity of the RAHC to coordinate the implementation of animal health interventions. The main achievements include:

- Capacities at the national level to effectively carry out core project management functions have been strengthened through the recruitment of qualified PIU staff responsible for fiduciary management, operational planning of activities, technical coordination and monitoring of the implementation of activities, M&E of project activities;
- A regional One-Health platform has been established since 2017 as ECOWAS countries' human, animal and environmental health sectors political decision-making body. The regional technical meeting of the multispectral platform enabled all concerned countries to share their respective experiences in terms of harmonizing interventions between the human, animal and environmental health sectors for epidemic preparedness and response. National One-Health platforms have been set up in countries and are at different step of decentralization;
- REDISSE has contributed to JEE/PVS and self-assessment of core capacities to implement the IHR that were carried out in twelve countries between 2016 and 2020 In ECOWAS countries and Mauritania, with WHO and OIE technical assistance. REDISSE work-plans have been elaborated based on the JEE recommendations to meet the gaps toward an adequate preparedness and response capacity to epidemics and to monitor progress toward achieving the PDO.

80. The main challenges faced by the Project implementing this component are:

- The operationalization of the RAHC is limited. There is no executive director formally appointed, which is a problem of leadership, there is a deficiency in staffing of essential positions causing restrain capacity, and finally, there is no clear institutional positioning, hence lack of articulation with technical partners;

- The RCSDC establishment has not progressed as planned. There is a shortage of staff and resources that hinders the implementation of Project activities as well as its role as leading regional agency for preparedness and response to outbreaks;
- The concept of the One-Health approach to preparedness and response to zoonotic diseases and other public health events of importance is still not mastered by all relevant stakeholders in West Africa. The increasing number of regional and international organizations supporting various One-Health activities in West Africa call for better coordination to ensure synergy of efforts toward the optimal implementation of the One-Health approach to health security.

IV. PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

4.1 Quality of Monitoring and Evaluation

81. Monitoring and Evaluation is used to systematically track project implementation progress and demonstrate results on the ground, and to support “evidence-based learning”. An adequately designed project’s Results Framework, combined with the use of M&E during implementation, is critical to allow “course-correction” and to improve the likelihood that the project will achieve the expected results. The assessment of the quality of M&E is based on three main elements: design, implementation, and utilization.
82. The M&E design included expected outcomes that measured progress towards the achievement of the PDO. The PDO and intermediate indicators are appropriate in measuring performance. The project was also designed to produce quarterly and annual project implementation reports which are used to measure performance of approved work plans and budget. As previously discussed in Section 2.2, the 2019 Project restructuring introduced changes in the RF to address limitations and better measure indicators.
83. In order to secure that M&E systems provide in real time the information necessary for decision-making by the management, the Project design required PIUs to prepare M&E implementation plans and manuals, which has been fully complied with.
84. At regional level, the M&E implementation is software based. Different dashboards were developed to capture internal and external M&E processes under a clear implementation timeline. Internal process include: (i) weekly, monthly and annual work planning and monitoring; (ii) mid-yearly and yearly reviews; (iii) weekly and monthly PIU achievements reporting, mid-yearly and annual progress reporting, including countries and project implementation partners (WHO, OIE, CCISD, FMx, and Universities of Ouagadougou, Ghana and Oslo). While external process focuses on biannual project supervision missions to countries and WB supervision mission to WAHO, as well as evaluation of the project implementing partners interventions.
85. In countries supervision missions are also organized by the specialists to assess the level of implementation of activities, document difficulties encountered and make recommendations to improve results. At the end of each mission, a report and supporting documents are sent to the PIU. Similarly, joint supervision missions (human, animal and environmental health) are organized at all levels. The WB sponsored Geo-Enabling for Monitoring and Supervision -GEMS tool- has been also

used for the georeferencing of the Project interventions, through forms elaborated, validated and deployed in smartphones or tablets. This tool allows all stakeholders to have the mapping of REDISSE Project interventions and facilitate supervision under restricted mobility as the COVID-19 has imposed.

86. The M&E manual includes a mechanism for monitoring the implementation of activities in the field, which is ensured by the Focal Points of the implementation agencies. For data collection, forms have been developed and shared. During the implementation of the activities, the data collected through these forms are sent back to the Coordination for processing, analysis and dissemination through appropriate media. This information is used for decision-making and planning of future interventions.
87. *Justification of overall rating of M&E quality.* The overall rating criteria to assess the M&E quality is based on a four-point scale as defined below.

High	There were no or only minor shortcomings in the M&E system’s design, implementation, or utilization. The M&E system as designed and implemented was more than sufficient to assess the achievement of the objectives and to test the links in the results chain. M&E findings were disseminated and used to inform the direction of the project, strategy development, and/or future projects.
Substantial	There were moderate shortcomings in the M&E system’s design, implementation, or utilization. The M&E system as designed and implemented was generally sufficient to assess the achievement of the objectives and test the links in the results chain, but there were moderate weaknesses in a few areas.
Modest	There were significant shortcomings in the M&E system’s design, implementation, or utilization. There were significant weaknesses in the design and/or implementation of the M&E system, making it somewhat difficult to assess the achievement of the stated objectives and test the links in the results chain, and/or there were significant weaknesses in the use and impact of the M&E system.
Negligible	There were severe shortcomings in the M&E system’s design, implementation, or utilization. The M&E system as designed and implemented was insufficient to assess the achievement of the stated objectives and test the links in the results chain and the use and impact of the M&E system were limited.

88. The overall quality of the M&E is rated *Substantial*. Effectively, it has made it possible to monitor the progress towards achieving the development objectives. The M&E information is used by Project management to provide guidance in the preparation of the annual work plans to the implementing agency, while facilitates decision-making for activities prioritization by the Government, WAHO and WB.

4.2 Environmental, Social, and Fiduciary Compliance and Issues

Safeguards

89. The Project fully complied with the Bank’s safeguards policies and procedures at appraisal. It was classified as category B operation due to moderate risk of the proposed activities and triggered two safeguard policies: Environmental (OP 4.01) and Pest Management (OP 4.09). At preparation, a national Healthcare Waste Management Plan (HCWMP), an Integrated Pest and Vector Management Plan (IPVMP) and an Environmental and Social Management Framework (ESMF) were developed. These documents detail the potential risks of each activity, define mitigation measure, provide a

budget for implementation and describe implementation arrangements for monitoring and supervision. The documents also provide guidance for site-specific waste management plans during implementation. The implementation of these plans is ongoing as they are site specific and requirement for initiating the related activity. Furthermore, sub-project screenings to document environmental and social risks are being conducted with attendant environmental and social management plans also developed.

90. The Grievance Redress Mechanism (GRM) was developed and is fully operational in all countries. In Sierra Leone, the Project prepared a Stakeholder Engagement Plan (SEP), a safeguard instrument under the Environmental and Social Standard (ESS) 10 of the WB Environmental and Social Framework (ESF), not originally required at the Project preparation.
91. Missions have been carried out to countries to support local PIU environmental and social safeguard specialists. These missions made it possible to propose recommendations and prepare a roadmap for a rapid operationalization of safeguards instruments in each country at project inception and, today, continue to monitor safeguards compliance during implementation.
92. A regional roadmap for the operationalization of the sustainable management of healthcare waste in West Africa was developed during a regional workshop organized by WAHO with the support of the World Bank, from 27 to 29 November 2018 in Ouagadougou in Burkina Faso. Two major activities of the roadmap were initiated at the regional level in 2019: (i) the development of a regional strategic plan to strengthen the management of healthcare waste, and (ii) the development of a directive for the harmonization of regulations on the sustainable management of healthcare waste in West Africa.

Procurement

93. In terms of procurement, WAHO and countries have had different experiences that led to impact in the Project implementation, reflected by the rating of moderately satisfactory at the Implementation Status and Results Report.
94. WAHO faced some challenges related to procurement at project inception due to the limited availability of procurement staff, which ultimately resulted in delays for preparation of procurement plans. Furthermore, staff retention issues posed additional stress to the PIU for compliance with procurement required processes, including the use of the Systematic Tracking of Exchanges for Procurement (STEP) system. At the MTR, WAHO staffing issue was addressed and it is recognized to be one of the best users of STEP. However, there are still delays in completing the tasks, mainly related to the limited availability suppliers in the region needed for the type of services and scope of work. This situation has led to direct contracting to international agencies.
95. Procurement remains a big challenge to project implementation in Senegal and Sierra Leone. There is serious delay in implementation of project procurement plans due to several factors including poor specifications from implementing governmental units and ongoing challenges of data management with the STEP system. There has also been some non-compliance with procurement guidelines identified during post-procurement review. PIUs have developed a roadmap for improving procurement processes including strengthening the quality and timeliness of the internal procurement system, clearly documenting procurement issues and undertaking corrective actions, developing a functional procurement tracking system and tools, and establishing a monthly

procurement and technical review meeting. This is in addition to the constant hands-on support from the Bank procurement team.

96. With regard to procurement in Guinea, there were no procurement problems but constraints in the implementation of the contracts, in particular the drafting of technical specifications for goods and other equipment, the difficulty in finding suppliers who responded to certain consultations (absence or low capacity of local national suppliers). This situation might be explained by the fact that Guinea has a seasoned PIU with previous experience implementing WB projects.

Financial Management

97. In general terms no particular difficulties have been noted for the Project financial management. Largely the PIUs at WAHO and countries maintain adequate financial management arrangements necessary to ensure that Bank Loan proceeds are being used for the purposes intended in an economical and efficient manner. The interim financial reports have been submitted timely and auditing conducted as planned. In addition, all the disbursement requests have been duly processed and approved by the WB. However, specific issues have been raised during the MTR, they list as follows:

- In Senegal there has been difficulties in monitoring stock and assets, lack of no-objections to some implemented activities, and unjustified expenses;
- Sierra Leone has experienced challenges with delays in liquidation of advances given to programs for activities thus, leading to occurrence of undocumented expenditures.

98. The WB financial management team has been very pro-active and responsive to addressing financial management issues that arise.

4.3 Bank Performance

Quality at entry

99. The World Bank team led the preparation process by ensuring the buy-in of all participating countries and brought together major stakeholders among the international development partner and within the national governments including the relevant ministries as well as the development partners to participate in the project preparation. With REDISSE being a regional project, the lessons learned from the then-ongoing West Africa Regional Disease Surveillance (WARDS) project and the WB response to the 2014 EVD outbreak in West Africa were incorporated in the project design including the role of WAHO as a coordinating entity.

100. The team also draw lessons from the other WB projects to strengthen the design, as such, Project components were properly developed and fit into the various aspects of surveillance and outbreak preparedness and response. The rapid response to COVID-19 pandemic with REDISSE resources without activating CERC is a further testament to appropriateness of the project design.

101. Nevertheless, there were shortcomings with selection and definition of indicators as reported in Section 2.2, which were not fully addressed by the 2019 project restructuring.

Quality of supervision

102. The REDISSE project has been supported by the WB with regular supervision and provision of technical support, both accompanied by relevant recommendations to improve Project's performance. In addition, the WB team supports the project throughout the entire process of elaborating the AWPBs and ensures the alignment of the activities of the different sectors with the development objectives.
103. The non-objection process has been timely, and the Bank leadership has been demonstrated through the Task Team Leaders (TTL) and team support. However, there is a need to strengthen the focus on process assessment beyond disbursement linking process with progress indicators.
104. The Project structure with country based TTLs has been proven successful as it permits the WB to provide real-time hands-on implementation support to the project team.

Overall WB performance rating

105. *Justification of overall rating of WB performance.* The performance is rated based on a six-point scale according to the following criteria:

Highly Satisfactory	There were no shortcomings in quality at entry and quality of supervision.
Satisfactory	There were minor shortcomings in quality at entry and quality of supervision.
Moderately Satisfactory	There were moderate shortcomings in quality at entry and/or quality of supervision.
Moderately Unsatisfactory	There were significant shortcomings in quality at entry and quality of supervision.
Unsatisfactory	There were major shortcomings in quality at entry and/or quality of supervision.
Highly Unsatisfactory	There were severe shortcomings in quality at entry and/or quality of supervision.

106. The WB performance is rated as *Satisfactory*, as overall its support has contributed to improving the Project's performance notwithstanding minor shortcomings of the results framework which impacted quality at entry.

4.4 WAHO Performance

107. To achieve its development objectives REDISSE Program relies on close coordination with development partners. For project implementation WAHO plays two roles, one as regional project coordinator and other as a direct beneficiary responsible for implementation of a series of activities either directly, or through sub-contracted agencies. These have different implications to participant countries, therefore WAHO's performance is evaluated as the extent to which services provided ensured the projects' effective implementation through appropriate support to countries and implementation of regional activities.
108. WAHO as the regional coordinator and convening agency, has been organizing workshops (as in 2017 which focused on results framework and semi-annual progress report writing) and holding annual project review meetings alongside regional steering committee meetings in 2018 and 2019, where

implementation progress was assessed across all participating countries. WAHO has also supported the project implementation through supervision and technical assistance missions. During the current COVID-19 pandemic, WAHO role as a convening body has been demonstrated by taking the lead in the establishment of the COVID-19 platform, which through its weekly meetings provides a forum for discussion, information sharing and collaboration for improved COVID-19 regional response.

109. Countries have been submitting semi-annual progress implementation reports to WAHO and reported that no feedback has been received. There is a perception that no harmonization between WAHO and country activities takes place as WAHO's AWPB is not shared/discussed with countries; similarly, countries do not share theirs with WAHO.

110. As responsible for implementing REDISSE activities through sub-contracted agencies, WAHO coordinates the implementation of several activities, ranging from technical assistance, training (formal and applied/ad hoc), development and dissemination of harmonized policies and standards, and implementation of surveillance infrastructure in the countries. Countries have also indicated that they are not aware of or benefiting from technical support from regional services (WHO and RAHC) through the agreements with WAHO. Providing the RAHC is still not operational eight years in its existence, WHO support to the project has indeed been limited JEE evaluations and IDSR training. Furthermore, initial difficulties experienced in contract management have been adequately addressed.

111. *Justification of WAHO performance rating.* The performance is rated based on a six-point scale according to the following criteria:

Highly Satisfactory	There were no shortcomings quality of support and quality implementation of regional activities.
Satisfactory	There were minor shortcomings in quality of support and quality implementation of regional activities.
Moderately Satisfactory	There were moderate shortcomings in quality of support and/or quality implementation of regional activities.
Moderately Unsatisfactory	There were significant shortcomings in quality of support and quality implementation of regional activities.
Unsatisfactory	There were major shortcomings in quality of support and/or quality implementation of regional activities.
Highly Unsatisfactory	There were severe shortcomings in quality of support and/or quality implementation of regional activities.

112. WAHO performance is rated *Moderately Satisfactory*, as moderate shortcomings were registered during the project implementation. It is important to note that WAHO itself has also been strengthened and acquiring a more prominent regional leadership role as result of REDISSE. Furthermore, all reported shortcomings are easily addressed with better communication, follow up and planning.

4.5 Risk to Development Outcome

113. The overall risk rating for the project was categorized as Substantial at preparation and remains valid at mid-term. The overall rating was based on an assessment of component risks in which the risk was rated as Substantial in six categories: (i) Political and Governance; (ii) Macroeconomic; (iii) Technical

Design of Project or Program; (iv) Environment and Social, (v) Fiduciary, and (vi) Stakeholders. The risk rating for Sector Strategies and Policies was rated Moderate; while the risk related to Institutional Capacity for Implementation and Sustainability was rated as High. None of these have changed.

114. The Project implementation has been relatively favorable, however, some aspects related to sustainability are of concern:

- Project support to funding FELTP and CES training is limited and countries are not taking steps towards sustainability and institutionalization of these funding lines to the development of their health security workforce with national state budgets;
- Reallocated funding to COVID-19 response has hampered implementation of project activities both nationally and regionally.

115. In terms of security intrinsically related to political and governance risks, the no observance of health security protocol related to COVID-19 may expose populations to higher contamination jeopardizing the current outcomes.

116. For Guinea, in terms of political and governance risks the recent year experiencing political instability has limited mobility of project teams in the country, which potentially will affect negatively project outcomes.

V. LESSONS AND RECOMMENDATIONS

Lessons

117. Strong regional institutions with clearly defined roles lead to success. WAHO's participation in REDISSE has proven to be pivotal for achieving project outcomes at mid-term, as it has allowed to foster the technical and policy dialogue, coordinate of collective action, provision of technical assistance, establish regional training programs, and information exchange. Nevertheless, WAHO's commitment to take up the challenge to become a leading agency in health security in the region has stretched its capacities beyond its current institutional strength, and limited support to RSCDC and RAHC are evidence of it.

118. Strong National Public Health Institutes (NPHIs) can improve the response to public health emergencies. During COVID-19 epidemic it was very clear that countries with strong institutions (NPHI) have responded better and benefited better from all the activities conducted by WAHO and financed by the REDISSE project.

119. Health security investments must be balanced between regional and national. There is need and space for both country-level and regional financing to health security activities, as they address different, but interrelated objectives. While regional financing foster countries' engagement and prioritize cross-border collaboration, country-level financing support specific activities related to disease surveillance, preparedness and response. Regionally funded and cross-border activities need to be part of country level action plans and budget to ensure ownership.

120. Collaboration is key for securing health security. Formal and collegial/informal approaches to collaboration are necessary to improve the One-Health approach to health security in the beneficiary countries. The establishment of treaties, agreements, memoranda of understanding, harmonization of policies, strategies and SOPs formally pave the way to countries' collaboration. Other informal activities such as cross-border planning at local level, exchange at informal networks (Example FELTP) and simulation exercises, information exchange among peers allows a soft collaboration that is key when responding to a crisis.
121. The One-Health (multi-sector) approach increases project complexity. Stakeholder coordination / collaboration represents a significant challenge. The management of multiple and overlapping planning processes to avoid duplication of efforts and failure to address country or sector priorities is often cumbersome to coordination agencies.
122. No single funding solution to respond to outbreaks. The project design, when feasible, can accommodate new activities and effectively manage the response to disease outbreaks. Although CERC is an instrument that facilitates the emergency response, its activation may require extra preparation work, thus it is best suited for non-emergency projects.
123. Operationalization of NAPHS through REDISSE AWPB's secure country ownership of health security agenda. REDISSE has become a key support for the implementation of the NAPHS in the countries, as it has contributed to (i) improving of the multisectoral collaboration (health, livestock and environment) through sponsoring One-Health platforms, (ii) enhancing the capacity for detection of priority diseases by laboratories (human and animal health); (iii) strengthening human resource capacity and availability for effective disease surveillance and public health emergency preparedness/disaster preparedness; and (iv) increasing the level of information provided to the population through awareness campaigns in favor of less risky behaviors.
124. Adequate human resources are essential for improving surveillance, preparedness and response capacity. Investments in training activities to strengthen human resources working in health security, among those field epidemiology, epidemiological surveillance, and AMR has greatly enhanced the capacity of countries. Sierra Leone for the first time relied on local health security professionals to respond an outbreak, the COVID-19.
125. Project impact is a result of proper planning. Overly ambitious and poorly prioritized AWPB leads to very low completion rate for proposed activities, prompting most activities to be rolled over from year to year. If coupled with late submission for approval the implementation period reduces drastically, which negatively impact project outcomes.
126. Procurement processes remains the rate-limiting steps in project implementation. The speed at which approved AWPB will be implemented is a function of how fast procurement processes are completed. The timely preparation and transmission of supporting documents (TORs, technical specifications and concept notes) followed by a rapid processing of the submissions to the PIU are crucial in improving progress towards the project performance indicators.
127. Attribution vs. Contribution always possibly not measured. Current indicators based on JEE score poses the challenge of measuring if progress on the indicators reflect investments by REDISSE or from multiple stakeholders including government and other development partners, or a combination of both.

128. Measuring results of regional interventions are not addressed in the JEE. There are no agreed regional health security indicators that capture the value added of working regionally, as regional capacity is more complex than the sum or average of national JEE scores.

129. The evolving nature of health security requires constant data tracking. Addition of new project activities like AMR or COVID-19 response has shed light on the need to measure their impact. This discussion can also be extended to issues related to gender, preparedness and response capacity, and the revised SPAR tool adopted by WHO.

Recommendations

130. Countries need to establish a better and efficient planning process to produce quality AWPB and supporting documents to facilitate the procurement process. AWPB should be submitted to Bank approval no later than beginning of December of each remaining year.

131. Countries should ensure that an institutionalization framework and a sustainability plan are developed to ensure that at the end of the REDISSE project, key impacting programs and activities can be retained and financed by national budget.

132. WAHO needs to ensure better communication and close following up of activities with countries to improve project coordination and alignment between national and regional AWPBs.

133. WAHO to establish memoranda of understanding between “WAHO and WHO” and “WAHO and each ECOWAS member State” regarding data sharing for better performance in cross border surveillance and outbreak response.

134. While keeping the focus on project implementation, WAHO must advocate for ECOWAS to ensure continued institutional capacity building to RCSDC and RAHC so that they are fully operational and able to fulfil their mandate.

135. WAHO should create partner coordination mechanisms and fora to ensure that investments in health security are streamlined based on a well designed and developed Strategic Regional Health Security Plan.

136. As the chronic shortage of qualified veterinary doctors in Guinea and Sierra Leone has been a major challenge in animal health surveillance and response capacity, WAHO and WB should explore ways to recruit, train and retain veterinarians as well as invest in frontline animal health officers to bridge that gap in the short term. Technical discussions should be carried out with development partners and countries for that purpose.

137. Whereas Project results framework remains valid, a discussion among REDISSE I countries should take place to propose actions to properly measure the REDISSE contribution to the JEE indicator scores, gender dimensions, AMR, emergency response and the updated SPAR tool.

138. WB to leverage the use of its Agriculture portfolio in the region to strengthen veterinary capacity in REDISSE countries, by bridging financing and coordinating health security activities among projects,

including Sahel Regional Pastoralism Support Project (PRAPS), Agricultural and Livestock Transformation Project (PIMELAN), and other livestock projects.

139. WB to process project restructuring to reflect the changes in activities and update the results framework. The restructuring should provide additional financing to replenish funds reallocated to respond COVID-19 and ensure adequate funding for the increased needs for regional activities.