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Report No: PAD2595

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON PROPOSED GRANTS

TO THE

REPUBLIC OF BENIN IN AN AMOUNT EQUIVALENT TO SDR 10.4 MILLION (US$15 MILLION EQUIVALENT)
REPUBLIC OF MALI IN AN AMOUNT EQUIVALENT TO SDR 10.4 MILLION (US$15 MILLION EQUIVALENT)
ISLAMIC REPUBLIC OF MAURITANIA IN AN AMOUNT EQUIVALENT TO SDR 13.9 MILLION (US$20 MILLION EQUIVALENT)
REPUBLIC OF NIGER IN AN AMOUNT EQUIVALENT TO SDR 13.9 MILLION (US$20 MILLION EQUIVALENT)

AND PROPOSED CREDITS

TO THE

REPUBLIC OF BENIN IN THE AMOUNT OF EUR 12.3 MILLION (US$15 MILLION EQUIVALENT)
REPUBLIC OF MALI IN THE AMOUNT OF EUR 12.3 MILLION (US$15 MILLION EQUIVALENT)
REPUBLIC OF NIGER IN THE AMOUNT OF EUR 16.4 MILLION (US$20 MILLION EQUIVALENT)

FOR A

REGIONAL DISEASE SURVEILLANCE SYSTEMS ENHANCEMENT PROJECT (REDISSE) IN WEST AFRICA - PHASE 3

April 16, 2018

Health, Nutrition and Population Global Practice
Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective February 28, 2018)

Currency Unit =	FCFA
536 FCFA =	US$1
US$ 1 =	SDR 0.69
US$ 1 =	EUR 0.81

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Makhtar Diop
Country Director:	Rachid Benmessaoud
Senior Global Practice Director:	Timothy Grant Evans / Juergen Voegele
Practice Manager:	Trina S. Haque / Maryanne Grosclaude
Task Team Leader(s):	John Paul Clark, Francois G. Le Gall, Patricia Geli

ABBREVIATIONS AND ACRONYMS

AAT	African Animal Trypanosomiasis
ACE	African Center of Excellence
ACGF	Africa Catalytic Growth Fund
AfDB	African Development Bank
AFENET	African Field Epidemiology Network
AHI	Avian and Human Influenza
AI	Avian Influenza
AMR	Antimicrobial Resistance
ASF	African Swine Fever
ASLM	*Société africaine pour la médecine de laboratoire* (African Society for Laboratory Medicine)
AU	African Union
AU-IBAR	Inter-African Bureau for Animal Resources of the African Union
AWP	Annual Work Plan
BMGF	Bill and Melinda Gates Foundation
BP	Bank Procedure
CAD	Canadian Dollar
CBA	Cost benefit Analysis
CAT-DDO	Catastrophe Risk Deferred Drawdown Option
CBPP	Contagious Bovine pleuropneumonia
CCHF	Crimean-Congo Hemorrhagic Fever
CCISD	Centre for International Cooperation in Health and Development
CDC	Center for Disease Control and Prevention
CDs	Communicable Diseases
CERC	Contingent Emergency Response Component
CERC OM	CERC Operations Manual
CHAMPS	Child Health and Mortality Prevention Surveillance
CIDA	Canadian International Development Agency
CNLS-TP	*Conseil National de Lutte contre le VIH-Sida, la Tuberculose, le Paludisme, les IST et les Epidémies*
CORDS	Connecting Organizations for Regional Disease Surveillance
CPS	Country Partnership Strategy
CRSA	*Centre Régional de Santé Animale* (Regional Animal Health Center)
CSO	Civil Society Organization
CY	Calendar Year
DFIL	Disbursement and Financial Information Letter
DGS	*Direction Générale de la Santé*
DHS	Demographic and Health Survey
DON	Disease Outbreak Notification
DP	Development Partner
DSA	Daily Subsistence Allowance
DSR	Disease Surveillance and Response
DSRE	*Directeur de la Surveillance et la Riposte aux Epidémies*

EA	Environmental Assessment
EAC	East Africa Community
EAPHLN	East Africa Public Health and Laboratory Networking Project
ECOWAS	Economic Community of West African States
ECOWAS-RAHC	Regional Animal Health Center of the Economic Community of West African States
ECTAD	Emergency Centre for Transboundary Animal Diseases
EERP	Ebola Emergency Response Project
EIDS	Emerging Infectious Diseases
EISMV	*(École Inter-États des Sciences et Médecine Vétérinaires de Dakar)* Dakar Inter-State School of Sciences and Veterinary Medicine
EOC	Emergency Operations Center
EPT	Emerging Pandemic Threat
EPT-2	Emerging Pandemic Threats 2
EROM	Emergency Response Operating Manual
ESMF	Environment and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Epidemic Surveillance System
ESSAF	Environmental and Social Screening and Assessment Framework
EVD	Ebola Virus Disease
FAO	Food and Agriculture Organization of the United Nations
FCFA	*Franc de la Communauté Financière Africaine*
FELTP	Field Epidemiology and Laboratory Training Program
FETP	Field Epidemiology Training Program
FM	Financial Management
FMD	Foot and Mouth Disease
FPFMD	Federal Project Financial Management Divisions
FY	Fiscal Year
GAC	Governance and Anti-Corruption
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GF-TAD	FAO/OIE Global Framework for the Progressive Control of Transboundary Animal Diseases
GGE	Gross Government Expenditure
GHSA	Global Health Security Agenda
GIS	Geographic Information System
GNI	Gross National Income
GPAI	Global Program for Avian Influenza Control and Human Pandemic Preparedness and Response
GPN	General Procurement Notice
GRM	Grievance Redress Mechanism
GRS	Grievance Redress System
H5N1	Avian Influenza Strain H5N1
HWMP	Hazardous Waste Management Plan
HIS	Health Information System
HMIS	Health Management Information Systems

HNFP	Health and Nutrition Financing Project
HPAI	Highly Pathogenic Avian Influenza
HRH	Human Resources for Health
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
ICT	Information and Communication Technology
IDA	International Development Association
IDSR	International Disease Surveillance and Response
IEG	Independent Evaluation Group
IFC	International Financial Corporation
IFMIS	Internal Financial Management Information System
IHPAU	Integrated Health Project Administration Unit
IHR	International Health Regulations
ILRI	International Livestock Research Institute
IMC	International Medical Corporation
INAP	Integrated National Action Plan
IPC	Infection Prevention and Control
IPF	Investment Project Financing
IPVMP	Integrated Pest and Vector Management Plan
IRCM	Integrated Regional Coordination Mechanisms for the Control of TADs and Zoonoses
ISR	Implementation Status and Results Report
ISRA	*Institut Sénégalais de Recherches Agricoles* (Senegalese Institute of Agricultural Research)
JEE	Joint External Evaluation
JICA	Japan International Cooperation Agency
LSU	Livestock Unit
M&E	Monitoring and Evaluation
MADR	Ministry of Agriculture and Rural Development
MAFFS	Ministry of Agriculture Forestry and Food Security
MCHNSS	Maternal and Child Health and Nutrition Services Support
MCMC	Markov Chain Monte Carlo
MDBS	Mekong Basin Disease Surveillance
MDTF	Multi-Donor Trust Fund
MECIDS	Middle East Consortium for Infectious Disease Surveillance
MEDD	Ministry of Environment and Sustainable Development
MEPA	Ministry of Livestock and Animal Production
MERS	Middle East Respiratory Syndrome
MERS-CoV	Middle East Respiratory Syndrome Coronavirus
MINSAP	Ministry of Public Health
MITS	Minimally Invasive Autopsy Tissue Sample
MOA	Ministry of Agriculture
MOH	Ministry of Health
MOHSA	Ministry of Health and Social Action
MoU	Memorandum of Understanding
MRRT	Multidisciplinary Rapid Response Team

MRU	Mano River Union
MSAS	Ministry of Health and Social Action
MWMP	Medical Waste Management Plan
NCB	National Competitive Bidding
NCDC	Nigeria Centre for Disease Control
NGO	Non-Governmental Organization
N-PCU	National Project Coordination Unit
NPF	New Procurement Framework
NSC	National Steering Committee
NTD	Neglected Tropical Disease
OAGF	Office of Auditor General for the Federation
OH	One health
OIE	World Organization for Animal Health
OP	Operations Policy
PACE	Pan-African Program for the Control of Epizootics
PATH	Program for Appropriate Technology in Health
PASSP	Primary Health Services Improvement Project in Guinea
PCU	Project Coordination Unit
PDO	Project Development Objective
PEF	Pandemic Emergency Facility
PHEIC	Public Health Emergency of International Concern
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PMU	Project Management Unit
PPR	*Peste des Petits Ruminants* (Small Ruminants' Plague)
PPSD	Project Procurement Strategy for Development
PRAPS	Regional Sahel Pastoralism Support Project
PVS	Performance of Veterinary Services
RAHC	Regional Animal Health Center
RAP	Resettlement Action Plan
RCDC	Regional Center for Disease Control and Prevention (of ECOWAS)
RDSR	Regional Disease Surveillance and Response
REDISSE	Regional Disease Surveillance Systems Enhancement Project
REOI	Request for Expression of Interest
RESEPI	Regional Network of National Epidemic Surveillance Systems for HPAI and other Priority Animal Diseases in West Africa
RESOLAB	Veterinary Laboratory Network for Avian Influenza and other Transboundary Animal Diseases in West Africa
RF	Results Framework
RIAS	Regional Integration Assistance Strategy
R-PCU	REDISSE Project Coordination Unit
RPF	Resettlement Policy Framework
R-PIU	Regional Project Implementation Unit
RRL	Regional Reference Laboratories
RRT	Rapid Response Team
RSC	Regional Steering Committee

RVF	Rift Valley Fever
SACIDS	South African Center for Infectious Disease Surveillance
SARS	Severe Acute Respiratory Syndrome
SCD	Systematic Country Diagnostic
SDGs	Sustainable Development Goals
SESFP	Social and Environment Focal Point
SMP	Social Management Plan
SOP	Series of Projects
SPINAP	Support Program for Integrated National Action Plans for Avian and Human Influenza
SPN	Specific Procurement Notice
SWEDD	Sahel Women Economic Empowerment and Demographic Dividend Project
SWOT	Strengths, Weaknesses, Opportunities and Threat
TAD	Transboundary Animal Disease
TB	Tuberculosis
TOMPRO	TOMPRO accounting software
ToR	Terms of Reference
UHC	Universal Health Coverage
UN	United Nations
UNDB	United Nations Development Business
UNDG	United Nations Development Group
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
US	United States
US CDC	United States Centers for Disease Control and Prevention
USAID	United States Agency for International Development
VACNADA	Control of trans-boundary animal diseases in Africa
Vet-GOV	Reinforcing Veterinary Governance in Africa Program
V-FETP	Veterinarian Field Epidemiology Training Program
VS	Veterinary Services
WAEMU	West African Economic and Monetary Union
WAHO	West Africa Health Organization
WANIDS	West African Network of Infectious Diseases Surveillance
WARDS	West Africa Regional Disease Surveillance Project
WB	World Bank
WBG	World Bank Group
WHO	World Health Organization
WHO/IST/WA	World Health Organization – Inter-Country Support Team for West-Africa
WHO-AFRO	World Health Organization – Africa Region
WMP	Waste Management Plan

BASIC INFORMATION

Is this a regionally tagged project?	Country(ies)	Financing Instrument
Yes	Benin, Mali, Mauritania, Niger	Investment Project Financing

[ ] Situations of Urgent Need of Assistance or Capacity Constraints

[ ] Financial Intermediaries

[✓] Series of Projects

Approval Date	Closing Date	Environmental Assessment Category
07-May-2018	31-Mar-2024	B - Partial Assessment

Bank/IFC Collaboration
No

Proposed Development Objective(s)

The PDOs 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 Emergency, to provide immediate and effective response to said Eligible Emergency.

Components

Component Name	Cost (US$, millions)
Component 1: Surveillance and Information Systems	34.30
Component 2: Strengthening of Laboratory Capacity	23.00
Component 3: Preparedness and Emergency Response	18.20
Component 4: Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness	16.40
Component 5: Institutional Capacity Building, Project Management, Coordination and Advocacy	28.10

Organizations

Borrower :	Republic of Benin Republic of Mali Republic of Mauritania Republic of Niger
Implementing Agency :	Mauritania - Ministry of Livestock Benin - CNLS-TP, Présidence de la République du Bénin Mali - Ministry of Health Niger - Ministry of Health

PROJECT FINANCING DATA (US$, Millions)

[ ] Counterpart Funding	[ ] IBRD	[✓] IDA Credit	[✓] IDA Grant	[ ] Trust Funds	[ ] Parallel Financing

Total Project Cost:	Total Financing:	Financing Gap:
120.00	120.00	0.00
	Of Which Bank Financing (IBRD/IDA): 120.00	

Financing (in US$, millions)

Financing Source	Amount
IDA-62350	50.00
IDA-D3130	70.00
Total	**120.00**

Expected Disbursements (in US$, millions)

Fiscal Year	2018	2019	2020	2021	2022	2023	2024
Annual	0.37	11.26	21.48	27.02	29.81	28.84	1.23

Cumulative	0.37	11.62	33.10	60.12	89.93	118.77	120.00

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

Agriculture

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

Yes

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

Yes

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	Substantial

7. Environment and Social	Substantial
8. Stakeholders	Substantial
9. Other	
10. Overall	Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Natural Habitats OP/BP 4.04		✓
Forests OP/BP 4.36		✓
Pest Management OP 4.09	✓	
Physical Cultural Resources OP/BP 4.11		✓
Indigenous Peoples OP/BP 4.10		✓
Involuntary Resettlement OP/BP 4.12		✓
Safety of Dams OP/BP 4.37		✓
Projects on International Waterways OP/BP 7.50		✓
Projects in Disputed Areas OP/BP 7.60		✓

Legal Covenants

Sections and Description

BENIN: NATIONAL STEERING COMMITTEE - Schedule 2. Section I.A.2. The Recipient, through the office of its President, shall create not later than three (3) months after the Effective Date and thereafter maintain, throughout Project implementation, the multisectoral steering committee of the Global Health Security Agenda assisted by its executive secretariat and a multisectoral technical committee, all supported by qualified and experienced staff in adequate numbers, and under terms of reference satisfactory to the Association to serve as

the National Steering Committee and vested with responsibility for overseeing the yearly planning of Project activities and monitoring Project implementation, including the preparation by the Project Coordinator of an annual report not later than October 31 each year on the carrying out of the precedent AWP&B.

Sections and Description

BENIN: PROJECT COORDINATION UNIT - Schedule 2. Section I.A.3. The Recipient shall: (i) not later than one (1) month after the Effective Date, appoint to the PCU the Project Coordinator; and (ii) not later than three (3) months after the Effective Date, recruit for the PCU one (1) procurement specialist, one (1) monitoring and evaluation officer, one (1) environmental specialist, one (1) social safeguards specialist, one (1) administrative and financial manager, one (1) accountant, one (1) internal auditor, one (1) human health specialist, one (1) animal health specialist, and one (1) operations officer, all on the basis of terms of reference and with qualifications and experience satisfactory to the Association.

Sections and Description

BENIN: PROJECT IMPLEMENTATION MANUAL - Schedule 2. Section I.E.(b). The Recipient shall: not later than one (1) month after the Effective Date, adopt the Project Implementation Manual in form and substance satisfactory to the Association.

Sections and Description

BENIN: ADMINISTRATIVE AND FINANCIAL PROCEDURES MANUAL, ACCOUNTING SYSTEM AND INTERNAL AUDITS - Schedule 2. Section I. H. The Recipient shall: (i) not later than three (3) months after the Effective Date: (A) develop a financial management manual, in form and substance satisfactory to the Association, to supplement the Project Implementation Manual; and (B) update the PIU's computerized accounting system to fit the Project and allow the Recipient to comply with its obligations under this Agreement; and (ii) ensure the PIU conclude an agreement with the Recipient's General Inspectorate of Finance (Inspection Générale des Finances) not later than six (6) months after the Effective Date to enable the General Inspectorate of Finance to carry out semi-annual internal audit reviews of the Project activities.

Sections and Description

BENIN: AUDITS AND COMPLAINT HANDLING MECHANISM - Schedule 2. Section I. I. The Recipient shall, not later than three (3) months after the Effective Date: (i) appoint an external auditor for the Project; and (ii) establish, and thereafter maintain and operate, a functional complaint handling mechanism for Parts 1, 2.1, 2.2, 2.3(i), 3.1(i), 3.2(i) and (iii), 3.3, 4 and 5.1 of the Project, with adequate staffing and processes for registering complaints and acceptable to the Association, thereby ensuring the ongoing improvement on service delivery under said Parts 1, 2.1, 2.2, 2.3(i), 3.1(i), 3.2(i) and (iii), 3.3, 4 and 5.1 of the Parts 2, 3 and 4 of the Project.

Sections and Description

MALI: NATIONAL STEERING COMMITTEE - Schedule 2. Section I.A.2. The Recipient, through the office of its Prime Minister, shall create, not later than three (3) months after the Effective Date and thereafter maintain, throughout Project implementation, the multisectoral steering committee of the One Health, under terms of reference

satisfactory to the Association, assisted by its executive secretariat and a multisectoral technical committee, and supported by qualified and experienced members in adequate numbers, to serve as the National Steering Committee, and vested with responsibility for overseeing the yearly planning of Project activities and monitoring Project implementation, including the preparation by the Project Coordinator of an annual report not later than October 31 each year on the carrying out of the precedent AWP&B.

Sections and Description

MALI: PROJECT COORDINATION UNIT - Schedule 2. Section I.A.3. The Recipient shall: (i) not later than one (1) month after the Effective Date, appoint to the PCU the Project Coordinator; and (ii) not later than three (3) months after the Effective Date, recruit for the PCU one (1) procurement specialist, one (1) financial management officer, one (1) monitoring and evaluation officer, one (1) environmental specialist, one (1) social safeguards specialist, and one (1) communication specialist, all on the basis of terms of reference and with qualifications and experience satisfactory to the Association.

Sections and Description

MALI: PROJECT IMPLEMENTATION MANUAL - Schedule 2. Section I.E.(b). The Recipient shall: not later than one (1) month after the Effective Date, revise and update the Project Implementation Manual in form and substance satisfactory to the Association.

Sections and Description

MALI: ADMINISTRATIVE AND FINANCIAL PROCEDURES MANUAL, ACCOUNTING SYSTEM AND INTERNAL AUDITS - Schedule 2. Section I. H. The Recipient shall, not later than three (3) months after the Effective Date: (i) develop a financial management manual, in form and substance satisfactory to the Association, to supplement the existing Project Implementation Manual; and (ii) update the PIU's computerized accounting system to suitable fit the Project and allow the Recipient to comply with its obligations under this Agreement.

Sections and Description

MALI: AUDITS AND COMPLAINT HANDLING MECHANISM - Schedule 2. Section I. I. The Recipient shall, not later than three (3) months after the Effective Date: (i) appoint an external auditor for the Project; and (ii) establish, and thereafter maintain and operate, a functional complaint handling mechanism for Parts 1, 2.1, 2.2, 2.3(i), 3.1(i), 3.2(i) and (iii), 3.3, 4 and 5.1 of the Project, with adequate staffing and processes for registering complaints and acceptable to the Association, thereby ensuring the ongoing improvement on service delivery under said Parts 1, 2.1, 2.2, 2.3(i), 3.1(i), 3.2(i) and (iii), 3.3, 4 and 5.1 of the Parts 2, 3 and 4 of the Project.

Sections and Description

MAURITANIA: NATIONAL STEERING COMMITTEE - Schedule 2. Section I.A.2. The Recipient, through the Ministry of Health, shall create not later than three (3) months after the Effective Date and thereafter maintain, throughout Project implementation, the multisectoral steering committee of the Global Health Security Agenda assisted by its executive secretariat and a multisectoral technical committee, all supported by qualified and experienced staff in adequate numbers, and under terms of reference satisfactory to the Association to serve as the National Steering

Committee and vested with responsibility for overseeing the yearly planning of Project activities and monitoring Project implementation, including the preparation by the Project Coordinator of an annual report not later than October 31 each year on the carrying out of the precedent AWP&B.

Sections and Description

MAURITANIA: PROJECT COORDINATION UNIT - Schedule 2. Section I.A.3. The Recipient shall: (i) not later than one (1) month after the Effective Date, appoint to the PCU the Project Coordinator; (ii) not later than three (3) months after the Effective Date, recruit for the PCU one (1) procurement specialist, one (1) accountant, one (1) monitoring and evaluation officer, one (1) environmental specialist, and one (1) social safeguards specialist, and (iii) not later than four (4) months after the Effective Date, recruit for the PCU one (1) accountant, all on the basis of terms of reference and with qualifications and experience satisfactory to the Association.

Sections and Description

MAURITANIA: PROJECT IMPLEMENTATION MANUAL - Schedule 2. Section I.E.(b). The Recipient shall, not later than one (1) month after the Effective Date, develop and adopt the Project Implementation Manual in form and substance satisfactory to the Association.

Sections and Description

MAURITANIA: ADMINISTRATIVE AND FINANCIAL PROCEDURES MANUAL, ACCOUNTING SYSTEM AND INTERNAL AUDITS - Schedule 2. Section I. H. The Recipient shall, not later than four (4) months after the Effective Date, revise and update, in form and substance satisfactory to the Association, the existing administrative and financial procedures manual for the Regional Sahel Pastoralism Support Project, to adapt said manual to the fiduciary requirements of the Project.

Sections and Description

MAURITANIA: AUDITS AND COMPLAINT HANDLING MECHANISM - Schedule 2. Section I. I. The Recipient shall, not later than three (3) months after the Effective Date: (i) appoint an external auditor for the Project; and (ii) establish, and thereafter maintain and operate, a functional complaint handling mechanism for Parts 1, 2.1, 2.2, 2.3(i), 3.1(i), 3.2(i) and (iii), 3.3, 4 and 5.1 of the Project, with adequate staffing and processes for registering complaints and acceptable to the Association, thereby ensuring the ongoing improvement on service delivery under said Parts 1, 2.1, 2.2, 2.3(i), 3.1(i), 3.2(i) and (iii), 3.3, 4 and 5.1 of the Parts 2, 3 and 4 of the Project.

Sections and Description

NIGER: NATIONAL STEERING COMMITTEE - Schedule 2. Section I.A.2. The Recipient, through the office of its MPH, shall create not later than three (3) months after the Effective Date, and thereafter maintain, throughout Project implementation, a National Steering Committee chaired by the Minister of Public Health. The Project Coordinating Unit within the MPH, supported by qualified and experienced staff in adequate numbers and under terms of reference satisfactory to the Association, shall ensure the technical coordination of the Project and serve as the secretariat of the National Steering Committee. The National Steering Committee shall be vested with responsibility for overseeing the yearly planning of Project activities and monitoring Project implementation,

including the preparation by the Project Coordinator of an annual report not later than October 31 each year on the carrying out of the precedent AWP&B.

Sections and Description
NIGER: PROJECT COORDINATION UNIT - Schedule 2. Section I.A.3. The Recipient shall: (i) not later than one (1) month after the Effective Date, appoint to the PCU the technical Project Coordinator; and (ii) not later than three (3) months after the Effective Date, recruit for the PCU one (1) monitoring and evaluation officer, one (1) environmental specialist, and one (1) social safeguards specialist, all on the basis of terms of reference and with qualifications and experience satisfactory to the Association.

Sections and Description
NIGER: PROJECT IMPLEMENTATION MANUAL - Schedule 2. Section I.E.(b). The Recipient shall, not later than one (1) month after the Effective Date, revise and update the Project Implementation Manual in form and substance satisfactory to the Association.

Sections and Description
NIGER: ADMINISTRATIVE AND FINANCIAL PROCEDURES MANUAL, ACCOUNTING SYSTEM AND INTERNAL AUDITS - Schedule 2. Section I. H. The Recipient shall, not later than three (3) months after the Effective Date, update the financial management manual used for the management of the Health Pooled Fund, in form and substance satisfactory to the Association, to supplement the existing Project Implementation Manual.

Sections and Description
NIGER: AUDITS AND COMPLAINT HANDLING MECHANISM - Schedule 2. Section I. I. The Recipient shall, not later than three (3) months after the Effective Date: (i) appoint an external auditor for the Project; and (ii) establish, and thereafter maintain and operate, a functional complaint handling mechanism for Parts 1, 2.1, 2.2, 2.3(i), 3.1(i), 3.2(i) and (iii), 3.3, 4 and 5.1 of the Project, with adequate staffing and processes for registering complaints and acceptable to the Association, thereby ensuring the ongoing improvement on service delivery under said Parts 1, 2.1, 2.2, 2.3(i), 3.1(i), 3.2(i) and (iii), 3.3, 4 and 5.1 of the Parts 2, 3 and 4 of the Project.

Conditions

Type	Description
Disbursement	CONDITIONS FOR ALL PARTICIPATING COUNTRIES (BENIN, MALI, MAURITANIA, NIGER) - SECTION IV. B.1.(b). No withdrawal shall be made under Category (2), until and unless the Recipient: (i) shall have adopted the ESIA and/or ESMP, as the case may be, and the same documents have been consulted upon and disclosed as approved by the Association; and (ii) shall have verified, through its own staff, outside experts, or existing environmental/social institutions, that the activities under Part 2.1 of the Project meet the environmental, social, and waste management requirements of appropriate national and local authorities and that they comply with the review procedures set forth in the ESIA and/or ESMP, as the

	case may be, and the provisions of the Project Implementation Manual.
Type Disbursement	Description CONDITIONS FOR ALL PARTICIPATING COUNTRIES (BENIN, MALI, MAURITANIA, NIGER) - SECTION IV. B.1.(c). No withdrawal shall be made under Category (3), for Emergency Expenditures under Part 3.3 of the Project, unless and until the Association is satisfied, and has notified the Recipient of its satisfaction, that all of the following conditions have been met in respect of said Emergency Expenditures: (i) the Recipient has determined that an Eligible Emergency has occurred, has furnished to the Association a request to include said Eligible Emergency under Part 3.3 of the Project in order to respond to said Eligible Emergency, and the Association has agreed with such determination, accepted said request and notified the Recipient thereof; (ii) the Recipient has prepared and disclosed all safeguards instruments required for said Eligible Emergency, and the Recipient has implemented any actions which are required to be taken under said instruments, all in accordance with the provisions of Section I.B.2. (c)(ii) this Schedule; (iii) the Coordinating Authority has adequate staff and resources, in accordance with the provisions of Section I.B.2(b) of this Schedule 2 to this Agreement, for the purposes of said activities; and (iv) the Recipient has adopted the Emergency Response Operations Manual in form, substance and manner acceptable to the Association and the provisions of the Emergency Response Operations Manual are fully current accordance with the provisions of Section I.B.2.(a) (iv) of this Schedule 2 so as to be appropriate for the inclusion and implementation Part 3.3 of the Project.

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
John Paul Clark	Team Leader(ADM Responsible)		GHN04
Francois G. Le Gall	Team Leader	Co-TTL	GFA01
Patricia Geli	Team Leader	Co-TTL	GHN07
Elzbieta Sieminska	Procurement Specialist(ADM Responsible)	Procurement	GGOPA
Boubacar Diallo	Procurement Specialist		GGOPF
Mahamadou Bambo Sissoko	Procurement Specialist	PS - Mali	GGOPF
Mohamed El Hafedh Hendah	Procurement Specialist	PS - Burkina Faso	GGOPF

Aissatou Diallo	Financial Management Specialist	Sr. Finance Officer	WFACS
Africa Eshogba Olojoba	Environmental Safeguards Specialist	Environmental Safeguards	GEN07
Aichatou Assa Cisse	Team Member		GED07
Alexandra C. Bezeredi	Safeguards Advisor		GSU01
Alice Diarra Sangare	Team Member		AFCW3
Amadou Ba	Team Member		GFA01
Amos Abu	Team Member		GEN07
Angelo Donou	Team Member	FMS - Bnein	GGOAW
Arcade Bigirindavyi	Team Member	PS - Niger	GGOPF
Batouly Dieng	Team Member		AFMMR
Bougadare Kone	Environmental Safeguards Specialist	Environmental Safeguards - Niger	GEN07
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Name	Title	Organization	Location

WESTERN AFRICA
REGIONAL DISEASE SURVEILLANCE SYSTEMS ENHANCEMENT (REDISSE) PHASE III

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I. STRATEGIC CONTEXT

A. Regional and Country Context

1. The Ebola Virus Disease (EVD) epidemic in West Africa highlighted the importance of strong disease surveillance systems and inter-country collaboration in order to minimize economic costs and the loss of human lives in an outbreak. The West Africa Ebola outbreak demonstrated that the rapid and large spill-over effects of disease outbreaks can transcend local and national boundaries.[1] Recent reports have also highlighted the strong case for investing in preparedness, especially strengthening of core country capabilities for International Health Regulations (IHR), and the World Animal Health Organization's Terrestrial Animal Health Code.[2] The concept of the proposed Regional Disease Surveillance Systems Enhancement Program ("REDISSE" and/or "Program") aims to strengthen human health, animal health, and disaster response system in West Africa to ensure resilience to future outbreaks and health emergencies. The regional benefits and positive externalities of effective disease surveillance and response are substantial. Collective action and cross-border collaboration are essential and emphasized throughout the Program: (i) the Program will support country efforts to harmonize policies and procedures; (ii) Empower countries to engage in joint planning, implementation and evaluation of program activities across borders at regional, national and district levels, and; (iii) Promote resource sharing of high-cost specialized assets. 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 is only as strong as its weakest link. The Program thus proposes to strengthen the full "value-chain" of disease surveillance across community, national, and regional institutions.

2. REDISSE 3 is the third project under the REDISSE Program, which is being prepared as a series of interdependent projects (SOP) and detailed in REDISSE 1 and REDISSE 2. The utilization of a SOP approach is deemed necessary given high-country demand for participation in the program, the multiple and complex issues involved, and the large number of stakeholders.

Major infectious diseases affecting human populations in West Africa

3. The impacts of infectious disease outbreaks can be devastating to the fragile social and economic situation of countries. In the West Africa region, the 2014 EVD outbreak 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 West Africa region. Overall, the estimated loss in Gross Domestic Product (GDP) for the 15 ECOWAS countries was approximately US$1.8 billion in 2014, and was projected to increase to US$4.7 billion in 2016. It is estimated a moderate influenza pandemic can lead to annual pandemic losses of approximately 2 percent of Gross

[1] The World Bank Group (WBG) financial support following the Ebola crisis amounted to US$1.62 billion. This support included IDA financing of US$1.17 billion and US$450 million from the International Financial Corporation (IFC), which supported critical emergency and humanitarian response control efforts in Guinea, Liberia, and Sierra Leone. The proposed REDISSE project is part of the Bank's longer-term support following the Ebola crisis.

[2] Sands, P., Mundaca-Shah, C., & Dzau, V. J. (2016). The neglected dimension of global security—a framework for countering infectious-disease crises. *New England Journal of Medicine*, *374*(13), 1281-1287.

National Incomes for the ECOWAS countries and Mauritania.[3] This would mean annual losses ranging between US$108 million for Mauritania to US$263 million for Mali for the REDISSE 3 countries.

4. The major drivers of the emergence of novel infectious diseases are population growth and rapid urbanization; land use changes (including deforestation); human behavior and cultural practices; international travel and trade; civil unrest; microbial adaptation and weak public health infrastructure. Urban population densities have dramatically increased due largely to migration from rural to urban areas. The link between deforestation and infectious disease outbreaks is well documented.[4] As per the Food and Agriculture Organization of the United Nations (FAO) data, Western Africa is suffering deforestation at approximately twice the world rate. Civil war and social turmoil have also been common in West Africa. Social instability and its consequent population relocation and breakdown of government services provide fertile ground for the rampant spread of infectious diseases.

5. Changes in the epidemiology of infectious diseases associated with climate variability in West Africa over the last 40 years has been reviewed and documented; and there is well-established evidence indicating that climate change is having an impact on infectious disease transmission patterns. Vector-borne diseases are susceptible to changes in temperature, humidity and precipitation; water-borne diseases are correlated with precipitation and flooding; animal migration patterns vary according to climatic conditions affecting water and feed resources; and, human displacement can result in novel disease emergence due to geography or population density. Periods of heavy rainfall (observed in both 1992 and 2016) favor the development of competent mosquito vectors, which drives epidemics in both ruminants and people (E.g. Rift Valley Fever epidemics in Niger). All REDISSE 3 countries are characterized as "hotspots" for climate-sensitive health impacts, meaning they occur in climate-vulnerable geographic regions, have vulnerable populations, and have pre-existing burdens of infectious diseases that are likely to increase with climate change.[5,6]

6. The REDISSE Program has systematically engaged the technical expertise of institutions and individual experts from across sectors. The REDISSE Program has also been supporting the establishment of coordinating mechanisms, such as a regional and national One health (OH) platforms and a Monitoring and Evaluation Reference Group for disease surveillance and response systems.

7. The Program is developed jointly by the Bank's Health, Nutrition and Population and Agriculture Global Practices. The Program will contribute to the region's progress in meeting obligations under the IHR 2005, the Integrated Disease Surveillance and Response strategy

[3] World Bank. 2017. From panic and neglect to investing in health security: financing pandemic preparedness at a national level. Washington, D.C.: World Bank Group.
http://documents.worldbank.org/curated/en/979591495652724770/From-panic-and-neglect-to-investing-in-health-security-financing-pandemic-preparedness-at-a-national-level.
[4] Olivero, Jesús, et al. "Recent loss of closed forests is associated with Ebola virus disease outbreaks." *Scientific Reports* 7 (2017): 14291.
[5] Geographic Hotspots for World Bank Action on Climate Change and Health (2017); Climate-Smart Healthcare - Low-Carbon and Resilience Strategies for the Health Sector (2017); Climate Change and Health - Approach and Action Plan (2017)
[6] WHO (2015) Climate Change and Human Health - Risk and Responses.

(IDSR), and the World Organization for Animal Health (OIE) international standards. The Program is also in line with the Global Health Security Agenda (GHSA) objectives and is structured to contribute to four of the key action packages defined in the GHSA strategy: surveillance and reporting; laboratory capacity; health workforce; and, epidemic preparedness and response. As with REDISSE 1 and 2, this project will support the countries to establish a coordinated approach to detecting and swiftly responding to regional public health threats.

8. The preparation of REDISSE 3 is based on the experience and lessons learned during the preparation and early implementation of the first two projects in the series, which are summarized in Section II C and Annex I, Detailed Project Description.

B. Sectoral and Institutional Context

Human Health

9. The performance of health systems in many countries in West Africa is weak. They suffer from chronic insufficiency of financial and human resources, limited institutional capacity and infrastructure, weak health information systems, absence of community participation, and lack of transparency and accountability. Public sector spending on health is generally low. None of the ECOWAS member States meets the Abuja target of ensuring 15 percent of Gross Government Expenditure (GGE) is allocated to health.

10. Joint External Evaluation (JEE) of several countries in the West African region as well as country-led self-assessments reveal key weaknesses in health systems in terms of infectious disease and antimicrobial resistance (AMR) surveillance, epidemic preparedness and response. These include a lack of the following: (i) fit for purpose health workforce for disease surveillance, preparedness and response at each level of the health pyramid; (ii) functional community level surveillance and response structures; (iii) sufficient availability of laboratory infrastructure for timely and quality diagnosis of epidemic-prone diseases; (iv) interoperability of different information systems; (v) adequate infection prevention and control standards, infrastructure and practices; (vi) efficient management of the supply chain system; and (vii) regional surge capacity for outbreak response, stockpiling of essential goods, information sharing and collaboration.

11. Although the countries included in REDISSE 3 vary in their health indicators and population size (see Annex 1), all four countries have poor public health outcomes and are at risk for epidemics. Some REDISSE 3 countries are experiencing improvement in certain health indicators such as Diphtheria Tetanus Toxoid Pertussis (DTP3) immunization coverage (for example, Benin has an immunization coverage of 79 percent as indicated by DTP3 coverage among 1 year old)[7]. However, improvements of other health indicators remain a challenge. All REDISSE 3 countries have high infant mortality rates (ranging between 51 per 1000 live births in Niger to 74.5 per 1000 live births in Mali), high under-five mortality rates (ranging between 84.7 deaths per 1000 live births in Mauritania to 114.7 deaths per 1000 live births in Mali). Across all

[7] WHO Global Health Observatory Data http://apps.who.int/gho/data/?theme=main

REDISSE 3 countries, children suffer from both chronic and acute malnutrition with high prevalence of stunting (as high as 43% in Niger) and wasting in children under five years old.

12. Infectious diseases burdens are high in the REDISSE 3 countries. Mortality and morbidity in all four REDISSE 3 countries is dominated by many endemic and epidemic communicable diseases (including malaria, Acute Respiratory Illness (ARI), diarrheal diseases, malnutrition, cholera, meningitis, HIV/AIDS, tuberculosis). All four countries fall in the African Meningitis Belt and have reported outbreaks/epidemics of major infectious diseases, including Yellow Fever, Rift Valley Fever (RVF), Crimean-Congo Hemorrhagic Fever (CCHF) and Lassa Fever. More details are shared in Annex I in the Table on Human Health Diseases in REDISSE 3 countries.

13. Globally, there is an increasing concern over antimicrobial resistance (AMR).[8] Sub-Saharan African countries, including the REDISSE countries, are highly vulnerable[9] to AMR related diseases due to significant gaps in disease surveillance systems, and human resource capacities to deal with infectious diseases, especially drug-resistant or AMR infections. In fact, a high level of drug resistance exists to commonly prescribed antibiotics on the African continent.[10]

14. The adverse effects of diseases are further exacerbated by lack of education, gender disparities, ineffective communication and poor availability of quality health services. Moreover, REDISSE 3 countries have porous borders, large populations, high mobility of people, animals and goods and rapid urbanization which present major challenges in terms of epidemiological surveillance and health security. Typically, these systems also suffer from insufficient appropriations, insufficient human resource capacity and low community involvement.

Animal Health

15. The animal health sector of countries in the ECOWAS region is characterized by a high incidence and prevalence of infectious communicable diseases, impacting veterinary and public health, trade, rural development and livelihoods. A 2013 summary of evaluations of Veterinary Services by the OIE in the ECOWAS countries highlighted the lack of budgetary resources and human resources for preventing and controlling animal diseases. In terms of the strategic action required to sustain animal health, the four countries have identified the need to improve the coverage of their surveillance programs for control of high-priority animal diseases.[11] Lack of preparedness, insufficient human, physical and financial resources, and the lack of cross-sector collaboration were again emphasized by the FAO and OIE as causes for failure to address promptly and efficiently the resurgence of Highly Pathogenic Avian Influenza (HPAI) in the region.

[8] Adeyi, Olusoji O.; Baris, Enis; Jonas, Olga B.; Irwin, Alec; Berthe, Franck Cesar Jean; Le Gall, Francois G.; Marquez, Patricio V.; Nikolic, Irina Aleksandra; Plante, Caroline Aurelie; Schneidman, Miriam; Shriber, Donald Edward; Thiebaud, Alessia. 2017. final report. Drug resistant infections: A threat to our economic future. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/323311493396993758/final-report.
[9] Leopold SJ, van Leth F, Tarekegn H, Schultsz C. Antimicrobial drug resistance among clinically relevant bacterial isolates in sub-Saharan Africa: a systematic review. J Antimicrob Chemother. 2014;69(9):2337–53.
[10] Antimicrobial resistance in Africa: a systematic review,
[11] OIE (2013). Feasibility study for a program to improve veterinary governance and the control of priority transboundary animal diseases in West Africa

16. Improvement of animal health requires increased and sustained investments in national veterinary services to meet OIE international standards of quality. Any country failing to prevent, detect, and control infectious diseases places other countries at risk, hence the importance of regional approaches. All countries in the sub-region have engaged in the OIE Performance of Veterinary Services (PVS) Pathway, which provides independent qualitative and quantitative summaries of veterinary services, identifying their strengths and weaknesses, prioritizing interventions and costing activities needed to address deficiencies.[12] A Table in Annex I provides details on REDISSE 3 countries and Animal Health Diseases.

17. REDISSE 3 countries are major producers of livestock.[13] The majority of REDISSE 3 labor force (ranging from 50 percent in Mauritania to 90 percent in Niger), depends on agriculture for its livelihood.[14] Consequentially, there is an increased likelihood of interactions between wildlife, domesticated animals, and humans. Increased interactions between humans and animals can expose humans to sylvatic cycles of pathogen transmission; and livestock can become intermediate or amplifying hosts for pathogens that may infect humans or spill over into humans.[15] The abuse of antimicrobials for prophylactic purposes, and the use of substandard veterinary medicinal products make livestock a driver of AMR.[16] Given that most of the REDISSE 3 countries rely heavily on livestock; infectious diseases can lead to high economic costs: by affecting livestock production and reducing market access. Aftermath of outbreaks in animals can often result in food insecurity and financial catastrophe for vulnerable populations. The importance of animal movements, porous borders, and trade in the region further increases the risk of disease occurrence and disease spread. Consequentially, there is not only higher risk of disease (both in animals and humans) but also higher risk of loss of livelihood, nutritional insecurity and poverty due to animal disease outbreaks. In the last few years, multiple countries in REDISSE 3 have experienced outbreaks of HPAI. (See Annex 1 for further details.)

18. Insufficient government funding and limited interest from donors to support VS have constrained progress in addressing systemic issues. However, some important programs are worth noting in the animal health sector, such as USAID's multi-country Emerging Pandemic Threats (EPT-2) program which is implemented in many ECOWAS countries through FAO and other implementing agencies; FAO support to HPAI infected countries; and Inter-African Bureau for Animal Resources of the African Union (AU-IBAR) support through the Vet-GOV program. In the last 15 years, two main regional and global programs significantly contributed to strengthening national VS, namely the Pan-African Program for the Control of Epizootics (PACE) program and the World Bank Financed Avian Influenza Global Program which were implemented in many countries of the sub-region. The lessons and best practices derived from these two programs are

[12] All four countries have completed PVS pathway evaluations while Benin, Mali and Mauritania have also had JEEs (Niger has not but a JEE is in process).
[13] FaoStat 2014 http://www.fao.org/faostat/en/#data/QA
[14] CIA Factbook, 2013 https://www.cia.gov/library/publications/the-world-factbook/fields/2095.html#uv
[15] Narrod C, Zinsstag J, Tiongco M. A OH Framework for Estimating the Economic Costs of Zoonotic Diseases on Society. Ecohealth. 2012;9(2):150-162. doi:10.1007/s10393-012-0747-9.
[16] Richardson J, Lockhart C, Pongolini S, Karesh WB, Baylis M, Goldberg T, Slingenbergh J, Gale P, Venturini T, Catchpole M, de Balogh K, Pautasso M, Broglia A, Berthe F, Schans J and Poppy G, 2016. Special issue: drivers for emerging issues in animal and plant health. EFSA Journal2016;14(S1):s0512, 11 pp.
doi:10.2903/j.efsa.2016.s0512

reflected in this Program. The Regional Network of National Epidemic Surveillance Systems for HPAI and Other Priority Animal Diseases in West-Africa (RESEPI) and Veterinary Laboratory Network for Avian Influenza and other Transboundary Animal Diseases in West-Africa (RESOLAB) networks were also supported and facilitated by FAO under different projects and handed over to ECOWAS in 2012. OIE has a network of national focal points for laboratories and for veterinary medicinal products.

19. ECOWAS and the West African Economic and Monetary Union (WAEMU) have set a target of harmonizing national animal health systems. WAEMU, which covers 8 countries in the region, has moved forward on the harmonization of regulations on veterinary medicinal products, but progress has been slow due to administrative, human, organizational and financial constraints. In 2012, ECOWAS member countries named the Regional Animal Health Center (RAHC) the ECOWAS specialized technical center for animal health. An operational plan for RAHC was developed in August 2014. The RAHC is currently supported through a limited number of initiatives with specific objectives, including to further develop the OH agenda in the sub-region, and to develop Integrated Regional Coordination Mechanisms for the control of transboundary animal diseases (TADs) and Zoonoses (IRCM). The Bank's Regional Sahel Pastoral Support project (PRAPS), which supports the improvement of animal health in six West African Sahel countries, the European Union and OIE project for "Capacity building and surveillance for Ebola Virus Disease (EVD)" (EBO-SURSY project) and REDISSE 3 specifically aim to contribute to the operationalization of the RAHC.

One health

20. Tackling multisectoral issues efficiently requires working across sectors and disciplines. Yet, except for those already engaged in REDISSE 1 and 2, very few countries have adopted coordinated approaches, along the lines of the OH concept. In addition, animal and human health disease surveillance systems across the ECOWAS region and Mauritania have experienced major setbacks due to general funding shortfalls that have had a severe impact on both animal health and human health care delivery systems. Nonetheless, important lessons have been learned and experience gained, and successful regional programs for the control of selected priority diseases, both within and outside the region, have demonstrated the efficiency of a regionally coordinated, multidiscipline approach to disease surveillance and response. World Bank's OH Operational Framework,[17] which builds on past experiences has been made public. Additionally, World Bank's Investing in One health brief will be shared with WAHO and REDISSE countries.

Partner Coordination

21. The Development Partner landscape for disease surveillance and response for both human and zoonotic diseases in the sub-region is complex. The World Bank Group is well positioned to promote regional and global propositions that address the fundamental weaknesses of health systems and their interoperability. Project preparation financing has been mobilized from the Bill

[17] Operational framework for strengthening human, animal, and environmental Public Health Systems at their interface, WBG 2018

and Melinda Gates Foundation, co-financing from the Government of Canada's Department of Foreign Assistance, Trade and Development, and Trust Funds from the Government of the People's Republic of China. The REDISSE Program has systematically engaged the technical expertise of institutions and individual experts from across multilateral, governmental, non-governmental academic and private institutions and is establishing coordinating mechanisms, such as a Regional OH Platform and a Monitoring and Evaluation Reference Group for disease surveillance and response systems (See Section IV Implementation, D. Role of Partners, for more information).

C. Higher Level Objectives to which the project contributes

22. **The project is aligned with pillar III of the Regional Integration Assistance Strategy (RIAS) for the region (2008/rev 2011, Report # 60387), building coordinated interventions to provide regional public goods.** The RIAS specifically identifies regional and sub-regional programs to address the cross-border dimensions of disease prevention and treatment as an area of focus. The project meets the four regional criteria for utilizing the regional International Development Association (IDA) funds. The project (i) involves three or more countries (Benin, Mali, Mauritania, and Niger); (ii) has benefits, either economic or social, that spill over country boundaries; (iii) reflects strong interest from regional bodies and the region's countries; and (iv) provides a platform for a high level of policy harmonization among countries. As part of the REDISSE Program, the countries under REDISSE 3 will benefit from regional activities financed under REDISSE 1 through a US$20 million IDA grant and a US$12 million multi-donor trust fund (MDTF). This includes the creation and strengthening of regional institutions, platforms and networks.

23. **The project is in line with the World Bank's Twin Goals to end extreme poverty and boost shared prosperity**. Communicable and non-communicable diseases are a major constraint on the health, education and potential earnings of people living in the ECOWAS region and have the greatest impact on vulnerable populations. Compounding the threats in this reality is climate change, which will stress already weak systems, displace populations, and create environmental conditions more favorable for disease transmission. The Country Partnership Frameworks (CPF) documents for the four countries emphasize the need to strengthen the capacity of health systems of which disease surveillance is a key pillar, in order to improve health outcomes and reduce vulnerability. Further, as part of the International Development Association (IDA)18 commitments, the World Bank will assist at least 25 countries in their pandemic preparedness efforts including countries in West Africa. The project is in line with the recommendations from the World Bank Systematic Country Diagnostic (SCD) which recommends strengthening health information systems, including disease surveillance capacity for early detection and response to disease outbreaks, as a priority policy action.

24. **Complementary to the REDISSE Program, the World Bank and its key partners have launched the Pandemic Emergency Facility (PEF)**. The PEF aims to provide immediate surge funding to countries (or PEF-accredited non-state agencies) experiencing rare or high-severity large-scale disease outbreaks of pandemic potential. All countries that qualify for credits from the

Bank's IDA are eligible to access PEF funds. PEF will make payouts early during an outbreak cycle—before it becomes a pandemic—through two Windows, Insurance and Cash. For the next three years, the Insurance Window will make available up to US$425 million for diseases likely to cause major epidemics. These include pandemic influenza, Severe Acute Respiratory Syndrome (SARS), Middle-Eastern Respiratory Syndrome (MERS), Ebola, Marburg, CCHF, RVF, and Lassa fever. To complement the Insurance Window, the PEF has a US$50 million Cash Window, which provides the flexibility to make resources available for outbreaks that have not or will not meet the criteria of the Insurance Window. The REDISSE program complements the PEF in the following ways: (i) by focusing on capacity for disease surveillance and epidemic preparedness, countries will be better able to detect and contain outbreaks before they develop into high-severity outbreaks that triggers the PEF; and (ii) including a Contingency Emergency Response Component (CERC), which adds an element of risk layering to address potential epidemics. CERC will enable countries to mobilize funds quickly from within the project in the event of an outbreak (thereby assisting in containing outbreaks before they escalate PEF triggers, or for outbreaks that do not meet PEF's parametric insurance criteria); (iii) in addition, CERC complements PEF by serving as a conduit for PEF's surge financing to REDISSE client countries (See Annex I for additional explanation of how these instruments relate).

25. **The project contributes to the implementation of IHR (2005), IDSR, and the OIE international standards, the GHSA, the Paris Climate Agreement (COP),[18] and the promotion of a OH approach.** The REDISSE Program complements other Bank initiatives to achieve Universal Health Coverage (UHC) included in the Sustainable Development Goals (SDGs) by 2030.[19] REDISSE compliments the World Bank's Africa Higher Education Centers of Excellence (ACE) Program, which promotes specialization among Universities — including of human and animal disciplines. Through the World Bank-Japan UHC initiative, the Government of Japan is providing support through the Japan Policy and Human Development Research Fund (PHRD) to accelerate UHC implementation and improve pandemic preparedness.[20] The quest of UHC includes access to affordable essential health services, protection from financial catastrophe due to illness, and equity. REDISSE complements Bank's efforts in UHC and health security through strengthening of health systems and through the CERC component embedded in the program. The REDISSE CERC component can provide rapid financing during health emergencies, to both respond and mitigate the disruption of essential health services. As noted, IDA18 commits the Bank to support at least 25 countries to strengthen their public health systems to reduce and manage risks to global health security, prioritize and institutionalize pandemic preparedness into development plans, and strengthen governance and institutional arrangements and multi-sectoral operational systems.[21] PHRD support will unlock and leverage IDA18 resources in support of pandemic preparedness and disaster risk management plans to be implemented through

[18]Per the Paris Climate Agreement "Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health…. and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity". The Bank is committed to ensure 28% of its entire portfolio and 20% of new HNP projects are climate sensitive by 2020.
[19] 1 Health Systems for Universal Health Coverage– A Joint Vision for health lives; UHC 2030 International Health Partnership, 2017
[20] Kenya, Senegal, Ghana, Sierra Leone, Myanmar, Vietnam, Cambodia, Afghanistan, Haiti, Sudan and Tanzania in phase 1.
[21] Report from the Executive Directors of the International Development Association to the Board of Governors, Towards 2030: Investing in Growth, Resilience and Opportunity, January 2017.

Development Policy Operations utilizing the Catastrophe Risk Deferred Drawdown Option (Cat-DDO), complementing available resources from other sources including the PEF and IMF standby arrangements for exogenous shocks.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

26. The PDOs, key results and indicators under REDISSE remain the same across the SOPs. Thus, the PDOs of REDISSE 3 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 Emergency, to provide immediate and effective response to said Eligible Emergency.

B. Project Beneficiaries

27. The main beneficiaries of the program will be the populations of ECOWAS countries. Under the REDISSE Program, all 15 ECOWAS countries and Mauritania will participate in regional policy and standard setting activities led by WAHO and RAHC, with support from WHO/AFRO and OIE. In addition, Benin, Mali, Mauritania, and Niger will receive financing for national systems strengthening under REDISSE 3. REDISSE 3 is expected to benefit over 53.9 million people (10.9 million in Benin, 18 million in Mali, 4.3 million in Mauritania and 20.7 million in Niger)[22] whose livelihoods may be affected by diseases.

28. Secondary beneficiaries include service providers (both public and private), as well as national and regional institutions involved in human and animal health. WAHO is a major institutional beneficiary of the REDISSE program, alongside the RAHC as well as the Regional Center for Disease Control and Prevention (RCDC) and other regional technical partners. Hence the population of the region will also benefit from the strengthened regional capacity to prevent, detect and react promptly to public health events of importance.

C. PDO-Level Results Indicators

29. The proposed Program will contribute to: (i) develop national and regional capacity to fully implement the IHR through the IDSR strategy, which calls for the continuous monitoring of mortality and morbidity to identify and respond to threats before they can develop into large scale or transboundary epidemics; (ii) facilitate country and regional compliance with international standards for veterinary services, with a particular focus on early detection and rapid response capacity, as adopted by the OIE members States in the Terrestrial Animal Health Code, and utilize the findings and recommendations from the OIE PVS Pathway; and (iii) ensure more efficient collaboration and synergies between human and animal epidemiological surveillance and response networks at country and regional levels. The following key indicators will be used to track progress

[22] Based on 2014 World Development Indicators.

towards the PDOs:

a. Laboratory testing capacity for detection of priority diseases: number of countries that achieve a JEE score of 4 or higher out of 5;

b. Progress in establishing indicator and event-based surveillance systems: number of countries that achieve a JEE score of 4 or higher out of 5;

c. Availability of human resources to implement IHR core capacity requirements; number of countries that achieve a JEE score of 3 or higher out of 5;
d. Multi-hazard national public health emergency preparedness and response plan is developed and implemented: number of countries that achieve a JEE score of 4 or higher out of 5;

e. Progress on cross-border collaboration and exchange of information across countries: number of countries that achieve a score of 4 or higher out of 5;

f. Progress towards establishing an active, functional regional OH Platform (Number based on 5-point Likert scale).

g. Indicators (a) through (d) are based on JEE monitoring progress for the implementation of the WHO IHR (2005),[23] as well as OIE PVS assessments. Indicators (e) and (f) are based on self-assessment by the region and individual countries.

III. PROJECT DESCRIPTION

A. Project Components

30. An extensive and in-depth consultative process forms the basis for the overall REDISSE Program. REDISSE 3 will enhance the capacities of the human and veterinary public health systems of Benin, Mali, Mauritania and Niger and via a collaborative regional approach that promotes the OH approach and supports the implementation of the IHR and OIE standards. (Annex I provides detailed information on "REDISSE 3 Country Epidemiological Surveillance and Preparedness Capacity".)

31. The REDISSE 3 project will comprise 5 components as follows:

Component 1: Surveillance and Information Systems (US$34.3 Million)

[23] The World Health Organization, together with other partners, has developed a Joint External Evaluation Tool-International Health Regulations (2005) (JEE-IHR) to assess country capacity to prevent, detect, and rapidly respond to public health threats. The tool allows countries to identify the most urgent needs within their health security system, to prioritize opportunities for enhanced preparedness, response and action, and, through regular evaluations, will help monitor the progress by country in implementation of the International Health Regulations (2005) (http://www.who.int/ihr/publications/WHO_HSE_GCR_2016_2/en/). The JEE makes use of the PVS evaluation missions' results which provide an assessment of the strengths and weaknesses of the national Veterinary Services (http://www.oie.int/support-to-oie-members/pvs-evaluations/oie-pvs-tool/).

32. This component will support: enhancement of national surveillance and reporting systems and their interoperability at the different tiers of the health systems; cross-border coordination in the surveillance of priority diseases, and timely reporting of human public health and animal health emergencies in line with the IHR (2005) and the OIE Terrestrial Animal Health Code. This component will strengthen the linkages of surveillance and response processes: at the local level through citizen and community engagement; sub-national and national levels of the health system; and at the regional level. Linkages along these different levels and steps within an animal health epidemiology and surveillance system shall be analyzed, optimized and formalized.

33. The sub-components are: (i) support coordinated community-level surveillance systems and processes across the animal and human health sectors; (ii) develop capacity for interoperable surveillance and reporting systems; and (iii) establish an early warning system for infectious disease trends prediction.

Component 2: Strengthening of Laboratory Capacity (US$23.0 Million)

34. This component will involve the identification and/or establishment of networks of efficient, high quality, accessible public health and veterinary laboratories (public or private). This component will also support the establishment of a regional networking platform to improve collaboration for laboratory investigation. Adapting some lessons learned from the East Africa Public Health and Laboratory Networking project (EAPHLN) project, the regional laboratory network will contribute towards strengthening the capacities of national veterinary and public health laboratories in the areas of surveillance, pathology, diagnosis of priority infectious disease pathogens and AMR, and insecticide resistance monitoring and mapping. The national laboratory networks in each country will be linked to and be supported by the networks of human and animal regional reference laboratories (RRL) being established with support from the Program through the REDISSE 1 project. Human Health RRLs are being developed in five ECOWAS member states: Burkina Faso, Côte d'Ivoire, Ghana, Nigeria and Senegal.

35. The sub-components are: (i) Review, upgrade and network laboratory facilities; (ii) Improve data management and specimen management systems; and (iii) Enhance regional reference laboratory networking functions.

Component 3: Preparedness and Emergency Response (US$18.2 Million)

36. This component will support national/regional efforts to enhance infectious disease outbreak preparedness and response capacity by improving local (community), national and regional capacities to prepare for and respond effectively to animal and human disease outbreaks. Project interventions will provide support to improve country and regional surge capacity to ensure both a rapid response and continuity of essential services during an emergency. This component will seek to better educate/change behavior and prepare communities for outbreaks and emergencies as part of the routine delivery of health services. Joint planning and joint implementation will be pursued. The project will also support enhancing country health system capacities for management of disaster recovery priorities including the capacity for the integration

of community-center emergency care into the broader healthcare system.

37. The sub-components are: (i) Enhance cross-sectoral coordination and collaboration for preparedness and response; (ii) Strengthen capacity for emergency response; and (iii) Contingency emergency response; a sub-component, which has the objective to improve the Government's response capacity in the event of an emergency, following the procedures governed by Bank Policy, IPF Section III, paragraphs 12 and 13 (*Projects in Situations of Urgent Need of Assistance or Capacity Constraints*).

38. There is a moderate to high probability that during the life of the project one or more countries will experience an epidemic or outbreak of public health importance or other health emergency with the potential to cause a major adverse economic and/or social impact which would result in a request to the Bank to support mitigation, response, and recovery in the region(s) affected by such an emergency. In anticipation of such an event, this Contingency Emergency Response Component (CERC) provides for a request from countries participating in REDISSE to the Bank to support mitigation, response, and recovery in the district(s) affected by such event. REDISSE's CERC component could complement contingency funding, which is often limited. (A table in Annex I presents the differences between REDISSE 3 CERC and other World Bank Group tools for crisis response.)

39. Following the procedures governed by Bank Policy Section III, Para 12 and 13 (*Projects in Situations of Urgent Need of Assistance or Capacity Constraints*) a CERC Operations Manual (CERC OM) will be prepared by each country as a condition of disbursement. (A CERC OM workshop for all REDISSE countries was held on October 16-18, 2017). Triggers will be clearly outlined in the CERC OM acceptable to the World Bank. Disbursements will be made against an approved list of goods, works, and services required to support crisis mitigation, response and recovery. All expenditures under this activity will be in accordance with paragraph 12 of Bank Policy IPF and will be appraised, reviewed, and found to be acceptable to the World Bank before any disbursement is made.

Component 4: Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness (US$16.4 Million)

40. This component is cross cutting and aims to strengthen government capacity to plan, implement and monitor human resource interventions. It will provide support to the development of institutional capacity for workforce training by leveraging existing training structures and programs in the region such as the Field Epidemiology Training Program (FETP), Field Epidemiology and Laboratory Training Program (FELTP), Veterinary-FETP, and other workforce training programs that address critical human/veterinarian health needs.

41. This component will support analysis to improve the incentive environment within which public health and veterinary health workers operate. This analysis will consider creating incentives that not only draw on those with relevant skills to the public sector, but also improve staff motivation and retention, taking into account gender differences within the health workforce. Viable options will be explored under this component to ensure a centrally coordinated and

efficient process for the retention of a skilled workforce (for both animal and human health) available for routine surveillance and rapid deployment for case detection, laboratory confirmation of suspected cases, vaccine distribution logistics, and for the delivery of primary healthcare needs for common illnesses as part of outbreak response.

42. The sub-components under this component are: (i) Healthcare workforce mapping, planning and recruitment; and (ii) Enhance health workforce training, motivation and retention.

Component 5: Institutional Capacity Building, Project Management, Coordination and Advocacy (US$28.1 Million)

43. This component focuses on all aspects related to project management. It includes fiduciary aspects (financial management and procurement), monitoring and evaluation (M&E), knowledge generation and management, communication, and management (capacity building, monitoring and evaluation) of social and environmental safeguard mitigation measures. It also provides for critical cross-cutting institutional support, meeting capacity-building and training needs identified in the four countries on top of specific technical capacity-building activities undertaken within the four technical components (including support to the management of operational research). It will support the routine external independent assessment of critical animal health and human health capacities of national systems using reference tools (such as OIE PVS and JEE) to identify weaknesses and monitor progress. This component will build on, and complement other projects and initiatives such as the West Africa Regional Disease Surveillance project (WARDS) (which has been supporting the development of the institutional capacity of WAHO, EAPHLN, GHSA, and EPT-2 and other discrete activities to foster the harmonization of a functional regional disease surveillance and response network in the ECOWAS region.

44. The sub-components are: (i) project coordination, fiduciary management, monitoring and evaluation, data generation, and knowledge management; and (ii) Institutional support, capacity building, advocacy, and communication at the regional level.

45. For the entire REDISSE Program WAHO will host the regional coordination unit and will be primarily responsible for regional coordination, including cross-border coordination, guided by the decisions of the REDISSE Regional Steering Committee under the political leadership of ECOWAS. WAHO will be responsible for supporting the establishment of national and regional OH coordination platforms for developing synergies, joint planning, implementation and communication. Strategies will be adopted for generating evidence to be used to advocate for increased and sustained financing for disease surveillance and preparedness from domestic sources.

46. Across all project components, the project will promote partnership with the private sector to improve areas of known weaknesses in the provision of public goods across all project activities. Potential areas involve aspects where the private sector may have a comparative advantage over, or complementary to, the public sector such as in logistics and supply chain management, information communication and technology development, and improvement of specimen

transportation systems. Private medical practitioners, veterinarians and veterinary paraprofessionals may be entrusted with official tasks through contractual arrangements. Under similar contractual mechanisms, the project will explore possible partnerships, with identified centers of excellence and private laboratories with the appropriate capacity to play a critical role in the provision of diagnostic and reporting services for diseases of national, regional and/or global importance.

Table 1: Estimated Project Budget Allocations by Component

Project Components	Budget Allocation (US$ Million)	% of Total Budget
Component 1: Surveillance and Information Systems	34.3	29.1
Component 2: Strengthening of Laboratory Capacity	23.0	18.4
Component 3: Preparedness and Emergency Response	18.2	15.9
Component 4: Human Resources Management for Effective Disease Surveillance and Epidemic Preparedness	16.4	13.7
Component 5: Institutional Capacity Building, Project Management, Coordination and Advocacy	28.1	22.9
Total	**120.0**	**100.0**

Table 2: Funding by component and sub-component (US$ million)

Project activities	Benin	Mali	Mauritania	Niger	TOTAL
COMPONENT 1					
Sub-Component 1.1 Support coordinated community-level surveillance systems and processes across the animal and human health sectors	6.4	4.9	2.8	3.7	17.8
Sub-Component 1.2 Develop capacity for interoperable surveillance and reporting systems	1.9	2.7	1.6	3.2	9.4
Sub-Component 1.3 Establish an early warning system for infectious disease trends prediction	1.7	2.4	1.1	1.9	7.1
Sub-total component 1	**10.0**	**10.0**	**5.5**	**8.8**	**34.3**

Project activities	Benin	Mali	Mauritania	Niger	TOTAL
COMPONENT 2					
Sub-Component 2.1 Review, upgrade and network laboratory facilities	4.0	2.3	2.8	2.4	11.5
Sub-Component 2.2 Improve data management and specimen management systems	1.3	2.3	0.4	3.4	7.4
Sub-Component 2.3 Enhance regional reference laboratory networking functions	1.0	1.4	0.3	1.4	4.1
Sub-total component 2	**6.3**	**6.0**	**3.5**	**7.2**	**23.0**

Project activities	Benin	Mali	Mauritania	Niger	TOTAL
COMPONENT 3					
Sub-Component 3.1 Enhance cross-sectoral coordination and collaboration for preparedness and response	0.7	2.8	0.9	5.5	9.9
Sub-Component 3.2 Strengthen capacity for emergency response	2.0	3.2	1.6	1.5	8.3
Sub-Component 3.3 Contingency emergency response	0.0	0.0	0.0	0.0	0.0
Sub-total component 3	**2.7**	**6.0**	**2.5**	**7.0**	**18.2**

Project activities	Benin	Mali	Mauritania	Niger	TOTAL
COMPONENT 4					
Sub-Component 4.1 Healthcare workforce mapping, planning and recruitment.	3.1	2.0	0.5	3.7	9.3
Sub-Component 4.2 Enhance health workforce training, motivation and retention	0.2	1.5	3.4	2.0	7.1
Sub-total component 4	**3.3**	**3.5**	**3.9**	**5.7**	**16.4**

Project activities	Benin	Mali	Mauritania	Niger	TOTAL
COMPONENT 5					
Sub-component 5.1 Project coordination, fiduciary management, monitoring and evaluation, data generation, and knowledge management	7.7	4.5	4.6	11.3	28.1
Sub-component 5.2 Institutional support, capacity building, advocacy, and communication	0.0	0.0	0.0	0.0	0.0
Sub-total of component 5	**7.7**	**4.5**	**4.6**	**11.3**	**28.1**

B. Project Cost and Financing

47. The tentative project financing in the amount of US$120 million is considered a third project investment under the SOP approach of the Program. Project financing is mobilized via contributions from individual country allocation of International Development Association (IDA) funds and a regional integration matching fund mechanism (1:2 IDA - RI match fund for Benin and Mali; and 1:1 IDA - RI match fund for Mauritania and Niger) (Table 3). Co-financing will also be mobilized through an MDTF associated with the REDISSE Program. Current commitments under the MDTF total CAD 20 million for Bank executed and recipient (WAHO) executed activities.

Table 3: Breakdown of Project Financing

Country / Regional Institution	Country IDA (US$ Million)	Regional IDA (US$ Million)	Total (US$ Million)
Benin	10.0	20.0	30.0
Mali	10.0	20.0	30.0
Mauritania	10.0	10.0	20.0
Niger	20.0	20.0	40.0
TOTAL	50.0	70.0	120.0

C. Lessons Learned and Reflected in the Project Design

48. **The design of the REDISSE program benefits from a rich set of lessons drawn from a variety of sources including:** (i) the achievements and challenges faced by World Bank health systems strengthening and disease control operations that are contributing to disease surveillance capacity for human and animal health; (ii) a comprehensive literature review of existing regional disease surveillance and response networking arrangements from other regions; (iii) best practices and lessons learned from international initiatives and development partner projects with similar

objectives; and (iv) lessons learned from major infectious disease outbreaks. A detailed set of lessons learned and reflected in the project design are included in Annex 2. Some of the most salient experiences and lessons learned incorporated in the REDISSE 3 are noted below:

a. **General lessons from REDISSE 1 and 2:** Four years post-Ebola, there is a rapidly decreasing demand for investments in preparedness, detection and response, which translate into critical gaps in regional health security. Additionally, stakeholder coordination and collaboration presents a significant challenge in the region, leading to duplication of efforts, overlapping multiple planning processes, and neglected priorities. The REDISSE Program has sought to underscore the importance of mutual benefit for country and regional actions; and taken substantial steps to provide mechanisms for country, regional and external partner coordination.
b. **Challenges in cross-border collaboration:** Challenges in implementing a regional disease surveillance and response approach include poor ownership and engagement of countries as well as deprioritized cross–border collaboration between countries. In response the REDISSE Program has incorporated formal approaches (such as, treaties, agreements, memorandum of understanding, and harmonization of policies, strategies, SOPs) as well as informal approaches (such as, cross–border planning, knowledge exchange, and simulation exercises) to strengthen cross-border collaboration.
c. **Challenges in cross-sectoral collaboration:** Experience from REDISSE 1 and 2 has highlighted challenges in multi-sectoral collaboration for disease surveillance. These challenges include working across sectors, competition for available resources, priority concurrence, fund flow, and implementation responsibilities. In many cases the One health approach is a new concept, which requires greater understanding of its implications. Environmental considerations can often be overlooked as the focus tends to be on human and animal health sectors. The REDISSE Program has sought to inculcate a sense of common cause and benefit by encouraging participation of all three sectors. Additionally, REDISSE Program has provided an opportunity for experimentation with different solutions for cross-sectoral collaboration, and to encourage cross-sectoral planning and to develop a culture of sharing the "resource blanket."
d. **Institutional implementation capacity and capacity building:** At the sub-regional level WAHO has built a robust management implementation unit which includes separate project coordinators for existing World Bank projects.[24]
e. **Address weaknesses in the M&E/Results Framework:** Initial experience with Intermediate Results (IR) level indicators led the countries participating in REDISSE 1 and 2 to recommend the deletion of two indicators: 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 Total number of project beneficiaries and percent female. These indicators are therefore not included in the results framework. A new indicator to capture the gender dimension of access to training in the Program is proposed, based on finding of gender disparity in the draft WARDS Implementation Completion and

[24] REDISSE 1 (P154807) and 2 (P159041), the West Africa Regional Disease Surveillance Capacity Strengthening project (P125018 -closed 6/2017), the Sahel Malaria and Neglected Tropical Diseases project (149426), the West African Medicines Regulatory Harmonization Project (P158363), and the Sahel Women's Empowerment and Demographics project (P150080).

Results Report.

f. **Clearly outlined project activities:** The Program and this project address the importance of identifying both country-implemented activities and activities implemented by regional institutions that contribute to the regional and global public good.

g. **Improving cooperation across sectors, among countries and between countries at critical cross-border junctures, as well as with development partners:** The REDISSE Program promotes cooperation across sectors through the adoption of a OH approach, linkages between disease surveillance and epidemic preparedness systems, and all hazard disaster management systems at country and regional levels. Country collaboration with development partners will be facilitated through the establishment of national and regional platforms for joint planning and resource coordination.

h. **Building better health systems:** The project design contributes to long-term systems capacity building across the two sectors to effectively detect and respond to infectious diseases of zoonotic nature in a more integrated manner.

i. **Adapting to climate change:** REDISSE 3 components and sub-components enables the REDISSE 3 countries to adapt to the downstream impacts of climate change, including emergency response with an all-hazards approach, and measures for risk mitigation of diseases exacerbated by climate change. The WBG Climate Change Action Plan has established a target of 20 percent of new Health, Nutrition, and Population (HNP) projects to include climate change in their design, and health-sector specific operational guidance (World Bank 2017). To ensure climate change adaption, World Bank's "Methodological guidance: Climate change and health diagnostic" will be provided to WAHO and REDISSE countries to guide programs to ensure climate change co–benefits.

j. **Gender considerations**: The REDISSE Program has taken a country-driven approach to build resilience to health emergencies in synergy with WBG's gender strategy.[25] The SCDs and CPFs of all REDISSE 3 countries have identified gender gaps in health outcomes and the economic opportunities/training rendered to women. Findings from the ICR of WARDS[26] project have also highlighted the gender disparity in the percentage of female participants in the FETP and the FELTP training programs in West Africa. REDISSE 3 seeks to address the skewed gender ratio through greater participation and training of women in disease surveillance, infection control, and emergency response.

k. **Private sector and non-governmental engagement**: Adopting lessons learned from other regional projects, the project promotes partnership with the private sector and non-governmental networks to improve performance in areas where the private sector and other entities may have a comparative advantage and/or complement the public-sector service delivery.

l. **Ensuring cost-effectiveness of interventions:** An IEG report highlights that while many projects supported significant improvement in disease diagnostic capacity, there was a tendency for projects to focus too much on investing in laboratory infrastructure and equipment rather than in systems development and human capacity. REDISSE will apply

[25] World Bank. 2015. World Bank Group gender strategy (FY16-23): gender equality, poverty reduction and inclusive growth. Washington, D.C: World Bank Group. http://documents.worldbank.org/curated/en/820851467992505410/World-Bank-Group-gender-strategy-FY16-23-gender-equality-poverty-reduction-and-inclusive-growth

[26] Implementation Completion and Results Report, WARDS project, 2017, Report # ICR00004224

cost-effectiveness considerations in all aspects of strategic planning and implementation.

m. **Client ownership:** along with the support from donor partners and other international agencies, individual countries are central to ensuring a coordinated regional program that successfully addresses the threats posed by infectious diseases. REDISSE communications activities are intended to keep the issue high on the agendas of Ministers and Heads of State in the region and promote domestic investment in systems maintenance.

n. **Sustainability plans:** Moving from an emergency response and working toward long-term capacity building to support health systems using a cross-sectoral interventions was identified as the proper approach post-GPAI, and is incorporated in the REDISSE Program design.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

49. Project implementation will be coordinated by WAHO. WAHO has taken steps to strengthen its procurement and Financial Management (FM), M&E, communications, social and environmental safeguards and project management competencies. It will continue to do so with support provided under REDISSE 1 and 2. Governments of the four participating countries will implement country-level tasks and project funds will flow directly from IDA to the individual countries for country level activities. In Benin, activities will be managed out of the office of the President, National Council to fight AIDS, TB, Malaria and other epidemics. In Mali and Niger country level activities will be led and coordinated by the Ministry of Health (MOH) in the respective countries, while implementation will be carried out by the relevant programs and divisions under the MOH and Ministry of Agriculture/Livestock. In Mauritania, country level activities will be led and coordinated by the Ministry of Livestock.

50. Regional level activities, including cross-border coordination efforts planned under REDISSE 3 will be coordinated by WAHO. WAHO will also ensure that the RAHC is supported (including through the contracting of support staff and contributions to operating costs) in performing regional animal health-related functions based on a memorandum of understanding. In addition, a contract was signed between WAHO and the OIE for specific activities related to its core mandate (e.g. PVS pathway-related activities, reference labs/collaborating centers, twinning arrangements, national focal points trainings). Under this contract, the OIE will also contribute to strengthening RAHC's capacity to perform its activities in accordance with WB rules and procedures.

51. The following country-specific arrangements have been confirmed during project appraisal:

Benin:

52. A multisectoral steering committee of the Global Health Security Agenda will be created, including the Ministry of Health (MOH) and Ministry of Agriculture and Livestock; the Ministry

in Charge of environment (MOE), one representative of the Mayors, 2 representatives of Civil society. It will be chaired by the Head of the National Council to Combat HIV/AIDS, Tuberculosis, Malaria and Epidemics (CNLS-TP) assisted by a technical committee. It will oversee annual project planning, monitor project progress, and approve annual reports. Project implementation will be the responsibility of a Project Coordination Unit (PCU), which is under the aegis of the CNLS-TP. The new PCU will be headed by a Project Coordinator and staffed with qualified procurement, financial, M&E, and safeguard specialists. Further, the Benin PCU will recruit an environmental specialist and a social safeguards specialist, who will work in close collaboration with the regional WAHO safeguards specialist. A sub-regional entity addressing the Abidjan-Lagos corridor will be looked to for cross-border aspects, while appropriate institutions will assist in the development of the One health approach.

Mali:

53. A multisectoral national committee for OH will be created through the Office of the Prime Minister, chaired by the MOH, the ministry responsible for overall project implementation. The committee will include the ministries of livestock, economy and finance, education, agriculture, security, environment and sustainable development, communications, and representatives from local, regional and global partners. The committee will review annual workplans and budgets, monitor project progress and approve annual project reports, meeting at least twice annually. The existing PCU established for the World Bank-funded Malaria/NTD project within the Ministry of Health and Social Welfare, will manage the project. The PCU is headed by a Program Coordinator. The project will hire qualified staff to strengthen the PCU, namely: a project coordinator, financial, accountant, procurement, M&E, communications, an environmental specialist and a social safeguard specialist. Health centers and health personnel, community health workers, veterinarian staff, as well as community agricultural workers, and the private sector will be involved in project execution. Existing multisectoral/ multidisplinary cadres functioning at community and district levels will share information/best practices in dealing with endemics and catastrophic events. The environmental specialist and the social safeguards specialist will work in close collaboration with the regional WAHO safeguards specialist.

Mauritania:

54. A multi-sectoral national committee of the GHSA, chaired by the MOH will include representatives of the ministries of livestock, health, economy and finance, education, environment and sustainable development, communications and local, regional, and global partners. Additionally, the project will benefit from a technical committee comprised of representatives of the relevant sectors, and regional and departmental units of the national Epidemic Monitoring Commission. The national steering committee will oversee project annual planning and budgeting, monitor project progress and approve annual project reports, meeting at least twice annually. An existing Project Coordination Unit (PCU) in the Ministry of Livestock will be responsible for the overall project implementation. The PCU will be headed by a Project Coordinator supported with qualified staff including financial, auditing, procurement, M&E, and safeguard specialists. Further, the PCU will recruit an environmental specialist and a social safeguards specialist, who will work

in close collaboration with the regional WAHO safeguards specialist.

Niger:

55. A National Multisectoral Committee for "One Health" will be established at the level of the Prime Minister's Office. This committee will include representatives from the Ministries of Planning, Agriculture and Livestock, Environment and Sustainable Development, and Communication as well as local, regional and international partners. To monitor the project, a National Steering Committee will be created and chaired by the Minister of Public Health (MSP). This committee will include all departmental, partner and technical representatives who are on the multi-sectoral "One Health" committee. The technical coordination of the project will be ensured by the Director of Surveillance and Response to Epidemics (DSRE) of the MSP and will act as the secretariat of the steering committee. Thus, the National Steering Committee will oversee the annual project planning and budgeting, monitor the progress of the project and approve the annual reports at least twice a year. An existing project coordination unit (PCU) within the Ministry of Public Health will be strengthened by qualified staff in financial management, procurement, M & E and an environmental specialist and a social safeguards specialist. (This unit is the same for the WB-funded Sahel Malaria and Neglected Tropical Diseases Project (P149526) and the Population and Health Support Project (P147638)). Also, for close monitoring during the implementation of project activities, each Ministry (in particular the Ministry of Public Health, the Ministry of Agriculture and Livestock, the Ministry of Environment and of Sustainable Development) will designate a project focal point. These focal points serve as a link between their Ministries' Departments and the PCU for carrying out the activities. They will be responsible for preparing draft annual work plans budgets. They will also be responsible for preparing the reports of the activities carried out within the framework of the project and the archiving of project documentation. Focal points will meet regularly to review the progress on the implementation of activities and will report to their respective ministries on implementation progress and challenges encountered. Futher, the Niger PCU environmental specialist and social safeguards specialist and a Social safeguards specialist will work closely with the regional WAHO safeguards specialist.

B. Results Monitoring and Evaluation

56. A set of indicators to be monitored and documented to assess performance and progress toward meeting the project objectives as described in the Results Framework (RF) in Section VII. There is an overall RF to measure regional progress and country-specific RFs with customized annual targets. Results will be reported annually in the Implementation Status and Results Reports (ISRs). Most indicators rely on existing international tools for evaluating IHR and OIE compliance and progress, namely the JEE and PVS tools to minimize the burden of data collection on countries. These measurement tools are being reviewed and may be modified over time, and REDISSE indicator adjustments will be made, as appropriate. Data sources also may vary by country and WAHO will establish a mechanism for ensuring the quality of the data. Section VII provides information on country entities responsible for the assessment, collection, compilation, and reporting on REDISEE 3 indicators.

C. Sustainability

57. The REDISSE 2 Project Appraisal Document (Report No. PAD2200), dated February 6, 2017 paragraphs 81-91 provides detailed information. Summaries of the relevant sections are provided below.

58. Preventing and controlling zoonotic disease outbreaks yields large economic benefits by reducing the threats of epidemics and pandemics. Such benefits of disease surveillance go well beyond the health benefits of reducing the number of infections, reducing mortality and morbidity, and healthcare costs. Disease outbreaks also affect economic activity by decreasing demand (as personal income, investment, and exports fall) and supply (as agriculture production falls and businesses in many sectors close), and reduces labor, capital, and productivity, which are the major components of growth (UNDP, 2014).

59. Specifically, the project intends to generate sustainable impact on the capacity for disease surveillance and response at country and regional levels through the following interventions:

- Disease surveillance and response policies, standard operating procedures, and relevant technical guidelines will be reviewed and updated;
- Strengthening a trained workforce in the human, animal health and environmental sectors; regional dialogue and identification of best practices for health workforce development; motivation and retention to make sure that critical posts for public human and animal health systems will be filled; and gender considerations as well as workforce retention will be taken into account. Managerial capacities within the involved ministries will be enhanced to better manage resources (human and financial) and operations;
- Review and prioritization of disease surveillance and control in each country is planned to improve technical and allocative efficiency of funding for the diseases surveillance and control systems for the diseases affecting human and animals in the countries. Regular disease burden assessments and prioritization based on the findings will streamline the disease surveillance program and improve better targeting; and
- Awareness raising, communication and advocacy materials will be tailored to strategic audiences, with a particular emphasis on political leaders and decision makers.

60. The World Bank has been supporting Benin, Mali, Mauritania and Niger in assessing financial sustainability for disease surveillance and response. This effort will be expanded to include all countries in REDISSE in an effort to identify strategies to sustain disease surveillance and response financing from domestic revenue sources. In addition, REISSE has begun identifying and exploiting opportunities for collaboration with ongoing and future investments from countries or development organizations to build synergies and ensure that investments and outcomes will be sustained. One of the primary engagements is with the United States Government and other contributors to the GHSA. In addition, the World Bank has initiated the development of a mechanism for pooling contributions from multiple donors, the REDISSE MDTF, with the objective of insuring improved resource coordination and longer-term commitment to health systems capacity building for disease surveillance and response. Efforts will also be made to estimate future financial and technical needs for both the regional and individual country

requirements as to infectious disease surveillance, preparedness, laboratory and human capacity, as well as institutional support. Multi-partner discussions will be held with potential resource providers to assess needs and seek commitments of assistance in the post-REDISSE period. First and foremost, however, sustainability will depend on commitments of the REDISSE governments and WAHO-ECOWAS to treat these needs as a high priority, and reflected in policies, programs, inclusion of incremental domestic financing by the countries needs to be incorporated in their annual budgets.

D. Role of Partners

61. Development partner engagement is extensive in the sub-region and in each of the four project countries, reflecting the widening recognition that disease surveillance, preparation, detection, and response is a critical element of the development challenge and one which touches upon nearly all of the seventeen SDGs. Beyond good health, disease prevention and containment affects SDG targets in reducing poverty, hunger, inequality, among others. Given the breadth of the potential participants which provide technical know-how and funding with respect to human and zoonotic diseases, and to eco-system mediation, the responsibility for coordinating and efficiently guiding the many participants must be done by the countries themselves and WAHO. As was done in developing this project, and will be the case in going forward with its implementation, the World Bank will be active in contributing to the common effort in each country, and with WAHO for the sub-region.

62. At global level and in the formation of normative policies, WHO, OIE and FAO will provide the normative guidance and frameworks for action in their respective areas of concentration. They will engage various UN agencies, multilateral and bilateral technical providers, academic and research universities and institutions, NGOs, and the private sector, in terms of coordination and in forming coalitions. Major contributing bilateral and non-governmental partners for technical support and financing include the U.S. Centers for Disease Control, the China Centers for Disease Control, Canadian Government support from its Department of Foreign Affairs, the Bill Melinda Gates Foundation, as well as national country members of the GHSA of which USAID's EPT-2 Program is a part.

63. At sub-regional and country level, each has its own various coordinating and collaborating partners which will be drawn on as the program evolves, and brought together by the national steering committees. The intention is for transparency of effort and dissemination of results on a regular basis in order to assure that the relevant entities are aware of and assess progress in carrying out project objectives.

V. KEY RISKS

Overall Risk Rating and Explanation of Key Risks

64. **The overall risk rating for the project is categorized as substantial.** The overall rating is based on an assessment of component risks in which the risk was rated as high for Institutional

Capacity for Implementation and Sustainability; and, substantial in five categories: Political and governance, Technical Design of Project or Program; Fiduciary; and Stakeholder risks. Macroeconomic, Sector Strategies and Policies, and Environment and Social are rated as moderate. The overall risk is heterogeneous across the four countries under REDISSE 3 with Benin, Mauritania, and Niger rated as substantial while Mali is rated as high risk. Further discussion on risks and their mitigation can be found in Annex 5.

VI. APPRAISAL SUMMARY

A. Economic and Financial (if applicable) Analysis

65. **REDISSE 2 (PAD2200, Annex 4A, pages 185-202) provides a detailed economic and financial analysis of the REDISSE Program and the basis for the iSOPs. In sum, there is a strong economic case for investing in integrated disease surveillance and response systems.** Preventing and controlling zoonotic disease outbreaks yields large economic benefits by reducing the threats of epidemics and pandemics. Disease outbreaks affect economic activity by decreasing demand (in response to reduced consumer and business confidence, which can substantially and abruptly reduce spending; exports may fall due to disruptions in logistics) and reducing supply (labor absenteeism and disruptions of supply chains will reduce production in agriculture and other sectors; some businesses will close altogether). The impacts of contagion will be to reduce productivity of both labor and capital, which are the major components of growth (UNDP, 2014).

66. REDISSE will enhance ECOWAS member States and Mauritania's capacity to rapidly detect and respond to public health threats of national and international concern. Ultimately, the Program will contribute towards significantly reducing the burden of diseases, particularly among poor and vulnerable populations, mitigating the public health and economic risks posed by infectious diseases in humans and animals, and decreasing the threats of future disease outbreaks. These impacts will improve economic security in ECOWAS member States and Mauritania, resulting in stronger growth and development prospects. In addition, REDISSE will enable REDISSE 3 countries to contribute a global public good, that of increased global health security.

67. There are three primary rationales for a publicly-provided regional approach to disease surveillance and response network in West Africa. The first rests on the status of a disease surveillance system as a global public good, which is both non-rival and non-exclusive. These benefits accrue to all countries and thus describe a 'pure' global public good. The second rationale is simply the overwhelming economic burden that infectious diseases, individually and collectively, place on the region, constraining regional and national economic development. The third rationale is based on the sharing of resources to enhance efficiency. Examples of resurgent polio, meningitis, cholera and yellow fever in West African countries that were thought to have eliminated or controlled them demonstrate the need for a coordinated regional response. Costly high-level resources, such as level 3 reference laboratories, specialized research institutions, and advanced training facilities may efficiently serve the needs of more than one country.

68. The value added from World Bank support is anchored in its regional approach and its institutional mandate. The proposed project fits squarely into its Regional Framework for Communicable Disease Control and Preparedness Program (RFCDCP) and its global mission to end extreme poverty and promote shared prosperity. A detailed presentation of both the rationale for public sector financing and World Bank added value is contained in the REDISSE 2, PAD2200 (Annex 4A, pages 185-202).

B. Technical

69. **There is an urgent need to establish or reinforce and maintain strong collaboration between systems at national, cross-border, and regional levels in order to better manage risks that arise at the animal-human-ecosystem interface (the 'One heath' concept).** For that to happen, attention will be given to priority core public functions (veterinary public health and human public health) that would reduce these risks. Assessing these core functions, bridging divides among systems and ministries and reducing capacity gaps would constitute a critical element of the program. Country assessment tools now exist for both systems as well as identified bridges for OH competencies between these tools. Countries will establish a OH national platform for inter-sectoral collaboration, planning and monitoring, and, when desirable, joint implementation. At the regional level, activities will support the establishment of a network of those country OH platforms. For both human and animal public health surveillance, the activities in the following four domains are required and have been identified as core areas for both country and regional levels: (i) surveillance and information systems; (ii) strengthening of laboratory capacity; (iii) epidemic preparedness and emergency response capacity; and (iv) workforce development.

70. Surveillance systems will provide the capacity either in-country or regionally to detect outbreaks and public health threats in time to implement an appropriate, relevant and coordinated response. Strong surveillance, supported by modern information technology, will support the timely recognition of the emergence of relatively rare or previously undescribed pathogens in specific countries.

71. Laboratory capacity. A national laboratory system or network is needed to ensure the safe and accurate detecting and characterizing of pathogens causing epidemic diseases, including both known and novel threats, from all parts of the country. Laboratory quality can be defined as accuracy, reliability and timeliness of reported test results and is necessary to identify emergent public health threats and to implement appropriate interventions. Although it is important to strengthen laboratory capacity at all levels of each country's health system, for purposes of efficiency and quality specialized and higher-level laboratory functions will be a shared resource at regional level.

72. Preparedness and emergency response capacity. This involves promoting local emergency awareness and response expertise, creating interconnected, robust public health emergency management programs, surveillance platforms to support planning and decision making, and a trained public health workforce to respond. Public health rapid response teams will need to be established and supported. Similarly, veterinary rapid response teams would have to be prepared

to intervene for animal disease outbreaks of major importance. Involvement of other key sectors and actors (such as law enforcement, customs, military) for emergency response should also be ensured when cases of zoonotic outbreaks are suspected, collaboration between public health and veterinary services would be warranted.

73. Workforce development. A multi-sectoral workforce that is fully trained and competent, coordinated, evaluated, and equipped is needed for prevention, detection, and response activities to be conducted effectively in response to both public health routine functions and emergencies. While developing additional capacity in participating countries for workforce in surveillance, laboratory, and preparedness and emergency response is necessary, workforce resources, especially in specialized fields, can be leveraged regionally as appropriate.

C. Financial Management

74. In connection with the preparation of the REDISSE 3 project, a FM assessment of the implementing entity within each participating country has been conducted. The assessment was done for the Ministries of Health in Niger (Pooled Fund) and Mali (Project Coordination Unit of the ongoing Sahel Malaria and Neglected Tropical Diseases Project (PMNTD), the Ministry of Livestock in Mauritania, and the Coordination Unit (PCU) to be established under the *Conseil National de Lutte contre le VIH/sida, la Tuberculose, le Paludisme, les IST et les Épidémies* (CNLS-TP) in Benin.

75. The objective of the assessment was to determine: (a) Whether these units have adequate FM arrangements (planning, budgeting, accounting, internal control, funds flow, financial reporting, and auditing arrangements) to ensure that project funds will be used for purposes intended in an efficient and economical way; (b) project financial reports will be prepared in an accurate, reliable and timely manner; and (c) the project's assets will be safeguarded. The FM assessment was carried out in accordance with the FM Manual for World Bank IPF operations that became effective on March 1, 2010 but was issued (retrofitted) on February 10, 2017. In this regard, a review of the FM arrangements has been conducted for the above entities. Annex 2 "Implementation Arrangements" contains details with respect to country FM and assessments.

76. The conclusion of the assessment is that the FM arrangements in place meet the Bank's minimum FM requirements under Bank Policy and Directive for Investment Project Financing operations, and subject to the implementation the FM action plan as highlighted below further detailed in Annex 2), are therefore adequate to provide, with reasonable assurance, accurate and timely information on the status of the project required by World Bank. The overall FM residual risk rating is **Substantial** for the four countries.

77. Details of the implementing agencies that will carry out the FM action plan to strengthen FM– including specifics of staffing, internal control, FM manual, accounting system, and external audit are detailed in the Annex.

78. The CERC OM and the Disbursement and Financial Information Letter will include the

detailed disbursement arrangements applicable under the CERC component of the proposed project. As part of such arrangements, a positive list could be used, which would be featured in the CERC OM, and would include the items against which disbursements will be made. Where a positive list of expenditures is used, the documentation required to support disbursement requests should be agreed (for example, invoices and bills of lading for food imports) and recorded in the CERC OM and the Disbursement Letter.

D. Procurement

79. The Borrowers will carry out procurement for the proposed project in accordance with the World Bank's "Procurement Regulations for IPF Borrowers" (Procurement Regulations) dated July 2016 and revised in November 2017 under the "New Procurement Framework (NPF), and the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January 2011 and as of July 1, 2016.

80. Procurement shall be carried out by: (a) At the regional level by WAHO; and (b) at the country level in: (i) Benin by the newly created *"Unité de Gestion du Projet"* housed by the Permanent Secretary of the *" Conseil National de Lutte contre le Sida* (CNLS)*"* of the Presidency; (ii) Mali by the MOH and the Ministry of Agriculture while MoH will also take a coordinating role; (iii) Mauritania by a new PCU based in the Ministry of Livestock, with close collaboration with the MoH and Ministry of Environment and, until the PCU has been established, by the PCU under the PRAPS Project; and (iv) Niger by the existing Unit of the Health Pooled Fund (*Projet d'Appui a la Population et la Santé* (P147638) and Projet MTN/*Paludisme Saisonnier au Sahel* (P149526) under the MOH.)

81. All procuring entities as well as bidders, and service providers, i.e. suppliers, contractors and consultants shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraph 3.32 and Annex IV of the Procurement Regulations.

82. Borrowers (with assistance from the WB) have prepared Project Procurement Strategies for Development (PPSD) which describe how procurement activities will support project operations for the achievement of project development objectives and deliver Value for Money (VfM). The procurement strategies will be linked to the project implementation strategy at sub-regional, country, and the state levels ensuring proper sequencing of the activities. They will consider institutional arrangements for procurement; roles and responsibilities; thresholds, procurement methods, and prior review, and the requirements for carrying out procurement. They also will include a detailed assessment and description of state government capacity for carrying out procurement and managing contract implementation, within an acceptable governance structure and accountability framework. Other issues taken into account will include the behaviors, trends and capabilities of the market (i.e. market analysis) to respond to the procurement plan.

83. Project design will provide a window to enable the Borrower to carry out Advance Contracting and Retroactive Financing in accordance with Section V (5.1&5.2) of the WB Procurement Regulations for IPF Borrowers. The retroactive financing will be allowed up to 20 percent of the credit/grant covering the expenditures incurred by the project, not more than 12 months before the date of the signing of the Legal Agreements for the WB Credit/Grant.

84. A detailed procurement description and institutional arrangements can be found in Annex 2, Implementation Arrangements.

E. Social (including Safeguards)

85. **The net social impacts and benefits of the project are expected to be positive since it will strengthen the engagement of citizens, as well as linkages of surveillance and response processes and ensure the rapid detection and reporting to enable prevention of potential disease outbreaks within high-risk communities.** By improving management of infectious waste, it will reduce the potential public health risk in participating countries. As the majority of project activities are expected to take place in existing government owned facilities on government-owned land, the project will not involve land acquisition leading to involuntary resettlement or restriction of access to resources or sources of livelihoods of populations. Therefore, OP 4.12 (Involuntary Resettlement) will not be triggered for this project, and the project will not finance activities that would trigger the policy.

F. Environment (including Safeguards)

86. **REDISSE 1 has been classified as a category B operation as per World Bank's Operational Policies due to the moderate risk of the proposed activities and their site-specific nature of their impacts on both the natural and physical environment.** The project is expected to have overall positive environmental impacts through its support to surveillance, monitoring and containment of diseases and improved management of infectious specimens and waste from laboratories. The potential negative impacts of the project are related to the rehabilitation/upgrading of existing medical and other facilities, generation of infectious medical and animal waste and usage of pesticides. These risks are considered to be moderate and site-specific and can be easily managed through the implementation of an effective and organized system.

87. The environmental safeguards policies triggered by REDISSE 3 are Environmental Assessment (OP/BP 4.01) and Pest Management (OP 4.09). Each country has prepared and disclosed three sets of documents: a national Hazardous Waste Management Plan (HCWMP), an Integrated Pest and Vector Management Plan (IPVMP) and an Environmental and Social Management Framework (ESMF). These documents have been consulted with stakeholders and disclosed in-country, at WAHO's website, and at the Association's website.

Safeguards Instrument	Disclosure In-Country	Disclosure at InfoShop
BENIN		
ESMF	March 8, 2018	March 8, 2018
HWMP	March 8, 2018	March 8, 2018
IPVMP	March 8, 2018	March 8, 2018
MALI		
ESMF	March 8, 2018	March 8, 2018
HWMP	March 8, 2018	March 8, 2018
IPVMP	March 8, 2018	March 8, 2018
MAURITANIA		
ESMF	March 7, 2018	March 8, 2018
HWMP	March 7, 2018	March 8, 2018
IPVMP	March 7, 2018	March 8, 2018
NIGER		
ESMF	March 8, 2018	March 8, 2018
HWMP	March 8, 2018	March 8, 2018
IPVMP	March 8, 2018	March 8, 2018

G. Other Safeguard Policies (if applicable)

None

H. World Bank Grievance Redress

88. **Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS).** The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit *http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service*. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY : Western Africa
Regional Disease Surveillance Systems Enhancement (REDISSE) Phase III

Project Development Objectives

The PDOs 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 Emergency, to provide immediate and effective response to said Eligible Emergency.

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Laboratory testing capacity for detection of priority diseases (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)		Number	0.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by countries in intermediary years.	Participating countries, JEE and OIE PVS experts
Description: Capacity graded on a score of 1-5 where: 1 = no capacity (National laboratory system is not capable of conducting any core tests); 2 = limited capacity							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
(national laboratory system is capable of conducting 1-2 (of 10) core tests); 3 = developed capacity (national laboratory system is capable of conducting 3-4 (of 10) core tests); 4 = demonstrated capacity (national laboratory system is capable of conducting 5 or more (of 10) core tests); and 5 = sustainable capacity (In addition to capability of conducting 5 or more core tests, country has national system(s) for procurement and quality assurance)							
Name: Progress in establishing indicator and event-based surveillance systems (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)		Number	1.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by countries in intermediary years.	Participating countries, JEE and OIE PVS experts
Description: Capacity graded on a score of 1-5 where: 1 = no capacity (no indicator or event based surveillance system exists); 2 = limited capacity (indicator and event based surveillance system(s) planned to begin within one year); 3 = developed capacity (indicator OR event based surveillance system(s) in place to detect public health threats); 4 = (demonstrated capacity (indicator AND event based surveillance system(s) in place to detect public health threats); 5 = sustainable capacity (in addition to surveillance systems in country, using expertise to support other countries in developing surveillance systems and provide well-standardized data to WHO and OIE for the past five years without significant external support)							
Name: Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of countries that achieve a JEE score of 3 or higher)		Number	0.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project,	Participating countries, JEE and OIE PVS experts

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
						Self-assessments by countries in intermediary years	
Description: Capacity graded on a score of 1-5 where: 1 = no capacity (country doesn't have multidisciplinary HR capacity required for implementation of IHR core capacities); 2 = limited capacity (country has multidisciplinary HR capacity (epidemiologists, veterinarians, clinicians and laboratory specialists or technicians) at national level); 3 = developed capacity (multidisciplinary HR capacity is available at national and intermediate level); 4 = demonstrated capacity (multidisciplinary HR capacity is available as required at relevant levels of public health system (e.g. epidemiologist at national level and intermediate level and assistance epidemiologist (or short course trained epidemiologist) at local level available); 5 = sustainable capacity (country has capacity to send and receive multidisciplinary personnel within country (shifting resources) and internationally)							
Name: Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)		Number	0.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by countries in intermediary years	Participating countries, JEE and OIE PVS experts
Description: Capacity graded on a score of 1-5 where: 1 = no capacity (national public health emergency preparedness and response plan is not available to meet the IHR core capacity requirements); 2 = limited capacity (a multi-hazard national public health emergency preparedness and response plan to meet IHR core capacity requirements has been developed); 3 = developed capacity (national public health emergency response plan(s) incorporates IHR related hazards and Points of Entry AND							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Surge capacity to respond to public health emergencies of national and international concern is available); 4 = demonstrated capacity (procedures, plans or strategy in place to reallocate or mobilize resources from national and intermediate levels to support action at local response level (including capacity to scaling up the level of response); 5 = sustainable capacity (the national public health emergency response plan(s) is implemented/tested in actual emergency or simulation exercises and updated as needed)							
Name: Progress on cross-border collaboration and exchange of information across countries (Number of countries that achieve a score of 4 or higher)		Number	0.00	4.00	Annual	Self-assessment	Participating Countries
Description: Progress graded on a score of 1-5 where: 1 = no capacity (no formal/informal agreements related to cross border collaboration/information exchange, and no standard operating procedures in place); 2 = limited capacity (informal agreements on cross-border collaboration/ information exchange and standard operating procedures drafted); 3 = developed capacity (formal agreements on cross-border collaboration/information exchange, and standard operating procedures adopted); 4 = demonstrated capacity (formal agreements on cross border collaboration/information exchange and standard operating procedures implemented and routinely monitored); 5 = sustainable capacity (normal agreements on cross-border collaboration/information exchange and standard operating procedures) implemented, routinely monitored and financed from domestic budget.							
Name: Progress towards establishing an active, functional regional One Health platform (Number based on 5 point Likert scale)		Number	1.00	4.00	Annual	Self-evaluation	WAHO/RAHC
Description: Where 1 = no capacity; 2 = governance structure established and endorsed; 3 = an action plan for regional collaboration is developed and endorsed; 4 = action plan is budgeted and implemented; 5 = fifty percent of operational budgets for the implementation of regional action plan comes from national budgets Additional info: the multi-sectoral aspects of One Health require the establishment of a platform consisting of a governance mechanism, an operational action plan, and M&E framework to determine intersecting areas and responsibilities between human, animal, and environmental health.							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: BENIN - Laboratory testing capacity for detection of priority diseases (Number of countries that achieve a JEE score of 4 or higher)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Progress in establishing indicator and event-based surveillance systems (Number of countries that achieve a JEE score of 4 or higher)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of countries that achieve a JEE score of 3 or higher)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							
Name: BENIN - Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or highe		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Progress on cross-border collaboration and exchange of information across countries (Number of countries that achieve a score of 4 or higher)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Progress towards establishing an active, functional regional One Health platform (Number based on 5 point		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Likert scale)							
Description:							
Name: MALI - Laboratory testing capacity for detection of priority diseases (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Progress in establishing indicator and event-based surveillance systems (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of		Number	3.00	3.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
countries that achieve a JEE score of 3 or higher)							
Description:							
Name: MALI - Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Progress on cross-border collaboration and exchange of information across countries (Number of countries that achieve a score of 4 or higher)		Number	0.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Laboratory testing capacity		Number	4.00	5.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3	JEE and OIE PVS

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
for detection of priority diseases (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)						and end of project	Experts report
Description:							
Name: MAURITANIA - Progress in establishing indicator and event-based surveillance systems (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)		Number	4.00	5.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of countries that achieve a JEE score of 3 or higher)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							
Name: MAURITANIA - Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Progress on cross-border collaboration and exchange of information across countries (Number of countries that achieve a score of 4 or higher)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Progress towards establishing an active, functional regional One Health platform (Number		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
based on 5 point Likert scale)							
Description:							
Name: NIGER - Laboratory testing capacity for detection of priority diseases (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Progress in establishing indicator and event-based surveillance systems (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of countries that achieve a JEE		Number	1.00	3.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
score of 3 or higher)							
Description:							
Name: NIGER - Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or highe		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Progress on cross-border collaboration and exchange of information across countries (Number of countries that achieve a score of 4 or higher)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Progress towards establishing an active, functional regional		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
One Health platform (Number based on 5 point Likert scale)						and end of project	
Description:							
Name: MALI - Progress towards establishing an active, functional regional One Health platform (Number based on 5 point Likert scale)		Number	1.00	4.00			
Description:							

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Interoperable, interconnected, electronic real-time reporting system: number of countries that achieve a JEE score of 4 or higher (Number)		Number	0.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project	Participating countries, JEE and OIE PVS

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
						Self-assessments by countries in intermediary years	experts
Description: Capacity graded on a score of 1-5 where 1 = no capacity (no interoperable, interconnected, electronic real-time reporting system exists; 2 = limited capacity (country is developing an interoperable, interconnected, electronic real-time reporting system, for either public health or veterinary surveillance systems); 3 = developed capacity (country has in place an inter-operable, interconnected, electronic reporting system, for either public health or veterinary surveillance systems. The system is not yet able to share data in real-time); 4 = demonstrated capacity (country has in place and interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems. The system is not yet fully sustained by the host government); and 5 = sustainable capacity (country has in place an inter-operable, interconnected, electronic real-time reporting system, including both the public health and veterinary surveillance systems which is sustained by the government and capable of sharing data with relevant stakeholders according to country policies and international obligations).							
Name: Laboratory systems quality: number of countries that achieve a JEE score of 4 or higher (Number)		Number	0.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by countries in intermediary years	Participating countries, JEE and OIE PVS experts
Description: Capacity graded on a score of 1-5 where 1 = no capacity (there are no national laboratory standards); 2 = limited capacity (national quality standards have been developed but there is no system for verifying their implementation); 3 = developed capacity (a system of licensing of health laboratories that includes conformity to a national quality standard exists but it is voluntary or is not a requirement for all laboratories); 4 = demonstrated capacity (mandatory licensing of all health laboratories is in place and conformity to a national quality standard is required); and 5 = sustainable capacity (mandatory licensing of all health laboratories is in place							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
and conformity to an international quality standard is required).							
Name: Surveillance Systems in place for priority zoonotic diseases/pathogens: number of countries that achieve a JEE score of 3 or higher (Number)		Number	0.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by countries in intermediary years	Participating countries, JEE and OIE PVS experts
Description: Capacity graded on a score of 1-5 where 1 = no capacity (no zoonotic surveillance system exists); 2 = limited capacity (country has determined zoonotic diseases of greatest national public health concern but does not have animal zoonotic surveillance systems in place); 3 = developed capacity (zoonotic surveillance systems in place for 1-4 zoonotic diseases/ pathogens of greatest public health concern); 4 = demonstrated capacity (zoonotic surveillance systems in place for five or more zoonotic diseases/ pathogens of greatest public health concern); and 5 = sustainable capacity (zoonotic surveillance systems in place for 5 or more zoonotic diseases/pathogens of greatest public health concern with systems in place for continuous improvement).							
Name: Workforce Strategy: number of countries that achieve a JEE score of 4 or higher (Number)		Number	0.00	4.00	Annual	EE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by	Participating countries, JEE and OIE PVS experts

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
						countries in intermediary years	
Description: Capacity graded on a score of 1-5 where 1 = no capacity (no health workforce strategy exists); 2 = limited capacity (a healthcare workforce strategy exists but does not include public health professions e.g. epidemiologists, veterinarians and laboratory technicians); 3 =developed capacity (a public health workforce strategy exists, but is not regularly reviewed, updated, or implemented consistently); 4 = demonstrated capacity (a public health workforce strategy has been drafted and implemented consistently; strategy is reviewed, tracked and reported on annually); and 5 = sustainable capacity ("demonstrated capacity" has been achieved, public health workforce retention is tracked and plans are in place to provide continuous education, retain and promote qualified workforce within the national system).							
Name: Specimen referral and transport system: number of countries that achieve a JEE score of 4 or higher (Number)		Number	0.00	4.00	Annual	EE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by countries in intermediary years	Participating countries, JEE and OIE PVS experts
Description: Capacity graded on a score of 1-5 where 1 = no capacity (i.e. aside from ad hoc transporting, no system is in place for transporting specimens from district to national level); 2 = limited capacity (system is in place to transport specimens to national laboratories from less than 50% of intermediate level/districts in country for advanced diagnostics); 3 = developed capacity (system is in place to transport specimens to national laboratories from 50- 80% of intermediate level/districts within the country for advanced diagnostics); 4 = demonstrated capacity (system is in place to transport specimens to national laboratories from at least 80% of intermediate level/districts within the country for advanced diagnostics; and 5 = sustainable capacity (system is in place to transport specimens to national laboratories from at least 80% of districts for advanced diagnostics; capability to transport specimens to/from other labs in the region; and specimen transport is funded from domestic budget).							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Applied epidemiology training program in place such as FETP: number of countries that achieve a JEE score of 4 or higher (Number)		Number	1.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by countries in intermediary years	Participating countries, JEE and OIE PVS experts
Description: Capacity graded on a score of 1-5 where 1 = no capacity (no FETP or applied epidemiology training program established or no access to such a program in another country); 2 = limited capacity (no FETP or applied epidemiology training program is established within the country, but staff participate in a program hosted in another country through an existing agreement (at Basic, Intermediate and/or Advanced level); 3= developed capacity (one level of FETP (Basic, Intermediate, or Advanced) FETP or comparable applied epidemiology training program in place in the country or in another country through an existing agreement); 4 = demonstrated capacity (two levels of FETP (Basic, Intermediate and/or Advanced) or comparable applied epidemiology training program(s) in place in the country or in another country through an existing agreement); and 5 = sustainable capacity (three levels of FETP (Basic, Intermediate and Advanced) or comparable applied epidemiology training program(s) in place in the country or in another country through an existing agreement, with sustainable national funding)							
Name: Systems for efficient reporting to WHO, OIE/FAO: number of countries that achieve a JEE score of 5		Number	0.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project	Participating countries,

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
(Number)						Self-assessments by countries in intermediary years	JEE and OIE PVS experts
Description: Capacity graded on a score of 1-5 where 1 = no capacity (no national IHR focal point, OIE Delegate and/or WAHIS National Focal Point has been identified and/or identified focal point/delegate does not have access to learning package and best practices as provided by WHO, OIE and FAO); 2 = limited capacity (country has identified National IHR Focal Point, OIE delegates and WAHIS National Focal Points; focal point is linked to learning package and best practices as provided by WHO, OIE and FAO); 3 = developed capacity (country has demonstrated ability to identify a potential PHEIC and file a report to WHO based on an exercise or real event, and similarly to the OIE for relevant zoonotic diseases); 4 = (demonstrated capacity (country has demonstrated ability to identify a potential PHEIC and file a report to WHO within 24 hours and similarly to the OIE for relevant zoonotic disease, based on an exercise or real event); and 5 = sustainable capacity (country has demonstrated ability to identify a potential PHEIC and file a report within 24 hours, and similarly to the OIE for relevant zoonotic disease, and has a multisectoral process in place for assessing potential events for reporting).							
Name: Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional: number of countries that achieve a JEE score of 4 or higher (Number)		Number	0.00	4.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by countries in intermediary years	Participating countries, JEE and OIE PVS experts

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description: Capacity graded on a score of 1-5 where 1 = no capacity (i.e. no mechanism in place); 2 = limited capacity (national policy, strategy or plan for the response to zoonotic events is in place); 3 = developed capacity (a mechanism for coordinated response to outbreaks of zoonotic diseases by human, animal and wildlife sectors is established); 4 = demonstrated capacity (timely* and systematic information exchange between animal/wildlife surveillance units, human health surveillance units and other relevant sectors in response to potential zoonotic risks and urgent zoonotic events); and 5 = sustainable capacity (timely** response to more than 80% of zoonotic events of potential national and international concern) *timeliness is judged and determined by country ** time between detection and response as defined by regional/national standards.							
Name: Veterinary human health workforce: number of countries that achieve a JEE score of 4 or higher (Number)		Number	0.00	3.00	Annual	JEE (IHR and GHSA), and OIE PVS evaluation at year 3 and end of project Self-assessments by countries in intermediary years	Participating countries, JEE and OIE PVS experts
Description: Capacity graded on a score of 1-5 where 1 = no capacity (country has no animal health workforce capable of conducting One Health activities); 2 = limited capacity (country has animal health workforce capacity within the national public health system); 3 = developed capacity (animal health workforce capacity within the national public health system and less than half of sub-national levels); 4 = demonstrated capacity (animal health workforce capacity within the national public health system and more than half of sub-national levels); and 5 = sustainable capacity (animal health workforce capacity within the public health system and at all sub-national levels; this includes a plan for animal health workforce continuing education).							
Name: Regional surge capacity and stockpiling mechanisms established		Number	1.00	3.00	Annual	Survey	WAHO

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
(capacity based on 5 point likert scale)							
Description: Capacity graded on a score of 1 -5 where: 1 = no capacity (no regional surge capacity and stockpiling mechanisms exist); 2 = limited capacity (regional stockpiling mechanism is in place with limited surge capacity); 3 = developed capacity (regional surge capacity and stockpiling mechanism has been established); 4 = demonstrated capacity (regional surge capacity and stockpiling mechanism has been established and tested); 5 = sustainable capacity (effective regional surge capacity and stockpiling mechanism has been established with sustainable funding arrangements from country budget).							
Name: Number of policy briefings on the status of Disease Surveillance and Response in the region presented at meetings of ECOWAS Heads of State and relevant Ministers (Health, Agriculture, Finance, and Env		Number	0.00	5.00	Annual	No description provided	WAHO
Description: Target number of policy briefings = 5 per year There should be annual reporting to the ECOWAS Heads of state and relevant line ministries (health, agriculture, environment, and finance) on the status of disease detection and response capacity in the region; and bi-annual reports to the AU, WHO/AFRO and OIE.							
Name: Citizens and/or communities involved in planning/implementation/evaluation of development programs (Yes/No)		Yes/No	N	Y	Annual	Survey	WAHO/Participating countries
Description: The existence/inexistence of citizens and grassroots organizations trained, engaged and incentivized to contribute to the achievement of the project's							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
objectives.							
Name: Number of people trained in Applied Epidemiology (All categories of training)		Number	0.00	416.00	Annual		
Percentage female of people trained in applied epidemiology (All categories of training)		Percentage	0.00	35.00	Annual		
Number of people trained in applied epidemiology: short-term course (3 months)		Number	0.00	400.00	Annual		
Percentage female trained in applied epidemiology: short-term course (3 months)		Percentage	0.00	40.00	Annual		
Number of people trained in applied epidemiology: full-term course (2 years)		Number	0.00	16.00	Annual		
Percentage female trained in applied epidemiology: full-term course (2 years)		Percentage	0.00	25.00	Annual		

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description: The total number of persons who successfully complete any of the following training courses in field epidemiology and laboratory practice: Basic (3 month) Field Epidemiology and Training Program or equivalent; Intermediate (9 month) Field Epidemiology and Training Program or equivalent; or Advanced (2 year) Field Epidemiology and Training Program or equivalent, by length of training.							
Name: BENIN - Interoperable, interconnected, electronic real-time reporting system: national capacity scores (Number)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Laboratory systems quality: national capacity scores (Number)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Surveillance Systems in place for priority zoonotic diseases/pathogens: national capacity scores (Number)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							
Name: BENIN - Workforce Strategy: national capacity scores (Number)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Specimen referral and transport system: national capacity scores (Number)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Applied epidemiology training program in place such as FETP: national capacity scores (Number)		Number	4.00	5.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Systems for Efficient reporting to WHO,		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3	JEE and OIE PVS

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
OIE/FAO: national capacity scores (Number)						and end of project	Experts report
Description:							
Name: BENIN - Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional: national capacity scores (Number)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Veterinary or animal health workforce: national capacity scores (Number)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: BENIN - Citizens and/or communities involved in planning/implementation/evaluation of development		Yes/No	Y	Y	Annual	Survey	WAHO and Participating Country

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
programs (Yes/No)							
Description:							
Name: BENIN - Number of people trained in applied epidemiology (all categories of training)		Number	0.00	104.00	Annual		
BENIN - Percentage female of people trained in applied epidemiology (all categories of training)		Percentage	0.00	35.00	Annual		
BENIN - Number of people trained in applied epidemiology: short-term course (3 months)		Number	0.00	100.00	Annual		
BENIN - Percentage female trained in applied epidemiology: short-term course (3 months)		Percentage	0.00	40.00	Annual		
BENIN - Number of people trained in applied epidemiology: full-term course (2 years)		Number	0.00	4.00	Annual		
BENIN - Percentage		Percentage	0.00	25.00	Annual		

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
female trained in applied epidemiology:full-term course (2 years)							
Description:							
Name: MALI - Interoperable, interconnected, electronic real-time reporting system (national capacity scores)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Laboratory systems quality (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Surveillance Systems in place for priority zoonotic diseases/pathogens (national capacity scores)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: MALI - Workforce Strategy (national capacity scores)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Specimen referral and transport system (national capacity scores)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Applied epidemiology training program in place such as FETP (national capacity scores)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Systems for Efficient reporting to WHO, OIE/FAO (national capacity scores)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							
Name: MALI - Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional (national capacity scores and regional average)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Veterinary or animal health workforce (national capacity scores)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MALI - Citizens and/or communities involved in planning/implementation/evaluation of development programs (Yes/No)		Yes/No	N	Y	Annual	Survey	WAHO and Participating Country

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							
Name: MALI - Number of people trained in applied epidemiology (All categories training)		Number	0.00	104.00	Annual		
MALI - Percentage female of people trained in applied epidemiology (All categories training)		Percentage	0.00	35.00	Annual		
MALI - Number of people trained in applied epidemiology: short-term course (3 months)		Number	0.00	100.00	Annual		
MALI - Percentage female trained in applied epidemiology: short-term course (3 months)		Percentage	0.00	40.00	Annual		
MALI - Number of people trained in applied epidemiology: full-term course (2 years)		Number	0.00	4.00	Annual		
MALI - Percentage female trained in applied		Percentage	0.00	25.00	Annual		

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
epidemiology: full-term course (2 years)							
Description:							
Name: MAURITANIA - Interoperable, interconnected, electronic real-time reporting system (national capacity scores)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Laboratory systems quality (national capacity scores)		Number	1.00	3.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Surveillance Systems in place for priority zoonotic diseases/pathogens (national capacity scores)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: MAURITANIA - Workforce Strategy (national capacity scores)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Specimen referral and transport system (national capacity scores)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Applied epidemiology training program in place such as FETP (national capacity scores)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Systems for Efficient reporting to WHO, OIE/FAO		Number	3.00	5.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
(national capacity scores)							
Description:							
Name: MAURITANIA - Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional (national capacity scores)		Number	3.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Veterinary or animal health workforce (national capacity scores)		Number	2.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: MAURITANIA - Citizens and/or communities involved in planning/implementation/evaluation of development programs (Yes/No)		Yes/No	N	Y	Annual	Survey	WAHO and Participating Country

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							
Name: MAURITANIA - Total number of people trained in applied epidemiology (All categories training)		Number	0.00	104.00	Annual		
MAURITANIA - Percentage female of people trained in applied epidemiology (All categories training)		Percentage	0.00	35.00	Annual		
MAURITANIA - Number of people trained in applied epidemiology: short-term course (3 months)		Number	0.00	100.00	Annual		
MAURITANIA - Percentage female trained in applied epidemiology: short-term course (3 months)		Percentage	0.00	40.00	Annual		
MAURITANIA - Number of people trained in applied epidemiology: full-term course (2 years)		Number	0.00	4.00	Annual		
MAURITANIA - Percentage female trained in applied		Number	0.00	25.00	Annual		

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
epidemiology: full-term course (2 years)							
Description:							
Name: NIGER - Interoperable, interconnected, electronic real-time reporting system (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Laboratory systems quality (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Surveillance Systems in place for priority zoonotic diseases/pathogens (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: NIGER - Workforce Strategy (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Specimen referral and transport system (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Applied epidemiology training program in place such as FETP (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - - Systems for Efficient reporting to WHO, OIE/FAO (national capacity scores)		Number	1.00	5.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							
Name: NIGER - Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Veterinary or animal health workforce (national capacity scores)		Number	1.00	4.00	Annual	JEE (IHR and GHSA) and OIE PVS evaluation at year-3 and end of project	JEE and OIE PVS Experts report
Description:							
Name: NIGER - Citizens and/or communities involved in planning/implementation/evaluation of development programs (Yes/No)		Yes/No	N	Y	Annual	Survey	WAHO and Participating Country
Description:							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: NIGER - Total number of people trained in applied epidemiology (All categories training)		Number	0.00	104.00	Annual		
NIGER - Percentage female of people trained in applied epidemiology (All categories training)		Percentage	0.00	35.00	Annual		
NIGER - Number of people trained in applied epidemiology: short-term course (3 months)		Number	0.00	100.00	Annual		
NIGER - Percentage female trained in applied epidemiology: short-term course (3 months)		Percentage	0.00	40.00	Annual		
NIGER - Number of people trained in applied epidemiology: full-term course (2 years)		Number	0.00	4.00	Annual		
NIGER - Percentage female trained in applied epidemiology: full-term course (2 years)		Percentage	0.00	25.00	Annual		

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							

Target Values

Project Development Objective Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Laboratory testing capacity for detection of priority diseases (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)	0.00	0.00	1.00	2.00	3.00	3.00	4.00
Progress in establishing indicator and event-based surveillance systems (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)	1.00	1.00	2.00	2.00	3.00	3.00	4.00
Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of countries that achieve a JEE score of 3 or higher)	0.00	0.00	1.00	2.00	3.00	4.00	4.00
Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)	0.00	0.00	1.00	2.00	3.00	3.00	4.00
Progress on cross-border collaboration and exchange of information across countries (Number of countries that	0.00	0.00	1.00	2.00	2.00	3.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
achieve a score of 4 or higher)							
Progress towards establishing an active, functional regional One Health platform (Number based on 5 point Likert scale)	1.00	1.00	2.00	2.00	3.00	4.00	4.00
BENIN - Laboratory testing capacity for detection of priority diseases (Number of countries that achieve a JEE score of 4 or higher)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
BENIN - Progress in establishing indicator and event-based surveillance systems (Number of countries that achieve a JEE score of 4 or higher)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
BENIN - Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of countries that achieve a JEE score of 3 or higher)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
BENIN - Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or highe	1.00	1.00	2.00	2.00	3.00	4.00	4.00
BENIN - Progress on cross-border collaboration and exchange of information across countries (Number of	2.00	2.00	3.00	3.00	4.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
countries that achieve a score of 4 or higher)							
BENIN - Progress towards establishing an active, functional regional One Health platform (Number based on 5 point Likert scale)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
MALI - Laboratory testing capacity for detection of priority diseases (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)	3.00	4.00	4.00	4.00	4.00	4.00	4.00
MALI - Progress in establishing indicator and event-based surveillance systems (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
MALI - Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of countries that achieve a JEE score of 3 or higher)	3.00	3.00	3.00	3.00	3.00	3.00	3.00
MALI - Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher	1.00	2.00	2.00	3.00	3.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
MALI - Progress on cross-border collaboration and exchange of information across countries (Number of countries that achieve a score of 4 or higher)	0.00	2.00	2.00	3.00	3.00	4.00	4.00
MAURITANIA - Laboratory testing capacity for detection of priority diseases (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)	4.00	4.00	4.00	4.00	4.00	5.00	5.00
MAURITANIA - Progress in establishing indicator and event-based surveillance systems (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)	4.00	4.00	4.00	4.00	4.00	5.00	5.00
MAURITANIA - Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of countries that achieve a JEE score of 3 or higher)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
MAURITANIA - Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or	2.00	2.00	3.00	3.00	4.00	4.00	4.00
MAURITANIA - Progress on cross-border collaboration and exchange of	2.00	2.00	2.00	3.00	3.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
information across countries (Number of countries that achieve a score of 4 or higher)							
MAURITANIA - Progress towards establishing an active, functional regional One Health platform (Number based on 5 point Likert scale)	1.00	1.00	1.00	2.00	3.00	4.00	4.00
NIGER - Laboratory testing capacity for detection of priority diseases (national capacity scores)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Progress in establishing indicator and event-based surveillance systems (national capacity scores) (Number of countries that achieve a JEE score of 4 or higher)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Availability of human resources to implement IHR core capacity requirements (national capacity scores) (Number of countries that achieve a JEE score of 3 or higher)	1.00	1.00	2.00	2.00	3.00	3.00	3.00
NIGER - Multi-hazard national public health emergency preparedness and response plan is developed and implemented (national capacity scores) (Number of countries that achieve a JEE score of 4 or highe	1.00	1.00	2.00	3.00	3.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
NIGER - Progress on cross-border collaboration and exchange of information across countries (Number of countries that achieve a score of 4 or higher)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Progress towards establishing an active, functional regional One Health platform (Number based on 5 point Likert scale)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
MALI - Progress towards establishing an active, functional regional One Health platform (Number based on 5 point Likert scale)	1.00	1.00	2.00	2.00	3.00	4.00	4.00

Intermediate Results Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Interoperable, interconnected, electronic real-time reporting system: number of countries that achieve a JEE score of 4 or higher (Number)	0.00	0.00	0.00	2.00	2.00	3.00	4.00
Laboratory systems quality: number of countries that achieve a JEE score of 4 or higher (Number)	0.00	0.00	0.00	1.00	2.00	3.00	4.00
Surveillance Systems in place for priority	0.00	0.00	1.00	2.00	3.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
zoonotic diseases/pathogens: number of countries that achieve a JEE score of 3 or higher (Number)							
Workforce Strategy: number of countries that achieve a JEE score of 4 or higher (Number)	0.00	0.00	1.00	2.00	2.00	3.00	4.00
Specimen referral and transport system: number of countries that achieve a JEE score of 4 or higher (Number)	0.00	0.00	1.00	2.00	2.00	3.00	4.00
Applied epidemiology training program in place such as FETP: number of countries that achieve a JEE score of 4 or higher (Number)	1.00	1.00	2.00	2.00	3.00	3.00	4.00
Systems for efficient reporting to WHO, OIE/FAO: number of countries that achieve a JEE score of 5 (Number)	0.00	0.00	0.00	2.00	2.00	3.00	4.00
Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional: number of countries that achieve a JEE score of 4 or higher (Number)	0.00	0.00	1.00	1.00	2.00	3.00	4.00
Veterinary human health workforce: number of countries that achieve a JEE score of 4 or higher (Number)	0.00	0.00	1.00	1.00	2.00	3.00	3.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Regional surge capacity and stockpiling mechanisms established (capacity based on 5 point likert scale)	1.00	1.00	1.00	2.00	2.00	3.00	3.00
Number of policy briefings on the status of Disease Surveillance and Response in the region presented at meetings of ECOWAS Heads of State and relevant Ministers (Health, Agriculture, Finance, and Env	0.00	5.00	5.00	5.00	5.00	5.00	5.00
Citizens and/or communities involved in planning/implementation/evaluation of development programs (Yes/No)	N	Y	Y	Y	Y	Y	Y
Number of people trained in Applied Epidemiology (All categories of training)	0.00	0.00	100.00	208.00	308.00	416.00	416.00
Percentage female of people trained in applied epidemiology (All categories of training)	0.00	0.00	15.00	25.00	30.00	35.00	35.00
Number of people trained in applied epidemiology: short-term course (3 months)	0.00	0.00	100.00	200.00	300.00	400.00	400.00
Percentage female trained in applied epidemiology: short-term course (3 months)	0.00	0.00	15.00	25.00	30.00	35.00	40.00
Number of people trained in applied	0.00	0.00	0.00	8.00	8.00	16.00	16.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
epidemiology: full-term course (2 years)							
Percentage female trained in applied epidemiology: full-term course (2 years)	0.00	0.00	0.00	25.00	25.00	25.00	25.00
BENIN - Interoperable, interconnected, electronic real-time reporting system: national capacity scores (Number)	2.00	2.00	2.00	3.00	3.00	4.00	4.00
BENIN - Laboratory systems quality: national capacity scores (Number)	2.00	2.00	2.00	3.00	4.00	4.00	4.00
BENIN - Surveillance Systems in place for priority zoonotic diseases/pathogens: national capacity scores (Number)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
BENIN - Workforce Strategy: national capacity scores (Number)	2.00	2.00	2.00	3.00	4.00	4.00	4.00
BENIN - Specimen referral and transport system: national capacity scores (Number)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
BENIN - Applied epidemiology training program in place such as FETP: national capacity scores (Number)	4.00	4.00	4.00	4.00	5.00	5.00	5.00
BENIN - Systems for Efficient reporting to WHO, OIE/FAO: national capacity scores (Number)	2.00	2.00	3.00	3.00	4.00	4.00	4.00
BENIN - Mechanisms for responding to infectious zoonoses and potential	3.00	3.00	3.00	4.00	4.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
zoonoses are established and functional: national capacity scores (Number)							
BENIN - Veterinary or animal health workforce: national capacity scores (Number)	2.00	2.00	2.00	3.00	4.00	4.00	4.00
BENIN - Citizens and/or communities involved in planning/implementation/evaluation of development programs (Yes/No)	Y	Y	Y	Y	Y	Y	Y
BENIN - Number of people trained in applied epidemiology (all categories of training)	0.00	0.00	25.00	52.00	77.00	104.00	104.00
BENIN - Percentage female of people trained in applied epidemiology (all categories of training)	0.00	0.00	15.00	25.00	30.00	35.00	35.00
BENIN - Number of people trained in applied epidemiology: short-term course (3 months)	0.00	0.00	25.00	50.00	75.00	100.00	100.00
BENIN - Percentage female trained in applied epidemiology: short-term course (3 months)	0.00	0.00	15.00	25.00	30.00	35.00	40.00
BENIN - Number of people trained in applied epidemiology: full-term course (2 years)	0.00	0.00	0.00	2.00	2.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
BENIN - Percentage female trained in applied epidemiology:full-term course (2 years)	0.00	0.00	0.00	25.00	25.00	25.00	25.00
MALI - Interoperable, interconnected, electronic real-time reporting system (national capacity scores)	2.00	2.00	2.00	3.00	3.00	4.00	4.00
MALI - Laboratory systems quality (national capacity scores)	1.00	2.00	2.00	3.00	3.00	4.00	4.00
MALI - Surveillance Systems in place for priority zoonotic diseases/pathogens (national capacity scores)	2.00	3.00	3.00	3.00	4.00	4.00	4.00
MALI - Workforce Strategy (national capacity scores)	2.00	2.00	2.00	3.00	3.00	4.00	4.00
MALI - Specimen referral and transport system (national capacity scores)	3.00	4.00	4.00	4.00	4.00	4.00	4.00
MALI - Applied epidemiology training program in place such as FETP (national capacity scores)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
MALI - Systems for Efficient reporting to WHO, OIE/FAO (national capacity scores)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
MALI - Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional	2.00	2.00	2.00	2.00	3.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
(national capacity scores and regional average)							
MALI - Veterinary or animal health workforce (national capacity scores)	3.00	3.00	3.00	3.00	4.00	4.00	4.00
MALI - Citizens and/or communities involved in planning/implementation/evaluation of development programs (Yes/No)	N	Y	Y	Y	Y	Y	Y
MALI - Number of people trained in applied epidemiology (All categories training)	0.00						104.00
MALI - Percentage female of people trained in applied epidemiology (All categories training)	0.00	0.00	15.00	25.00	30.00	35.00	35.00
MALI - Number of people trained in applied epidemiology: short-term course (3 months)	0.00	0.00	25.00	50.00	75.00	100.00	100.00
MALI - Percentage female trained in applied epidemiology: short-term course (3 months)	0.00	0.00	15.00	25.00	30.00	35.00	40.00
MALI - Number of people trained in applied epidemiology: full-term course (2 years)	0.00	0.00	0.00	2.00	2.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
MALI - Percentage female trained in applied epidemiology: full-term course (2 years)	0.00	0.00	0.00	25.00	25.00	25.00	25.00
MAURITANIA - Interoperable, interconnected, electronic real-time reporting system (national capacity scores)	2.00	2.00	2.00	3.00	3.00	4.00	4.00
MAURITANIA - Laboratory systems quality (national capacity scores)	1.00	1.00	2.00	2.00	3.00	3.00	3.00
MAURITANIA - Surveillance Systems in place for priority zoonotic diseases/pathogens (national capacity scores)	3.00	3.00	3.00	3.00	4.00	4.00	4.00
MAURITANIA - Workforce Strategy (national capacity scores)	3.00	3.00	3.00	3.00	3.00	4.00	4.00
MAURITANIA - Specimen referral and transport system (national capacity scores)	2.00	2.00	2.00	2.00	3.00	4.00	4.00
MAURITANIA - Applied epidemiology training program in place such as FETP (national capacity scores)	3.00	3.00	3.00	3.00	3.00	4.00	4.00
MAURITANIA - Systems for Efficient reporting to WHO, OIE/FAO (national capacity scores)	3.00	3.00	4.00	4.00	5.00	5.00	5.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
MAURITANIA - Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional (national capacity scores)	3.00	3.00	3.00	4.00	4.00	4.00	4.00
MAURITANIA - Veterinary or animal health workforce (national capacity scores)	2.00	2.00	3.00	3.00	3.00	4.00	4.00
MAURITANIA - Citizens and/or communities involved in planning/implementation/evaluation of development programs (Yes/No)	N	Y	Y	Y	Y	Y	Y
MAURITANIA - Total number of people trained in applied epidemiology (All categories training)	0.00	0.00	25.00	52.00	77.00	104.00	104.00
MAURITANIA - Percentage female of people trained in applied epidemiology (All categories training)	0.00	0.00	15.00	25.00	30.00	35.00	35.00
MAURITANIA - Number of people trained in applied epidemiology: short-term course (3 months)	0.00	0.00	25.00	50.00	75.00	100.00	100.00
MAURITANIA - Percentage female trained in applied epidemiology: short-term course (3 months)	0.00	0.00	15.00	25.00	30.00	35.00	40.00
MAURITANIA - Number of people trained	0.00	0.00	0.00	2.00	2.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
in applied epidemiology: full-term course (2 years)							
MAURITANIA - Percentage female trained in applied epidemiology: full-term course (2 years)	0.00	0.00	0.00	25.00	25.00	25.00	25.00
NIGER - Interoperable, interconnected, electronic real-time reporting system (national capacity scores)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Laboratory systems quality (national capacity scores)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Surveillance Systems in place for priority zoonotic diseases/pathogens (national capacity scores)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Workforce Strategy (national capacity scores)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Specimen referral and transport system (national capacity scores)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Applied epidemiology training program in place such as FETP (national capacity scores)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - - Systems for Efficient reporting to WHO, OIE/FAO (national capacity scores)	1.00	1.00	2.00	3.00	3.00	5.00	5.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
NIGER - Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional (national capacity scores)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Veterinary or animal health workforce (national capacity scores)	1.00	1.00	2.00	3.00	3.00	4.00	4.00
NIGER - Citizens and/or communities involved in planning/implementation/evaluation of development programs (Yes/No)	N	Y	Y	Y	Y	Y	Y
NIGER - Total number of people trained in applied epidemiology (All categories training)	0.00	0.00	25.00	52.00	77.00	104.00	104.00
NIGER - Percentage female of people trained in applied epidemiology (All categories training)	0.00	0.00	15.00	25.00	30.00	35.00	35.00
NIGER - Number of people trained in applied epidemiology: short-term course (3 months)	0.00	0.00	25.00	50.00	75.00	100.00	100.00
NIGER - Percentage female trained in applied epidemiology: short-term course (3 months)	0.00	0.00	15.00	25.00	30.00	35.00	40.00
NIGER - Number of people trained in applied epidemiology: full-term course (2	0.00	0.00	0.00	2.00	2.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
years)							
NIGER - Percentage female trained in applied epidemiology: full-term course (2 years)	0.00	0.00	0.00	25.00	25.00	25.00	25.00

ANNEX 1: DETAILED PROJECT DESCRIPTION

COUNTRY : Western Africa
Regional Disease Surveillance Systems Enhancement (REDISSE) Phase III

PROJECT COMPONENTS

1. The REDISSE program design incorporates a shift from a paradigm grounded in crisis response to one that embraces a disaster risk reduction approach and better risk management by building support for the animal health and human health systems, and the required linkages at country and regional level to manage infectious disease threats.

2. The project seeks to address three priority areas: (i) Strengthen national capacity to detect and respond to infectious human and animal disease threats; (ii) establish national and regional platforms for collaboration and collective action; and (iii) ultimately promote a platform to increase engagement across the human health, animal health and environmental sectors to implement a OH approach.

3. The PDOs, key results and indicators under REDISSE remain the same across the SOPs. As adopted under REDISSE 1 and 2, the PDOs 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 Emergency, to provide immediate and effective response to said Eligible Emergency.

4. The project will be comprised of the following components: (i) Surveillance and Information Systems; (ii) Strengthening of Laboratory Capacity; (iii) Preparedness and Emergency Response; (iv) Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness; and (v) Institutional Capacity Building, Project Management, Coordination and Advocacy.

Component 1: Surveillance and Information Systems. ***Total estimated costs including contingencies US$34.3 million equivalent.***

5. This component will provide support to strengthening the human and animal disease surveillance systems of Benin, Mali, Mauritania, and Niger, and the development of regional interconnected human and animal platforms to promote collective action, cross-border and cross-sectoral collaboration in surveillance. It will in particular support the (i) assessment of epidemic-surveillance systems and networks; (ii) prioritization of diseases (including zoonotic ones); (iii) development of harmonized procedures for the surveillance, reporting, diagnosis of and response to prioritized diseases within the countries of the region; (iv) development of institutional mechanisms to improve the efficiency and coordination of animal health epidemiological networks with human health networks, including protocols for rapid information sharing across sectors; (v) design and implementation of operational research (including the use of epidemic-surveillance surveys) and utilization of surveillance data for risk management (decision making on disease

prevention and control across the sub-region), and risk communication; and (vi) scale-up of the use of ICT including for disease risk mapping, data analysis, forecasting and reporting purposes.

Sub-Component 1.1 Support coordinated community-level surveillance systems and processes across the animal and human health sectors. Total costs including contingencies US$17.8 million equivalent.

6. This sub-component will involve the strengthening of community-level surveillance structures and processes in countries where gaps exist for detecting events in communities (human and animal). This will entail improving community-level surveillance capacity for active, passive and rumor surveillance including in cross-border areas, and the development and implementation of a plan to ensure adequate territorial coverage for surveillance from the community to the central level.

7. Recognizing the high degree of unregulated movement of livestock and humans across the sub-region, there is a critical need to improve cross-border surveillance. Project activities under this component will strengthen surveillance and reporting action for ports of entry, and strengthen community-based surveillance at land cross-border crossing. The activities in this component will complement other programs such, as Regional Network of Epidemic Surveillance Systems for HPAI and Other Priority Animal Diseases in West Africa (RESEPI), recipient communities.

Sub-Component 1.2 Develop capacity for interoperable surveillance and reporting systems. Total costs including contingencies are US$9.4 million equivalent.

8. The second sub-component will support the: (i) assessment of existing human and animal health surveillance systems and networks for prioritization of interventions; (ii) review and update of national and regional disease priorities, harmonized guidelines, protocols and tools for surveillance and reporting; (iii) development of common methodologies and protocols (public and private actors) for utilization of surveillance data; (iv) development of the required ICT infrastructure to facilitate cross-sectoral interoperability of surveillance and reporting systems at the national and regional level; and (v) establishment of the necessary linkage of surveillance and reporting systems to national incidence management systems

9. The project will address the need to reduce the fragmentation that currently exists with multiple surveillance systems, and to improve surveillance data management and reporting processes of the human health and veterinary public health systems. It will support the IDSR strategic goals to improve availability of quality information by investing in the development of the required ICT infrastructure for cross-sectoral interoperability of surveillance and reporting systems at the country and regional level. Adopting best practices from other regions, measures will be taken to ensure the practicality of building evidence-based, effective and efficient interoperable surveillance systems.

Sub-Component 1.3 Establish an early warning system for infectious disease trends prediction. Total costs including contingencies are US$7.1 million equivalent.

10. This sub-component will involve the establishment of an early warning system including the use of Geographic Information System (GIS) techniques to study infectious disease patterns and make predictions on evolution of disease outbreaks, and identify potential high disease-risk areas in the region. Activities under this will support monitoring trends that occur in infectious diseases such as AMR and insecticide resistance, and the impact of climate change on infectious disease outbreaks in the region. Identified interventions will also complement activities under the USAID EPT-2, which focuses on risk-based surveillance in select countries for the implementation of appropriate mitigation measures.

11. Examples of country[27] and regional activities[28] supported by the project component are indicated in the footnotes.

Table 4: Funding allocation by Sub-Component, Component 1

Project activities	**Benin**	**Mali**	**Mauritania**	**Niger**	**Total**
COMPONENT 1					
Sub-Component 1.1 Support coordinated community-level surveillance systems and processes across the animal and human health sectors	6.4	4.9	2.8	3.7	17.8
Sub-Component 1.2 Develop capacity for interoperable surveillance and reporting systems	1.9	2.7	1.6	3.2	9.4
Sub-Component 1.3 Establish an early warning system for infectious disease trends prediction	1.7	2.4	1.1	1.9	7.1
Sub-total component 1	**10.0**	**10.0**	**5.5**	**8.8**	**34.3**

Component 2: Strengthening of Laboratory Capacity. ***Total estimated costs including contingencies are US$23 million equivalent.***

12. The objective of this component is to strengthen existing networks of efficient, high quality, accessible public health and veterinary laboratories, and to establish a regional networking platform to improve collaboration for laboratory investigation. Public health and veterinary laboratories form an integral and critical part of human and animal disease surveillance systems

[27] Development of non-financial incentives-based early reporting mechanisms for human and animal health; Renovation and rehabilitation of facilities, provision of equipment, logistics and materials for sample collection, preservation and shipment to the laboratory; and Partnership with the private sector for enhanced disease surveillance and reporting.

[28] Establishment of mechanisms such as a Memorandum of Understanding (MoU) for improved regional collaboration on disease surveillance and data sharing practices across countries; Design and provision of ICT infrastructure including improving video conference capacity for enhanced communication and regional networking; and periodic dissemination of information on surveillance best practices and stock taking exercises in the ECOWAS region.

and an underdeveloped laboratory network hinders governments' ability to confirm and respond in a coordinated manner to disease outbreaks. In designing the specific activities, the project will seek to work with existing institutions, systems and international partners and complement ongoing initiatives such as the Global Fund to Fight AIDS, TB and Malaria (GFATM), the ECOWAS Veterinary Laboratory Network for Avian Influenza and other Transboundary Animal Disease in West Africa (RESOLAB)[29]. It will also provide support to establish the necessary linkages of public health laboratory networks with existing private laboratory networks to improve laboratory practices across countries in the region.

13. The project will aim at addressing key gaps in laboratory networks that are needed for (i) cost-efficient and integrated disease surveillance; (ii) compliance with IHR and OIE international standards; (iii) conduct of quality and rapid diagnosis to guide control measures; and (iv) support to the implementation of operational research. It places a strong emphasis on consolidating regional networks of national human health and veterinary laboratories for efficiency gains and achieving quality diagnostic services. The project will support the development of regionally harmonized policies, strategies, protocols, aligned with internationally recognized practices, and inter-laboratory trials to ensure prompt and high-quality results. This component is divided into three sub-components:

Sub-Component 2.1 Review, upgrade and support network laboratory facilities. Total costs including contingencies are US$11.5 million equivalent.

14. This sub component will include the: (i) assessment of existing human and animal health laboratory facilities and networks for prioritization of interventions; (ii) increase of laboratories services, and biosafety and biosecurity; (iii) support for improved supply chain management including the establishment of efficient inventory tracking and management systems; (iv) technical support for integrated laboratory information systems and the interoperability with disease surveillance and reporting systems; and (v) support to the strengthening of quality assurance systems for diagnostic services.

15. The project will make investments in renovating and upgrading existing facilities, in ensuring adequate supplies and in strengthening supply chain management. Networking of laboratories will be supported for (i) sharing timely information across countries; and (ii) contributing to joint investigations of disease outbreaks. Networks will ensure improved capacity to diagnose diseases, identify public health threats, and conduct surveillance. Networks will also serve as effective platforms for learning and knowledge sharing.

Sub-Component 2.2 Improve data management and specimen management systems. Total costs including contingencies are US$7.4 million equivalent.

16. Under this component, measures to improve data management will include the: (i) strengthening of the competencies of laboratory personnel to analyze and use laboratory

[29] This is a network of laboratories across West Africa including Benin, Togo, Burkina Faso, Guinea, Mali, Niger and Senegal.

surveillance data; (ii) strengthening of laboratory data management systems to 'report up' and 'report down' more effectively; and (iii) achievement of interoperability between data management systems, where possible.

17. This sub-component will also support strengthening specimen management including the: (i) streamlining of the laboratory specimen referral process, including use of sub-national laboratories rather than having all specimens coming to a central laboratory, where possible; and (ii) improvement of efficiency of specimen transport and disposal systems including through the use of private sector partnerships.

Sub-Component 2.3 Enhance regional reference laboratory networking functions. Total costs including contingencies are US$4.1 million equivalent.

18. Regional level activities will seek to (i) strengthen existing and possibly identify new regional reference laboratories for specific diseases or diagnostic techniques, (ii) strengthen regional networking and information sharing between countries; and (iii) harmonize laboratory quality assurance policies across countries in the region, based on international standards.

19. The sub-component will support regional reference laboratories to serve as hubs for quality diagnosis along with acting as centers for knowledge generation and sharing. These laboratories will harmonize tools, offer training, technical support, explore innovative laboratory diagnosis, and serve as centers of excellence, documenting and sharing good practices in disease surveillance.

20. This sub-component will also provide support to improve quality assurance, and notably (i) the development of common standards, quality assurance systems, procedures and protocols; (ii) the introduction of peer review mechanisms; (iii) the application of the WHO/AFRO five-step accreditation process and technical assistance to support accreditation of laboratories; and (iv) support for inter-laboratory external quality assessments among the participating countries and recruitment of additional personnel to provide mentorship to laboratories.

21. Examples of country[30] and regional[31] activities supported by the project component are indicated in the footnotes.

[30] Upgrading laboratory policies, optimization of cost-effective laboratory networks; Provision of laboratory equipment and materials, waste management equipment and protective gear; Rehabilitation of existing laboratory facilities; Convening of experts to achieve interoperability of surveillance systems with laboratory information systems platform; Development of private sector partnership to streamline referral and sample transportation processes.

[31] Strengthening the information sharing platforms of regional reference laboratories; Development of a regional laboratory sample transportation system; Development of regional proficiency testing between national and regional reference laboratories, and other activities to improve quality assurance processes; Upgrading capacity to manage priority infectious diseases.

Table 5: Funding allocation by Sub-Component, Component 2

Project activities	Benin	Mali	Mauritania	Niger	Total
COMPONENT 2					
Sub-Component 2.1 Review, upgrade and network laboratory facilities	4.0	2.3	2.8	2.4	11.5
Sub-Component 2.2 Improve data management and specimen management systems	1.3	2.3	0.4	3.4	7.4
Sub-Component 2.3 Enhance regional reference laboratory networking functions	1.00	1.4	0.3	1.4	4.1
Sub-total component 2	**6.3**	**6.0**	**3.5**	**7.2**	**23.0**

Component 3: Preparedness and Emergency Response. ***Total estimated costs including contingencies are US$18.2 million equivalent.***

22. This component will support strengthening of national and regional preparedness and response capacity to respond effectively to human and animal disease outbreak threats. Project interventions will provide support to improve country and regional surge capacity to ensure a rapid response during an emergency and, for what concerns the human health sector, a better performance of the healthcare system in service delivery.

23. Project activities will involve the establishment of adequate policies, legislation and operational planning for early response mechanisms (with due consideration to increased demand for services during epidemics and possibly other disasters); as well as the establishment of multidisciplinary rapid response teams at both national and regional level. It will seek to better educate and prepare communities for outbreaks and emergencies as part of the routine delivery of health services[32]. As part of the cross-sectoral efforts, the development of joint planning and joint implementation will be pursued. The project will also support enhancing countries' health system capacities for management of disaster recovery priorities including the capacity for the integration of community-centered emergency care into the broader healthcare system.

24. Activities under this component will support 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); (iv) regional exchange of best practices and lessons learned in preparedness and response across countries in the region; (v) explore the establishment of national

[32] Evidence-based preparedness activities using the lessons learned on best approaches to involve and prepare will be used to ensure community acceptance and promote community resilience during emergencies.

and regional financing mechanisms for animal health (including the development of compensation schemes for livestock culling) and public health emergencies; (vi) establishment of public-private partnerships to improve supply chain logistics management and planning across countries in the region; (vii) development of mechanisms for improving access to essential health services and nutrition needs of the population during and after disasters.

25. Component 3 will be made up of three sub-components.

Sub-Component 3.1 Enhance cross-sectoral coordination and collaboration for preparedness and response. Total costs including contingencies are US$9.9 million equivalent.

26. This sub-component will support (i) partnership building (including partnership with the private sector) and effective capacity development activities for outbreak preparedness and disaster risk management at the community, district, national and regional level; (ii) improvement and harmonization of policies, legislations, and operating procedures that include representation from other relevant sectors including environment, customs/immigration, education, law enforcement; and (iii) explore the establishment of national and regional financing mechanisms to ensure swift mobilization of resources for animal health and public health emergencies.

27. This sub-component will support activities to strengthen coordination and communication in outbreak preparedness and response across countries (using a bottom-up and top-down approach) including (i) development, upgrading, testing of operational communication mechanisms, development of risk communication strategies, training of spokespersons; and (ii) the preparation and test-run of communication materials prior to an outbreak to ensure local acceptance and understanding of contents. Support will also be provided at the regional level for coordination purposes, sharing best practices and lessons learned across the region.

Sub-Component 3.2 Strengthen Capacity for emergency response. Total costs including contingencies are US$8.3 million equivalent.

28. Weaknesses in surge capacity of the healthcare system are a major problem that hinders the roll-out of effective response interventions during emergencies. This sub-component will support the strengthening of EOC and surge capacity at the national and regional levels, to ensure the implementation of established control measures under national and regional emergency response plans at the community, district, national and regional level.

29. Activities under this sub-component will support (i) the establishment and management of a database of Multidisciplinary Rapid Response Teams (MRRTs) that will be available for rapid deployment; (ii) the development and management of stockpiling mechanisms (virtual and physical) to ensure availability of supplies to countries during an emergency response; and (iii) the swift mobilization and deployment of resources in response to major infectious disease outbreaks to limit the need for reallocation of resources and the consequent burden on the health system; (iv) the development of mechanisms to ensure the provision of essential health services to meet other primary health needs and nutrition needs of the population.

Sub-Component 3.3 Contingency Emergency Response Component (CERC) US$0 million.

30. The objective of this sub-component is to improve the Government's response capacity in the event of an emergency, following the procedures governed by IPF Bank Policy paragraph 12 and 13 (*Projects in Situations of Urgent Need of Assistance or Capacity Constraints*). There is a moderate to high probability that during the life of the project one or more countries will experience an epidemic or outbreak of public health importance or other disaster which causes a major adverse economic and/or social impact (e.g. Ebola), which would result in a request from the country to the World Bank to support mitigation, response, and recovery in the region(s) affected by such an emergency. In anticipation of such an event, this CERC provides for a request from the country to the World Bank to support mitigation, response, and recovery in the district(s) affected by such an epidemic. The CERC will serve as a first line financing option during an emergency response, country IDA funding that hasn't been used will be allocated to this sub-component in the case of an emergency.

31. An immediate CERC OM will be prepared by each country in complement to the Project Implementation Manual (PIM) as a condition of disbursement as soon as possible after project effectiveness. Triggers for the CERC will be clearly outlined in the PIM and the CERC OM acceptable to the World Bank. Disbursements will be made against an approved list of goods, works, and services required to support crisis mitigation, response and recovery

32. Examples of country[33] and regional activities supported by the project component are indicated in the footnotes.

33. The project will support regional partners to undertake activities such as:

- ✓ development of MoUs for the regional stockpiling platform for the effective management of essential stocks and supplies during an emergency response;
- ✓ regional exchange of best practices and lessons learned in preparedness and response across countries in the region; and
- ✓ establishment of public-private partnerships to improve supply chain logistics management and planning across countries in the region.

[33] Review and implementation of existing preparedness and response plans building on the experience of the Integrated National Action Plans for the animal and human health sector to better respond to infectious diseases threats; Improvement of video conferencing and communication equipment for EOCs and RRTs; Establishment and management of a real-time database of emergency response health workers on standby for rapid deployment; Table-top simulation exercises and drills related to infectious disease outbreaks control at local, sub-national and national level and cross-border; and Establishment of private sector partnerships for supply chain logistics distribution management.

Table 6: Funding allocation by Sub-Component, Component 3

Project activities	Benin	Mali	Mauritania	Niger	Total
COMPONENT 3					
Sub-Component 3.1 Enhance cross-sectoral coordination and collaboration for preparedness and response	0.7	2.8	0.9	5.5	9.9
Sub-Component 3.2 Strengthen capacity for emergency response	2.0	3.2	1.6	1.5	8.3
Sub-Component 3.3 Contingency emergency response	0.0	0.0	0.0	0.0	0.0
Sub-total component 3	**2.7**	**6.0**	**2.5**	**7.0**	**18.2**

Component 4: Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness. ***Total estimated costs including contingencies are US$16.4 million equivalent.***

34. The REDISSE 3 project will provide 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. This component will include two sub-components:

Sub-Component 4.1 Health workforce mapping, planning and recruitment. Total costs including contingencies are US$9.3 million equivalent.

35. The project aims to strengthen government capacity to plan, implement and monitor human resource interventions. In so doing, the project seeks to build long-term capacity for improved management of human resources. Decisions regarding human resources should be based on a solid understanding of the current state of play in each country. In this regard, stock-taking exercises will greatly aid the planning of human resources for health (HRH) interventions and the required recruitment processes.

36. This sub-component includes: (i) assessments of current workforce in terms of quantity, geographical and gender distribution and capacity; (ii) strengthening capacity for human resource management for disease surveillance and response; (iii) supporting the capacity of governments to recruit health workers and create an incentive environment which encourages skilled individuals to join the public sector (excluding any kind of cash transfers and salary top-ups to civil servants); and (iv) using private actors to deliver public sector activities through delegation of power (e.g. sanitary mandates for veterinarians).

Sub-Component 4.2 Enhance health workforce training, motivation and retention. Total costs including contingencies are US$7.1 million equivalent.

Training

37. This sub-component will include an assessment of, and provision of technical assistance to improve institutional capacity for planning and managing continuing workforce training programs (public and private actors). It will also deliver a number of training activities to strengthen surveillance, preparedness and response at various levels. Cognizant of the importance of community involvement in disease surveillance, a key lesson from the Ebola crisis, the project places emphasis on training at the community level, rather than focusing solely on higher level cadres. At the community level, activities may include: (i) training of OH community agents in community-based surveillance and response; (ii) technical support and supervision of community agents (iii) support to inter-sectoral interventions combining animal and human health service providers within the community, such as promoting the collaboration of public health informants and livestock farmers through awareness campaigns and training in best practices. At the district and national level, this includes training of health workers in core skill sets (described below). Training will depend on individual country capacity but will seek to leverage on existing programs in the region and other workforce training programs that address critical public health areas.

Motivation and Retention

38. Employment decisions are subject to many factors other than financial ones, such as job satisfaction, community recognition, and other factors that influence individual preferences. The project will seek to understand and address the incentive environment within which health workers operate. Armed with an improved understanding of this environment, the project will seek to implement activities which create incentives which not only draw those with relevant skills to the public sector, but also improve staff motivation and retention. Activities under this sub-component will support (i) operational research to better understand the incentive environment; (ii) the provision of incentives-based mechanisms including technical support and supervision for community "One health" agents engaged in community-based surveillance and response for both public health and veterinary health.

39. Examples of country[34] and regional[35] activities that can be supported by the project component are described in the footnotes.

[34] Recruitment and retention of a skilled health workforce for routine surveillance and rapid deployment; Recruitment of new staff per the findings of assessments; Training of community health agents in community-based surveillance and response; Training in case management and containment of infectious patients and livestock; Training of specialists; Sponsorship for long-term training of highly-skilled professionals, e.g. veterinarians and entomologists; Leveraging existing programs in the region such as FETP, FELTP, Veterinarian FETP, etc; Provision of hand held devices for epidemiological event/syndromic surveillance; Provision of incentives-based mechanisms for all cadres including technical support and mentorship.

[35] Identification of regional experts to support countries and regional institutions; Reinforcement of regional institutions including ECOWAS-WAHO and ECOWAS-RAHC to build countries' capacity in close partnership with ECOWAS-CDC and other centers of excellence in the region, ACE, and training institutions such as EISMV; Cross-country and regional twinning arrangements and staff exchange programs;
Capacity building for skilled MRRTs.

Table 7: Funding allocation by Sub-Component, Component 4

Project activities	Benin	Mali	Mauritania	Niger	Total
COMPONENT 4					
Sub-Component 4.1 Healthcare Workforce mapping, planning and recruitment.	3.1	2.0	0.5	3.0	9.3
Sub-Component 4.2 Enhance health workforce Training, Motivation and Retention	0.2	1.5	3.4	2.0	7.1
Sub-total component 4	**3.3**	**3.5**	**3.9**	**5.0**	**16.4**

Component 5: Institutional Capacity Building, Project Management, Coordination, and Advocacy. ***Total estimated costs including contingencies are US$28.1 million equivalent.***

40. This component focuses on all aspects related to project management. Project management activities to be supported under this component include fiduciary aspects (FM and procurement), M&E, knowledge generation and management, communication, and the monitoring of safeguard mitigation measures. It also provides for critical cross-cutting institutional support, meeting capacity-building and training needs identified in the four countries and at WAHO and RAHC on top of specific technical capacity-building activities undertaken within the four technical components. It will support the routine assessment of critical animal health and human health capacities of national systems using reference tools (such as OIE PVS and JEE) to identify weaknesses and monitor progress. Support will also be provided for the establishment of national and regional OH coordination platforms for the purpose of developing synergies, joint planning, implementation and communication. Strategies will be adopted for generating evidence to be used to advocate for increased and sustained financing for disease surveillance and preparedness from domestic sources.

41. Lessons learned from the implementation of other regional projects by WAHO including the Sahel Malaria and Neglected Tropical Diseases project, the Sahel Women Economic Empowerment and Demographic Dividend (SWEDD) and the WARDS have been taken into account for enhancing the institutional capacity to be supported under this component.

42. Component 5 will include two sub-components.

Sub-component 5.1 Project coordination, fiduciary management, monitoring and evaluation, data generation, and knowledge management. Total costs including contingencies are US$28.1 million equivalent.

43. WAHO will host the REDISSE coordination unit (R-PCU) at the regional level, while line ministries in charge or other institutions supporting REDISSE implementation in the four countries will each host a national coordination unit (N-PCU) or implementation unit. REDISSE will (i) strengthen the capacities of national and regional institutions to efficiently perform core project

management functions including operational planning, FM, procurement arrangements, and environmental and social safeguards policies in accordance with WB guidelines and procedures; (ii) enhance monitoring and evaluation systems including routine HMIS and other data sources; (iii) manage operational research program implemented by national and regional institutions which have been identified under each of the four technical project components; (iv) promote the design of impact evaluation studies to measure impact of project interventions; and (v) coordinate the roles of existing national and regional institutions to better support the planned project activities.

44. REDISSE will also finance the generation of data on animal and human health activities in the ECOWAS countries, which is critical to guide and calibrate investments.

Sub-component 5.2 Institutional support, capacity building, advocacy, and communication at regional level. Total costs including contingencies are US$0.0 million equivalent.

45. Sub-component 5.2 was financed under REDISSE for US$20 million equivalent financed by IDA and US$12.0 million financed by the MDTF. It will provide technical and investment support to enhance provision of services by WAHO, RAHC and other cross-cutting regional and international institutions or organizations relevant to animal and human health sector development. WAHO will be primarily responsible for regional coordination, guided by the decisions of the REDISSE Regional Steering Committee under the political leadership of ECOWAS. The project will support in particular the: (i) conduct of capacity gap analysis (including staffing, skills, equipment, systems, and other variables); (ii) identification of potential synergies and cross-fertilization possibilities among various operations pertaining to disease surveillance and response, using a progressive pathway for OH operationalization at country level, supported by regional institutions (see Table below); and (iii) establishment or upgrading of national public health institutions. This component will also support advocacy and communication activities that sustain the OH approach.

Table 8: Possible progressive approach towards the implementation of OH at the national level

Steps	General Objectives	How	With who	By whom
1-	Understanding of respective strengths and weaknesses with regards IHR and OIE standards -Broad identification of areas for common action	Joint workshop with HH (Human Health) and AH staff from respective ministries "IHR-PVS" bridging workshop	Representative staff from relevant ministries from central up to the smaller administration level possible (e.g. min 20 persons from each sector)	-Pool of OIE PVS and WHO IHR experts -Role of regional technical bodies in developing own capacity to facilitate and coordinate these national workshops (e.g. WAHO and RAHC, with support from WHO HQ/AFRO and OIE)
2-	Development of a common strategy to address issues where joint action is required	-Formal commitment from line ministries -Establishment of an intersectoral committee tasked with the development	-Mainly heads of relevant departments from the line ministries; -Involvement of relevant stakeholders	-Self -Possible facilitation by the regional level (pool of trained experts for regular guidance along

		of the strategy -Ad Hoc meetings held N.B.: strategy=Living document with attached process for regular revision		the process)
3-	Prioritization of diseases or antimicrobial resistance types (for OH approach)	Use of disease prioritization tools adapted for OH approach.	Technical experts, staff from relevant ministries	WAHO and RAHC, with support from WHO/FAO/OIE experts
4-	Development of a detailed action plan for OH activities	Derives from 2 and 3 Joint working groups for each specific topic to address Core team ensuring coordination and consolidation NB: includes detailed budget, timeline, M&E		
5-	Implementation of the action plan	Development of joint protocols for surveillance and/or control activities with clearly defined roles of respective sectors; joint and complementary trainings (in-service and pre-service); development of communication tools and materials; development of multi-sector emergency plans and simulation exercises; adaptation of legislation/regulations as need be; coordination of data collection/analysis, reporting mechanisms and communication procedures; disease surveillance and control cost-benefit analysis; risk analysis; etc.		

Table 9: Funding allocation by Sub-Component, Component 5

Project activities	**Benin**	**Mali**	**Mauritania**	**Niger**	**Total**
COMPONENT 5					
Sub-component 5.1 Project coordination, fiduciary management, monitoring and evaluation, data generation, and knowledge management	7.7	4.5	4.6	11.3	28.1
Sub-component 5.2 Institutional support,	0.0	0.0	0	0.0	0.0

capacity building, advocacy, and communication			0.0		
Sub-total of component 5	**7.7**	**4.5**	**4.6**	**11.3**	**28.1**

PROJECT FINANCING

46. The lending instrument will be a Series of Projects (SOP) as part of IPF, financed under IDA Credits and Grants in the amount of US$120 million equivalent for the third phase (see table below). In addition, a multi-donor trust fund from the Department of Foreign Affairs, Training and Development in Canada was created in the amount of US$12.0 million and will be used to finance activities under REDISSE 1, 2 and 3, component 1. The World Bank support is planned for six years (FY2016-FY2023).

47. The proposed IDA budget breakdown per country for the REDISSE-SOP 3 is the following:

Table 10: IDA budget breakdown per country

Country / Regional Institution	**Country IDA ($ Million)**	**Regional IDA ($ Million)**	**Total ($ Million)**
Benin	10.0	20.0	30.0
Mali	10.0	20.0	30.0
Mauritania	10.0	10.0	20.0
Niger	20.0	20.0	40.0
TOTAL	**50.0**	**70.0**	**120.0**

LESSONS LEARNED AND REFLECTED IN THE PROJECT DESIGN

48. The most salient experiences and lessons learned are noted below, keeping in mind that the main characteristics of the REDISSE project are its focus on building and sustaining national public health and animal health surveillance systems, strengthening their inter-sectorality, and promoting regional cooperation in developing national and regional preparedness and response capacity to improve global health security.

- ✓ **General lessons from REDISSE 1 and 2:** Four years post-Ebola, there is a rapidly decreasing demand for investments in preparedness, detection and response, which translate into critical gaps in regional health security. Additionally, stakeholder coordination and collaboration presents a significant challenge in the region, leading to duplication of efforts, overlapping multiple planning processes, and neglected priorities. The REDISSE Program has sought to underscore the importance of mutual benefit for country and regional actions; and taken substantial steps to provide mechanisms for country, regional and external partner coordination.
- ✓ **Challenges in cross-border collaboration (Lessons from REDISSE 1 and 2:** Challenges in implementing a regional disease surveillance and response approach include poor

ownership and engagement of countries as well as deprioritized cross–border collaboration between countries. In response the REDISSE Program has incorporated formal approaches (such as, treaties, agreements, memorandum of understanding, and harmonization of policies, strategies, SOPs) as well as informal approaches (such as, cross–border planning, knowledge exchange, and simulation exercises) to strengthen cross-border collaboration.

- ✓ **Challenges in cross-sectoral collaboration:** Experience from REDISSE 1 and 2 has highlighted challenges in multi-sectoral collaboration for disease surveillance. These challenges include working across sectors, competition for available resources, priority concurrence, fund flow, and implementation responsibilities. In many cases the One health approach is a new concept, which requires greater understanding of its implications. Environmental considerations can often be overlooked as the focus tends to be on human and animal health sectors. The REDISSE Program has sought to inculcate a sense of common cause and benefit by encouraging participation of all three sectors. Additionally, REDISSE Program has provided an opportunity for experimentation with different solutions for cross-sectoral collaboration, and to encourage cross-sectoral planning and to develop a culture of sharing the "resource blanket".

- ✓ **Analytical Studies:** The project design has been informed by extensive analytical work on the post-Ebola Health Systems Strengthening Financing Framework. The project incorporates lessons learned from comprehensive literature review of existing regional disease surveillance and response networking arrangements adopted in other regions including the: (i) Pacific Public Health Network in the Pacific Island Region; (ii) East Africa Infectious Disease Surveillance Network in the East Africa Community; (iii) Mekong Basin Disease Surveillance network in the Mekong Basin Region; (iv) Middle East Consortium for Infectious Disease Surveillance network in the Middle East; and (v) the South Africa Center for Infectious Disease Surveillance network. The table below provides a summary of key findings and lessons learned from the analytical studies.

- ✓ **Institutional implementation capacity and capacity building**: At the sub-regional level WAHO has built a robust management implementation unit, which includes separate project coordinators for World Bank projects (including REDISSE). WAHO has strengthened its expertise in FM, accounting, M&E, and communications, which is shared among its externally funded projects. Additional WAHO staff has been recruited with the objective of improving World Bank non-objection requests including procurement requests. Further, ECOWAS delegations of authority requiring actions/signatures from ECOWAS to the WAHO Director General, has been significantly streamlined. More broadly, the project takes into account the need for institutional capacity building and support at both regional and national levels, in both substantive areas and program management.

- ✓ **Addressing weaknesses in the M&E/Results Framework**: The quality-at-entry issues most commonly cited in IEG reviews are: weaknesses in monitoring and evaluation system: with indicators that focused on production of outputs that do not necessarily assess

whether actual increase in surveillance and response capacity has been achieved rather than on achievement of intermediate or final outcomes. Indicators that measure the completion of outputs are often not very useful, especially in the case when no outbreaks occur. Another commonly reported problem is the use of too many indicators, which overwhelm the limited capacity of project management units. This results in failure to collect data, and/or data collected solely for routine reporting purposes rather than for project management purposes. Given the REDISSE Program focuses on the prevention and preparedness for the control of infectious disease outbreak threats with uncertain probability of occurrence and unknown magnitude of impact (in the event that such outbreaks occur), some selected indicators have been chosen as PDO-level indicators that can assess the progress made in improving intermediate outcomes including improvements in institutional capacity (effectiveness of surveillance systems, etc.). The project results framework also makes use of existing tools such as the Joint External Evaluation tools used to assess the capacity of countries to implement the IHR (2005) and the OIE PVS (Performance of Veterinary Services) tool. Initial experience with Intermediate Results (IR) level indicators led the countries participating in REDISSE 1 and 2 to recommend the deletion of two indicators: 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 Total number of project beneficiaries and percent female. These indicators are therefore not included in the results framework. A new indicator to capture the gender dimension of access to training in the Program is proposed, based on finding of gender disparity in the draft WARDS Implementation Completion Report. The REDISSE Program has also been designed in close collaboration with the U.S. CDC to align the results framework indicators with measures utilized in the implementation of the GHSA.

- ✓ **Clearly outlined project activities**: The REDISSE Program addresses the importance of distinguishing between country-implemented activities to be financed under the REDISSE 3 for improving disease surveillance systems capacity and activities implemented by regional institutions that contribute to the global public good nature of the project.

- ✓ **Improving cooperation across sectors and regions:** Effective control of infectious diseases and preparedness for outbreak of animal origins requires cooperation and coordination between animal and human health sectors, both at the strategic level and in implementation. The design of the REDISSE relies heavily on the cooperation of both sectors within the World Bank, and among country government representatives, regional entities, and Development Partners. The project design highly promotes cross-sectoral interventions at the regional level to encourage inter-country cooperation, an important element reported to be lacking in the GPAI projects. The REDISSE design also encourages systematic institutional support to encourage cross-sectoral coordination from preparation to project implementation.

- ✓ **Implementation arrangements:** REDISSE 3 will put in place a country PCU in each country that will be responsible for the overall coordination of project activities across sectors to improve efficiency in the implementation of the interventions.

- ✓ **Building better health systems:** The REDISSE design incorporates a shift from a paradigm grounded in crisis response to one that embraces a disaster risk reduction approach and better risk management by building support for the required animal health and human health systems, and the required linkages at country and regional level to manage infectious disease threats. The design thus contributes to long-term systems capacity building across the two sectors to effectively detect and respond to infectious diseases of zoonotic nature in a more integrated manner. In the longer term, the project design accounts for the need to build sectoral capacity to perform core public health and veterinary health functions in line with the international standards established by WHO and OIE. The design of REDISSE 3 also addresses the need for integrated surveillance systems that can tackle various kinds of disease outbreaks, and the development of interoperable systems for improving data sharing practices between the animal and human health surveillance systems for zoonoses and other common issues such as AMR.

- ✓ **Climate Change**: The REDISSE 3 design takes into account that extreme heat, rising sea-levels, changes in precipitation and other environmental changes can cause floods and droughts, intense storms, shifting disease vectors and degraded air quality, all or any of which affect human health and vulnerability to infectious disease. Countries have explicitly included health considerations in their Nationally Determined Contribution (NDC)[36] to UNFCCC. REDISSE 3 components and sub-components addressing surveillance and information systems, preparedness and emergency response, and human resource capacity, will factor in the impact of climate change, influencing the location and degree of country's intervention, while ensuring other climate change planning, programming and funding can complement and be coordinated with the REDISSSE program, including that provided through external partner support (e.g. new climate-specific finance mechanisms, such as the Green Climate Fund, Global Environment Facility, and NDC Partner Support Facility). The WBG Climate Change Action Plan has established a target of 20% of new Health, Nutrition, and Population (HNP) projects include climate change in their design. Further, the WBG has recently developed health-sector specific operational guidance, and forged critical partnerships with collaborating partners and technical agencies, including additional resources, directed at improving HNP investments while launching a new era of "climate smart healthcare" (World Bank 2017). REDISSE 3 countries will be encouraged to actively pursue these opportunities to enhance climate change adaptation strategies for improved health outcomes.

- ✓ **Gender considerations**: Outbreaks can be considered a gendered vulnerability. While gender can influence patterns of exposure to some infectious diseases, women and other marginalized population can be at increased risk of disease due to socio-economic vulnerabilities, low decision-making power, and limited access to resources and healthcare, and inadequate risk reduction capacity. Additionally, some infectious diseases (such as, Dengue or Zika) are particularly worse during pregnancy either for the mother or the infant[37].

[36] Attached: Health in NDC paper
[37] WHO. Addressing sex and gender in epidemic-prone infectious diseases. 2007

Women's vulnerability to the impact of outbreaks is also increased by socially determined differences in roles and responsibilities[38]. Across West Africa, women are primary care-givers for sick family members, and predominate among nurses and HCWs. However, women often lack training to protect themselves from exposure. For example, up to 75 percent of Ebola deaths in some countries were women, because women made up the majority of nurses and caregivers for ailing family members[39]. The REDISSE Program in synergy with WBG's gender strategy,[40] has taken a country-driven approach to build resilience to health emergencies. The SCDs and CPFs of all the REDISSE 3 countries have identified gender gaps in both health as well as economic opportunities and training rendered to women. Disruption of essential health services[41], including maternal health services[42], has been observed in past outbreaks – both due to fear-related reduction in health seeking behavior[43] and abandonment of hospitals by HCWs[44]. Findings from the ICR of WARDS[45] project have highlighted the gender disparity in the percentage of female participants in the FETP and the FELTP training programs in West Africa. Out of the 49 FELTP trainees selected to participate in the program, only seven were women. Eight of the countries in the WARDS program, including REDISSE countries: Sierra Leone, Senegal, and Mali, had no female representative in the program. Given the strong need to focus on women's human development to address health outbreaks in a resilient manner, gender considerations will be an integral aspect of REDISSE project activities. The REDISSE program takes into account gender consideration, to ensure greater participation of women in capacity building for disease surveillance, infection control, emergency response in both human and animal health sectors.

- ✓ **Private sector engagement**: Adopting lessons learned from other regional projects, the project also promotes partnership with the private sector to improve areas of known weaknesses in the provision of public goods like supply chain logistics planning and management, biosecurity, specimen transportation systems, and development of clear communication strategies tailored to the local context, and the stronger involvement of private actors in disease surveillance and control activities (e.g. sanitary mandate for private veterinarians).

- ✓ **Ensuring cost-effectiveness of interventions:** The IEG report highlights that while many projects supported significant improvement in disease diagnostic capacity, there was a tendency for projects to focus too much on investing in laboratory infrastructure and

[38] WPRO. Taking gender and sex into account in emerging infectious disease programs. 2011 http://www.wpro.who.int/topics/gender_issues/Takingsexandgenderintoaccount.pdf
[39] Gender dimensions to the Ebola outbreak in Nigeria. 2016. http://www.annalsafrmed.org/article.asp?issn=1596-3519;year=2016;volume=15;issue=1;spage=7;epage=13;aulast=Fawole
[40] World Bank. 2015. *World Bank Group gender strategy (FY16-23) : gender equality, poverty reduction and inclusive growth*. Washington, D.C. : World Bank Group. http://documents.worldbank.org/curated/en/820851467992505410/World-Bank-Group-gender-strategy-FY16-23-gender-equality-poverty-reduction-and-inclusive-growth
[41] Mukherjee JS, Marsh R ,Excess maternal death in the time of Ebola. Fletcher F World Aff 2015;**39**:149.
[42] Ribacke KJB, van Duinen AJ, Nordenstedt H, et al. The impact of the West Africa Ebola outbreak on obstetric health care in Sierra Leone. PLoS ONE 2016;11:e0150080. doi:10.1371/journal.pone.0150080
[43] Sulzhan Bali, Kearsley A Stewart, Muhammad Ali Pate. Long shadow of fear in an epidemic: fearonomic effects of Ebola on the private sector in Nigeria. BMJ Global Health Nov 2016, 1 (3) e000111; DOI: 10.1136/bmjgh-2016-000111.
[44] Sokol DK. Ethics and epidemics. Am J Bioeth 2008;8:28–9. doi:10.1080/15265160802318121
[45] Implementation Completion Report, WARDS project, 2017, Report # ICR00004224

equipment rather than in systems development and human capacity. Having thoroughly considered the cost-effectiveness and high maintenance cost implications (infrastructure and human capacity) required to sustain a Biosecurity Level 3 (BSL3) laboratory, the REDISSE design will focus on improving overall laboratory performance at all levels of the health pyramid, but only consider supporting the upgrading of identified reference laboratories to BSL3 laboratory standards as a regional level activity that will promote effective laboratory networking among countries. Other cost-effective interventions have been thoroughly considered and incorporated in the REDISSE 3 project. For example, to reduce the time taken for diagnostic tests, the project takes into account that it is often cost-effective to develop an effective specimen transportation system rather than to finance a large and ultimately unsustainable laboratory network.

- ✓ **Client ownership:** Another important lesson is that along with the support from donor partners and other international agencies, individual countries are central to ensuring a coordinated regional program that successfully addresses the threats posed by infectious diseases. For example, while pandemics and AMR are global threats, programs to reduce these threats must be initiated and led by countries, based on their assessment of opportunities to meet country goals through reduction of emerging and reemerging infectious disease burdens, including endemic diseases. Country commitment to integrated programs is critical, as is coordinated donor support for such programs.

- ✓ **Sustainability Plans:** The REDISSE 3 design accounts for the need to mainstream epidemic preparedness and zoonotic diseases risk management into ongoing agendas across the health and agriculture sector to ensure sustainability. While WB performance in developing and managing the Global Program for Avian Influenza Control and Human Pandemic Preparedness and Response (GPAI) was overall successful, the failure to sustain its support to infectious disease prevention and control left countries insufficiently prepared to face recurrent or new threats. Moving away from emergency response, and working toward long-term capacity building to support health systems using cross-sectoral interventions, was identified as the proper approach, which is incorporated in the REDISSE 3 project design.

Table 11: Summary of findings from literature review on evidence of value and impact of regional networking in disease surveillance and response

Indicators/Measures of value-added	Case Study Network	Evidence of Impact
Epidemiologic Indicators		
Reduced time to detection	EAIDSNet	o Early detection of 4 Ebola outbreaks and points of transmission in Uganda (see Table 5.1)
Cases/Outbreaks averted	EAIDSNet	o Averted outbreaks and reduced cases of Ebola, Rift Valley Fever, Marburg, and Wild Polio Virus
Effective early warning system with the capacity for trends assessment established	PPHSN	o Establishment of PacNet has resulted in the implementation of preventive measures against the spread of emerging and reemerging infectious diseases across countries in the region including Dengue Fever, Influenza, Measles, Rubella and SARS
Reduced time to action/effective response	EAIDSNet	o Reduced time of transmission of vital information from surveillance data for effective response
Magnitude of mortality and morbidity averted	EAIDSNet	o Containment of the spread of 4 recorded outbreaks of EVD in the region
Measure of disease risk factors for the development of early prevention interventions	MBDS	o Training of workforce on disease risk communication across countries in the Mekong basin
Measure of improved IHR (2005) Core Capacities		
Increase in country technical capacity (including improved usage of ICT)	EAIDSNet; MBDS; SACIDS	o Successful pilot of a web-based OH portal for linking animal and human health disease surveillance (EAIDSNet); o Successful partnership with the University of Mahidol to train cross-border officials on the use of Geographic Information Systems for research, outbreak investigations and communication (MBDS) o Partnership with EAIDSNet on the pilot of a mobile phone-based system for rapid cross-border communication of animal-human health surveillance information (SACIDS)
Improved surveillance and usage of surveillance data for action/implementable policy formulation	EAIDSNet; MECIDS; PPHSN	o Improved framework for cross-border surveillance within the context of IHR (2005) and IDSR o Improved reporting system used for mitigating the impact of AI (MECIDS) o Streamlining of surveillance data across member countries
Improved Preparedness and Response Capacity	EAIDSNet; MBDS; MECIDS	o Successful completion of a field simulation exercise in HPAI pandemic preparedness (EAIDSNet) including at the Kenyan-Ugandan border; o Successful Preparation for and response to H5N1, Dengue Fever Outbreaks and natural disasters in Myanmar in 2008 (MBDS); o Successful preparedness and response to the H1N1 outbreak in the middle east region (MECIDS)
Number of cross border sites established (Points of Entry)	EAIDSNet; MBDS	o Strengthened district health management teams at cross-border districts; o Expansion of cross-border sites from 4 to 24 in 3 years (MBDS)

Improved laboratory confirmation	EAIDSNet; across all regional networks	o Implementation of activities under the EAPHLN project to improve laboratory capacity in the region o Promotion of better laboratory practices and dissemination of standardized laboratory protocols
Appropriately trained and skilled Human Resources	EAIDSNet; MBDS; MECIDS	o Expansion of the HRH staffing capacity for disease surveillance and response using a OH approach (EAIDSNet) o Improved capacity building for HRH: training of medical doctors in field epidemiology, disease surveillance and response (MBDS) o Development of common health workforce training protocols in core skillsets for member countries (MECIDS)
Health Systems Strengthening Indicators		
Efficiency of a RDSR system	MBDS, MECIDS	o Improved cross-sectoral coordination for preparedness and response activities (MBDS) o Serves as an effective platform for countries to monitor emerging and reemerging infectious disease trends across member countries (MECIDS)
Improved coordination of disease prevention and control activities from community to national level	EAIDSNet; SACIDS	o Establishment of Village Health Teams (VHTs) and reporting protocols to the district health information system o Serves as an effective bridge between the ministries of human health, livestock, and wildlife in the 14 SADC countries
Allocation of resources during health planning	MBDS	o Allocation of resources for expansion of cross-border surveillance response sites
Improved country capacity in the health sector	EAIDSNet; SACIDS	o Institutionalization of a formal health unit within the EAC o Serves as an effective bridge between the ministries of human health, livestock, and wildlife in the 14 SADC countries
Private Sector Engagement	PPSHN; SACIDS	Establishment of PacNet
Measures of multi-sectoral and Regional Cooperation		
Increase in cooperation among member states	MBDS; SACIDS	o Establishment of multisectoral cross-border response teams (MBRTs) made of trained officials from member countries representing the health, animal, customs and immigration sectors (MBDS) o Effective surveillance of climate-dependent vector borne disease with potential inter-species concern (SACIDS)
Joint outbreak investigations conducted	MBDS; EAIDSNet	o Joint Dengue fever investigation by multi-sectoral cross-border response teams (health, customs and immigration officials) between Lao and Thai Provincial sites; joint Typhoid investigation between Lao and Thai provincial sites; joint Avian Influenza investigation of cases in humans (MBDS); o Joint outbreak investigations for 4 EVD outbreaks

Human Health REDISSE 3 countries

Country (Population, 2015)[46]	Infant Mortality Rate (infant death/1000 live births) (2015)	Under 5 mortality (per 1000 live births) (2015)	Maternal Deaths/100,000 births (2015) [18]	Cause of death, by communicable diseases and maternal, prenatal and nutrition conditions (% of total), (2015)	DTP3, Diphtheria, Tetanus toxoid, and pertussis coverage among 1 year old's (%), (2015)	Prevalence of stunting, height for age (% of children under 5) (2016 or latest year)	Prevalence of wasting (% of children under 5 years under 2 S.D weight for height) (2016 or latest year)	TB Incidence/100,000 (2015)	Malaria incidence/1000 population at risk[18]	New HIV infection among adults 15-49 years old (per 1000 uninfected)	No of people requiring interventions against NTDs (2015)	No of districts with meningitis that crossed epidemic threshold (weekly rate >10 cases/100,000 persons) (2007-2015)	Human Outbreaks (2005-2017)[47]
Benin (10, 880, 000)	64.2	99.5	405	52%	79%	34 %	4.5%	60	293.7	0.69	7,029, 345	1 (2014) 1(2013) 6 (2012)	Lassa Fever (2017, 2016) Meningococcal disease (2012, 2001) Cholera (2005, 2003); CCHF endemic
Mali (17, 600, 000)	74.5	114. 7	587	60%	68%	38.5	15.3%	57	448.6	1.05	18, 291, 866	1 (2012) 3 (2008)	Ebola (2014), Yellow Fever (2005), Cholera (2005); CCHF endemic

[46] WHO Global Health Observatory *http://www.who.int/gho/en/*
[47] WHO Disease Outbreak Notifications *http://www.who.int/csr/don/archive/country/en/#B*

Mauritania (5, 068, 000)	65.1	84.7	602	53%	73%	27.9	14.8%	107	74.2	0.28	690, 268		Rift valley fever (2014, 2012, 2010), Crimean-Congo Hemorrhagic Fever (2015, 2013, 2003, endemic); *Dengue (2015, 2016)*
Niger (19,899,000)	57.1	95.5	553	64%	65%	43	18.7%	95	356.5	0.19	15, 779, 056	4 (2010) 23 (2009) 5 (2008)	Hepatitis E Virus (2017), Rift Valley Fever (2016), Meningococcal disease (2015, 2009), Polio (2013), Cholera (2010, 2005)

Epidemiological surveillance and preparedness capacity of REDISSE 3 countries

	EPIDEMIOLOGICAL SURVEILLANCE AND PREPAREDNESS CAPACITY OF REDISSE 3 COUNTRIES				
Country	**Year**	**Plans available**	**Disease**	**Type of Plan**	**Notes[48]**
Benin	2006	Plan D'Intervention D'urgence Contre La Grippe Aviaire	Avian Influenza	Response Plan	In the context of the prevention and control of diseases, Benin has set up an **epidemiological surveillance system** based on all the structures of the health pyramid. The circulation of information in the system of integrated epidemiological surveillance of diseases in Benin is carried out by routing of laboratory samples from Center Hospitalier Départemental to the national public health laboratory for confirmation. Preparedness and response to epidemics is achieved through pre-positioning of medicines, public awareness of individual and collective hygiene measures. These different interventions suffer **from insufficient coordination at the operational and even central level.** The Government of Benin's interest in **increasing human resource capacity for health** is reflected in Benin's Strategic Development Guidelines, the Poverty Reduction and Growth Strategy, and the Plan National Health Development Corporation 2008-2017, which has identified the development of human resources as one of the five priority areas of the plan.
	2009	Plan D'Actions Contre La Grippe A/H1N1 Au Benin	Influenza	Response Plan	
	2008	Programme National d'Actions Intégré (PNAI) pour la Prévention et le Contrôle de l'Influenza aviaire et humaine au Bénin (Partners : WHO, FAO, OIE)	Avian Influenza	Preparedness and Response	
Mali	2006	Plan De Contingence Pour La Prévention Et La Lutte Contre La Grippe Aviaire Au Mali (Partner : USAID, FAO, WHO, UNICEF)	Avian Influenza	Preparedness and Response	The **shortage of competent and motivated human resources** for health is recognized as the main constraint of the Malian health system, beyond the lack of infrastructures, equipment and financial resources.

[48] http://www.afro.who.int/fr/pays.html

Mauritania	2006	Plan Stratégique National De Préparation et de riposte contre la pandémie de la grippe aviaire (Partners : WHO, OIE, UNICEF)	Avian Influenza	Preparedness and response plans for Ebola and Avian Flu are available.	Diseases with epidemic potential are regularly monitored in the country. An **early warning system** for major epidemic diseases is present. The laboratories of the regional and national hospitals have been strengthened by the training of laboratory technicians on the surveillance of diseases with epidemic potential and the monitoring of the quality of their services. Insufficient attention to the Integrated Disease Surveillance and Response (IDSR *)* and the very low community involvement of health regions considerably limit the effectiveness of the health system. The 2005 International Health Regulations have not been implemented nationally. However, Government is currently preparing a **National Public Health Emergencies Response Strategy** that will include the creation of an Emergencies Response Center.
	2014	Plan de riposte a l'épidémie de la maladie a virus Ébola déclarée dans la sous région	Ebola		
Niger	2006	Plan National d'Urgence de Prévention et Lutte contre la Grippe Aviaire au Niger	Avian Influenza	Preparedness and Response	Niger is confronted all year round with the problems of epidemics. To cope with this situation **an epidemiological surveillance network**, was set up. A national network of laboratories was also established. National plans for Avian Influenza, Rift Valley Fever, and Ebola exist. Epidemiological surveillance mainly concerns the 11 *Mandatory Declarations (MDOs)* , including those with epidemic potential, to be eradicated, and others with major public health problems. The types of surveillance used in Niger range from passive surveillance to sentinel surveillance and community-based surveillance. However, National Health Information *System of Niger* is weak. The lack of financial resources also limits the implementation of the national plan for the preparation and response to health emergencies.
	2006	Programme National d'Actions Intégré (PNAI) pour la Prévention et le Contrôle de l'Influenza aviaire et humaine au Niger	Avian Influenza	Preparedness and Response	
	2007	Plan National d'Urgence de Prévention et Lutte contre la Grippe Aviaire au Niger	Avian Influenza	Preparedness and Response	

	2015 (2015-2019)	Plan De Contingence Pour Prévention Et Le Contrôle De L'Influenza Aviaire Et Humaine Au Niger (2015-2019) (Partner : USAID, FAO, WHO, OIE)	Avian Influenza	Preparedness and Response	
	2016	Plan National De Riposte Contre La Réponse A L'Epidémie Fièvre De La Vallée Du Rift (Partners : WHO, MSF)	Rift Valley Fever	Response Plan	
	2015	Plan opérationnel de préparation et de réponse à l'épidémie de la maladie a virus Ebola (Partners: WHO, USAID, CDC, PH England)	Ebola	Preparedness and Response	
	2014	Plan stratégique multisectoriel d'élimination du choléra au Niger (2015-2019)	Cholera	Response	
	2017	Plan de préparation et de réponse aux épidémies de méningites	Meningitis	Preparedness and Response	

	2014	Plan d'action 2015 – 2016 de mise en œuvre des capacités essentielles du règlement sanitaire international RSI (Partner: WHO)	All-Hazards	Preparedness and plan of action for IHR capacities	
	2014	Plan National de Préparation et de Réponses aux Urgences Sanitaires (2014-2016) (Partner: WHO)	All Health Emergencies	Preparation and Response	
	2017	Plan de riposte en cas de flambée de poliomyélite (UNICEF, WHO)	Polio	Response	
	2017	Modèle de budget pour la riposte aux flambées (renforcement des moyens)	Polio	Budget for Response	
	2017	Supplementary Immunization Activities (SIAs) for Polio Eradication	Polio	Budget	

Animal Health- REDISSE 3 countries

	Population (WHO, 2015)	Labor force in agriculture (% of total population) [49]	Cattle (2014) [50]	% of total cattle in Western Africa[20]	Poultry (1000 units) (2014)	% of total poultry in Western Africa	Influenza Outbreaks in animals (OIE)[51]	Other outbreaks in animals (OIE, 2013-2017)
Benin	10, 880, 000	--	2, 222, 000	3%	18, 764	4%	H5N1 (2007)	Rabbit hemorrhagic disease (2015), African swine fever (2013), anthrax (2013)
Mali	17, 600, 000	80%	10,012, 968	15%	38, 587	7%		Rift Valley fever (2017), African swine fever (2016)
Mauritania	5, 068, 000	50%	1, 800, 000	3%	4, 600	1%		Rift Valley fever (2015, 2013), foot and mouth disease (2015), contagious bovine pleuropneumonia (2015, 2014)
Niger	19,899,000	90%	11, 377, 312	17%	18, 000	3%	H5N1 (2017, 2016, 2015), H5N8 (2017), H5N1 in poultry (2006)	Anthrax (2017), Rift Valley fever (2016)
West Africa			68, 970, 764		5, 22, 707			

[49] CIA Fact book, *https://www.cia.gov/library/publications/the-world-factbook/fields/2048.html#132*
[50] FAO Stat, 2014, *http://www.fao.org/faostat/en/#data/QA*
[51] OIE Avian Influenza Portal *http://www.oie.int/en/animal-health-in-the-world/update-on-avian-influenza/2004/*

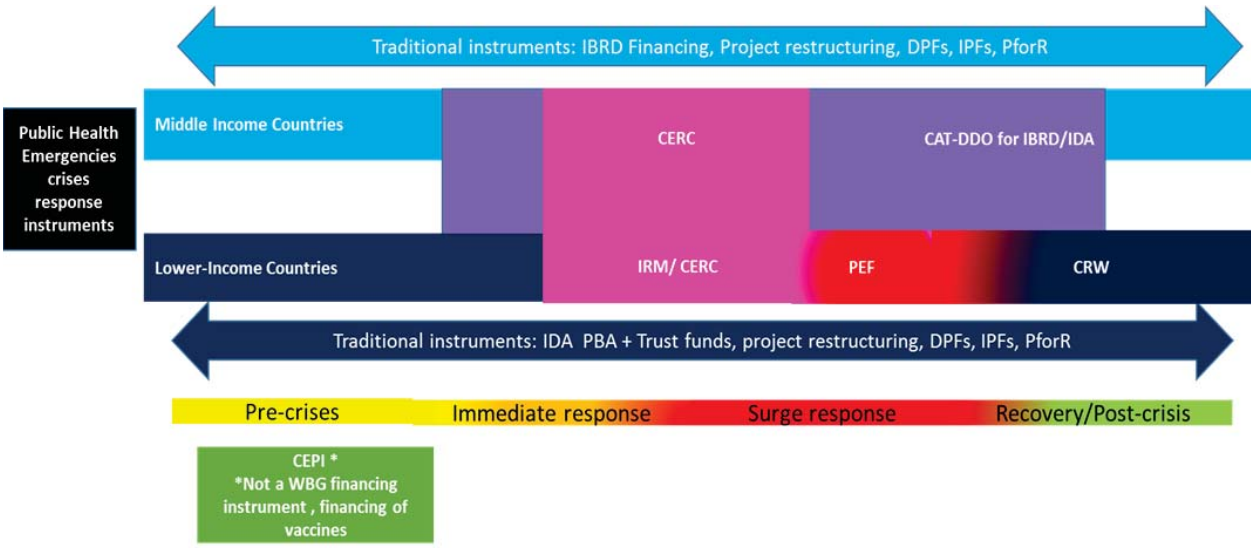
Differences between REDISSE's CERC and other WBG tools for crisis response (CERC IRM, PEF, and CRW)

	Contingency Emergency Response Component (CERC) REDISSE's response component	Immediate Response Mechanism (IRM)	Pandemic Financing Facility (PEF)	Crises Response Window (CRW)
Description	Investment project component designed to provide swift response in the event of an eligible crises or emergency by providing access to undisbursed IDA resources in country portfolio.	IRM provides rapid access to undisbursed IDA resources to address immediate post-crisis financing needs through IRM CERC component.	Insurance-based financing mechanism designed to finance response efforts in IDA-eligible countries to tackle rare, high severity disease outbreaks, with the aim of preventing such outbreaks from becoming pandemics.	Initially piloted in IDA 15, formalized in IDA 16, CRW is an instrument in organizing IDA's support to crises response, including public health emergencies. CRW compliments core IDA and allocations from regional programs.
Time for disbursement	<2 weeks	< 2 weeks	< 1 week	4-7 months
Phase	Immediate to Early Response (Investigation, assessment, and immediate response)	Immediate to Early Response (Investigation, assessment, and immediate response)	Epidemic or Pandemic Emergency Response	Recovery/ containment (medium to long term recovery efforts)
Activation	Declaration of state emergency or equivalent 'flexible' triggers as agreed with the Bank in accordance with national/subnational authority.	Declaration of state emergency or equivalent 'flexible' triggers as agreed with the Bank in accordance with national or subnational authority in accordance with emergency response procedures.	Parametric triggers for certain high-impact diseases. Criteria used in PEF parametric triggers include outbreak size (number of cases or deaths), outbreak growth, and outbreak spread.	Declaration of national emergency by IDA country and declaration of PHEIC by WHO under WHO's Global Alert and Response system in accordance with IHR 2005.
Decision for Activation	Country Director	Regional Vice President	Insurance window triggers independently when parametric triggers are met. Cash window is	Regional Vice President/Board

			activated by coordination unit (based out of GHNP) in consultation with the PEF Steering body and Roster of experts.	
Eligible countries	IBRD-IDA countries	IDA countries Adoption of IRM manual and inclusion of CERC component in project are pre-requisite for disbursement	• IDA-eligible countries or blend countries that are either (a) eligible under IDA 17, or/and (b) are IDA-eligible at the time of submission of request for funds. • PEF accredited non-state agencies or multilateral agencies (such as, WHO, MSF, UNICEF) are also eligible to borrow.	All IDA countries are eligible
Sources of Funding	IDA PBA/IBRD	IDA PBA	PEF	IDA CRW
Geographical coverage	Single country outbreaks are eligible	Single country outbreaks are eligible	Multi-country outbreaks of 2+IDA countries (single country outbreaks of high severity can be covered via cash window)	Single country outbreaks are eligible
Disease Coverage	Pre-determined triggers that are country/ project specific. CERC may be used for all-hazards- natural disasters as well as health emergencies.	Pre-determined triggers that are country/project specific. IRM CERC may be used for all-hazards- natural disasters as well as health emergencies.	Defined set of viruses: New Orthomyxoviruses (does not cover seasonal flu), Coronavirus (SARS, MERS), Filoviridae (Ebola Marburg), and other viral hemorrhagic fevers (CCHF, RVF, Lassa Fever) covered through insurance window, and other new emerging infections through cash window.	
Complementarity	PEF can supplement CERC	PEF can supplement IRM	Requires financial conduit through tools like CERC, CERC IRM, CAT DDO or CRW	PEF can supplement CRW

Financial coverage	In the event of a crises, uncommitted funds are reallocated to the CERC. No cap. Embedded in IPF with zero funds allocated to it.	Capped at 5% of IDA's countries undisbursed balances or US$ 5 million, whatever is higher.	Up to US$ 500 million for three years through insurance window, and up to US$ 50-100 million through cash window.	Financing in addition to PBA allocation through IDA. As per IDA 18 proposal, a larger CRW of US$ 3 billion is proposed.
Implementation	Implemented by specific PCU	Implemented by a PCU that is selected out of all the projects with IRM-CERC components whose funds are pooled together.		
Type of lending instrument	IPF	IPF	DPF or IPF	DPF or IPF

Figure 1. Diagrammatic summary of the new and old World Bank instruments available to IDA and IBRD countries to respond to public health emergencies



This figure identifies the various World Bank response-financing innovations/instruments available for countries dealing with public health emergencies and crises. Both IDA and IBRD countries that have projects with a CERC or IRM-CERC component can utilize uncommitted funding from those projects to finance response to outbreaks or public health crises as the means for providing a timely response. The Catastrophe Deferred Drawdown Option (Cat-DDO) is a contingent credit line option that provides government quick access to financing following a disaster. Like CERC and IRM-CERC, Cat-DDO is available to both IBRD and IDA countries. In contrast, PEF provides surge financing after certain parametric triggers for disease outbreaks are met and is currently only available to IDA countries. CRW financing is a World Bank instrument available to IDA countries, that provides additional financing for recovery from severe crisis.

ANNEX 2: IMPLEMENTATION ARRANGEMENTS

COUNTRY : Western Africa
Regional Disease Surveillance Systems Enhancement (REDISSE) Phase III

Project Institutional and Implementation Arrangements

1. The REDISSE program will be implemented at a regional and national level. At the regional level, project implementation will be led by WAHO of ECOWAS, which hosts the regional secretariat under the two previous REDISSE projects. Under this regional coordination, the governments of the four participating countries will implement country-level tasks as per their respective country implementation arrangements. WAHO will also provide support to countries both directly and through service agreements and Memoranda of Understanding (MoUs) with technical organizations such as WHO and OIE. This proposed arrangement is fully in line with IEG's recommendations on regional projects[52].

2. Regional coordination will be managed through a Regional Steering Committee (RSC), whose secretariat will be run by WAHO. More generally, WAHO will be responsible for technical coordination at regional level. WAHO on the human health side, and RAHC on the animal health side, the latter supported by OIE[53], will also be responsible for the execution of identified regional activities and of supporting countries regarding specific issues. The RSC will include representatives of involved Ministries from all the four countries and will meet twice a year.

3. As financial flows, IDA funds will be made available to WAHO (through a regional grant to ECOWAS under REDISSE 1). WAHO will allocate part of the regional grant proceeds to support the implementation of regional animal health activities and targeted technical assistance to the countries to be carried out by the Bamako Regional Animal Health Center supported by OIE. This support is envisaged until the capacity of RAHC is built to the minimum level necessary to carry out project activities. For the aforementioned purposes, the Financing and Project Agreements concluded between the ECOWAS and the Association and the Association and WAHO under the first REDISSE project will be amended concomitantly with the finalization of the processing of this third phase.

4. In countries, it is expected that PCU will be put in place and would be responsible for the overall coordination and management of project activities. The PCU will need to work across sectors to improve efficiency and alignment in the implementation of project intervention. Given the multi-sectoral nature of the proposed activities, an existing national steering committee (NSC)

[52] "*What has generally worked best is reliance on national institutions for execution and implementation of program interventions at the country level, and on regional institutions for supportive services that cannot be performed efficiently by national agencies, such as coordination, data gathering, technical assistance, dispute resolution, and monitoring and evaluation*." (IEG 2007).

[53] REDISSE will contribute to the operationalization of RAHC which is in its early stages of development. The World Organization for Animal Health (OIE) will assist RAHC as it moves toward assuming its responsibilities as the ECOWAS Specialized Agency for Animal Health, in conformity with the 2012 decision of ECOWAS Heads of States.

or one to be formed will oversee the yearly planning and monitor the implementation of the project, while a project implementation unit will be set up for coordinating and managing project activities as well as transferring and monitoring the use of funds by other implementing ministries and partners. In all countries, the implementing agency will function as an "umbrella ministry", in charge of coordinating the implementation of the various components by sectoral ministries (agriculture, livestock, health, environment, etc.) and NGOs. Each technical ministry will be represented at the NSCs and the RSC.

Below is a description of in-country institutional arrangements.

Benin:

5. A multisectoral steering committee of the Global Health Security Agenda will be created, including the Ministry of Health (MOH) and Ministry of Agriculture and Livestock; the Ministry in Charge of environment (MOE), one representative of the Mayors, 2 representatives of Civil society. It will be chaired by the Head of the National Council to Combat HIV/AIDS, Tuberculosis, Malaria and Epidemics (CNLS-TP) assisted by a technical committee. It will oversee annual project planning, monitor project progress, and approve annual reports. Project implementation will be the responsibility of a Project Coordination Unit (PCU), which is under the aegis of the CNLS-TP. The new PCU will be headed by a Project Coordinator and staffed with qualified procurement, financial, M&E, and safeguard specialists. Further, the Benin PCU will recruit an environmental specialist and a social safeguards specialist, who will work in close collaboration with the regional WAHO safeguards specialist. A sub-regional entity addressing the Abidjan-Lagos corridor will be looked to for cross-border aspects, while appropriate institutions will assist in the development of the One health approach.

Mali:

6. A multisectoral national committee for One Health will be created through the Office of the Prime Minister, chaired by the Minister of Health and Social Welfare (MOH), the ministry responsible for overall project implementation. The committee will include the ministries of livestock, economy and finance, education, agriculture, security, environment and sustainable development, communications, and representatives from local, regional and global partners. The committee will review annual workplans and budgets, monitor project progress and approve annual project reports, meeting at least twice annually. The existing PCU established for the World Bank-funded Malaria/NTD project within the MOH, will manage the project. The PCU is headed by a Program Coordinator. The project will hire qualified staff to strengthen the PCU, namely: a project coordinator, financial, accountant, procurement, M&E, communications, and an environmental specialist and a social safeguards specialist. Health centers and health personnel, community health workers, veterinarian staff, as well as community agricultural workers, and the private sector will be involved in project execution. Existing multisectoral/multidisplinary cadres functioning at community and district levels will share information/best practices in dealing with endemics and catastrophic events. The Mali PCU environmental specialist and the social

safeguards specialist will work in close collaboration with the regional WAHO safeguards specialist.

Mauritania:

7. A multi-sectoral national committee of the GHSA, chaired by the MOH will include representatives of the ministries of livestock, health, economy and finance, education, environment and sustainable development, communications and local, regional, and global partners. Additionally, the project will benefit from a technical committee comprised of representatives of the relevant sectors, and regional and departmental units of the national Epidemic Monitoring Commission. The national steering committee will oversee project annual planning and budgeting, monitor project progress and approve annual project reports, meeting at least twice annually. An existing Project Coordination Unit (PCU) in the Ministry of Livestock will be responsible for the overall project implementation. The PCU will be headed by a Project Coordinator supported with qualified staff including financial, auditing, procurement, M&E, and an environmental specialist and a social safeguards specialist. The PCU environmental specialist and the social safeguards specialist will work in close collaboration with the regional WAHO safeguards specialist.

Niger:

8. A National Multisectoral Committee for "One Health" will be established at the level of the Prime Minister's Office. This committee will include representatives from the Ministries of Planning, Agriculture and Livestock, Environment and Sustainable Development, and Communication as well as local, regional and international partners. To monitor the project, a National Steering Committee will be created and chaired by the Minister of Public Health (MSP). This committee will include all departmental, partner and technical representatives who are on the multi-sectoral “One Health” committee. The technical coordination of the project will be ensured by the Director of Surveillance and Response to Epidemics (DSRE) of the MSP and will act as the secretariat of the steering committee. Thus the National Steering Committee will oversee the annual project planning and budgeting, monitor the progress of the project and approve the annual reports at least twice a year. An existing project coordination unit (PCU) within the Ministry of Public Health will be strengthened by qualified staff in financial management, procurement, M & E and an environmental specialist and a social safeguards specialist. (This unit is the same for the WB-funded Sahel Malaria and Neglected Tropical Diseases Project (P149526) and the Population and Health Support Project (P147638)). Also, for close monitoring during the implementation of project activities, each Ministry (in particular the Ministry of Public Health, the Ministry of Agriculture and Livestock, the Ministry of Environment and of Sustainable Development) will designate a project focal point. These focal points serve as a link between their Ministries' Departments and the PCU for carrying out the activities. They will be responsible for preparing draft annual work plans budgets. They will also be responsible for preparing the reports of the activities carried out within the framework of the project and the archiving of project documentation. Focal points will meet regularly to review the progress on the implementation of activities and will report to their respective ministries on implementation progress and challenges

encountered. The Niger PCU environmental specialist and the social safeguards specialist will work closely with the regional WAHO safeguards specialist.

Financial Management

A. FINANCIAL MANAGEMENT

9. In connection with the preparation of the REDISSE 3 project, a FM assessment of the implementing entity within each participating country has been conducted. The assessment was done for the Ministries of Health in Niger (Unit of the Health Pooled Fund) and Mali (Project Coordination Unit of the ongoing Sahel Malaria and Neglected Tropical Diseases Project (PMNTD), the Ministry of Livestock in Mauritania, and the Coordination Unit (PCU) to be established under the Conseil National de Lutte contre le VIH/sida, la Tuberculose, le Paludisme, les IST et les Épidémies (CNLS-TP) in Benin.

10. The objective of the assessment was to determine: (a) whether these units have adequate FM arrangements (planning, budgeting, accounting, internal control, funds flow, financial reporting, and auditing arrangements) to ensure that project funds will be used for purposes intended in an efficient and economical way; (b) project financial reports will be prepared in an accurate, reliable and timely manner; and (c) the project's assets will be safeguarded. The FM assessment was carried out in accordance with the FM Manual for World Bank Investment Project Financing Operations that became effective on March 1, 2010 as last revised on February 10, 2017. In this regard, a review of the FM arrangements has been conducted for the above entities as further detailed below.

11. The conclusion of the assessment is that the FM arrangements in place meet the Bank's minimum FM requirements under Bank Policy and Directive for Investment Project Financing operations, and subject to the implementation the FM action plan as highlighted below further detailed in Annex 2), are therefore adequate to provide, with reasonable assurance, accurate and timely information on the status of the project required by World Bank. The overall FM residual risk rating is **Substantial** for the four countries.

12. The implementing entities will carry out the FM action plan to strengthen FM arrangements as follows:

a. **Staffing**: A FM team consisting of a qualified and experienced Financial Manager, and a qualified and experienced Accountant will be recruited within three months of effectiveness by the PCU in Benin. In Mali, the PCU is familiar with Bank FM requirement. A new FM Officer auditor will be recruited three months after effectiveness. In Niger, MOH's Unit of the Health Pooled Fund (Fond Commun) is well staffed and will be strengthened through the recruitment of a senior financial officer and a qualified accountant to carry out the project activities. In Mauritania, a qualified accountant will be recruited to work with the existing FM team within the PRAPS project.

b. **Internal Control.** All four PCUs will furnish risk-based internal audit reports to the Association not later than forty-five (45) days after the end of each-audited period. In Benin, the project's internal control system could be strengthened by establishing a close collaboration between Inspection Générale des Finances (IGF) and the project's internal

audit unit for conducting periodical internal audit review on the project activities. In Mauritania, the internal audit function will be carried out by the internal auditor of the PRAPS project and will require including the REDISSE related activities in the annual internal audit work plan.

c. **FM Manual.** For implementing entities in Benin, Mali and Niger, the project FM manual will be developed as part of the PIM; the Bank will clear the FM manual. In Mauritania, the Administrative and Accounting Procedures Manual currently in use under the PRAPS project is satisfactory; it will be updated to include an annex on REDISSE related activities. In Niger, the FM manual will be developed as part of the PIM; the Bank will clear the FM manual.

d. **Accounting System.** In Benin, the PCU will acquire a multi-project and multi-site accounting software whereas in Mali and Niger the PCUs will configure their existing accounting software to reflect this project. In Mauritania, the PRAPS accounting software, which includes a multi-project feature is adequate to maintain segregated accounting records and to generate financial reports for the REDISSE project.

e. **External Audit.** All implementing entities will recruit an external auditor based on TORs acceptable to the Bank and audited Project Financial Statements will be submitted to the Bank within six months of the end of the participating country's fiscal year. All audits will be carried out in accordance International Standards on Auditing issued by IFAC or International Standards for Supreme Audit Institutions issued by the International Organization for Supreme Audit Institutions.

13. The CERC OM and the Disbursement Letter and Financial Information will include the detailed disbursement arrangements applicable under the CERC component of the proposed project. As part of such arrangements, a positive list could be used, which would be featured in the CERC OM, and would include the items against which disbursements will be made. Where a positive list of expenditures is used, the documentation required to support disbursement requests should be agreed (for example, invoices and bills of lading for food imports) and recorded in the CERC OM and the Disbursement Letter.

B. BUDGETING ARRANGEMENTS

14. The four countries will prepare annual budgets based on their annual work plans (AWP) and thereafter submit them to the World Bank at least two months before the beginning of the project's fiscal year. The specific details of each entity's budgeting procedures will be described in the FM Manual. Implementing entities receiving funds from the PCUs will submit their budgets to the PCUs for consolidation. The AWP will then be approved by the respective and appropriate national authority in each country and submitted to the WB no later than November 30 of the year preceding the year the work plan should be implemented.

15. The implementing entities will monitor its execution using the project's accounting software in accordance with the budgeting procedures specified in the manual of procedures and report on variances along with the quarterly interim financial report (IFRs). The budgeting system needs to forecast for each fiscal year the source and use of funds under the project. Only budgeted expenditures would be committed and incurred so as to ensure the resources are used within the agreed upon allocations and for the intended purposes. The quarterly IFRs will be used to monitor the execution of the AWP.

C. ACCOUNTING ARRANGEMENTS

16. *Accounting Policies and Procedures*: These are adequate for all the implementing entities for the four countries. Implementing entities (the PCUs) in Benin, Mali and Niger will include FM aspects related to the project but not covered in their existing manuals under the Project Implementation Manual. In Mauritania, the existing manual under the PRAPS project will be updated to include REDISSE 3 activities.

17. *Accounting Staff*. The following needs to be done to strengthen the accounting staffing arrangements in the PCUs for four countries. All accounting staff, where necessary, will be trained in World Bank FM and Disbursement guidelines as well as in the use of projects' accounting software where applicable.

- *Benin*: The FM function will be carried out by a team composed of: (i) a qualified and experienced Financial Manager expert in charge of the supervision of all project's FM activities managed by this ministry; and (ii) a qualified and experienced Accountant. This staff will be recruited through a competitive process in compliance with Bank's rules. The team will have the overall FM responsibility over budgeting, accounting, reporting, disbursement, internal control, and auditing.
- *Mali*: The PCU is familiar with Bank FM requirement. A new FM officer will be recruited.
- *Mauritania*: For the REDISSE activities, a qualified accountant with relevant experience in handling Bank financed project will be recruited. He will be under the technical responsibility of the PRAPS Financial Director.
- *Niger*: The Unit of the Health Pooled Fund (FC) of the MOH is fully staffed with qualified and experienced finance professionals. Accordingly, this project will be overseen by the existing staff. The current FM team of FC is comprised of one Principal Accountant, two Assistant Accountants at the central level, and height Regional Accountants, all under the responsibility and supervision of the Director of Financial and Material Resources (DRFM). The team will be strengthened with the recruitment of an experienced and qualified senior financial officer and an accountant under Terms of Reference acceptable to the Bank. Trainings on IDA FM procedures and requirements will be provided over the project

18. *Accounting Information Systems.* In Benin, the PCU will purchase an acceptable accounting software with multi-sites, and multi-donors features for managing the project. In Mali, the existing multi-project accounting software (TOM2PRO, already used by PMNTD) will be

customized to host the book-keeping of REDISSE 3. In Mauritania, PRAPS accounting software which includes a multi-project feature is adequate to maintain segregated accounting records and to generate financial reports for the REDISSE project. In Niger, MOH through the FC, will configure its existing TOM2PRO accounting system to reflect this project. When configured, this software is capable of recording transactions and reporting project operations in a timely manner including preparation of withdrawal applications (WAs) and periodic financial reports (IFRs and annual financial statements).

19. *Accounting Standards and Basis. Accounting Standards and Basis.* The fiduciary units for Benin, Mali, and Niger will use the SYSCOHADA accounting standard in use by West African Francophone Countries to prepare the project financial statements. The "*plan comptable de Mauritanie PCM*" current accounting standards in use in Mauritania for ongoing Bank-financed projects will be applicable. Project accounts will be maintained on an accrual basis, supported with appropriate records and procedures to track commitments and to safeguard assets. Annual financial statements will be prepared by the FM team in place.

Table 12: Accounting Arrangements

Institution	Accounting Staff	FM Manual	Accounting Information System
Benin	A FM team (a qualified and experienced Financial Manager and a qualified and experienced Accountant) will be recruited within three months of effectiveness.	The project FM manual will be developed as part of the PIM; the Bank will clear the FM manual.	The PCU will appropriately procure a multi-project and multi-site financial and accounting management software
Mali	A FM Officer will be recruited	The project FM manual will be developed as part of the PIM; the Bank will clear the FM manual.	upgrade of the accounting software to manage the project financial transactions
Mauritania	A qualified accountant with relevant experience in handling Bank financed project operations will be recruited.	The PRAPS Administrative and Accounting Procedures Manual is satisfactory and will be reinforced by an annex for REDISSE activities.	PRAPS accounting software which includes a multi-project feature is adequate to maintain segregated accounting records and to generate financial reports for the REDISSE project.
Niger	MOH's Unit of the Health Pooled Fund (Fond Commun) is well staffed and experienced enough to carry out the project activities	The project FM manual will be developed as part of the PIM; the Bank will clear the FM manual.	**MOH will configure its existing TOM2PRO accounting system to reflect this project**

D. INTERNAL CONTROL AND INTERNAL AUDIT ARRANGEMENTS

20. *Internal Controls.* The internal control procedures will be documented in the FM Manuals shown in the table above for each of the implementing entities and their Project Implementation Manuals that will take into consideration gaps in their existing FM Manuals/Regulations to ensure project FM arrangements are in line with the Financing Agreement. These will ensure that the project does have an effective internal control system.[54]

21. *Internal Audit.* The PCUs in Mali and Niger have adequate internal audit functions whereas in Benin, an Internal Audit Unit will need to be established within the PCU to implement the Project's internal audit annual work-program with special attention to operating costs, including per diems and other soft expenditures, to ensure they are used in an economical manner and for the purposes intended. All four PCUs will furnish risk-based internal audit reports to the Association not later than forty-five (45) days after the end of each-audited period. In Benin, the project's internal control system will be strengthened by recruiting a qualified and experienced internal auditor and by establishing a close collaboration between Inspection Générale des Finances (IGF) and the project's internal audit unit for conducting periodical internal audit review on the project activities. In Mauritania, the PRAPS' internal audit plan will be updated to include the REDISSE project's activities.

E. GOVERNANCE AND ANTI-CORRUPTION (GAC) ARRANGEMENTS

22. As part of the GAC arrangements FM arrangements will ensure that there are internal control systems in place and audits conducted to prevent and detect fraud and corruption. Transparency and accountability is highly encouraged by putting the project's budget and audited financial statements on the implementing entity's websites. Complaint handling mechanisms should also be set up by the implementing entities such that beneficiaries who are not receiving services as planned can have a mechanism to raise their complaints in a manner promotes effective follow up and resolution. This will involve putting in place a system to record all complaints received, direct them to the responsible person to be addressed and record when a response is sent to the complainant. In addition, the project will comply with the World Bank Anti-Corruption Guidelines, dated October 15, 2006 and revised in January 2011 and as of July 1, 2016.

F. FUNDS FLOW ARRANGEMENTS

23. ***Designated and Project Accounts.*** One Designated Account (DA) will be opened at a financial institution acceptable to the World Bank in USD or local currency. In Benin, the CFAF denominated DA will be opened at the Central Bank of West African States (*Banque Centrale des Etats de l'Afrique de l'Ouest* - BCEAO). In Mali and Niger, a CFAF denominated account will be opened in a commercial bank acceptable to IDA. In Mauritania, a USD denominated account

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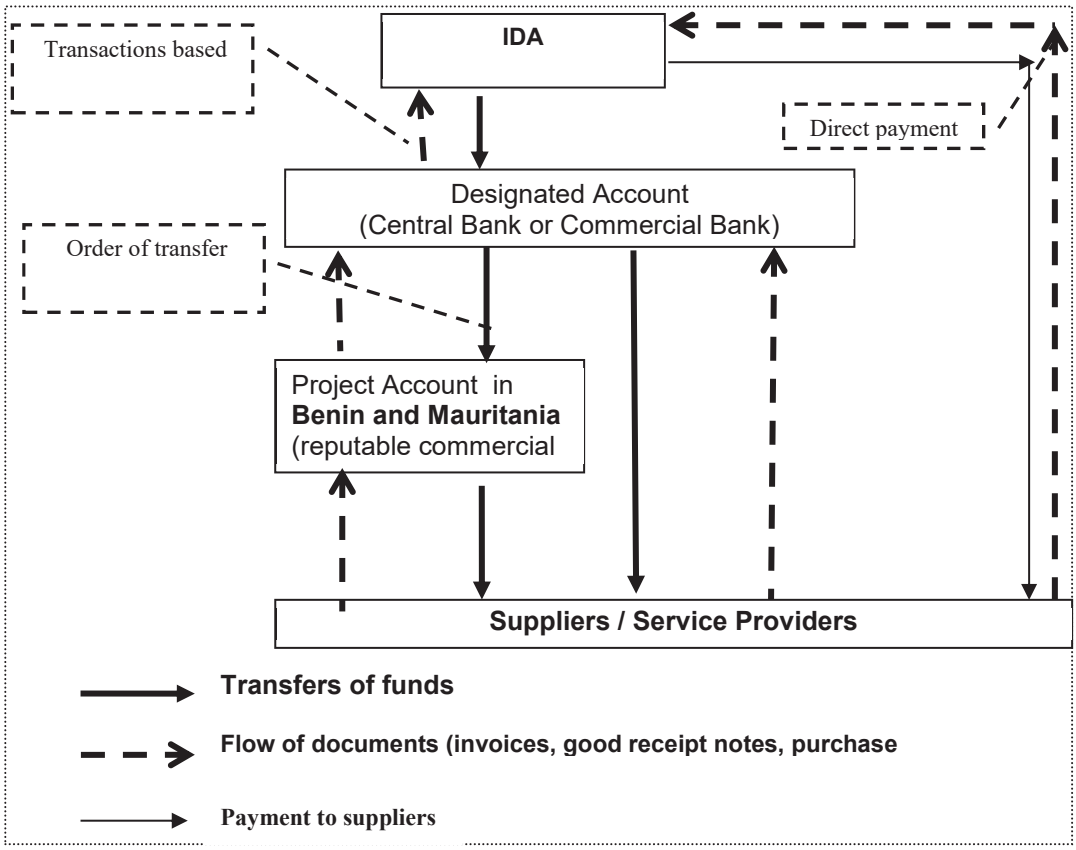
will be opened at the Central Bank of Mauritania (*Banque Centrale de Mauritanie - BCM).* The funds will be released to Project Accounts for Benin and Mauritania opened in a reputable commercial bank or central bank denominated in CFAF in Benin, and in MRO in Mauritania; however, Mali and Niger will not use project accounts. The Project Account will be managed by each PCU in line with the FM Manual. Cash withdrawal transactions from the Project Account will be authorized respectively by the Project Coordinator and the Project's FM Specialist. The account is set up to fund eligible expenditures based on the approved annual activity plans. The ceiling for each DA for approximately six months of expenditures and will be specified in the respective Disbursement and Financial Information Letter (DFILs).

Table 13: Designated and Project Bank Accounts

Institution	Designated Account	Project Account
Benin	BCEAO	Commercial bank
Mali	BDM	Commercial bank
Mauritania	BCM	Commercial Bank
Niger	SONIBANK	Commercial bank

24. ***Project Accounts.*** Sub-implementing entities receiving funds from the Designated Accounts will have to open a Project Account denominated in local currency to receive funds in either the Central Bank or in commercial banks acceptable to the World Bank. The signatories to these accounts should be in line with the FM Manuals for the project or PIM of the sub-implementing entities and they should be submitted to the main implementing entities in the country.

Figure 2: Funds Flow Diagram



Disbursements

25. *Disbursements.* Disbursements will be made in line with the Disbursement Guidelines for Investment Project Financing issued on February 2017. All implementing entities in the four countries will access funding from the World Bank using a combination of the four disbursement methods (Advance, Reimbursement, Direct Payment and Special Commitment). Detailed disbursement procedures will be documented in the project's DFIL as well as the FM manuals of each implementing entity. Upon credit and/or grant effectiveness, PCU will be required to submit a withdrawal application for an initial advance to the Designated Account, drawn from the IDA Credit/Grant account, up the DA ceiling amount agreed and specified in the DFILs. Further advances of funds from IDA to the Designated Accounts will be made upon receiving evidence of satisfactory utilization of the previous advance, as reflected in SOEs. Withdrawal applications are required to be submitted regularly at least once a month.

26. Withdrawal applications will be prepared by the Project's FM Specialist and signed by the authorized signatory or signatories (designated through an authorized signatory letter (ASL) and submitted electronically via the Bank's client portal (Client Connection).

27. For the Contingent Emergency Response Component, the existing flexibility in the Bank Guidance for Contingent Emergency Response Components (CERC), would be used to provide significant advances in order to provide the necessary liquidity for fast response. The level of the advance needed for the CERC would be established independently of any existing advances for the project components and recorded in the revised Disbursement and Financial Information Letter. The advances for the CERC would be deposited in separate Designated Accounts established for the purpose.

28. If ineligible expenditures are found to have been made from the Designated and/or Project Accounts, the borrower will be obligated to refund the same. If the Designated Account remains inactive for more than 6 months, the WB may reduce the amount advanced. The WB will have the right, as reflected in the terms of the Financing Agreement, to suspend disbursement of the funds if significant conditions, including reporting requirements, are not complied with. Additional details regarding disbursement are provided in the DFILs.

29. *Disbursements by category.* The table below sets out the expenditure categories to be financed out of the Credits and Grants. This table takes into account the prevailing Country Financing Parameter for all participating Countries in setting out the financing levels.

CATEGORY	BENIN		MALI		MAURITANIA		NIGER	
	Amount of the Credit Allocated (expressed in USD million)	Amount of the Grant Allocated (expressed in USD million)	Amount of the Credit Allocated (expressed in USD million)	Amount of the Grant Allocated (expressed in USD million)	Amount of the Credit Allocated (expressed in USD million)	Amount of the Grant Allocated (expressed in USD million)	Amount of the Credit Allocated (expressed in USD million)	Amount of the Grant Allocated (expressed in USD million)
1) Goods, non-consulting services, consultants' services, Training, and Operational Costs under Components 1, 2.2, 2.3 (i), 3.1 (i), 3.2 (i) and (iii), 4 and 5.1 of the Project	13.1	13.1	13.85	13.85	0.0	17.2	18.8	18.8
(2) Goods and works under Components 2.1 of the Project	1.9	1.9	1.15	1.15	0.0	2.8	1.2	1.2
(3) Emergency Expenditures under Component 3.3 of the Project	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL AMOUNT	15.0	15.0	15.0	15.0	0.0	20.0	20.0	20.0

30. *Financial Reporting Arrangements*. The PCUs in the four countries will prepare quarterly un-audited Interim Financial Reports (IFRs), in form and content satisfactory to the WB, which will be submitted to the WB within 45 days after the end of the quarter to which they relate. The formats and contents of the IFR were agreed on between the WB and the national implementing entities during negotiations. The contents of the IFR for all implementing entities will include the following information to account for project funds: (i) Statement of Sources and Uses of Funds; (ii) Statement of Uses of Funds by Project Activity/Component including comparison with budget for the quarter and cumulative; and (iii) the Designated and Project Account Reconciliation Statements and related bank statements.

31. The PCUs in the four countries will also prepare the Project's annual financial statements three months after the end of the accounting year in accordance with "*plan comptable de Mauritanie PCM*" for Mauritania and SYSCOHADA for Benin, Mali and Niger. The audited financial statements will be required to be submitted to the WB within six months after the end of the participating country's fiscal year.

32. *External Audit Arrangements.* All audits should be carried out in accordance with International Standards on Auditing issued by IFAC or International Standards for Supreme Audit Institutions issued by the International Organization for Supreme Audit Institutions. The Terms of Reference for the external audit of each implementing entity will be agreed with the World Bank. The external auditors should be appointed within six months after project effectiveness. Audit reports together with management letters should be submitted to the World Bank within six months after the end of the respective government's fiscal year.

33. In accordance with World Bank Policy on Access to Information, the borrower is required to make its audited financial statements publicly available in a manner acceptable to the Association; following the World Bank's formal receipt of these statements from the borrower, the World Bank also makes them available to the public.

Table 14: Financial Management Action Plan

Implementing Entity	Action	Responsibility	Due Date	Legal Covenants
All Implementing Entities	Interim Financial Report Formats were agreed on before negotiations and External Audit Terms of Reference will be agreed on before the signing of the Financing Agreement	All implementing entities	at Negotiations	
PCU in Benin	Recruit a FM team comprising (i) a qualified and experienced Financial Manager; (ii) a qualified and experienced Accountant; (iii) a qualified and experienced internal auditor	CNLS-TP	Three months after effectiveness	Dated covenant
PCU in Mali	Recruitment of the FM Officer	PMNTD	Three months after effectiveness	Dated covenant
PCU in Niger	Recruit a senior financial officer and a	FC of MOH	Three months	Dated covenant

Implementing Entity	Action	Responsibility	Due Date	Legal Covenants
	qualified accountant based on ToR acceptable to the Bank to strengthen the current FM team of FC of MOH		after effectiveness	
PCU in Mauritania	Recruit an accountant with skills and experience satisfactory to the Bank	Ministry of Livestock thru PRAPS PCU	Not later than four (4) months after effectiveness	Dated covenant
PCU in Benin and Mali	Set up/update a "multi-project" computerized accounting system to fit project needs	CNLS-TP, PMNTD, and FC of MOH	Three months after effectiveness	Dated covenant
PCU in Mauritania	update the existing administrative financial manual of procedures of the PRAPS Project in order to include the procedures relevant to the REDISSE 3 project	Ministry of Livestock thru PRAPS PCU	Not later than four (4) months after effectiveness	Dated covenant
Benin, Mali and Niger	Prepare an FM manual as part of the Project Implementation Manual (PIM) that is acceptable to the WB.	All implementing entities	Within three months of effectiveness	Dated covenant
PCU in Benin	Conclude an agreement with the General Inspectorate of Finance to include the project in its annual work program and carry out semi-annual internal auditing	CNLS-TP	Six months after effectiveness	Dated covenant
All Implementing Entities	Appoint an external auditor for the Project	All implementing entities	No later than 3 months after the Effective Date	
All implementing entities	Put in place and strengthen complaint handling mechanisms to enhance service delivery.	All implementing entities	No later than 3 months after the Effective Date	

34. *Implementation Support Plan*. FM implementation support missions will be carried out twice a year for the four countries based on the substantial FM residual risk rating. Implementation Support will also include desk reviews such as the review of the IFRs and audit reports. In-depth reviews and forensic reviews may be done where deemed necessary. The FM implementation support will include FM training missions for all implementing entities and will be an integrated part of the project's implementation support plan.

35. The conclusion of the assessment is that the FM arrangements in place meet the Bank's minimum FM requirements under Bank Policy and Directive for Investment Project Financing operations, and subject to the implementation the FM action plan above, are therefore adequate to provide, with reasonable assurance, accurate and timely information on the status of the project required by World Bank. The overall FM risk rating is **Substantial** for the four countries and at the project level.

Procurement

36. The Borrowers will carry out procurement under the proposed project in accordance with the World Bank's "Procurement Regulations for IPF Borrowers" (Procurement Regulations) dated

July 2016 and revised in November 2017 under the "New Procurement Framework (NPF), and the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January 2011 and as of July 1, 2016, and other provisions stipulated in the Financing Agreements.

37. All procuring entities as well as bidders, and service providers, i.e. suppliers, contractors and consultants shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraph 3.32 and Annex IV of the Procurement Regulations.

38. The Borrowers shall prepare and submit to the Bank a General Procurement Notice (GPN) and the Bank will arrange for publication of GPN in United Nations Development Business (UNDB) online and on the Bank's external website. The Borrowers may also publish it in at least one national newspaper.

39. The Borrowers shall publish the Specific Procurement Notices (SPN) for all goods, works, non-consulting services, and the Requests for Expressions of Interest (REOIs) on their free-access websites, if available, and in at least one newspaper of national circulation in the Borrower's country, and in the official gazette. For open international procurement selection of consultants using an international shortlist, the Borrower shall also publish the SPN in UNDB online and, if possible, in an international newspaper of wide circulation; and the Bank arranges for the simultaneous publication of the SPN on its external website.

40. The project design will provide a window to enable the Borrower to carry out Advance Contracting and Retroactive Financing in accordance with Section V (5.1 & 5.2) of the Procurement Regulations for IPF Borrowers. The retroactive financing will be allowed up to 20% of the credit covering the expenditures incurred by the project, not more than 12 months before the date of the signing of the Financing Agreements.

Institutional Arrangements for Procurement:

41. At the regional level the institutional arrangements remain the same as in REDISSE 1 and 2 and are as follows:

42. WAHO – the West African Health Organization (WAHO), a health specialized agency of the Economic Community of West African States (ECOWAS). WAHO has the full mandate to coordinate all public health activities within ECOWAS member states. WAHO consists of 4 departments among which a Financial Direction including a Procurement Unit which is responsible for all regional procurement activities up to 250,000 UC (≈ $ 250,000) for WAHO.

43. RAHC – The Regional Animal Health Center (RAHC) for West and Central Africa based in Bamako (Republic of Mali) was the first Center established in April 2006 by OIE, FAO, and AU-IBAR and inaugurated on October 20, 2007, to support, among others, the states of West and Central Africa in their efforts of prevention and control of highly pathogenic Avian Influenza and

other transboundary animal diseases and zoonoses. In 2012, ECOWAS member countries recognized the RAHC as the ECOWAS specialized technical center for animal health. This Administration and Finance unit has in principle 3 staff: the program officer in administration and finance (the unit chief), an administrative assistant and an accountant. The administrative assistant is responsible for the procurement. To date, no one has been recruited. The center is not operational because it did not receive the required operating funds from ECOWAS. A program officer and an accountant, all within the AU have been seconded to Bamako to lay the foundation; but no independent capacity of RAHC has been developed.

44. WAHO continues carrying out procurement for RAHC and supports RAHC to build its fiduciary capacity. There is a clear responsible decision-making mechanism for procurement. Any purchase or acquisition estimated to be equal or greater than EUR 2500 must be duly authorized by the Director General. For some exceptions, delegation of signature authority is given to the Head of Administration.

45. OIE – OIE will also help RAHC to build its capacity to carry out selected functions and activities (i.e. development of a strategic and action plan, support of selected technical activities, and possibly support in the preparation of REDISSE-related work plans and budgets required by WAHO, in line with WB requirements) based on identified needs once core staff (i.e. Executive Director) has been appointed by ECOWAS and support staff recruited through REDISSE (and possibly from other donors). In the context of programs funded by Donors, OIE procurement and management is the responsibility of the senior staff members at the OIE Headquarters: The Director General, the Director of Finance, the Head of the World Animal Health and Welfare Fund Unit, and a Head of the Budget Unit, in addition, the Head of Legal Affairs and Human Resources Unit and the Head of the Performance Management Cell are involved (internal audit and procedural matters). There is no dedicated staff assigned to carry out procurement since this depends on the nature of goods and services to be procured.

46. Procurement at the national level shall be carried out by:

47. **Benin** - Activities will be led and coordinated by the multisectoral steering committee, while implementation will be carried out by the Project Coordination Unit (PCU) of SP-CNLS-TP, which will include a competitively hired experienced procurement specialist. Based on the SP-CNLS-TP experiences with the Benin's CAMEG (Centrale d' Achats de Médicaments Essentiels et Génériques), acquiring, storing and distributing, medicines and medical supplies will be delegated to CAMEG who will use World Bank standard bidding documents for open International approach. For the remaining procurement using open national approach, the National SBD as agreed with the WB will be used or, if not available, shall be developed and agreed with the WB.

48. The SP-CNLS-TP should establish a Procurement Commission that will be chaired by the nominated Person in charge of Procurement. The Person in charge of Procurement will also designate his Secretary who will serve as a secretary to the Commission. The documents (BD, RfP, BER) conjointly elaborated by the Procurement Commission and the PCU will be submitted for decisions of the procurement control commission of the SP-CNLS-TP or to the decisions of the

National Procurement Control Directorate (Direction Nationale de Contrôle des Marchés Publics under the Ministry of Finance depending of the competency of the procurement control threshold. The person in charge of procurement, the procurement commission and the procurement control commission will be established in accordance with articles 10 to 17 of the new procurement code No 2017-04 dated of October 19, 2017.

49. **Mali** - The existing Project Coordination Unit (PCU), established for the World Bank funded Malaria/NTD project within the Ministry of Health and Social Welfare will be responsible for the coordination and day-to-day management of the REDISSE 3. The PCU will be responsible for the project planning, financial and procurement management, M&E, and internal auditing. Technical coordination with respect to OH will involve the appropriate technical ministries. The Coordinator will be responsible for decision making during the procurement process. A procurement assistant will be recruited to support the Procurement Specialist of NTD project in order to deal with the workload increasing.

50. **Mauritania** - A PCU will be created and housed at the Ministry of Livestock. The Ministry has a procurement department within the Directorate of Administrative and Financial Affairs. The Chief Market Officer is familiar with Mauritanian procurement procedures, but has no experience in IDA procedures. It has been agreed that a qualified Procurement Specialist (PS) will be hired and dedicated to the project to ensure quality control of the procurement and execution of project contracts. In accordance with the Client's regulations, the procurement structures will be:

- Departmental Contracts Commission (CMD) which will be responsible for the execution of procurement procedures whose estimated value is greater than or equal to 1.5 million MRU (approximately US$42,000);
- Internal Commission for procurement with an estimated value of less than 1.5 million MRU (approximately US$42,000).

51. **Niger** - The MOH will be responsible for the overall management as well as the monitoring and evaluation of the project. The Secretary General (SG) of the MOH will be responsible for oversight and strategic coordination of the Project. The SG will coordinate the overall functions and responsibilities of the technical directorates.

52. Under the coordination of the Secretary General, the existing Project Coordination Unit (PCU), established for the pooled projects financed by international multilateral donors as well as the World Bank funded projects (*P147638 - Population and Health Support Project and P149526 - Sahel Malaria and Neglected Tropical Diseases)* will be responsible for the coordination and management of the REDISSE 3.

53. The PCU will be responsible for the project planning, financial and procurement management, M&E, and internal auditing. The existing PCU already demonstrated strong capacity to coordinate project implementation, and the arrangements in the key areas of FM, procurement, as well as M&E and reporting. The draft PPSD has been prepared the PCU.

54. The technical coordination of the project will be led by the head of the DSRE (Directeur de la Surveillance et la Riposte aux Epidémies). The mandate of the joint Epidemics Oversight Steering Committee will include the monitoring of the project.

55. The steering committee will approve the project related annual work plan and review annual budgets and audit reports. The committee will be chaired by a representative from the Ministry of Planning and will be composed of the representatives from the Ministry of Finance (MOF), MOH, MOP and other key ministries involved in implementation. The steering committee will function during the full project implementation period, and will meet at least twice a year.

56. *Filing and record keeping*: The Procurement Procedures Manual will set out detailed procedures for maintaining and providing readily available access to project procurement records, in compliance with the Financing Agreement. Implementing Agencies will assign one person responsible for maintaining the records. The logbook of the contracts with unique numbering system shall be maintained.

57. The signed contracts as in the logbook shall be reflected in the commitment control system of the Borrower's accounting system or books of accounts as commitments whose payments should be updated with reference made to the payment voucher. This will put in place a complete record system whereby the contracts and related payments can be corroborated.

58. *Project Procurement Strategy for Development*: The Borrowers (with support from the World Bank) prepared their Project Procurement Strategies for Development (PPSD) which described how fit-for-purpose procurement activities will support project operations for the achievement of project development objectives and deliver Value for Money (VfM). The procurement strategies were linked to the project implementation strategy at regional, country and state level ensuring proper sequencing of the activities. They considered institutional arrangements for procurement; roles and responsibilities; thresholds, procurement methods, and prior review, and the requirements for carrying out procurement. They included a detailed assessment and description of state government capacity for carrying out procurement and managing contract implementation, within an acceptable governance structure and accountability framework. Other issues taken into account included behaviors, trends and capabilities of the market (i.e. Market Analysis) to inform the procurement plan. The activities also required strong technical capability to prepare proper technical specifications in order to avert lack of, or inadequate, market response. This capability – or a plan to enhance was considered in the strategies. Special arrangements like direct contracting, use of SOEs, UN Agencies, third party monitors, local NGOs, Force Account, or civil servants needs, results based arrangements, need for prequalification, if any, were considered and addressed.

59. UN agencies may be hired by the Governments on sole-source basis for contracts for which they offer their unique roles and qualifications in responding to the emergency situations. Standard forms of agreement for UN agencies as acceptable to the Bank will be adopted. For those UN agencies, if such forms have not been agreed with the Bank, Bank team will provide acceptable sample forms for use by the countries. For the UN agencies hired by the Government, certain

quick-disbursing arrangements may be agreed upon to finance a positive list of imported or locally produced goods that are required for the project, further subject to the Bank's prior agreement on the conditions for the release of the financial tranches and the required documentation and certifications, such as customs and tax certificates or invoices.

60. The recruitment of civil servants as individual consultants or as part of the team of consulting firms will abide by the provisions of paragraph 3.23 (d) of the Procurement Regulations.

61. Special Considerations: Mali is on the harmonized list of Fragile and Conflict affected Situations (FCS) countries and therefore the Project will trigger paragraph 12 of the Policy for Investment Project Financing in order to apply flexibilities and simplification to facilitate procurement implementation. These procurement arrangements therefore draw on the Bank Guidance on Procurement Procedures in Situations of Urgent need of Assistance or Capacity Constraints issued on July 1, 2016.

62. *Procurement Plan*: The Borrowers and their Implementing Agencies prepared detailed 18-month procurement plans which were agreed to by the Government and the Bank during the loan negotiations. The Procurement Plans will be updated in agreement with the Bank Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

63. The Implementing Agencies will carry out procurement for their needs to implement the Project and for the Ministries necessary for the Project implementation and explained below. They may also procure goods, works, or services for other institutions and agencies of the health system in their countries for the purpose of the project as included in the Procurement Plan and agreed with the Bank.

64. The scope of procurement is described in the Project Procurement Strategy for Development and the Procurement Plans agreed by the Bank, and summarized below.

65. **Benin**: The procurement activities that are critical for the success of this operation will consist of Laboratory equipment; laboratory consumables; reagents; usual and specialized vehicles; acquisition of laboratory equipment and biosecurity and medical devices; consulting services.

66. **Mali**: The Project will finance procurement of vehicles and motorbikes for the levels of the health and veterinary system in need of such equipment, specialized publications, medical inputs such as reagents, vaccines, consumables, laboratory equipment, and ambulance. Works contracts will include rehabilitation of the antimicrobial resistance research/control center, a laboratory into a laboratory P3, the sterilization room and the meningitis laboratory; renovation / equipment of the reception hall/conditioning/dispatching of the INRSP surveillance samples, renovation and equipment of the launderette of the new diagnostic unit, the laboratory for the diagnosis of major zoonoses, the reception room/conditioning/dispatching of the samples, eight laboratories in accordance with the standards (medical bacteriology, virology, mycoplasma, etc.)

of LCV, and rehabilitation/fitting/equipment (office equipment, logistics, light water source, cold chain, incinerator, etc.) infrastructures for sanitary controls at entry points and technical structures (DOU-SP, DNS, DNSV, DNA, DNACPN, DNEF, DGPC); public health emergency treatment centers (DNS (DNSV, DNA, DNACPN, DNEF), infrastructure for health personnel, sorting, isolation of suspected cases at district health headquarters (human health and animal health) (DOU-SP (DNS DNSV, DNA, DNACPN, DNEF).

67. **Mauritania**: The implementation of the Project requires 82 major activities that are likely to be the subject of various types of contracts. These activities are broken down as follows:

a. Construction contracts: USD 2,275,000 (approximately 11.57%)
b. Goods contracts: USD 7,141,000 (approximately 36.31%)
c. Consultant contracts: USD 10,254,000 (approximately 52.12%)

The construction contracts for the Project are simple civil engineering works. There are enough local companies that are competent for this type of work and will be able to respond to the consultations that will be launched.

In the area of procurement of goods and works, the local market is competitive. There are a multitude of companies on the market that will be able to participate in national bidding process for the procurement of supplies.

For intellectual studies and services, consulting firms and individual consultants at national level might be interested. International providers may be solicited if necessary.

68. **Niger**: The project will mainly finance procurement of drug, vaccine, consumables, vehicles, motorbikes, ambulance, laboratory equipment, and medical equipment. The project will also finance rehabilitation and construction of small buildings aimed at hosting human and animal laboratories. The PCU within the MOH has a long and quite successful procurement experience in using open competition, UN agencies and request for quotations. Thus, the project procurement strategy is built toward this experience using and improving traditional approaches.

69. More specifically goods and non-consulting services to be procured under this project will include pharmaceuticals, vaccines, laboratory equipment, medical and veterinary supplies and equipment, including testing kits and consumables. Major goods procurement will also include mobile laboratories, ambulances, vehicles, motorcycles, communications and ICT equipment. There is no large work contract but rather several small works contracts for rehabilitation, extension and construction of laboratories, construction and installation of incinerators, construction and rehabilitation of small offices of health and veterinary services in the country side. The consultant services under the projects are likely to include recruitment of technical experts. Their assignment would include a few technical studies and provision of short terms support for epidemiologic surveillance and crisis management.

70. Training, Workshops, Study Tours, and Conferences: Workshops, Seminars and Conferences. Training activities would comprise workshops and training, based on individual needs, as well as group requirements, on-the-job training, and hiring consultants for developing training materials and conducting training. Selection of consultants for training services follows the requirements for selection of consultants above. All training and workshop activities (other

than consulting services) would be carried out on the basis of approved Annual Work Plans / Training Plans that would identify the general framework of training activities for the year, including: (i) the type of training or workshop; (ii) the personnel to be trained; (iii) the institutions which would conduct the training and reason for selection of this particular institution; (iv) the justification for the training, how it would lead to effective performance and implementation of the project and or sector; (v) the duration of the proposed training; and (vi) the cost estimate of the training. Report by the trainee(s), including completion certificate/diploma upon completion of training, shall be provided to the Project Coordinator and will be kept as parts of the records, and will be shared with the Bank if required.

71. A detailed training and workshops' plan giving nature of training/workshop, number of trainees/participants, duration, staff months, timing and estimated cost will be submitted to IDA for review and approval prior to initiating the process. The selection methods will derive from the activity requirement, schedule and circumstance. After the training, the beneficiaries will be requested to submit a brief report indicating what skill have been acquired and how these skills will contribute to enhance their performance and contribute to the attainment of the project objective.

72. Operational Costs: Operational costs financed by the Project would be incremental expenses, including office supplies, vehicles operation and maintenance cost, maintenance of equipment, communication costs, rental expenses, utilities expenses, consumables, transport and accommodation, per diem, supervision costs, and salaries of locally contracted support staff. Such services' needs will be procured using the procurement procedures specified in the Project Implementation Manual (PIM) accepted and approved by the Bank.

73. Procurement Manual: Procurement arrangements, roles and responsibilities, methods and requirements for carrying out procurement shall be elaborated in detail in the Procurement Manual which may be a section of the PIM. The PIM shall be prepared by the Borrowers and agreed with the Bank not later than within three months.

74. The procurement arrangements applicable under the Sub-Component 3 "Component for emergency response" shall be described in the Emergency Operation Manual which shall be prepared by the Borrower and agreed with the Bank in due time to ensure that it is in place before occurrence of any potential emergency situation that would require using this sub-component.

75. Procurement methods: The Borrowers will use the procurement methods and market approach in accordance with the Procurement Regulations.

76. Open National Market Approach is a competitive bidding procedure normally used for public procurement in the country of the Borrower and may be used to procure goods, works, or non-consultant services provided it meets the requirements of paragraphs 5.3 to 5.6 of the Procurement Regulations.

77. The thresholds for particular market approaches and procurement methods are indicated in the below table. The thresholds for the Bank's prior review requirements are also provided in the table below:

Table 15: Thresholds for Procurement Methods, and Prior Review

Note: The thresholds are for all countries unless indicated otherwise for specific items.

No	Expenditure Category	Contract (C) Value Threshold* [eq. USD]	Procurement Method	Contracts Subject to Prior Review / [eq. US$]
1	Works	Benin and Mauritania: C ≥ 10,000,000 Mali: C ≥ 15,000,000 Niger: C ≥ 5,000,000	Open Competition International Market Approach and Direct Contracting	≥ 10,000,000
		Benin and Mauritania: 200,000 < C < 10,000,000 Mali: 200,000 < C < 15,000,000 Niger: 200,000 < C < 5,000,000	Open Competition National Market Approach	None .
		C ≤ 200,000	RfQ	None
2	Goods, IT and non-consulting services	Benin and Mauritania: C ≥ 1,000,000 Mali: C ≥ 3,000,000 Niger: C ≥ 500,000	Open Competition International Market Approach and Direct Contracting	≥ 2,000,000
		Benin and Mauritania: 100,000 < C < 1,000,000 Mali: 100,000 < C < 3,000,000 Niger: 100,000 < C < 500,000	Open Competition National Market Approach	None
		C ≤ 100,000	RfQ	None
3	National shortlist for selection of consultant firms	Benin : C < 100,000 Mali : C < 200,000 Mauritania : C < 100,000 Niger: C < 100,000	for Consulting Services	None
		Benin : C ≤ 300,000 Mali : C ≤ 400,000 Mauritania : C ≤ 300,000 Niger: C ≤ 200,000	for Engineering and Construction Supervision	None
4	International shortlist for	Benin : C ≥ 1,00,000	for Consulting	≥ 1,000,000

No	Expenditure Category	Contract (C) Value Threshold* [eq. USD]	Procurement Method	Contracts Subject to Prior Review / [eq. US$]
	selection of consultant firms	Mali : C ≥ 200,000 Mauritania : C ≥ 100,000 Niger: C ≥ 100,000	Services	
		Benin : C ≥ 300,000 Mali: C ≥ 400,000 Mauritania : C ≥ 300,000 Niger: C ≥ 200,000	for Engineering and Construction Supervision	≥ 1,000,000
5	Selection of Individual consultants	All Values	All Approaches	≥ 300,000
6	Direct contracting	All Values		As agreed in the Procurement Plan
7	Training, Workshops, Study Tours	All Values	Based on approved Annual Work Plan & Budgets (AWPB)	Annual Work Plan & Budgets (AWPB)

Note: The thresholds in the above Table are for the purposes of the initial procurement plan for the first 18 months. The thresholds will be revised periodically based on re-assessment of risks. All contracts not subject to prior review will be post-reviewed.

78. **Procurement Risk Rating:** The project procurement risk prior to the mitigation measures is "Substantial". The risk can be reduced to a residual rating of "Moderate" upon consideration of successful implementation of the mitigation measures.

79. The risks and mitigation measures are provided in the table below.

Table 16: Procurement Risk Assessment and Mitigation Action Plan

Procurement Risk	Mitigation measure	Responsibility and Deadline	Risk level Initial/residual
Benin			**Substantial/Moderate**
SP-CNLS-TP			
Insufficient procurement capacity in WB procurement procedure	Recruit a procurement specialist	SP-CNLS-TP Within 3 Months after effectiveness of the Financing Agreement	
The procurement procedures of the current project will be reflected in the existing manual of SP-CNLS-TP	Amend the existing manual in order to introduce procurement arrangements planned for this project	SP-CNLS Within 3 Months after effectiveness of the Financing Agreement	
Non-designation of the person in charge of procurement and non-establishment of the procurement commission and the procurement control commission	Nominate the person in charge of procurement and establish the procurement commission and the procurement control commission with accordance articles 10 to 17 of the new procurement code No 2017-04 dated of October 19, 2017	SP-CNLS_TP Within 3 Months after signing of the Financing Agreement	
Weak capacity of the procurement specialist, the procurement commission, the procurement control commission, the National procurement control directorate in NPF procedures	Capacity building will be provided by the Bank on NPF procurement.	SP-CNLS-TP and WB During project implementation	
Insufficient stock management	CAMEG will work on improving its supply chain system	CAMEG During project implementation	
Insufficient capacity in preparing technical specifications and TOR	Obtain short term TA for drafting of technical specifications when required	SP-CNLS and CAMEG During project implementation	
Laboratory equipment; laboratory consumables; reagents – est. US$ 1,877,324: Fake/poor products; Delay in procurement; Frequent stock shortage.	If applicable, rigorous prequalification system of the couple supplier/product; Quality control at each key step from production to delivery in Benin to ensure among other things batch traceability; Technical assistance to review and improve	SP-CNLS and CAMEG During project implementation	Laboratory equipment; laboratory consumables; reagents will be procured by CAMEG (Centrale d' Achat de Médicaments Essentiels et Génériques) owing to its experience in applying prequalification & quality control for consumables and reagents;

	CAMEG supply chain and stock management.		If CAMEG is not able to directly finance TA needed the project could considerer to finance the most pressing needs.
Usual and specialized vehicles: est. US$ 1,414,600 Difficulty to draft appropriate technical specifications (clear & neutral); Very few if not none qualified bidders interested for some specialized vehicles laboratory); High bid prices.	Request short term TA for drafting of technical specifications when required; Conduct in a market analysis for the less common equipment to better Identify practices, players and prices; Direct contracting with UN agency for specialized vehicles for which they proven track record.	SP-CNLS During project implementation	
Consulting services; est. $2,089,213. Poor Tors; Very few qualified firms;	Bank support in drafting of TOR Use of specialized consultants	SP-CNLS and WB During project implementation	
SE / CNLS-TP Headquarters Rehabilitation: Dispute between SE / CNLS-TP and the Constitutional Court on the ownership of the estate	Require the authorization of the Minister of Finance on the property ownership by SE / CNLS-TP	SP-CNLS During project implementation	
Mali			**Substantial/Moderate**
Ministry of Health and Social Welfare (MOH)-NTD PCU			
1-Absence of a manual of procedures procedures	Preparation of Project Implementation Manual with section on procurement detailing out all applicable procedures, instructions and guidance for handling procurement, the SBDs and other standard procurement documents to be used. The PIM will outline the interaction between the project's staff responsible for procurement and the Ministry's relevant central unit for finance and procurement (DFM)	Project Coordination Unit (PCU)/ No later than three months after effectiveness	
2-Increasing of the procurement specialist workload of NTD Project	Recruitment of a procurement assistant experienced in World Bank procurement to support the Procurement Specialist of NTD Project due the additional	PCU/ Three months after effectiveness	

	workload brought by the project. The capacity of the procurement unit of the agency will be enhanced through training and a mentoring mechanism		
3- High level staff within MoH responsible for process control and approval are not familiar with Bank procurement procedures	Organize a workshop to update staff on current changes in Bank procurement procedures Hands-on training of identified high level staff within the MoH on Bank procurement procedures Capacity building for the all project staff involved in the procurement decision-making process and tender committee members, customized and hands-on training for the procurement staff on procurement focusing on: procurement planning, preparation of bidding documents, evaluation of bids or proposals, and procurement documents filing	PCU-IDA/ Three months after effectiveness PCU Procurement Specialist / No later than three months after effectiveness PCU Procurement Specialist / Throughout the project life	
4-Inadequate communication leading to delays in the drafting of ToR, and technical specifications as well as poor cost estimation	Strengthen the flow of communication between the PCU and technical structures by avoiding bureaucratic procedures and set up periodic meetings	PCU-Technical departments-MoH/ Throughout project implementation	
5-Political interference/Fraud and Corruption	Adherence to the implementation arrangements as provided for in the project Legal Agreement and Project Implementation Manual (PIM) will be enforced. Project launch will be organized before effectiveness to brief all stakeholders on their roles and responsibilities as provided for in the PIM The Control Body (DGMP) and the Regulation Authority (ARMDS) will have to play	PCU /IDA Throughout project implementation DGMP-DS/ARM-DS /IDA/ Throughout project implementation	

	their role to ensure good governance and limit the opportunities for undue influence by anyone		
6-Timeouts in the implementation of some activities, mainly evaluation committee management and contracts award	Close monitoring and exercise quality/control on all aspects of the procurement process, including evaluation, selection, and contract award	PCU/ Throughout project implementation	
7-Lack of a dedicated archiving room with a trained staff for its management	Provide adequate space and equipment for the procurement archive and set up an adequate filling system for project records to ensure easy retrieval of information/data. Designate or recruit an officer to be responsible for data management	PCU No later than six months after the beginning of the project implementation	
8-Security concerns particularly in the North and the Center regions	UN Agencies and Locally based NGOs will be hired to provide required support in the affected locations	PCU/ Throughout project implementation	
Mauritania			**Substantial/Moderate**

Ministry of Livestock			
Insufficient procurement capacity in WB procurement procedure	Recruit a qualified Procurement Specialist (PS) among the recruited staff of the newly PCU	Ministry (PCU) Deadline: Within 3 Months after effectiveness of the Financing Agreement	
Lack of the procurement manual	Revision and update of the existing administrative and financial procedures manual for the Regional Sahel Pastoralism Support Project with section on procurement detailing out all applicable procedures, instructions and guidance for handling procurement. The PIM will outline the interaction between the project's staff responsible for procurement and other procurement commissions	Ministry (PCU) Deadline: Within 4 Months after effectiveness of the Financing Agreement	
Weak capacity of the Departmental Contracts Commission, the Ministry level internal procurement commission and the National procurement control Commission in NPF procedures	Capacity building will be provided by the PCU on NPF procurement	Ministry (PCU) and the WB Deadline: during project implementation	
Niger			**Substantial/Moderate**
The Ministry of Health (MOH)			
1-Lack of experience by the PCU in using the New Procurement Framework	Capacity building will be provided by the Bank on NPF and STEP	MOH and the Bank By the project effectiveness and throughout project implementation	
2- Dual control by the World Bank and the Government which delay the procurement process	- Planning according to the dual control - Dialogue for building systems and institutions- Dialogue for building systems and institutions	MOH and the Bank Throughout project implementation MoH and the Bank Throughout project implementation	

Environmental and Social (including safeguards)

80. The net social impacts and benefits of the project are expected to be positive since it will support the creation of environmentally and socially sound laboratory technologies, surveillance systems and safe and secure mechanisms for disposal of medical all of which will reduce the potential of public health risk.

81. The potential negative impacts of the project relate to the rehabilitation/upgrading of medical and other facilities (waste management and occupational health and safety issues), use of pesticides (indiscriminate and inaccurate usage and poor disposal practices) and medical and animal waste management (haphazard disposal resulting in risk to public health and to the environment). These risks are likely to be considered moderate and site-specific and easily managed through the implementation of an effective and organized system. Therefore, REDISSE 3 has been classified as a category B operation as per World Bank's Operational Policies. The following policies have been triggered for this project: Environmental Assessment (OP/BP 4.01) and Pest Management (OP 4.09). Each country has prepared and then consulted upon a national Hazardous Waste Management Plan (HWMP), an Integrated Pest and Vector Management Plan (IPVMP), and an Environmental and Social Management Framework (ESMF). The documents detail the potential risks of each activity, define mitigation measure, provide a budget for implementation, define institutional arrangements, outlining the roles and responsibilities for the various stakeholder groups and describe implementation arrangements for monitoring and supervision.

82. Site-specific Environmental and Social Management Plans (ESMPs) and/or Environment and Social Impact Assessments prepared in accordance with the ESMF will examine the existing and potential environmental and social risks and impacts associated with the proposed project activities, including animal waste management.

83. The environmental safeguards instruments will build on the previous instruments developed for the ongoing WB funded operations in the participating countries, as well as on the lessons learned and missed opportunities from experience in implementing the instruments. The three documents will have been consulted with key stakeholders and have been disclosed in-country, at WAHO's website, and at the Association's website.

84. Project activities will be undertaken within existing government owned facilities on government-owned land. Therefore, it is not expected that the project will involve land acquisition leading to involuntary resettlement or restriction of access to resources or sources of livelihoods of populations. Therefore, OP 4.12 (Involuntary Resettlement) was not triggered for this project, and the project will not finance activities that would trigger the policy.

PUBLIC CONSULTATION AND PARTICIPATION AND CITIZEN ENGAGEMENT

85. Design and preparation of REDISSE 3 have been grounded in an inclusive public consultation and participation style. A series of meetings has been held in Dakar (December 2015 and March 2016) and in each individual country (January 2016) that offered a platform for open discussions and experience gathering to better frame the design and preparation of REDISSE program. Reliance on ECOWAS as the regional entity to coordinate the program, especially through one of its branches (WAHO), adds a plausible weight in the consultative and inclusive coordination approach REDISSE 1 and 2 is built on.

86. The preparation of the safeguards instruments was done in a consultative and participatory manner which were disclosed in-country to ensure broad public engagement (considerate of women, youth, elderly, disabled and vulnerable groups) through ownership and social accountability mechanism that altogether are foreseen to foster a sustainable development path. Since consultation and participation is an iterative process, the same trend will be maintained throughout the lifecycle of REDISSE.

IMPLEMENTATION ARRANGEMENT FOR SOCIAL AND ENVIRONMENTAL (INCLUDING SAFEGUARDS)

87. To ensure adequate and timely implementation of safeguards measures in the related safeguards instruments and project appraisal documents for all three phases of the REDISSE Program, the West African Health Organization (WAHO) has recruited a safeguards specialist to join its regional Project Management Unit. The WAHO safeguards specialist will work closely with both the national-level environmental specialist and the social safeguards specialist to be recruited to each PCU in each country. The national environmental specialist and the social safeguards specialist will be responsible for social assessment and development – including gender, youth, and vulnerable groups aspects of the project and for environmental safeguards and natural resources management—including climate change aspects of the project. The WAHO safeguards specialist and the national environmental specialist and social safeguard specialist will work in tandem with the World Bank safeguards specialists to ensure building of technical capacity and satisfactory implementation of environmental and social requirements as defined in the safeguards documents. Likewise, they will prepare and share with World Bank safeguards specialists' periodic reports (to be clarified in the project implementation manual) on the status of safeguards implementation and monitoring. Together, the team will agree on core recommendations to be implemented after each supervision/implementation support mission to ensure compliance with legal documents.

88. The respective Borrowers have individually and collectively benefited from other (past and ongoing) IDA projects which provided/are providing relatively sufficient capacity for understanding and applying safeguard policies. In addition, borrowing countries have adequate institutional and legal frameworks that are expected to ensure satisfactory compliance with World Bank operational safeguard policies. The same is true for ECOWAS/WAHO the regional implementing agency that has also gained sufficient experience in handling WB financed operation in the past, and is therefore sufficiently prepared to handle this new operation. Moreover, the WB's involvement in the health sector has been significant and the clients have over time shown relatively sufficient capacity and goodwill in implementing World Bank funded projects. Nonetheless, in aiming at complying with the legal framework and boosting the program's overall performance on safeguards and gender aspects, additional technical capacity building will be required for WAHO and each individual participating country institutions, including the respective national environmental (and social) agencies.

Monitoring and Evaluation

89. A set of indicators to be monitored and documented to assess performance and progress toward meeting the project objectives are described in the Results Framework (RF) in Section VII. Results will be reported annually in the Implementation Status Reports (ISRs). WAHO M&E specialists will lead the monitoring and evaluation of the project implementation.

90. The project will support the strengthening of national health information systems to collect and report quality data. Monitoring and Evaluation will be undertaken at the national level by the four participating countries and aggregated at the regional level by WAHO. The countries will be responsible for conducting annual self-assessments using the JEE and OIE PVS tools, and the JEE will be carried out by external experts biennially to validate the quality of the data and findings from the national self-assessments. In principle, OIE PVS external evaluations would be carried out shortly prior to the JEE to streamline findings into the JEE. WAHO will coordinate the M&E function for the project as a whole, based on an M&E manual detailing the requirements for all countries and at the regional level. This will be harmonized with the PIM for all implementing agencies which are expected to be ready within three months of project effectiveness. WAHO will also implement data collection for specific indicators of regional level activities, and will ensure that all participating countries provide data and information of the required quality on time. WAHO will also provide technical backstopping in M&E to participating countries and encourage cross-country learning. At the national level, the PCUs of the four participating countries would be responsible for collecting and compiling all national level data, with the assistance of external partners through external evaluations, including the US CDC and WHO for the human health sector, and OIE for the animal health sector.

91. M&E in REDISSE 3 has been developed as: (i) a tool for results-based management, to ensure that data and information on the project's progress—or lack of progress—toward the outcomes under the PDO feed into management and that corrective measures can be taken in time if necessary; (ii) a framework for accountability for progress toward national and regional development objectives attributable to interventions and actions of the regional institution WAHO (alongside with RAHC) and national governments implementing REDISSE 3; (iii) an approach to monitor performance of participating countries in REDISSE 3 to ensure a certain level of regional performance and more or less even contributions from the four countries to regional objectives; and (iv) a platform for communicating the project's results. M&E is also designed to meet the World Bank's routine reporting requirements (specifically, the six-monthly progress report, Implementation Status and Results (ISR) report, which is developed for each country and publicly disclosed), and data and information requirements for the mid-term review.

92. Context and Capacity. Government capacity in the four countries to plan, execute, monitor, and evaluate projects can often be weak. Signs of weak capacity include (but are not limited to) incomplete datasets, field-level data that are not validated, missing information, inconsistent reporting, and the delivery of data and information that are never subsequently reported or used in making decisions or formulating policy.

93. Design of Results Framework. The cross-sectoral aspects and weak capacity have been taken into account in designing the M&E framework for REDISSE 1 and 2, especially with regard

to the number and selection of indicators, the data sources, and the methodologies used to collect data. The main instrument for M&E in the REDISSE 3 is the Results Framework (SECTION II), which is common to all of the REDISSE 3 countries and will be reported in the ISRs. It consists of the PDO statement and 6 (six) PDO indicators and 9 (nine) intermediate indicators. Core indicators of the World Bank are included too, such as the core indicator on direct project beneficiaries and healthcare worker trainings.

94. Some indicators are disaggregated by national and regional level and by sex (to calculate percentage of female) for the core indicator on direct project beneficiaries. Where possible, indicators have baselines and targets listed, as well as the frequency for data collection, the data sources, the methodology for calculating baseline and progress values, and responsibilities for data collection. Baselines are proposed as REDISSE 3 activities with progressive targets being established after determining these baseline values. For some countries, baselines for indicators will be derived as part of project activities to be verified during the first year of data collection.

95. Recognizing that REDISSE program directly complements other existing global disease surveillance and response initiatives such as GHSA in West Africa, efforts have been made to harmonize with existing indicators. This would reduce the data collection burden on participating countries as well as enable comparable data to monitor baselines and progress towards achieving common objectives. Similarly, as the interventions in the animal health sector aim at improving the quality of Veterinary Services towards compliance with OIE international standards, and were designed in accordance with recommendations of PVS Pathway missions, measurement of progress would be done through the use of the OIE PVS qualitative evaluation tool.[55]

96. Monitoring & Evaluation Arrangements. Monitoring and Evaluation will be undertaken at two levels for REDISSE 3: (i) at the regional level by WAHO (and RAHC) and (ii) by the four participating countries in conjunction with external partners such as WHO, CDC, and OIE. WAHO has overall responsibility for coordinating the M&E function of REDISSE 3 and will ensure that data and information from all countries are produced on time and are of sufficient quality. The Results Framework indicates whether the designated M&E units in the four countries have the delegated responsibility to collect data on REDISSE 3 indicators or whether that responsibility rests with WAHO. WAHO will provide overall coordination for the M&E function based on one M&E manual describing the requirements for all countries and the regional level. WAHO will design and implement data collection efforts that are best done at the regional level, and it will provide technical backstopping on M&E to the participating countries, put a data quality assurance mechanism in place, collect data on its own, and encourage cross-country learning. Annex 1 presents an overview of the various data collection activities and data sources, including responsibilities for data collection and coordination.

97. Monitoring and Evaluation Activities. Monitoring and Evaluation activities for REDISSE 3 will: (i) generate information on the project's progress; (ii) analyze and aggregate data generated

[55] All beneficiary countries of REDISSE having undergone at least one evaluation, such evaluation could serve as baseline, or be refreshed at the onset of the project to provide a better accuracy if some significant changes occurred; an external OIE evaluation would be realized also at the closing of the project and intermediate self-evaluation could be carried out at mid-term.

at the regional, national, and local levels; and (iii) document and disseminate key lessons to users and stakeholders across ECOWAS countries together with the communication function of REDISSE 3. REDISSE 3 will receive evaluation and progress reports from all four countries and will be able to share results and best practices across ECOWAS. The project-level M&E will draw on and strengthen national and regional systems to monitor results and needs across beneficiary countries, consistent with the ECOWAS mandate. Project will put special emphasis on mapping project interventions and results through geocoding of activities and overlay with key development indicators. This information will be accessible through platforms along the lines of the Mapping for Results initiative.

98. Planning for Monitoring & Evaluation Use. The implementation of the M&E framework will be tracked during implementation, and will be a central part of project supervision. The opportunity of the mid-term review will be used to also assess some fundamental M&E design issues, and make adjustments accordingly. There will be a strong results-orientation during supervision, with adequate attention devoted to progress with data collection, data quality and the actual use of data in tracking project implementation.

99. Annual review meetings, organized under the auspices of WAHO would provide a forum for sharing implementation experiences, proposing recommendations on programmatic changes, and generating additional demands for information and analysis. The Mid Term Review will be used to: (i) assess progress and continued relevance/realism of the targets; (ii) review the experience with the indicators, data collection systems, analysis, and other methodological aspects.

Role of Partners

100. In the area of animal health, two international (OIE and FAO) and one regional (AU-IBAR) organizations would be expected to provide support at regional (RAHC) and national levels (ECOWAS participating countries).

101. These institutions have their specific role, mandate and comparative advantages and have established collaborative arrangements, in particular since the last HPAI crises.

(i) The OIE is the World Organization for Animal Health (its historic acronym has been maintained). The organization was created in 1924 (before the UN). It is ruled by an International Agreement to which 180-member countries have subscribed. Representatives from member countries are designated by their government and they are in general those responsible for the national Veterinary Services in charge of preparing and implementing national policies and legislation for the control of animal diseases, including those transmissible to humans. The main mandates of the OIE are (i) to ensure transparency in the global animal disease situation; (ii) to collect, analyze and disseminate veterinary scientific information; (iii) to encourage international solidarity in the control of animal diseases; (iv) to safeguard world trade by publishing health standards for international trade in animals and animal products; (v) to improve the legal framework and resources of national Veterinary Services; and (vi) to provide a better guarantee of food of animal origin and to promote animal welfare through a

science-based approach. OIE standards are recognized as reference on animal diseases and zoonoses by the WTO/SPS agreement. The OIE manages five permanent regional representations and eight sub-regional offices. The OIE has established official collaborations with the World Bank (see below), WHO (GLEWS together with FAO), FAO (GF-TADs; OFFLU; GLEWS), and many other public and private organizations.

(ii) The Animal Health Service of the Food and Agriculture Organization (FAO-AGAH). Animal health (AH) issues (highly contagious trans-boundary animal diseases, veterinary public health, emerging vector-borne diseases and Veterinary Services organization) are the responsibilities of the AH Service (AGAH) of the Animal Production and Health Division (AGA). AGAH is managed by the Chief Veterinary Officer (CVO) of the FAO and regroups a multi-disciplinary team of specialists (epidemiology, microbiology, laboratory activities, parasitology, and ecology of tick-borne and insect-borne diseases). Using the complementarities of other services of AGA, AGAH addresses the problems of AH with a holistic approach (socio-economic, livestock policy and institutions, interaction between farming systems and the environment, and AH). The EMPRES (Emergency and Prevention Systems) program focuses on the early detection of TADs. Information systems and disease intelligence are key activities for surveillance, risk assessments, forecast, and preparation of strategic control programs. ECTAD (the Emergency Center for TADs) is a centralized structure, designed to insure a central chain of command with regards to strategies for the prevention and control of TADs. ECTAD is under the leadership of the FAO CVO, and regroups the various experts working on animal health, animal production, livestock policy, modeling, GIS, and communication, as well as administrative and financial matters.

(iii) The African-Union InterAfrican Bureau for Animal Resources (AU-IBAR) mission is to provide leadership in the development of animal resources for Africa through supporting and empowering AU Member States and Regional Economic Communities. Its mandate is to support and coordinate the utilization of animals (livestock, fisheries and wildlife) as a resource for human wellbeing in the Member States of the African Union and to contribute to economic development. The specific areas of the mandate are to: improve public and animal health through the control and possible eradication of transboundary animal diseases and zoonoses; improve the management of animal resources and the natural resource bases on which they depend; explore investment options and enhance competitiveness of African animal products; contribute to the development of relevant standards and regulations and enhance compliance by Member States; strengthen institutional capacity and support policy development and harmonization; disseminate information and knowledge on animal resources to Member States, Regional Economic Communities and other relevant institutions; and provide essential support to Member States with special needs or in emergency situations.

(iv) The Regional Animal Health Centre (RAHC) for West and Central Africa was set up in Bamako in 2006 as an informal platform under the OIE coordination, as a joint initiative of the FAO and the OIE, later joined by AU-IBAR, originally to meet the need for coordination of Avian Influenza control. In accordance with its new status, the RAHC is under the authority of ECOWAS. It will be a legal entity in its own right and enjoy functional autonomy based on an annual budget provided by the REC (covering at least its "sovereign" expenses), while its staff will be governed by the staff regulations of ECOWAS.

102. Development partner engagement is extensive in the sub-region and in each of the four project countries, reflecting the widening recognition that disease surveillance, preparation, detection, and response is a critical element of the development challenge and one which touches upon nearly all of the seventeen Sustainable Development Goals. Beyond good health, disease prevention and containment affects SDG targets in reducing poverty, hunger, inequality, among others. Given the breadth of the potential participants which provide technical know-how and funding with respect to human and zoonotic diseases, and to eco-system mediation, the responsibility for coordinating and efficiently guiding the many participants must be done by the countries themselves and WAHO. As was done in developing this project and will be the case in going forward with its implementation, the World Bank will be active in contributing to the common effort in each country, and with WAHO for the sub-region.

103. That said, at global level and in the formation of normative policies, the World Health Organization, the World Organization for Animal Health, as well as the Food and Agriculture Organization will each provide the normative guidance and frameworks for action in their respective areas of concentration, engaging various UN agencies, multilateral and bilateral technical providers, academic and research universities and institutions, NGOs, and the private sector, in terms of coordination and in forming coalitions. Major contributing bilateral and non-governmental partners for technical support and financing include the U.S. Centers for Disease Control, the China Centers for Disease Control, Canadian Government support from its Department of Foreign Affairs, the BMGF, as well as national country members of the GHSA of which USAID's EPT-2 Program is a part.

104. At sub-regional and country level, each has its own various coordinating and collaborating partners which will be drawn on as the program evolves, and brought together by the national steering committees. The intention is for transparency of effort and dissemination of results on a regular basis in order to assure that the relevant entities are aware of and assess progress in carrying out project objectives.

105. During the past few years, OIE and FAO, in particular, have reinforced their collaboration through a MoU based on their complementarities and have: (i) developed a global framework for transboundary diseases (GF-TADs), (ii) co-organized a number of international and regional events, (iii) co- published several articles, (iv) issued common resolutions and recommendations, as well as (v) conducted joint technical and scientific field missions. It is important to note that their collaboration went well beyond the emergency response to the HPAI crisis, but paved the way for a future strengthened animal health system needed for the prevention and control of

emerging and re-emerging global diseases of animal origin. In addition, the OIE and FAO have reinforced their collaboration with WHO to form the "Tripartite" to better address threats at the animal-human-ecosystem interface. The RAHC, which was set up in Bamako in 2006, is now under ECOWAS and collaborates with the three AH institutions. The strengthening of the RAHC should reinforce the collaboration of the OIE, FAO and AU-IBAR in support to the ECOWAS countries.

106. At National level,

- OIE activities include: AH Standards and Guidelines development and implementation (trainings of Delegates and focal points); Trade Issues/SPS; National Official Data Collection and Dissemination; Certification; OIE AH Information system; Performance of Veterinary Services assessment and PVS Gap Analysis; veterinary legislation upgrading; Laboratory network optimization; twinning between diagnostic laboratories and Veterinary education establishments);

- AGAH activities include: Surveillance and Epidemiological Analysis; Contingency Planning, Strategy Development and Emergency Preparedness; Good Emergency Management Practices; Comprehensive Livestock Sector Development: production, health and policy; Improvement of National AH Services and Delivery; and Laboratories (support, targeted research and epidemiological surveys, technology transfer);

- Both OIE and AGAH are involved in: Capacity Building; Global Early Warning System; and Coordinated Response to Emergencies.

107. While countries participating in the project will ultimately decide when and how to engage with those three organizations in support to their respective national project activities, the OIE will play a critical role at the regional level, supporting strengthening of the RAHC as well as implementation of the regional project animal health activities.

108. At Regional level, these activities could include:

(i) Coordination
   a. M&E of national animal health activities;
   b. Use and extension of the coordination/consultation mechanism established by PRAPS;
   c. Harmonization of national animal health surveillance strategies and mechanisms;
   d. Shared information among national Veterinary Services regarding country animal health status;
   e. Strategic thinking on transversal themes of regional interest (legislation; regional control bodies; borders control; database; etc.).

(ii) Technical Support

a. Technical assistance to participating countries upon their request on designing and/or revising national surveillance and emergency plans;
b. Facilitate collaborative process to establish bridges between IHR and PVS;
c. Develop national and regional epidemiological database and facilitate sharing of information among participating countries, linked with the World Animal Health Information System (WAHIS) of OIE;
d. Develop manuals and technical guides on good practices in epidemic surveillance;
e. Support to the management (previously funded by the FAO/ECTAD project) of the epidemiological surveillance network (RESEPI) and diagnostic laboratories network (RESOLAB), whose activities in West Africa are now associated with the RAHC.

(iii) Training

a. Design and conduct a program of continuous and specific training located at RAHC/CRSA especially designed for Veterinary services and Laboratories staff (epidemic surveillance; early detection; diagnostic methods, etc.);
b. Conduct a specific training program for the OIE Delegates and national focal points directly concerned by the Project (reporting; laboratories; wildlife; communication);
c. Support national training program (design and/or revision of national training program; design of training curricula; manuals; etc.).

ANNEX 3: IMPLEMENTATION SUPPORT PLAN

COUNTRY : Western Africa
Regional Disease Surveillance Systems Enhancement (REDISSE) Phase III

Strategy and Approach for Implementation Support

1. The Implementation Support Plan (ISP) for the project has been developed based on the specific nature of the project activities, lessons learned from past operations in the region, countries and sectors, and the project's risk profile as described in this PAD. The ISP will be reviewed regularly and revised as and when required. Given the project complexity, REDISSE 1 and 2 experience, limited WAHO budget, and regional Bank budget constraints; the REDISSSE Program has used trust funds and partners for strengthening supervision. To enhance project implementation, other partner organizations will be looked to as providers of technical assistance and delegated to carry out some supervision tasks. Efforts are in process to mobilize financial and human resources from external sources, including a multiyear secondment financed by Resolve to Save Lives. The ISP will be reviewed regularly and revised as and when required.

2. Taking into account above, the ISP includes regular, thorough reviews of implementation performance and progress to be carried out by a team of WB specialists, supported by external partners, with the project implementing agencies (four participating countries) and with the key supporting agency (WAHO). In addition to these formal implementation support missions and field visits, which will be carried out at least semi-annually given project urgency and complexity, special workshops will be held at key decision points in the project. Midway during the project, the WB team, supported by external partners, will hold a Mid-term review mission to take stock of project implementation and to take any corrective actions, as necessary. The MTR is expected to take place in March 2020. In advance of the mission the implementing agencies, under the coordination of WAHO and the Regional Steering Committee, will prepare and send to the WB a report summarizing project progress, highlighting any particular issues that require special attention. At the end of the project, the WB team will prepare an Implementation Completion Report (ICR) which will summarize achievements made under the project. This report will also include an assessment of the project by the project implementing agencies. This process will also be guided and coordinated by WAHO.

Implementation Support Plan and Resource Requirements

3. The WB team will monitor progress on several fronts including: (i) key performance indicators as identified in the Results Framework; (ii) project components; (iii) compliance with key legal conditions and covenants; (iv) progress made against the project implementation plan and the procurement plan; (v) whether estimated project costs are sufficient to cover planned activities and whether reallocations of the credit funds are required and/or requests for additional implementation funds are needed; (vi) compliance with the WB's FM and disbursement

provisions; and (vii) compliance with environmental and social safeguards. In addition, the World Bank will also review the findings and results of third party assessments, community-based monitoring, and social audits which will be undertaken during the course of project implementation. The WB team will also closely monitor the completion of the baseline, mid-term and end-term quantitative surveys that will be used to evaluate the impact of key activities supported by the project, including user-satisfaction assessments.

4. In addition to monitoring project progress, the WB team will work closely with all implementing agencies and with WAHO to provide technical support as needed. The implementation support team will include public health specialists (including disease surveillance, and laboratory specialists), animal health specialists, commodity procurement and management specialists, specialists on social mobilization/advocacy, specialists with experience in implementation of training programs, M&E specialists, and operations staff that will provide necessary just-in-time advice and support. The WB procurement specialist will carry out annual ex-post review of procurement that falls below the prior review thresholds and will have separate focused missions depending on the procurement needs that arise. The WB FM specialist will review all FM reports and audits and take necessary follow-up actions as per WB procedures. The Bank team members will also help identify capacity building needs to ensure successful project implementation.

5. Given the complexity of the project (4 countries and multisectoral interventions), the Bank team will have a meeting every two months with the WB colleagues based in the field and those working in education and social protection (as well as gender and governance if needed).

6. The specific support in implementation during the project period is outlined below:

		Skills Needed	Total Staff weeks	Number of trips
	Overall coordination	Task Team Leaders (TTLs)		
Year 1				
	Project launch	**Task team: total** TTL – health specialists Animal health specialists Commodity specialists Social/mobilization specialists Training programs specialists Monitoring and Evaluation specialists Operations Officers FM specialists Procurement specialists		1 for each specialist listed
	Regular implementation support mission	**Task team: total** TTL – health specialists Animal health specialists Commodity specialists Social/mobilization specialists		1 for each specialist listed

		Training programs specialists Monitoring and Evaluation specialists Operations Officers FM specialists Procurement specialists Consultants on specialized issues		
	Regular implementation support mission	**Task team: total** TTL – health specialists Animal health specialists Commodity specialists Social/mobilization specialists Training programs specialists Monitoring and Evaluation specialists Operations Officers FM specialists Procurement specialists Consultants on specialized issues		1 for each specialist listed
Years 2-5				
	Bi-annual implementation support missions (technical and fiduciary reviews)	**Task team: total** TTL – health specialists Animal health specialists Commodity specialists Social/mobilization specialists Training programs specialists Monitoring and Evaluation specialists Operations Officers FM specialists Procurement specialists Consultants on specialized issues	8*12=96	1 for each specialist listed
	Special workshops (as required)	Specialists (as required)		1 for each specialist
	Mid-Term Review March 2020	**Task team: total** TTL – health specialists Animal health specialists Commodity specialists Social/mobilization specialists Training programs specialists Monitoring and Evaluation specialists Operations Officers FM specialists Procurement specialists Consultants on specialized issues		1 for each specialist listed
	Implementation Completion Review Mission June 2023 ICR preparation	**Task team: total** TTL – health specialists Animal health specialists Monitoring and Evaluation Specialists Operations Officers ICR Authors		1 for each specialist listed

ANNEX 4: Systematic Operations Risk-Rating Tool (Sort)

COUNTRY: Western Africa
Regional Disease Surveillance Systems Enhancement (REDISSE) Phase II

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	Substantial
7. Environment and Social	Substantial
8. Stakeholders	Substantial
9. Other	n/a
OVERALL	Substantial

1. **The overall risk rating for the project is categorized as Substantial**.
The overall rating is based on an assessment of component risks in which the risk was rated as high for Institutional Capacity for Implementation and Sustainability; and, substantial in five categories: Political and governance, Technical Design of Project or Program; Fiduciary; and Stakeholder risks. Macroeconomic, Sector Strategies and Policies, and Environment and Social are rated as moderate.

I. Political and Governance - SUBSTANTIAL

2. A review of country reports and forecasts publish by the Economist Intelligence Unit[56] indicate that political and governance risks are generally substantial across the ECOWAS region. All four countries participating in REDISSE 3, are at substantial risk of political instability. Looking at the overall risk rating across the countries covered under REDISSE 3, Benin, Mauritania and Niger are rated as substantial risk, while Mali is rated as high-risk country.

II. Macroeconomic - MODERATE

[56] Economist Intelligence Unit Risk Briefing- *http://viewswire.eiu.com/index.asp?layout=homePubTypeRK*

3. **The risk of emerging external and/or domestic imbalances is moderate and macroeconomic effects could affect the achievement of the PDO**. Prices are moderately stable and key operational inputs (including imports) are generally available. The macroeconomic environment has limited effects on individual operations. The implementing partners of the project will maintain attention to economic developments that could jeopardize the quality, objectivity, and regional nature of the Program. However, the EVD epidemic has demonstrated how vulnerable the countries of West Africa are to external shocks.

III. Sector Strategies and Policies-MODERATE

4. The four countries have sectoral strategies and policies in health, livestock, the environment and for OH which are broadly aligned with REDISSE program desired objectives. These will be under continuing review in varying degrees, with varying levels of effective application. There is reasonable likelihood that such strategies and policy changes may occur and affect project outcomes.

IV. Technical Design of Project or Program – SUBSTANTIAL

5. **There is substantial likelihood that factors related to the technical design of the project may adversely impact the achievement of the PDO**. This is due to the complexity of the project and the implementation environment. The project has four technical components, each with a large number of potential interventions. Strategic prioritization of interventions within each component is the core technical design challenge. To address this, the team: (i) engaged in substantial analytical work to assess and identify key components of and best practices from successful disease surveillance operations and networks[57]; (ii) consulted with key technical partners; (iii) held regional and country specific consultations to identify core unmet needs in the context of ongoing and planned support from other partners.

V. Institutional Capacity for Implementation and Sustainability – HIGH

6. **There is a high likelihood that weak institutional capacity for implementing and sustaining operational engagement may adversely impact the PDO**. There may be an issue of absorptive capacity that will need to be addressed by strengthening the programs and/or scaling-up interventions in a phased manner. In addition, although several of the programs have experience facilitating cross-border collaboration, there is limited experience implementing and sustaining regional programs. The need for effective collaboration within governments and with non-governmental partners contributes to the risk. The project will require active engagement and collaboration between Ministries of Health, Agriculture, Environment, Education and Technology/Communications and local government. The High rating is also due to the perceived weak institutional capacity of Ministries in some countries and the need to clearly articulate the

[57] MOVING BEYOND ZERO: Post-Ebola Health Systems Strengthening and Fiscal Space Assessment for Guinea, Liberia, and Sierra Leone, World Bank. MAY 2016, pp 63-76.

role of local government and non-governmental organizations. Furthermore, there is uncertainty regarding the clients' capacity to sustain the outcomes of the operation beyond the WB's support.

VI. Fiduciary – SUBSTANTIAL

7. **The overall fiduciary environment has substantial weaknesses in the integrity of procurement systems**. Difference in procurement, fiscal management and project management capacities among the three countries could result in delays in the acquisition of key project commodities and lead to uneven progress in the implementation of activities and achievement of project targets. To provide a more granular evaluation of the fiduciary environment in each country, FM and procurement assessments was conducted during project preparation.

VII. Environmental and Social – SUBSTANTIAL

8. **While the specific project activities will have low to moderate environmental impacts, a breakout of disease among human and/or animals could pose significant environmental and social risks for the project**. To this end, the project includes pest and medical waste management plans, as well as mitigation measures for animal waste in the ESMFs. ESMPs and/or Environmental and Social Impact Assessments will be prepared, consulted upon and disclosed during project implementation once sites and works and have been identified and finalized.

VIII. Stakeholders – SUBSTANTIAL

9. **The project is both regional and multi-sectoral and there are many stakeholders with diverse and sometimes non-compatible agendas providing technical, financial and commodity support to countries in the sub-region**. In this sort of environment there is the risk of inefficiency, duplication of effort and overburdening the client with reporting and other requirements from multiple donor partners. Stakeholder risks are being addressed through engagement with sectoral and development partners in joint planning to prepare the annual workplan and budgets, as well as frequent briefings and reports to Senior managers in government and other stakeholders.

ANNEX 5: Alignment with Other World Bank-Supported and Other Partners Projects

COUNTRY: Western Africa
Regional Disease Surveillance Systems Enhancement (REDISSE) Phase III

REDISSE 3 is being developed to ensure alignment with other WB project in the four targeted countries as well as ensure a harmonization platform among partners engaged in those countries. The tables below represent what is being done in these countries.

BENIN

REDISSE 3 Areas	Name of the ongoing Project	Other major partners
Surveillance and Information Systems	WARDS Ebola surveillance	CDC, USAID, AfDB, WHO, UNICEF, OOAS
Strengthening of Laboratory Capacity	Case diagnosis	Bernard NOCHT Institut, Germany
Preparedness and Emergency Response	Emergency response team support	ANCRE/USAID
Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness	Training, supervision and personnel motivation	CDC, USAID, AfDB, WHO, UNICEF, OOAS
Institutional Capacity Building, Project Management, Coordination and Advocacy	Coordination of epidemic preparedness and management	

MALI

Areas	Name of the ongoing Project	Other major partners
Surveillance and Information Systems	Malaria/NTD, WARDS and PADEL Meningitis case surveillance Assistance with multiple surveillance activities	WHO, U.S. CDC, CRS, IMC, WAHO, OIE
Strengthening laboratory capacity	Malaria/NTD Project Support to enhance laboratory capacity Funds for purchasing and storage of reagents	GHSA, WHO,WAHO, U.S. CDC, Centre Merieux, OIE
Preparedness and Emergency Response	Malaria/NTD Project Support for improving surveillance systems Support to improve information management systems Assistance in fighting AIDS, TB, and Malaria Support for vaccination campaigns and monitoring	WHO, USAID, Croix-rouge Mali et Croix-rouge Belgique, MSF, Intrahealth International, IMC
Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness	Training and in-service training of health staff Training of field epidemiologists	OMS, WAHO, U.S.CDC, OIE
Institutional Capacity Building, Project Management, Coordination and Advocacy		GHSA, USAID,U.S. CDC

MAURITANIA

Areas	Name of the ongoing Project	Other major partners
Surveillance and Information Systems	PRAPS RIMRAP One Health/RSI	Government WB OIE WHO Unicef EU Coopération Espagnole GIZ FAO
Strengthening of Laboratory Capacity	-One Health/RSI -Projet contrôle des contaminants chimiques et microbiologiques des aliments(ONARDEL) -Centre Elevage Camelin	Government WB AIEA FAO WHO
Preparedness and Emergency Response	One Health/RSI CNOUSP COVACC	Government WB EU OIE FAO WHO Unicef
Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness	One Health/RSI RIMRAP PRAPS	Government WB FAO Coopération Espagnole GIZ
Institutional Capacity Building, Project Management, Coordination and Advocacy	One Health/RSI RIMRAP PRAPS	Government WB EU Coopération Espagnole GIZ

NIGER

Areas	Name of the ongoing Project	Other major partners
Surveillance and Information Systems	Population and Health PADEL and WARDS	WHO, OIE, U.S. CDC, CIRDS, MDN, MSF (Médecins Sans Frontières), FM (Fondation Mérieux). Fonds Commun, RSS/FM
Strengthening of Laboratory Capacity	Same	WHO, Bill & Melinda Gates Foundation, FM, Veterinarians Sans Frontier, African Society of Medical Laboratories, African Development Bank
Preparedness and Emergency Response	Same	WHO, OIE, World Food Program, MSF, UNICEF, OOAS, MDM

Human Resource Management for Effective Disease Surveillance and Epidemic Preparedness	Same	WHO, OIE, OOAS, UNICEF, MDM, MPDL, NGO HELP, FM, FC, International Rescue Committee (IRC)
Institutional Capacity Building, Project Management, Coordination and Advocacy	Same	FM Spain, UNICEF, UNFPA, GAVI, African Development Bank, Belguim

ANNEX 6: Enhanced Project Accountability Framework

COUNTRY: Western Africa
Regional Disease Surveillance Systems Enhancement (REDISSE) Phase II

1. An enhanced accountability framework has been put in place for this project to provide increased assurance that funds are used for the intended purposes with economy and efficiency and attain value for money.

2. The objectives of a strengthened accountability framework include:

- Development and implementation of a robust improvement in accountability for the use of project funds to attain expected outcomes for the various programs;
- Provision of guidelines on minimum requirements to be complied with regarding workshops, training, and related activities.

Specific accountability framework for training, workshops, study tours, etc.

3. An enhanced accountability framework for the purposes of training, workshops, study tours, etc. as follows:

- At the beginning of each fiscal year, a separate training summary plan shall be developed and shared with the TTL for review as part of the annual work plan.
- Local and international training, would require prior clearance from the WB's TTL before being undertaken. The request for clearance should, at a minimum, include the following:

  - A demonstrated linkage between the rationale for the workshop/training/etc. and the Development Objective of the project shall be established;
  - Annual Work Program (AWP) to which the activity falls shall be identified;
  - The number of trainees, their function and mode of selection will be defined (number of times during the past 18 months that listed trainees had benefitted from training);
  - Number of years before retirement from service of each of the proposed trainees;
  - The process used for selection of training provider, and if foreign training, rationale for not proposing local training, to be provided;
  - Training prospectus and reference to the beneficial outcome of the training to be provided;
  - Detailed costing of the event: if local training/workshop/sensitization, the following additional information would need to be provided: i) venue for the event, ii) how venue was or is proposed to be selected, iii) venue rental, refreshments/lunches, per diem, transport cost (air or land travel cost per trainee);
  - No residential local training program will be allowed where the venue of the training is in the locality of the trainees; the preferred choice of locality should be the location of most officials to be trained.

4. Only based on these above submissions and the TTL's prior clearance will expenses be committed and become eligible for financing under the project.

- Each PCU will ensure a formal process of accountability is instituted on training expenditures which will include:

  - Submission of training report by the trainee;
  - Certificate of attendance from the training institution;
  - Relevant travel certifications such as air tickets, boarding passes for air travel, hotel bills etc.;
  - Consistent with the Government's cashless policy, air tickets shall be procured directly from the airline through electronic payment or check (no cash payments shall be allowed); and
  - Similar practice shall also be applied in the payment to vendors and tuition fee to training providers.

- Reduced amount of DSA (Daily Subsistence Allowance) will be paid where training/workshop organizers provide meals and accommodation. Cash advance granted to Project staff must be retired by concerned staff within the timeline specified in the PIM before new advance is granted. Where retirement of an advance is past due, an automatic payroll deduction of the unretired amount should be affected. To keep track of cash advances disbursed, an Advances Register shall be maintained as a control measure.

- The Project Internal Auditor shall include in their work program periodic random audits of travel advances and withdrawal thereof, as well as a review of the training/workshop conducted. A report of this review shall be provided to the PC as well as the WB TTL.

ANNEX 7: References

COUNTRY: Western Africa
Regional Disease Surveillance Systems Enhancement (REDISSE) Phase III

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