REPUBLIC OF SOUTH SUDAN



NATIONAL ACTION PLAN FOR HEALTH SECURITY (NAPHS)
[2020-2024]



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PREFACE -

South Sudan, the youngest nation, has braced several emergencies and disease outbreaks since her independence in July 2011. The notable emergencies include the persistent cholera outbreaks reported from 2014 to 2017 during which nearly 30,000 cases and over 600 deaths were reported; the 2018 Rift Valley Fever outbreak in Eastern Lakes during which over 50 cases and at least three deaths were reported; the 2018 yellow fever outbreak in Nzara during which three yellow fever cases were confirmed; and the 2019 measles outbreaks during which outbreaks were confirmed in 15 counties and 4 Protection of Civilian (PoC) sites. Besides, SouthSudan is affected by other hazards like floods, population displacements, and severe food insecurity. Moreover, South Sudan has experienced outbreaks of Ebola virus disease in 1976, 1979, thus underscoring the endemic risk of viral spillover into local populations. In the aftermath of the 2018 DR Congo Ebola outbreak, South Sudan faced the threat of importing the virus given the proximity, cross-border interactions, and fragility of health systems. These events highlight the critical need of establishing and building in-country capacity to prepare for, detect and promptly respond to public health events as enshrined in the International Health Regulations (IHR (2005)).

The emergencies highlighted have demonstrated the need for multi-sectoral and whole-of-government collaboration for effective preparedness and response.

The 2017 Joint External Evaluation (JEE) of IHR implementation capacities for South Sudan, confirmed many serious gaps to address for enhanced health security.

The recommendations from the JEE have been enriched with benchmarks and success stories from other countries and concretized to formulate the South Sudan National Action Plan for Health Security (NAPHS). The goal of the South Sudan NAPHS is to enhance national development through the adoption of the ONE HEALTH strategy prevent and mitigate the effects of emergencies. The implementation of the NAPHS will safeguard and ensure a healthy human population, livestock, wildlife and environment.

The development of the NAPHS entailed a highly consultative process involving stakeholders from the line Ministries, Departments, Agencies of government, donors, and implementing partners. The NAPHS team conducted a SWOT analysis before coming up with a feasible plan for improving the capacity of the country to ensure national health security.

The country has embarked on a very ambitious strategy of building in-country capacity to strengthen the technical areas that were reasonably performing in the JEE and build up from the baseline level, for technical areas in which the country had no capacity.

All the activities in the NAPHS are estimated to cost a total of about seventy million USD which translates to a per capita expenditure of about six USD, which is a modest investment. Responding to emergencies is way more expensive than preventing them, and early detection limits the cost in terms of lives lost and economic impact.

We, therefore, call on all-of-government ministries and our development partners to prioritize the implementation of this NAPHS over its life period January 2020- December 2024.

Hon. Mrs. Elizabeth Acuei Yol Minister for Health

Hon. Mr. Onyoti Adigo Nyikec

Hon. Ms. Josephine Napwon Cosmas Minister for Livestock & Fisheries Minister for Environment and Forestry

FOREWORD-

The International Health Regulations (IHR (2005)) are a legally-binding global agreement about procedures to protect public health. The IHR (2005) was adopted by the World Health Assembly in 2005 and is binding on all of WHO's 196 States Parties including South Sudan. The IHR aims to build national capacities to prevent, detect and respond to acute public health risks that have the potential to cross borders and be a threat to public health worldwide The world has become a global village with a lot of movement of persons and goods, and this poses a potential risk to the global population. Public health threats globally are an inevitable and serious threat, and our first line of defence against them is having strong national health security capacities.

Public health threats have and are still evolving with most emerging epidemics being zoonoses, that is, infectious diseases that spread from animals to people. Antimicrobial resistance also presents an ongoing challenge for both human and animal health. The country has a robust petroleum industry that requires commensurate measures against chemical threats to public health and t the ecosystem. The One Health approach that combines the expertise within human, animal and environmental health for a multidisciplinary response is critical for tackling these public health threats.

The government of the Republic of South Sudan with support from partners has developed this National Action Plan for Health Security (NAPHS) to guide the process of building national capacities to prepare for, prevent, detect and respond to any public health events of international concern. It reechoes the commitment to take concrete steps to reinforce our defencees against all forms of public health threats. The NAPHS follows from the recommendations from the Joint External Evaluation (JEE) of the implementation of the International Health Regulations (2005) (IHR) conducted from October 2017.

The NAPHS implementation will commence in 2020 through the end of 2024. The Ministry of Cabinet Affairs will coordinate the overall implementation while the Ministry of Health will manage the secretariat.. All line Ministries, Departments and Agencies (MDAs) of government have pledged their commitment to play an active role in the implementation of the NAPHS. The National Steering Committee for Health Security and multi-sectoral Technical Committee have been established and tasked with responsibility for the oversight of the delivery of the Action Plan, its monitoring and evaluation.

We are therefore confident that this NAPHS will offer a solid framework for the harmonization of all efforts of government and partners to continue to improve South Sudan's capacities to prevent, prepare for, detect and respond to public health threats.

Hon. Dr. Martin Elia Lomoro Minister for Cabinet Affairs

ACKNOWLEDGEMENT -

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- Ministry of Defense/SSPDF
- Ministry of Interior
- Ministry of Justice
- Ministry of Humanitarian Affairs and Disaster Management
- Ministry of Petroleum
- Ministry of Environment
- Ministry of Livestock and Fisheries
- Ministry of Wildlife, Conservation and Tourism
- Ministry of Agriculture and Forestry
- Ministry of Transport/ Civil Aviation Authority
- Ministry of Water, dams, and Irrigation
- Drug and Food Control Agency

UN Agencies

- WHO
- UNICEF
- IOM

Donors

- Resolve to Save Lives
- USAID
- ECHO
- CDC
- DFID
- HPF
- Japanese Government
- CANADA
- Norwegian

Partners

- Live well
- UNIDOR
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EXECUTIVE SUMMARY

Emerging and re-emerging threats with pandemic potential continue to challenge fragile health systems in the African region, creating enormous human and economic toll. The ongoing 10th outbreak of Ebola Virus Disease (EVD) in the neighboring Democratic Republic of Congo (DRC), is already the second largest ever outbreak of EVD following the devastating outbreak in West Africa from 2013-2016. For the neighboring countries, including the Republic of South Sudan, to effectively mitigate cross-border transmission of EVD, they must be operationally ready to adequately respond. However, substantial resources are needed to engage relevant sectors and partners to systematically implement preparedness actions that will have a lasting impact and contribute of strengthening of core capacities for the IHR (2005).

Health security planning and emergency preparedness are essential for the effective implementation of IHR 2005. In line with the regional strategy for health security and emergencies, countries in the WHO AFRO region are assessing their IHR core capacities and subsequently developing national action plans to address capacity gaps identified. Many of the core capacities and much of the infrastructure required for the effective implementation of IHR also contribute to establishing operational readiness for emergencies from all hazards. Investing in emergency preparedness is highly cost-effective, protects lives and safeguards livelihoods and communities. Whether measured in human lives saved or economic disruption avoided, the return on investments in epidemic, pandemic, and emergency preparedness is high.

The Joint External Evaluation (JEE) of IHR implementation capacities for South Sudan, conducted in October 2017, confirmed many serious gaps that threaten public health, the environment and economy of South Sudan.

The goal of the NAPHS is to build national capacities for the Republic of South Sudan to be a resilient nation that can prevent, detect and respond to any public health threats.

The National Steering Committee (NSC) and the Technical Committee (TC) will guide the implementation of the plan. The Minister of Cabinet Affairs is the chairperson of the NSC.

The Ministry of Health is the secretariat to the NSC and chair to the Technical Committee. All implementing agencies should make monthly reports to the secretariat who should analyze, consolidate and submit to the steering committee for strategic decision making. The NAPHS incorporates high level recommendations to the Government of the Republic of South Sudan, WHO Country Office & partners, WHO (regional office & headquarters) and other donors on implementation priorities.

The NAPHS implementation is estimated to cost about seventy million dollars over the five years of its implementation 2020-2024. The NAPHS cost is a modest investment given the potential lives saved and economic toll averted by the ever-emerging public health threats over the same period. Resource mapping and mobilization are paramount since only 25% of the budget is funded. There is therefore need for all stakeholders to play their respective roles to ensure that South Sudan establishes and maintains the requisite IHR capacities for health security.

BACKGROUND

The Republic of South Sudan was born in 2011 when it attained its independence from the government of Sudan in Khartoum. It is a landlocked country bordered by Central African Republic to the west, Sudan to the north, Uganda to the south, Ethiopia to the east, Kenya to the southeast, and the Democratic Republic of the Congo to the southwest. The country is home to a population of about 12 million, and it is estimated to be demographically among the youngest nations in the world.

The persistent and multiple in country public health challenges and the continued and escalating EVD outbreak in the neighboring DRC emphasizes the need to develop capacities to prevent, detect and respond to public health threats through the implementation of the International Health Regulations (IHR 2005). South Sudan has also had its fair share of outbreaks having detected and responded to cholera, Rift Valley Fever, malaria, measles, rubella, yellow fever and hepatitis E over the last two years.

The country has a nascent health system as seen from health indicators with sub-optimal physical access to primary care, low immunization coverage against vaccine preventable diseases, low capacity to detect outbreaks on time and reduced capacity to respond to outbreaks. The capacity to detect and response to outbreaks in livestock and wildlife is also largely limited by prevailing social service and access constraints. The country has not been declared polio free and has an ongoing measles outbreak since the beginning of 2019. The leading causes of death are infectious diseases though there is an increase in the incidence of non-communicable diseases. South Sudan is committed to attaining Universal Health Coverage, but this will require significant funding, infrastructural and human resources investments into the national health system.

There is also a threat of waterborne diseases that contributed to the prolonged cholera outbreak of 2014-2019. As highlighted before, the sustainable control and elimination of cholera from South Sudan will require a whole-of government approach that ensures sustainable and predictable investment of resources to ensure populations in hotspot areas have access to improved sources of water and improved sanitation facilities.

One of the strategic objectives of the South Sudan Health Development Plan (2012-2016) was to enhance epidemics, emergencies and disaster preparedness and response capabilities through implementing the International Health Regulations. The capabilities include but are not limited to disaster risk reduction, timely detection/confirmation of outbreaks, prompt response and recovery as a means of mitigating the negative outcomes of adverse public health events. The Republic of South Sudan through the Ministry of Health committed to provide the overall leadership and coordination at the highest levels of authority in the health sector for management of health response to Emergencies, Epidemics and Disasters in the country. The ministry also committed to strengthen the Integrated Disease Surveillance and Response (IDSR)

capacity from national to subnational levels and designated ports of entry to improve the capacities for early detection, confirmation and prompt response to any Public Health Events of National and International Concern (PHEIC).

The NAPHS for South Sudan highlights the following; background, vision, mission, goal and objectives. It also underpins the methodology for the development of the NAPHS, major components of the NAPHS, including top priorities and their costs, implementation, monitoring and evaluation of the NAPHS.

International Health Regulations (IHR 2005)

Many determinants of health and by extension the implementation of the IHR (2005) capacities are outside the mandate of the health sector. Development and implementation of policies in different ministries, departments and Agencies of Government have a direct influence on health outcomes. Key among these sectors include Ministries of; Health, Interior, Justice, Agriculture, Wildlife, Finance, Security, Transport, Humanitarian Affairs & Disaster Management, Livestock and all these are to be coordinated by the Ministry of Cabinet affairs. The country will therefore need to develop a one health policy to coordinate the interface of the different Ministries, Departments and Agencies (MDAs) of government in health-related interventions.

Monitoring and Evaluation Framework for the IHR.

The JEE forms one component of the IHR Monitoring and Evaluation Framework, which guides the implementation of the country's IHR core capacities. The IHR secretariat developed the framework in 2016, in collaboration with related initiatives such as the Global Health Security Agenda and the Performance of Veterinary Services (PVS) Pathway. In engaging with States Parties, WHO is following three principles for assessment, monitoring, and evaluation which include: Country ownership, WHO leadership as custodian of the IHR and Active partnership. A key tenet is mutual accountability of State Parties and the IHR Secretariat for global public health security through ongoing communication and transparent reporting.

Simulation Exercises: SimEx provide an evidence based assessment of functional capacities to respond to emergencies and to strengthen preparedness and response. Exercises are useful tools for identifying and assessing levels of preparedness and may be used at each stage of emergency preparedness development to test the practicality, adequacy, sufficiency, and efficiency of proposed plans and procedures. Multisectoral and multidisciplinary coordination and communication mechanisms are tested regularly through exercises within health as well as whole of government exercises. As part of her preparedness efforts, South Sudan conducted a full-scale simulation exercise to assess capacities for Ebola preparedness at the national level and in the three high risk states of Jubek, Torit, and Yei River on 14th August 2019.

After-action Review: Whole-of-government after action reviews for significant events, generate recommendations on potential response improvements. An AAR generally takes the form of a structured, facilitated discussion with those directly involved in the response to analyses best practices, lessons, and challenges. The AAR should take place within three months of the end of the event when the memories of those involved in the event are still fresh. Every country should conduct an AAR after every emergency response, and at least once a year. The After-Action Review for the 2016-2017 cholera outbreak generated lessons for developing the South Sudan National Cholera Control Plan.

Situation Analysis by the Joint External Evaluation

The situation analysis is largely informed by both the findings and recommendations from the JEE for South Sudan conducted 15th-20th October 2017. Also, the WHE released a benchmarking tool in February 2019 which guides state parties on the key activities needed to achieve the benchmarks commensurate with the level of preparedness that the state intends to achieve.

Technical areas	Indicators findings		
	P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place are sufficient for implementation of IHR (2005)	2	
National legislation, policy	P.1.2 The State can demonstrate that it has adjusted and aligned its domestic legislation, policies and administrative arrangements to enable compliance with IHR (2005)	1	
and financing	P.1.3 Financing is available for the implementation of IHR capacities		
	P.1.4 A financing mechanism and funds are available for the timely response to public health emergencies		
IHR coordination, communication and advocacy	P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR		
Antimicrobial	P.3.1 Antimicrobial resistance detection P.3.2 Surveillance of infections caused by antimicrobial-resistant pathogens	1	
resistance	P.3.3 Healthcare-associated infection (HCAI) prevention and control programs P.3.4 Antimicrobial stewardship activities	1	

Technical		Score
areas	Indicators findings	
	P.4.1 Surveillance systems in place for priority zoonotic	3
Zoonotic	diseases/pathogens	3
diseases	P.4.2 Veterinary or animal health workforce	2
uiseases	P.4.3 Mechanisms for responding to infectious and potential	1
	zoonotic diseases are established and functional	•
	P.5.1 The country has IBS or EBS and monitoring systems in place	
	to monitor trends	2
Food safety	and detect foodborne events (outbreak or contamination)	
. oou salety	P.5.2 Mechanisms are established and functioning for the	
	response and	
	management of food safety emergencies	
Biosafety and	P.6.1 Whole-of-government bio-safety and bio-security system is	1
biosecurity	in place for human, animal and agriculture facilities	
•	P.6.2 Biosafety and bio-security training and practices	1
Immunization	P.7.1 Vaccine coverage (measles) as part of national programme	1
	P.7.2 National vaccine access and delivery	2
	D.1.1 Laboratory testing for detection of priority diseases D.1.2 Specimen referral and transport system D.1.3 Effective modern point-of-care and laboratory-based	
· ·		
system	diagnostics	
	D.1.4 Laboratory quality system	1
	D.2.1 Indicator- and event-based surveillance systems	3
Real-time	D.2.2 Interoperable, interconnected, electronic real-time	2
surveillance	reporting system	
	D.2.3 Integration and analysis of surveillance data	3
	D.2.4 Syndromic surveillance systems	4
Reporting	D.3.1 System for efficient reporting to FAO, OIE and WHO	3
	D.3.2 Reporting network and protocols in country	2
	D.4.1 Human resources available to implement IHR core	1
Workforce	capacity requirements	
development	D.4.2 FETP or other applied epidemiology training programme	1
	in place	
	D.4.3 Workforce strategy	2
Preparedness	R.1.1 National multi-hazard public health emergency	1
•	preparedness and response plan is developed and implemented	

Technical	Indicators findings	
areas	mulcators infulligs	
	R.1.2 Priority public health risks and resources are mapped and utilized	1
	R.2.1 Capacity to activate emergency operations	1
Emergency	R.2.2 EOC operating procedures and plans	1
response	R.2.3 Emergency operations programme	1
operations	R.2.4 Case management procedures implemented for IHR relevant hazards.	2
Linking public health and security authorities	R.3.1 Public health and security authorities (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event	1
Medical	R.4.1 System in place for sending and receiving medical countermeasures during a public health emergency	1
countermeasures and personnel	R.4.2 System in place for sending and receiving health personnel during a public health emergency	1
deployment	R.4.3 Case management procedures implemented for IHR relevant hazards	
	R.5.1 Risk communication systems (plans, mechanisms, etc.)	1
Risk	R.5.2 Internal and partner communication and coordination	2
communication	R.5.3 Public communication	1
	R.5.4 Communication engagement with affected communities	1
	R.5.5 Dynamic listening and rumor management	2
Points of entry	PoE.1 Routine capacities established at points of entry	1
,	PoE.2 Effective public health response at points of entry	1
	CE.1 Mechanisms established and functioning for detecting and	1
Chemical events	responding to chemical events or emergencies	
	CE.2 Enabling environment in place for management of chemical events	1
	RE.1 Mechanisms established and functioning for detecting and	1
Radiation	responding to radiological and nuclear emergencies	
emergencies	RE.2 Enabling environment in place for management of radiation emergencies	1

VISION, MISSION AND OBJECTIVES OF THE NAPHS -

Vision

A safe and resilient nation with optimal capacities to prevent, detect timely and promptly respond to any public health threats.

Mission

To build sustainable national and subnational capacities against public health threats across all IHR technical areas to ensure health security.

Goal

To enhance national development through adoption of the ONE HEALTH strategy to ensure a healthy human population, livestock, wildlife and environment.

Objectives

The specific objectives are to:

- 1. Build, strengthen and sustain the national capacity to prevent, detect and respond to disease outbreaks and other health emergencies.
- 2. Build a robust health emergency risk assessment & management system aligned with One Health approach.
- 3. Strengthen the collaboration and coordination mechanisms for NAPHS implementation through application of multi-sectoral and one health approaches.
- 4. Map existing and potential domestic and external financing to support the delivery of the NAPHS.
- 5. Build, strengthen and maintain strategic partnerships using a One Health, all-hazards, whole of government and whole of society approach.
- 6. Develop an effective monitoring and evaluation system for health security through the implementation of the one health strategy

GUIDING PRINCIPLES OF THE NAPHS

- 1. Country Ownership/ Political buy-in: South Sudan Government leads and coordinates the implementation of the NAPHS, tracks its progress and aligns it with national plans and strategies.
- 2. Shared responsibility: Global health security is a shared responsibility that cannot be achieved by a single state or sector of government. Its success depends upon collaboration among the health, security, environment and agriculture sectors.
- 3. Responsive Accountability and Transparency: openness and willingness to share information to facilitate rapid response.
- 4. Partnership with development partners: The NAPHS upholds South Sudan's partnership with development partners including but not limited to UN agencies, EU, USAID, CDC, Canadian Government, ECHO, DFID, JICA, Norwegian Government, HPF, etc. to protect and promote health security.
- 5. Evidence-led and prioritization: forward looking to consider emerging trends, risks and health innovations to reinforce timely information sharing and coordinated interventions.
- 6. Continuous Improvement: Activities, plans and strategies are to be reviewed and improved based on lessons learnt, new evidence, or changes in health threats, policy and legislation. Some NAPHS activities build upon others, therefore flexibility in their implementation is required

DEVELOPMENT OF THE NAPHS

The NAPHS development process was led by MOH and line sectors with support from WHO, partners and donors.

Review of JEE and Other Assessment Recommendations.

Following the finalization of the JEE in October 2017 and the Service Availability and Readiness Assessment (SARA) in 2018, the MOH with the support of partners undertook several initiatives to address gaps and weaknesses identified in the IHR 2005 core capacities.

Risk Management Action Plan

The Republic of South Sudan needs to strengthen capacities to reduce the health risks and consequences of emergencies and disasters through the implementation of multi-hazard disaster risk management, the IHR (2005), and health system strengthening. The health, economic, political and societal consequences of these events can be devastating. Climate change, unplanned urbanization, population growth and displacement, antimicrobial resistance and state fragility are contributing to the increasing frequency, severity and impacts of many types of hazardous events that may lead to emergencies and disasters without effective risk management. In line with risk management, South Sudan will conduct a situational analysis of Anti-Microbial Resistance (AMR); develop the laboratory strategic plan to improve the diagnostic capacity; establish an Infection Prevention & Control (IPC) programme; and other interventions to improve surveillance, laboratory and epidemic preparedness and response.

Prioritization of Activities by Technical Area

The October 2017 JEE identified key recommendations across 19 technical areas that formed the backbone of NAPHS priorities. The benchmarking tool facilitated the identification of activities for attaining the desired country preparedness level by technical area. The review of the JEE findings culminated into a planning meeting held in August 2018.

This meeting gave way to the validation and costing workshop held on 16th-20th September 2019. All these meetings brought together all stakeholders that included line government ministries, departments and agencies whose mandates fall in line with implementation of the IHR (2005). Other stakeholders such as development and implementing partners also played an active role in the prioritization process.

Objectives of the planning and costing workshop were threefold; to review recommendations from the JEE report, prioritize realistic interventions against each of the 19 technical areas, and to cost the agreed interventions.

Prioritization was done both between and within technical areas due to shortage of operational resources and the limited workforce. Some technical areas were prioritized over the others because the JEE revealed that the country had some demonstrable capacities in some technical areas whereas others had no capacity at all. During the preliminary meetings, the technical working groups had identified ongoing activities, areas that were critical for capacity development, activities that already had committed partners' support and those that needed minimal or no financial resources to implement.

COST ESTIMATES FOR THE NAPHS

The NAPHS for South Sudan is estimated to cost about 69 million US dollars whose breakdown is as follows;

Table.....Showing the cost per technical area

Technical Area	Budget (USD)	Total (%)
National Legislation and Financing	1,473,169	2.1%
IHR Coordination and National IHR Focal Point Functions	625,967	0.9%
Antimicrobial Resistance (AMR)	1,922,152	2.8%
Zoonotic events and the human–animal interface	1,468,086	2.1%
Food safety	613,709	0.9%
Biosafety and biosecurity	1,518,082	2.2%
Immunization	36,961,929	53.5%
National laboratory system	6,327,276	9.2%
Real-time surveillance	3,907,102	5.7%
Reporting	1,116,072	1.6%
Human resources/Workforce development	118,398	0.2%
Preparedness	614,431	0.9%
Emergency Response Operations	5,908,071	8.6%
Linking public health and security authorities	179,101	0.3%
Medical countermeasures and personnel deployment	257,494	0.4%
Risk communication	3,078,049	4.5%
Points of entry (PoE)	2,544,366	3.7%
Chemical events	379,085	0.5%
Radiation emergencies	54,520	0.1%
Total	69,067,059	100.0%

Table Showing the breakdown per broad category

Broad Category	Budget (USD)	Total (%)
Prevent	44,583,094	64.6%
Detect	11,468,848	16.6%
Response	10,037,146	14.5%
Other	2,977,971	4.3%
Total	69,067,059	100.0%

Table Showing the breakdown per cost center

Cost category	Budget USD	% total
Meeting	4,662,664	6.8%
Training	6,435,666	9.3%
Workshop	1,519,126	2.2%
SOP development	41,855	0.1%
Communication	57,511	0.1%
Construction	3,054,440	4.4%
Consultancy	1,633,126	2.4%
Evaluation	70,080	0.1%
Field visits	10,174,303	14.7%
Human resources	5,038,200	7.3%
Infrastructure	64,000	0.1%
Document reproduction/printing	263,577	0.4%
Procurement	17,228,515	24.9%
Services	657,920	1.0%
Simulation exercises	88,868	0.1%
Plaidoyer	-	0.0%
Study	-	0.0%
Campaign	-	0.0%
Operational costs	-	0.0%
Incentives	16,415,808	23.8%
Contingency	825,000	1.2%
Monitoring	833,400	1.2%
Renovation	-	0.0%
Total	69,064,059	100.0%

Table showing the breakdown per responsible authority

Responsible Authority	Budget (USD)	%total
Ministry of Health	60,497,995	88.2%
Ministry of Interior	83,070	0.1%
Ministry of Finance	3,601,841	5.3%
Ministry of Agriculture and Forestry	603,909	0.9%
Ministry of Transport - (Civil Aviation)	914,615	1.3%
Ministry of Cabinet Affairs	83,400	0.1%
Ministry of Petroleum	60,950	0.1%
Ministry of Humanitarian Affairs	-	0.0%
SSPDF- (Defense Health Services)	179,101	0.3%
Ministry of Wildlife and Tourism	-	0.0%
Ministry of Environment	352,215	0.5%
Ministry of Justice	709,656	1.0%
Ministry of Livestock and Fisheries	1,453,951	2.1%
Ministry of Energy and Dams	20,440	0.0%
Other 2	-	0.0%
Other 3	-	0.0%
Other 4	-	0.0%
Other 5	-	0.0%
Other 6	-	0.0%
Other 7	-	0.0%
Other 8	-	0.0%
Other 9	-	0.0%
Other 10	-	0.0%
Total	68,561,143	100.0%

RESOURCE MAPPING AND RESOURCE MOBILIZATION

Resource Mapping

As with most plans of this magnitude a critical challenge is a gap in resources available to government at national and subnational level and a lack of awareness among key stakeholders at all levels.

Under the new Global Programme of Work (GPW 13), the WHO Health Emergencies Programme will contribute heavily to strategic priority of having 1 billion more people better protected from health emergencies. WHO SPH has developed the resource mapping tool as part of the effort to accomplish this objective and strengthen health security.

NAPHS is an advocacy tool for stakeholders in the country. It identifies current achievements and implementation gaps that need support. The resource mapping tool will show supported areas, those that are not supported, and will quantify the resources to supported areas. And that will create awareness of areas of gap to strengthen the core capacities in the country.

WHO will facilitate a workshop involving the Ministry of Health, representatives of other ministries, and partners including donors to sensitize them on the tool and finalize the resource mapping.

Funding gaps and potential funding sources will be identified, including domestic funding.

This process will also provide visibility for partner projects and allow policymakers, donors and partners to see where gaps in investment exist.

The resource mapping tool will facilitate the harmonization different country plans and recommendations. This process will facilitate the identification of priority activities through the harmonization of different plans.

Furthermore, activities will be synchronized among different areas to ensure effectiveness and efficacy of NAPHS.

The resource mapping tool will facilitate monitoring countries' progress in completing health security activities and implementing the NAPHS.

The outcomes of the workshop will also include, in addition to the visualization of the donor and partner landscape in South Sudan, the creation of a list of priority actions for focused implementation of the five-year NAPHS, broadening of the partner network for health security in the country, and establishment of the tool as a platform to coordinate efforts for NAPHS implementation and build strategic partnerships.

Resource Mobilization

The provision of adequate funding for IHR implementation through the national budgeting or other mechanisms is essential to ensure availability of resources for implementation and response to public health emergencies at all times.

NAPHS implementation shall use an all government approach drawing on the Public Private Partnership linkages. Resources will be integrated in the sector budgets and additional resources mobilized from within government and partners.

Domestic resources mobilization (Government annual budgetary allocation to line Ministries) in addition to donor contributions will finance the plan.

The NAPHS activities costing will be integrated into the pertinent ministries request for budget every year, and additional resources mobilized from within government and partners.

The role of the Ministry of Health will be to strengthen the health components of the IHR core capacities, leads the development and implementation of the NAPHS and mobilize resources for the implementation.

Resource will be mobilized also through grant writing/application, strategic partnerships, etc....

Donors and partners should completement and support government to mobilize resources.. This support will be realized through organizing partnership forum meeting for resource mobilization.

Collaboration with internal and external partners, agencies and organizations is essential. WHO will support in identifying, facilitating and coordinating with external partners for resource mobilization.

There is also a need for increased high-level advocacy for additional resources to support implementation as well as capacity building to address capacity gaps across the country.

IMPLEMENTATION, MONITORING AND EVALUATION OF THE NAPHS

Overall Governance of the NAPHS implementation

The National Steering Committee (NSC) and the Technical Committee (TC) will guide the implementation of the plan. The Minister of Cabinet Affairs is the chairperson of the NSC. The Ministry of Health is the secretariat to the NSC and chair to the Technical Committee. The Director General in charge of International Health and Coordination in MOH is the chairperson of the National Focal Point (NFP) for IHR implementation. The ministry of cabinet affairs will designate an officer at the level of a Director General to coordinate IHR implementation in an all-of government and one health approach. It is therefore the cabinet affairs ministry that will convene other government ministries, departments and agencies to implement the NAPHS.

Technical Committee

The NFP chairperson will lead the technical committee with representation from all the implementing government ministries, departments, agencies and the key donors. All the Technical Working Groups (TWGs) highlighted in the NAPHS implementation matrix will be forwarding their meeting resolutions to the Technical Committee for action and feedback. The TC playing the technical coordination role of the NAPHS implementation will synthesize these resolutions, give feedback to the TWGs and further inform the NSC on the progress made.

National Steering Committee

Purpose

The purpose of the National Steering Committee (NSC) is to oversee and, when necessary, to coordinate development and implementation of the national action plan for health security in all sectors to guarantee a systematic, comprehensive approach.

Scope

The NSC should address all aspect of the NAPHS framework from inception, development and implementation related activities in country. The scope should be broad enough to address all three strategic steps of NAPHS framework.

Role and responsibilities

Leadership

The IHR NSC will lead facilitation and, when appropriate, coordination of development, implementation and monitoring of the NAPHS. Its leadership could take the form of officially delegated authority, with more formal procedures and official monitoring, evaluation and reporting.

Facilitation and coordination

The IHR NSC should facilitate and, when appropriate and agreed, coordinate efforts to develop and implement the NAPHS. The IHR NSC should facilitate on building a collaborative, cooperative, supportive environment for sharing knowledge, information and experience. Each participating party should understand the scope and limits of its contributions and also its inter-dependence with other parties and with the whole system to meet the defined goals. Political support and selection of a chairperson (recommended on a rotational basis) with appropriate status and leadership skills are critical factors.

External interactions

Collaboration with internal and external partners, agencies and organizations is essential for many countries. WHO offices can support Member States in identifying, facilitating and coordinating with external partners for resource mobilization.

Internal interactions

The NAPHS should link with national sectoral development plans, emergency preparedness and response plan and specific disease related programmers. The nature of these internal interactions and the results will depend on the country. As many agencies and programmes have responsibilities in the NAPHS, a guiding principle of the IHR NSC is to find, at the highest levels of government, the most suitable ways to facilitate and provide synergy with new or existing work to accomplish programme objectives. Furthermore, the IHR NSC must be appropriately integrated and have clearly defined roles and responsibilities in existing health system, animal health and other relevant sectors.

Membership

The national Technical Committee (TC) should be composed of high level (institutional leadership level) members representing the relevant sectors, notably human health, animal health, finance, environment, justice and other sectors and based on stakeholder analysis. Delegated representatives should be given enough authority (written) by their institutions to make immediate decisions. While it is important to have enough representation of these key stakeholders, the IHR NSC should remain small enough to be functional, striking a balance between full representation and the functionality of the group.

Meeting format and rules

The meeting format and rules should conform to national norms. Standard operating procedures may be elaborated, transparently and according to the principles of best practice, to guide the activities of the steering group.

The responsible minister(s) should select a chairperson based on his or her expertise in leadership. Rotation of the chair among members of the IHR NSC could be considered, as could be the elevation of the chair to the supra-ministerial level (office of the President or Prime Minister)

Members should be selected to ensure that all relevant stakeholders are equitably represented. The stakeholders may be requested to recommend members. Still, the chairperson (with the support of the secretariat) should ensure that the recommended members have adequate skills, knowledge, authority and influence and can collaborate. It is prudent to attain a gender balance.

The IHR NSC should be reinforced by an appropriately resourced secretariat responsible for the logistics of meetings; minute-taking; preparation and circulation of documents background papers, reports and advisory notes to ministers; and management. Preferably, the head of the secretariat will be the national IHR focal point.

It is recommended that the group have a mechanism (with appropriate records) to ensure that its members have no conflicts of interests and that the work of the IHR NSC in the interests of public health is transparent.

Reporting, Monitoring and Evaluation.

All implementing agencies should make monthly reports to the secretariat who should analyze, consolidate and submit to the steering committee for strategic decision making. Monthly meetings for the implementing ministries, agencies and other implementing partners will be held through the TWGs and reports submitted to the Technical Committee. The TC will be meeting quarterly to analyze and deliberate on the resolutions from the TWGs for approval and guidance.

The steering committee will be meeting on a semiannual basis.

Annual performance reviews will be conducted and should bring in more stakeholders Midterm review is expected to be done in the 1st half of 2023.

High Level Recommendations

A. Government of the Republic of South Sudan:

- 1. Strengthen the national IHR NFP as secretariat for NAPHS implementation
- 2. Establish integrated, multi-sectoral, One Health high-level and technical platforms such as an IHR Technical Working Group/National Steering Committee with the IHR National Focal Point as the secretariat for the oversight of the implementation of the NAPHS.
- 3. Develop specific linkages at policy and operational level to connect NAPHS with broader national budgeting, planning and implementation cycle (including feeding into the 2019 and subsequent South Sudan Humanitarian Response Plans, Pillar 5 of the EVD Strategic Response Plan (SRP 4). It is also important to identify opportunities for integration of the NAPHS into other national campaigns and programs for Universal Health Coverage (UHC) and health related Sustainable Development Goals (SDGs).
- 4. Establish, review and update the key pieces of legal documentation to bring the country's legal framework in line with IHR 2005. Consideration should be given to legal instrument establishing a dedicated port health entity.
- 5. Strengthen advocacy for IHR and cross border collaboration with relevant national, regional and international bodies and partners; to jointly ensure capacity building, collaboration and mobilization of partners to assist and support the activities of the NAPHS in terms of technical assistance, financial and material resources.
- 6. Develop and implement advocacy plans and secure commitment at all levels of government for allocation of domestic financing for sustainable implementation of NAPHS.
- 7. Develop a strategy for both internal and external resource mobilization to support the implementation of NAPHS activities.

- 8. Urgent attention should be given to the development of a strategy for IHR workforce development.
- 9. Develop annual operational plans for implementation of prioritized actions in the NAPHS with a robust monitoring and evaluation mechanism to ensure timely and effective implementation of planned activities and milestones.
- 10. Document and share lessons learnt and best practices on IHR implementation in complex settings.

B. WCO and In-Country Partners

- 1. Provide leadership, technical guidance, assistance, and support to the finalization and phased implementation of the NAPHS.
- 2. Support the government to implement all the above recommendations.
- 3. Support the engagement of a full-time technical officer (consultant) to support the NAPHS finalization, launch, and inception of phased implementation.
- 4. Support development of annual operational plans for implementation of prioritized actions.
- 5. Support the development of a detailed and well laid out monitoring and evaluation plan to track the progress of the NAPHS by a full-time technical officer (consultant).
- 6. Advocate with national authorities for domestic financing of NAPHS activities through relevant entities and line ministries.
- 7. Support coordinated for joint review of implementation of progress with the leadership of the review.

C. WHO and international Partners:

- 1. Advocate for and facilitate strategic partnership opportunities for international financing.
- 2. Provide leadership, technical guidance, assistance, and support to the in-country entities in their support to the government's various line ministries and entities.

- 3. Advocate and provide support to the in-country entities for the implementation and monitoring of the NAPHS.
- 4. Provide technical guidance and assistance to help harmonize the implementation of the various initiatives, plans and tools.
- 5. Support coordinated for joint review of NAPHS implementation and progress on IHR core capacities with the leadership of the national authorities.
- 6. Provide technical support for IHR and DRM implementation to strengthen Emergency Preparedness and Response (EPR).

COMPONENTS OF THE NAPHS

PREVENT

NATIONAL LEGISLATION, POLICY AND FINANCING

Target

Adequate legal framework for States Parties to support and enable the implementation of all their obligations, and rights to comply with and implement the IHR (2005). New or modified legislation in some States Parties for implementation of the IHR (2005). Where new or revised legislation may not be specifically required under the State Party's legal system, States may revise some legislation, regulations or other instruments to facilitate their implementation and maintenance in a more efficient, effective or beneficial manner. States Parties ensure provision of adequate funding for IHR implementation through the national budget or other mechanism.

South Sudan Level of Capabilities

The country has legislation and several regulations and administrative documents that govern public health surveillance and response. They include: The Transitional Constitution of the Republic of South Sudan (2011), the National Health Policy (2016-2026); the draft National Health Sector Development Plan (2017-2021); the Environmental Policy (2015-2025); the Drug and Food Control Authority Act (2012); National Disaster Risk Management Policy (2016); the Petroleum Act (2012); the HIV/AIDS Commission Act (2006); the General Medical Council Provisional Order (2014) and the Civil Aviation Authority Act (2012). However, the launch of other relevant acts such as the Public Health and Animal Health bills have been delayed at the Ministry of Justice and Constitutional Affairs, and therefore need to be expedited. The country carried out a desk review on available legislation and regulations for IHR (2005) implementation

in December 2015. It was however noted that a more comprehensive review must be done to inform the review of key legislation.

Although the government has provided financial support to recent outbreaks of cholera, information on dedicated government budget for emergencies was not readily available

Activity	Responsible Authority	Budget in US Dollars		
	Objective 1: To ensure adequate administrative and statutory provisions are available for			
implementation of IHR by 2022				
1.1 One day seminar for 30 Stakeholders from relevant authority to sensitize on IHR and develop a road map for passing the pending bills.	Ministry of Justice	1840		
1.2 Conduct annual meetings to review implementation of the road map for passing the pending bill	Ministry of Justice	9200		
2.1 one day meeting with 40 stakeholders' representatives to sensitize on the updated laws	Ministry of Justice	4740		
2.2 Dispatch the sensitization teams to 32+1 states	Ministry of Justice	133600		
2.2 conduct sensitization training in 3 zones	Ministry of Justice	8700		
3.1 Conduct One national annual meeting with neighboring countries to review, validate and monitor implementation of the MOUs	Ministry of Health	17650		
3.1 Conduct Four 3 subnational meetings with neighboring countries to review, validate and monitor implementation of the MOUs	Ministry of Health	162700		
3.2 Form joint committees to monitor implementation of MOUs and agreed guidelines	Ministry of Health	378000		
4.1 Two-day meeting by line sectors (Health, Agriculture, Livestock &Fisheries, Environment, Interior, Justice etc.) to finalize the budget Line for IHR and submit to MOF for fund approval and allocation	Ministry of Justice	21700		
4.2 Convene a meeting with Ministry of Finance & Member of Parliament to present the consolidated IHR budget	Ministry of Justice	24100		

Objective 2. Comprehensive desk review of national laws touching implemented	on IHR (2005)	
Conduct a one-day meeting of stakeholders (30 participants) to identify Internal and external IHR funders	Ministry of Justice	5520
1.2 Conduct 3 days' workshop for 30 participants	Ministry of Justice	44670
1.1 Hiring of 2 medico-legal consultants (1 International) to conduct a desk review of the existing laws and facilitate the 3 days' workshop (Three-month Consultancy)	Ministry of Health	61320
1.1 Hiring of 2 medico-legal consultants (1 national) to conduct a desk review of the existing laws and facilitate the 3 days' workshop (Three-month Consultancy)	Ministry of Health	41040
Specialized Committee members (10) within National Parliament to convene and come up with bill to be enacted by the parliament	Ministry of Justice	10500
1.2 Conduct biannual meetings to follow up on progress of the legislative amendments (hall hire for one day, DSA, Meals, Transport, Facilitation)	Ministry of Justice	153390
1.3 Conduct consultative Five (5) meetings (2 national & 3 subnational) to solicit stakeholder opinions on the proposed legislative amendments (hall hire for one day, DSA, Meals, Transport, Facilitation)	Ministry of Justice	5240
1.3 Conduct consultative Five (5) meetings (2 national & 3 subnational) to solicit stakeholder opinions on the proposed legislative amendments (hall hire for one day, DSA, Meals, Transport,	Ministry of Health	74730
1.4 Typing, designing and printing of reviewed laws	Ministry of Justice	3300
To review all Bills (Pending, Passed and Required)	Ministry of Justice	2535
To conduct 1-day stakeholders advocacy workshop to review bill status,	Ministry of Justice	10230
Printing of the ready or passed Bill (Public Health Bill, Drugs and food control authority acts, National Health Policy, Policy framework and strategic plans 2012-2016, Revised Technical guideline-IDSR 2013, Disaster Risk Management Policy, Boma Health Initiative Bill, National Health Sector Strategic Plan 2017-2021, Assessment of Public Health Core Capacities for IHR 2015)	Ministry of Justice	500

Sensitize 9 specialized committees of the different pending bills mentioned above to lobby for enactment of the bills	Ministry of Justice	
Conduct a special sitting of National Legislative Assembly to enact pending laws	Ministry of	83400
	Cabinet Affairs	
Printing of the DRM Policy	Ministry of	82500
	Justice	
Dissemination of DRM policy to 33 State	Ministry of	22176
	Justice	
Training for Disseminators	Ministry of	109888
	Justice	

IHR COORDINATION, COMMUNICATION AND ADVOCACY

TAGETS

Multi sectoral/multidisciplinary approaches through national partnerships that allow efficient, alert and responsive systems for effective implementation of the IHR (2005). Coordinate nationwide resources, including sustainable functioning of a national IHR focal point – a national center for IHR (2005) communications which is a key requisite for IHR (2005) implementation – that is always accessible.

States Parties provide WHO with contact details of national IHR focal points, continuously update and annually confirm them.

South Sudan level of capabilities

The Ministry of Health has designated the Directorate of International Health and Coordination (IH&C) to oversee IHR implementation. The Directorate is yet to be staffed and provided with the requisite logistics for it to be fully functional. Access to the National IHR Focal Point (NFP) is thus limited. There is an OIE delegate, however, there are no IHR focal persons for food safety and relevant sectors such as security agencies, immigration, chemical events, and radiation emergencies. There exists a National Emergency Preparedness and Response (EP&R) taskforce that holds a weekly meeting and predominately oversees activities related to infectious diseases. The membership of the taskforce does not include all key stakeholders and varies based on type of disease outbreak or event. The National IDSR program currently collects and analyses alerts and disease outbreaks and provides a platform for information sharing for some potential epidemic-prone diseases. The country has been able to carry out an After-Action Review after a cholera outbreak and provided feedback to stakeholders. Generally, there is no formalized structure for coordination and communication between relevant ministries and other stakeholders on events of national and international interest. This gap often leads to duplication of efforts and delayed response.

Activity	Responsible Authority	Budget in US Dollars	
Objective: To strengthen IHR NFP for effective coordination, communication and advocacy			
1.1 Formation of IHR coordination and communication committee at national level (Each from relevant stakeholders), develop ToRs and Orient Committee members (2-days meeting involving 40 participants)	Ministry of Health	34436	
1.2 Conduct annual meeting of the IHR C&C Committee to address any national or international health concern (1-day meeting involving 40 participants)	Ministry of Health	148305	
2.1 Develop TORs and recruitment two (2) Public Health Officers to support the IHR NFP	Ministry of Health	240000	
2.2 Adapt; validate; and launch the SOPs for the IHR NFP (2-days meeting involving 30 participants to review and adapt the IHR NFP SOPs)	Ministry of Health	12500	
2.3 Print and disseminate the IHR NFP SOPs	Ministry of Health	1515	
2.4 Establish and assign offices for IHR as department (headed by a Director) under International Health & Coordination Directorate in MOH	Ministry of Health	10000	
3.1 Train the IHR NFP and support staff on the national IHR NFP SOPs (2-days meeting for 20 people [IHR NFP and sectoral IHR focal points])	Ministry of Health	16100	
3.2 Procure office equipment and stationeries for IHR department	Ministry of Health	37250	
Operational costs (internet monthly access)	Ministry of Health	30000	
4.1 Develop TOR for IHR NFP TWG and one-day meeting to designate and sensitize the TWG members (one day meeting for 40 participants).	Ministry of Health	29661	
42 Conduct monthly meetings of the IHR TWG meetings at PHEOC to review ongoing PH events; and guide the NFP functions and report back to the IHR committee.	Ministry of Health	53700	
2.2 Adapt; validate; and launch the SOPs for the IHR NFP (2-days meeting involving 30 participants to review and adapt the IHR NFP SOPs)	Ministry of Health		

ANTIMICROBIAL RESISTANCE

TARGETS

Support work coordinated by FAO, OIE and WHO to develop an integrated global package of activities to combat antimicrobial resistance, spanning human, animal, agricultural, food and environmental aspects (i.e. a One Health approach). Each country has: (i) its own national comprehensive plan to combat antimicrobial resistance; (ii) strengthened surveillance and laboratory capacity at the national and international levels following international standards developed as per the framework of the Global Action Plan; and (iii) improved conservation of existing treatments and collaboration to support the sustainable development of new antibiotics, alternative treatments, preventive measures and rapid point-of-care diagnostics, including systems to preserve new antibiotics.

South Sudan level of capabilities

Antimicrobial resistance (AMR) is an issue of huge global importance and therefore strong actions must be undertaken by every country to control it. South Sudan currently has no AMR reference laboratory but has a designated NPHL in Juba that could be used for this function. There is no national plan for the detection and reporting of AMR pathogens and there are no Health Care Associated Infection (HCAI) sentinel sites.

Furthermore, there is no mention of AMR pathogens in the National Public Health Laboratory Strategic Plan 2010-2015. The National TB program has demonstrated capacity for the detection of rifampicin resistance, but this does not extend to any other priority pathogens. There is no surveillance for AMR in animal populations.

No antimicrobial stewardship plans exist, and neither are laws on appropriate prescription of antibiotics, thus making them easily available over the counter.

Activity	Responsible Authority/Budget holder	Budget in US Dollars
Objective 1: To establish a system for AMR detection		
1.1 One day planning meeting for 20 persons drawn from MOH		
National level, NPHLS, major hospitals (public & private) and	Ministry of Health	1310
Teaching Institutions to develop plan of action for AMR		
1.2 Hire a technical consultant for a period of 20 working days	Ministry of Health	20440
to support the development of the AMR plan of action		20440
1.2 Hire a technical consultant for a period of 3 months to	Ministry of Health	45.00
support the development of the AMR plan of action		4560

Activity	Responsible Authority/Budget holder	Budget in US Dollars
1.3 One Day validation meeting for 15 persons (6 Pax from		
three greater regions; Greater Bahr Ghazal, Greater Equatorial,	Ministry of Health	2707
Greater Upper Nile)		
1.4 Printing of validated AMR plan of action	Ministry of Health	224
1.5 Launching of AMR validated action plan high level meeting	Ministry of Health	15231
for 20 persons	Willistry Of Fleater	15251
1.6 Develop guidelines and SOPs on AMR prevention and	Ministry of Health	20440
control	Willistry Of Fleater	
1.7 Two Day Workshop to validate, launch and disseminate	Ministry of Health	18260
guidelines and SOPs on AMR prevention and control	Williastry of Fledicit	
1.9 Printing of 64 validated AMR Prevention and Control	Ministry of Health	448
guidelines and 64 SOPs (70 pages each)	Willistry Of Fleater	
2. 1 One Day meeting to develop, review and validate draft TOR	Ministry of Health	15231
for the AMR TWG	Willistry Of Fleater	15251
2.2 One Day quarterly meeting for AMR Prevention and Control	Ministry of Health	17800
TWG (20people). Refreshments and tea	Willistry Of Fleater	17800
3.1 Designation of selected laboratory as national AMR focal	Ministry of Health	0
laboratory (Secure official letter from the national MoH)	TVIIIISELY OF FICURE	
3.2 Designate one AMR Focal Person for each site (Juba, Wau,		124200
Malakal) in-consultation with line MoHs, refer to nominal roll	Ministry of Health	
public service Ministry of Labor for salary scale and grade		
3.4 Five (5) day AMR Testing Training for 15 Laboratory		
Technicians from NPHL, JTH, Military Hospital, Alsabah Children	Ministry of Health	46250
Hospital and the vet labs		
3.5 Hire national consultant for 60 working days to deliver		
bench mentorship during AMR Testing Training and	Ministry of Health	39280
implementation at the three sites (20 days per site)		
3.6 A one (1) day training for 20 participants to integrate AMR		
specimen management into the National specimen referral	Ministry of Health	17240
system		
4.1 Hire a consultant for one (1) month to support desk review	Ministry of Health	20440
of existing sources of AMR data	.viiiisti y Si i i cuitii	20440
4.2 One-day Planning meeting for 30 persons for survey to	Ministry of Health	4610
ascertain AMR prevalence (facilitated by the above consultant).	The state of the s	,010
5.1 Engage a consultant for one (1) month to incorporate AMR	Ministry of Health	20440
reporting into existing systems	·	20110
5.2 Two-day ToT training on DHIS2 AMR module	Ministry of Health	6932

Activity	Responsible Authority/Budget holder	Budget in US Dollars
1.1 Conduct a Needs Assessment and develop tools for AMR Surveillance	Ministry of Health	0
1.2 Develop tools for AMR Surveillance for two days and piloting for One day within Juba, then another two days after to finalize the tools	NPHL	0
1.3 Print, launch and disseminate the reporting form	Ministry of Health	0
1.4 Collect and analyze data for AMR surveillance, 5 days TOT training in Juba on data collection 4 from Juba, 3 Malakal and 3 Wau. Cascade the training to the state levels	Ministry of Health	0
2.1 5 Batches of 5-Day residential training on surveillance for program officers	Ministry of Health	19754
4.1 One Day planning meeting on awareness creation for AMR (20 persons)	Ministry of Health	15602
4.2 Engage consultant to develop information, communication and education (IEC) materials for print and electronic media	Ministry of Health	20440
Develop an IPC policy, guideline and action plans	Ministry of Health	20440
4.4. Identify and nominate a focal person for IPC at National and Health facility level in the former 10 hubs		0
4.5. Create an IPC National steering Committee for national and state level in the former 10 hubs		0
One day meeting of steering committee	Ministry of Health	30462
Objective 2: Establish surveillance systems to identify and monitor AMR pathogens		
1.1 Conduct a Needs Assessment and develop tools for AMR Surveillance	Ministry of Health	-
1.2 Develop tools for AMR Surveillance for two days and piloting for One day within Juba, then another two days after to finalize the tools	Ministry of Health	-
1.3 Print, launch and disseminate the reporting form	Ministry of Health	-
1.4 Collect and analyze data for AMR surveillance, 5 days TOT training in Juba on data collection 4 from Juba, 3 Malakal and 3 Wau. Cascade the training to the state levels	Ministry of Health	-
2.1 5 Batches of 5-Day residential training on surveillance for program officers	Ministry of Health	19,754
4.1 One Day planning meeting on awareness creation for AMR (20 persons)	Ministry of Health	15,602
4.2 Engage consultant to develop information, communication and education (IEC) materials for print and electronic media	Ministry of Health	20,440
Develop an IPC policy, guideline and action plans	Ministry of Health	20,440

Activity	Responsible Authority/Budget holder	Budget in US Dollars
4.4. Identify and nominate a focal person for IPC at National and Health facility level in the former 10 hubs	Ministry of Health	-
4.5. Create an IPC National steering Committee for national and state level in the former 10 hubs	Ministry of Health	-
One day meeting of steering committee	Ministry of Health	15,231
4.3 Print and disseminate IECs	Ministry of Health	4,300
Objective 3: Develop/establish and institutionalize a national in	fection prevention a	nd control (IPC)
programme.	ı	
1.1 Engage consultant for national IPC programme development	Ministry of Health	20440
1.2 one (1) Day Planning meeting for IPC programme development (20 persons)	Ministry of Health	112340
1.3 one (1) day workshop for National IPC Programme development (20 participants)	Ministry of Health	11234
1.4 Two (2) Day validation and dissemination of National IPC programme policy document 32+1 states	Ministry of Health	21289
1.5 Print National IPC program policy document and guidelines	Ministry of Health	448
Periodic (annual) IPC health facility assessments using the standard WHO assessment tool (Quarterly visits will be undertaken by a team of 10 National IPC experts who will travel to the states to work with the state IPC team for 7-10days where they will visit and conduct assessments in a representative sample of health facilities stratified by level (i.e. state hospital; county hospital; PHCC; PHCU	Ministry of Health	8610
1.6 One (1) day meeting to disseminate National IPC program policy document and guidelines (33 participants)	Ministry of Health	15231
2.1 Designate IPC focal persons in all healthcare facilities and create a database of all IPC focal persons with contact details (e mail address and phone numbers)	Ministry of Health	0
3.1 Conduct quarterly field visits to assess the burden of HCAI 4 pax per state in 4 8-hospitals	Ministry of Health	57856
3.2 Disseminate the result from the assessment on the burden	Ministry of Health	0
4.1 Conduct annual review meetings on HCAI for 2 days between the national and state levels for 20 pax; hire a hall and refreshments	Ministry of Health	73040
4.2 Conduct annual three days consultative meeting between MoH, ministry of Labor, MLF, Ministry of Higher Education, Ministry of Justice and Parliamentary Affairs for 33 participants to establish occupational health program for health workers		85156

Activity	Responsible Authority/Budget holder	Budget in US Dollars
Objective 4: To establish antimicrobial resistance stewardship	ip to promote appro	priate use of
antibiotics and monitoring		
Please refer to AMR policy, plans and guidelines not yet developed but is being plan and costed already	Ministry of Health	20,440
Hire the same consultant to put on a policy, and regulations on antibiotics use in human	Ministry of Health	11,234
Have annual 2 days meeting to review an update the guidelines on antibiotic use for 20 pax	Ministry of Health	11,234
Please refer to AMR policy, plans and guidelines not yet developed but is being plan and costed already	Ministry of Health	21,289
Use the guideline in the algorithm to include prescription consumption patterns in both human and animals by conducting joint monitoring supervisory field visits one health quarterly	Ministry of Health	448
Form a stewardship committee in health facilities level in the 10 former hubs	Ministry of Health	15,231
To carry out awareness and sensitization in the community level thru IEC materials and radio talk shows. (One health approach and physicians and Doctors)	Ministry of Health	-
To carry out awareness and sensitization in the community level thru IEC materials and radio talk shows. (One health approach and physicians and Doctors)	Ministry of Health	3,616
Quarterly review meetings in Malakal, Juba, and Wau 10 pax coming from each site	Ministry of Health	-
Periodic review (semiannual) meetings for the three sites of Malakal, Juba, and Wau	Ministry of Health	18,260
To carry out awareness and sensitization in the community level thru IEC materials and radio talk shows. (One health approach and physicians and Doctors)	Ministry of Health	21,289
To carry out awareness and sensitization in the community level thru IEC materials and radio talk shows. (One health approach and physicians and Doctors)	Ministry of Health	-
Quarterly review meetings in Malakal, Juba, and Wau 10 pax coming from each site	Ministry of Health	20,440
Periodic review (semiannual) meetings for the three sites of Malakal, Juba, and Wau	Ministry of Health	21,289

ZOONOTIC DISEASES

TARGET

Adopted measured behaviors, policies and/or practices that minimize the transmission of zoonotic diseases from animals into human populations.

South Sudan level of capabilities

The country recognizes that zoonotic diseases contribute significantly to the burden of human disease in the region and that South Sudan is not immune to the impact of zoonotic diseases on human health. In this regard the country has identified zoonotic diseases of the greatest public health concern, which include Ebola, Yellow Fever, cutaneous anthrax, brucellosis, bovine TB, highly pathogenic avian influenza (HPAI), rabies and Rift Valley Fever.

South Sudan has a large animal population, including domestic, commercial and wild animals, although a census of animal populations was last performed in 2007. The Ministry of Livestock and Fisheries has developed an animal health policy and strategic plan (2012-2016), however, the timeframe of this document has elapsed. A revised/updated document was not available at the time of the evaluation.

Surveillance systems are in place for detection and reporting of priority zoonotic diseases that pose the greatest risk to humans, through the IDSR, and animal health through the Animal Epidemiology Disease Information System. Comprehensive outbreak guidelines and reporting forms are available for zoonotic disease outbreaks. The country is yet to establish a One Health policy. Currently the human and animal health sectors are not coordinated with interactions and operations happening on an ad hoc basis.

Activity	Responsible Authority	Budget in US Dollars
Objective 1: Strengthen an integrated zoonotic disease surv	eillance system for prior	rity zoonotic
pathogens of public health co	ncern	
Develop and launch one health policy for zoonotic diseases in	Ministry of Livestock	20,440
South Sudan	and Fisheries	
Prepare OH Advocacy and Sensitization Materials (6	Ministry of Livestock	3.550
participants, 2facilitators for 3 days meeting)	and Fisheries	3,550
Print and disseminate copies of One Health Advocacy	Ministry of Livestock	2 000
materials to all counties	and Fisheries	3,000
1.3 Conduct stakeholder workshop for developing National	Ministry of Livestock	
One Health Strategic plan draft (50 participants, 4 facilitators	Ministry of Livestock and Fisheries	62,406
for 5 days)	and risheries	

Activity	Responsible Authority	Budget in US Dollars
1.4 Conduct workshop to finetune the National One Health Strategic Plan (10 participants,2 facilitators for 3days).	Ministry of Livestock and Fisheries	2,440
1.5. Hire 1 consultant for 21 days to develop and operationalize the National One Health Strategic plan	Ministry of Livestock and Fisheries	14,788
1.6. Validation workshop for 2 days for 50 participants	Ministry of Livestock and Fisheries	12,820
1.7. Print and disseminate copies of the National One Health Strategic plan for the states/counties	Ministry of Livestock and Fisheries	3,000
Train and deploy a multidisciplinary RRT to conduct a joint risk assessment for two days to prioritize zoonotic diseases and strengthen priority zoonotic disease surveillance at state and county levels (5 RRT members in each of the 32+1 states)	Ministry of Livestock and Fisheries	306,900
1.10 Orientation training of the One Health secretariat 5 personnel, 2 facilitators for 2 days	Ministry of Livestock and Fisheries	1,080
Conduct a Joint Risk Assessment to Prioritize zoonotic diseases for South Sudan	Ministry of Livestock and Fisheries	17,815
2.0. Conduct Workshop to draft the guidelines ,5days,20 participants and 2 facilitators	Ministry of Livestock and Fisheries	6,250
2.1. Two days Validation workshop ,30 participants	Ministry of Livestock and Fisheries	10,714
2.2. Printing and dissemination 100 copies of the guidelines	Ministry of Livestock and Fisheries	1,000
3.1 Conduct meeting with National & States Laboratory Directors general from relevant ministries (2 days ,40 participants & 2 facilitators.	Ministry of Livestock and Fisheries	28,250
3.2. Launching the National Laboratory Network (200 persons)	Ministry of Livestock and Fisheries	9,530
4.1 Conduct awareness programmes on TV, radio (TV airtime,	Ministry of Livestock and Fisheries	3840
4.2 Conduct annual awareness meetings with the community leaders at 32+1 States	Ministry of Livestock and Fisheries	17,392
Objective 2: Increase animal health workforce capacity at na Counties levels by 2024		st 80 percent
A one-day workshop that will map a multidisciplinary Rapid Response Team from relevant sectors that will support joint response, 32 participants.	Ministry of Livestock and Fisheries	1,996

Activity	Responsible Authority	Budget in US Dollars
Conduct training FELTP for the national level staffs (10 national staffs) and engage a consultant for the period of the trainings	Ministry of Livestock and Fisheries	1,064
Conduct training FELTP for the national level staffs (10 national staffs) or engage a consultant for the period of the trainings	Ministry of Livestock and Fisheries	4,000
1.1. Train Human and Animal Health frontline workers on FELTP basic level (64 Staffs)	Ministry of Livestock and Fisheries	16,150
1.2. Train Human and Animal Health workers FELTP intermediate level (32 Staffs)	Ministry of Livestock and Fisheries	31,122
1.3. Train Human and Animal Health workers on FELTP advanced level (20 Staffs)	Ministry of Livestock and Fisheries	6,250
2.1 Procure laboratory supplies and equipment	Ministry of Livestock and Fisheries	500,000
2.2 Training of laboratory personnel on use calibration and maintenance of equipment for 2 days, 20 participants, 2 facilitators	Ministry of Livestock and Fisheries	2,620
2.3 Training of laboratory technician on diagnosis/detection of zoonotic pathogens for 3 days, 20 participants, 2 facilitators	Ministry of Livestock and Fisheries	3,530
3.2 Consultants tender advert	Ministry of Livestock and Fisheries	5,000
3.3 Hire Two National and Two International consultants for thirty (30) days to develop a master plan for the construction of Veterinary Infrastructures, 30 participants.	Ministry of Livestock and Fisheries	8,912
3.4. Two days validation workshop of draft of the master plan for 40 participants both residents and non-residents	Ministry of Livestock and Fisheries	6,556
3.5. Submission of the validated draft to the council of ministers for approval	Ministry of Livestock and Fisheries	-
Objective 3: Establish a multi-sectorial mechanism for coo zoonotic diseases at national and s		itbreaks of
1.1 Conduct a one-day top level management meeting to	Ministry of Livestock	
establish a reporting system in the animal health sector.	and Fisheries	3,050
1.2 Install DHIS2 database for information storage and management system in animal health laboratory	Ministry of Livestock and Fisheries	23,816
Setting up a coordination office for a veterinary focal point and recruiting a focal person with MoH who will engage with the relevant line sectors in zoonotic diseases	Ministry of Livestock and Fisheries	240,000

Activity	Responsible Authority	Budget in US Dollars
Procure office furniture and IT equipment	Ministry of Livestock and Fisheries	9,500
Setting up a coordination office for a veterinary focal point and recruiting a focal person with MoH who will engage with the relevant line sectors in zoonotic diseases	Ministry of Health	120,000

FOOD SAFETY

TARGET

Surveillance and response capacity among States Parties for food- and water-borne disease risks or events ensured by strengthening effective communication and collaboration among the sectors responsible for food safety, and safe water and sanitation.

South Sudan level of capabilities

The regulatory system for food safety in the Republic of South Sudan is in the developing stages, with political will and commitment of the Government of South Sudan demonstrated by its membership of the CODEX Alimentarius. A CODEX Committee is in existence, with membership from different sectors and a vision to align with CODEX guidelines, standards and recommendations for food safety.

The stakeholders identified and included in the committee include the MOH, Drug and Food Control Authority, Ministry of Agriculture and Food Security, Ministry of Livestock and Fisheries, Ministry of Trade and Industries, Ministry of Environment and Forestry, Office of the President for National Security, and the National Bureau of Standards. Other stakeholders include multilateral agencies like FAO and WHO. Focal points across different sectors exist, and this multisectoral approach has the potential of driving the vision of ensuring standards and protecting the public from unsafe food.

Relevant legislation exists including the Drug and Food Control Act, 2012, which provides a legal framework for the regulation of food and drug safety. There are ongoing plans to develop national standards to guide implementation of food safety procedures. South Sudan applies the IDSR system to monitor, identify and investigate food-borne illnesses specifically during food related outbreak of disease. There is significant capacity in the use of IDSR among healthcare workers and public health experts.

Operational links between different focal points and sectors are lacking, leaving no formal mechanism for multi-sectoral collaboration and coordination. Food safety related events are not documented, and there is no information-sharing system in place. These are issues that can and should be addressed quickly to improve coordination and food safety.

Activity	Responsible Authority	Budget in US Dollars
Objective 1: To develop a National Food Safety Policy and S	Strategy by end of Dec	ember 2021
Convene a multi-sectoral stakeholders consultative meeting (surveillance, response, food safety, animal health and laboratories) with WASH Sector inclusive to form a TWG - one day 20 participants	Ministry of Agriculture and Forestry	4,360
Develop TOR for TWG with clearly define roles and responsibilities - One day meeting	Ministry of Agriculture and Forestry	275
Develop and review annual action plan in collaboration with partners and relevant sectors including WASH - One day meeting - (30 participants)	Ministry of Agriculture and Forestry	6950
Organize quarterly TWG coordination meetings - one meeting per quarter X 4 quarters for 5 years	Ministry of Agriculture and Forestry	4000
Organize quarterly TWG coordination meetings at State level (32+1) - one meeting per quarter X 4 quarters for 5 years	Ministry of Agriculture and Forestry	4000
Convene a capacity-building workshop for focal points in the various sectors and other relevant stakeholders on prevention and response to Food safety/foodborne disease outbreaks for 2 days, 20 participants	Ministry of Health	9800
Develop a national check list to monitor food safety events - one day meeting of TWG and partners - 20 participants	Ministry of Agriculture and Forestry	160
Identify food safety focal points in all the 32+1 states and train them on the use of the monitoring checklist - (2 staff per County x 80 Counties = 160 Participants) - 2 days training (40 persons per batch in each of the state hubs)	Ministry of Agriculture and Forestry	158,100
Conduct monitoring and registration of food premises/slaughterhouses and distribution points in the Counties on quarterly basis- 2 participants per County	Ministry of Livestock and Fisheries	3,000
Recruit national consultant to support the development of national guidelines on food safety	Ministry of Agriculture and Forestry	7,560
Organize 2 days Consultative meeting to develop guidelines and one day validation meeting (30 participants for each meeting)	Ministry of Agriculture and Forestry	3,240

Activity	Responsible Authority	Budget in US Dollars
Print 140 copies of the guidelines and distribute to the Counties	Ministry of Agriculture and	14,000
Time 110 copies of the gardennes and distribute to the countries	Forestry	1 1,000
Hire a consultant for 3 months to develop the National Food	Ministry of	
Safety Policy and strategy	Agriculture and Forestry	40,120
Convene two state hubs consultative meetings for	Ministry of	
development of the policy and strategy 2 days for each meeting participants including 5 facilitators) - 40 participants for each	Agriculture and Forestry	30,340
Conduct Validation meetings (one for the policy and another for the strategy ([40 participants - one day each	Ministry of Agriculture and Forestry	1,770
Adopt Draft Policy - through parliamentary process	Ministry of Cabinet Affairs	-
Print and disseminate 1400 copies each of the Policy and Strategy on Food Safety	Ministry of Agriculture and Forestry	14,000
Organize high level awareness raising consultative meeting with policy makers (breakfast meeting) - 100 participants	Ministry of Agriculture and Forestry	27,826
Hire a national consultant to support the develop IEC/BCC materials on Food Safety	Ministry of Agriculture and Forestry	7,560
Field test to validate the IEC/BCC materials - 5 days (10 people in 5 locations in the counties)	Ministry of Agriculture and Forestry	4,280
Conduct validation meeting (one day - 40 participants)	Ministry of Agriculture and Forestry	1,770
Print and disseminate 5000 of IEC/BCC materials	Ministry of Agriculture and Forestry	17,500
Roll out the policy and plan to stakeholders at the State hubs Hold dissemination meetings for 200 participants in each State Hub/Counties: one day meeting	Ministry of Agriculture and Forestry	98604
Develop two Jingles on food safety - Hire consultants for one month	Ministry of Agriculture and Forestry	6384

Activity	Responsible	Budget in US
,	Authority	Dollars
Produce and disseminate/airing jingles in all the 10 hubs across	Ministry of	
the Country	Agriculture and	53200
the Country	Forestry	
Produce and disseminate /airing lingles in all the 10 hubs across	Ministry of	
Produce and disseminate/airing jingles in all the 10 hubs across the Country	Agriculture and	241200
	Forestry	
Organize quarterly radio and television programmes/talk shows	Ministry of	
	Agriculture and	112000
(state radios & TVs)	Forestry	
Organiza guartarly radio and talevision talk shows (at national	Ministry of	
Organize quarterly radio and television talk shows (at national	Agriculture and	0
radio and national TV)	Forestry	

BIOSAFETY AND BIOSECURITY

TARGET

A whole-of-government national biosafety and biosecurity system with especially dangerous pathogens identified, held, secured and monitored in a minimal number of facilities according to best practices; biological risk management training and educational outreach conducted to promote a shared culture of responsibility, reduce dual-use risks, mitigate biological proliferation and deliberate use threats, and ensure safe transfer of biological agents; and country-specific biosafety and biosecurity legislation, laboratory licensing and pathogen control measures in place as appropriate.

South Sudan level of capabilities

Capacity in the area of biosafety and biosecurity in South Sudan is generally weak. Currently there is no specific training on biosafety or biosecurity conducted in the country, however Infection Prevention and Control training was conducted in relation to the Ebola preparedness plan. South Sudan does not have biosafety and biosecurity systems for human, animal and agriculture facilities in place and there are no national guidelines or an oversight mechanism in the country. Training on biological risk management is planned to be rolled out in all regions of South Sudan but as yet has not been implemented. The Laboratory Safety Manual, which is still in draft form, is a comprehensive document and its completion would build capacity in this area.

Activity	Responsible	Budget in
	Authority	US Dollars
Objective 1: To develop legal framework for biosafety and biosecu	ırity.	
1.1 Formation of technical working group (5 members including		
Ministry of Higher Education, MLF, MoA & MoH); TWG meeting	Ministry of Health	_
of 5 participants for 2 days to come up with list of pathogens and	IVIIIISTI Y OT TICATOR	
toxins of security concern		
1.2 Select 2 experts to visit human, agriculture and animal	Ministry of Health	1,652
laboratories that handle pathogens	Willingtry of freatti	1,032
2.1 Hire 2 expert to conduct need assessment for 1 month	Ministry of Health	20,440
4.1 Conduct workshop to develop a draft of legal and regulatory		
framework on Biosafety and biosecurity (25 participants for 5	Ministry of Justice	22,247
days facilitated by 2 experts)		
4.2 Validation of draft document by MoJ, MoH, MoHE MLF and	Ministry of Justice	9,460
Agriculture and 30 participants for 2 days	Willistry of Justice	9,460
	NMOH, NMOJ and	
4.3 Enaction of the draft document by the parliament	Drugs and food	-
	control	
5.1 Identify 5 Monitoring teams (2 members each) to be dispatch	Ministry of Health	40,880
to various states to oversee the implementation progress	Willistry of Health	40,880
5.2 Conduct refresher training for 10 participants (Monitoring	Ministry of Health	21,747
teams) for 2 days on monitoring tools	IVIIIIISTI y OI TIEAITII	21,747
3.1 Review existing curricula of selected higher learning		
institutions and incorporate topics of biosafety and biosecurity	Ministry of Health	12,660
for 2 days, 20 participants		
6.1 Form national and States Task forces (1 representative from		
each stakeholder) to convene at respective locations twice a	Ministry of Health	4,450
month to share information on biosafety and biosecurity		
6.2 Disseminate shared information to respective decision makers	Ministry of Health	13,920
at higher levels	Willingtry of Health	13,320
1.2 Establish on site mentorship for 20 trainees on lab bio safety	Ministry of Health	93120
and bio security for 2 weeks per site (Juba, Wau and Malakal)	IVIIIIISTI y OI TIEAITII	93120
3.1 Construct and commission 3 regional biobanks	Ministry of Health	750000
3.2 Construct a waste area to enhance on site management	Ministry of Health	
biological waste adequately to improve bio safety and bio		84000
security in Juba, Wau and Malakal		
procurements of biohazards waste 40liters color coded bins (Red,	Ministry of Health	
Yellow and Black), waste bags medium, sharp container		28075
disposable,		
recruit one Bio safety personal each for Juba, Wau and Malakal	Ministry of Health	360000

Activity	Responsible Authority	Budget in US Dollars
conduct 3 days specialized training to waste managers on		
Biohazard waste handling , treatment and final disposal at state	Ministry of Health	1431
level		
Enroll the bio safety focal persons on 2 months online bio safety	Ministry of Hoalth	0
and bio security training	Ministry of Health	0
procure 2 kit of bio safety and bio security cold chain equipment	Ministry of Health	54000
per site to enhance specimens storage	willistry of nearth	34000

IMMUNIZATION

TARGETS

A national vaccine delivery system – with nationwide reach, effective distributions, access for marginalized populations, adequate cold chain and ongoing quality control – that can respond to new disease threats.

South Sudan level of capabilities

The National EPI programme in South Sudan is responsible for the implementation and management of immunization activities, which is guided by the Comprehensive Multi-Year Plan for Immunization. Despite security challenges, there is a strong commitment towards improving coverage and ensuring access to vaccines. Efforts are ongoing by the government to expand cold chain management, and these efforts are being supported by Gavi— through the Cold Chain Equipment Optimization Plan. Capacity building for healthcare workers on immunization and provision of critical infrastructure, such as the provision of solar panels and refrigerators to ensure effective cold chain management are an integral part of this plan.

The Republic of South Sudan has an established cholera vaccines working group, with cholera vaccines being delivered during humanitarian emergencies and through campaigns to vulnerable populations. This initiative has led to improved protection of vulnerable groups especially the internally displaced persons living in camps.

The South Sudanese EPI programme has the buy in of several partners including WHO, UNICEF, CDC, Gavi, Bill and Melinda Gates Foundation, the Health Pooled Fund and IMA World. The government collaborates with these partners to ensure ownership and sustainability of programmes.

Despite challenges with routine data collection related to overwhelmed health systems, the government of South Sudan supports periodic surveys and EPI reviews to ascertain the status of immunization in the country. Significant efforts have been made through information and logistics management, to ensure there is no stock out of vaccines at the national level. Still, stock outs do occur at regional levels especially in areas affected by conflicts.

Immunization coverage remains low at 34% (Republic of South Sudan EPI and Surveillance Review, September 2017) as the country is faced with challenges of inadequate funds and a high rate of attrition of trained immunization staff due to poor motivation. The presence of difficult terrain and conflicts also means that certain parts of the country are left out for significant periods without vaccines, as resources required like flights to transport vaccines are not readily available. Poor awareness at the community level of the benefits of immunization, remains a major challenge to the EPI programme in South Sudan.

However, the coverage for oral polio vaccination is over 70% since the polio national immunization days are well resourced and are conducted 4 times a year nationwide.

A mechanism has been put in place to ensure effective vaccine distribution, adequate cold chain and ample human resources are available.

Activity	Responsible Authority	Budget in US Dollars
Objective 1: To achieve and sustain at least 90% penta	_	
1. conduct mapping of health facilities in all Bomas, by 33 teams of 5 persons each (1 team per state) for 10 days	Ministry of Health	0
2.Conduct 4 batches of 3-day health facility micro-planning training for 40 healthcare workers	Ministry of Health	6676
3. Conduct 2-day health facility micro-planning meeting in 500 health facilities	Ministry of Health	323400
Quarterly review of EPI activities	Ministry of Health	57000
5. Engagement of a total of 1,716 volunteers - 500 for fixed sites, 500 for support outreach activities, 216 for mobile teams and 500 for OTP centers.	Ministry of Health	14771808
8. Two days meeting to develop integrated rapid response plan for 35 participants	Ministry of Health	9170
9. Engage 3 rapid response teams (supervisor, driver,Vaccinator, recorder, nutritionist, surveillance officer) for the33 states.	Ministry of Health	1696200
10. Provide stipends to M&E Officers in 32+1 states for data collation and reporting.	Ministry of Health	198000
11. County level Monthly 2-Day residential immunization program review meeting for 25 persons	Ministry of Health	96000
12. State level Quarterly 3-Day residential immunization program review meeting for 40 persons	Ministry of Health	302400
14. 1 Day planning meeting for SIA	Ministry of Health	64400
15. Conduct 4 rounds of NIDs annually		10400000
1. 1-Day planning meeting for the conduct of needs assessment for effective cold chain management for 40 participants		40800
2. Hire consultant to conduct needs assessment	RSS-MoH, SMoH	20440

A attacks.	Responsible	Budget in US	
Activity	Authority	Dollars	
3. Conduct of field work during needs assessment	RSS-MoH, SMoH	70080	
4. 4 batches of 3 Day residential training for 40 program			
managers and cold chain technicians at all levels on	Ministry of Health	117455	
implementing the Cold Chain Optimization and Contingency	Willingtry of Fleatti	117433	
Plan every year			
6. Provide DSA for 5 teams of 3 supervisors per state for 33	Ministry of Health	5890500	
states and 2 teams of 3 supervisors per county for 80 counties.	Willingtry of Fleatti	3830300	
5. 4 batches of 7-Day residential Middle Level Training for 40	Ministry of Health	289400	
EPI county supervisors every year	Willingtry of Fleatti	283400	
6. 25 batches 5-Day Immunization in Practice training for 40	Ministry of Health	2247795	
vaccinators every year	Willingtry of Fleatti	2247733	
Objective 2: To strengthen the capacity of District Health Mana	gement Teams for in	nproved vaccine	
access and delivery			
Conduct 12 batches of 5-Day residential training on supply	Ministry of Health	197540	
chain management for 40 persons annually	TVIIIISELY OF FICALET	137340	
Conduct 40 batches of 5-day residential training on Monitoring	Ministry of Health	57000	
and Evaluation for DHMTs and EPI officers	·		
Objective 3: Availability of annual vaccination program f	or at least 5 zoonotic	diseases	
Provide transportation for advocacy visit to stakeholders	Ministry of Health	197540	
Develop advocacy packs	Ministry of Health	57000	
Print advocacy packs	Ministry of Health	197540	
Refreshments for advocacy meetings	Ministry of Health	57000	
Engage consultant for 3 months to develop Livestock			
Immunization Program including Monitoring & Evaluation	Ministry of Health	197540	
framework			
5-Day residential workshop for review of draft LIP plan for 40	Ministry of Health	57000	
persons	Willingtry of Fleatti	37000	
2 Day residential workshop to validate LIP Plan (40	Ministry of Health	12,700	
participants)	TVIIIIISCI y OI FIEditii	12,700	

DETECT

NATIONAL LABORATORY SYSTEM

TARGET

Real-time bio surveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics.

South Sudan level of capabilities

Laboratory services in South Sudan operate in the Department of Diagnostic Services, which falls under the Directorate of Medical Services. This Directorate is overseen by the MoH, which provides the overarching leadership. There is one NPHL, four laboratories at national teaching hospitals, seven at state hospital level, 17 at county hospital level and 143 at primary health care centers. There is also a veterinary laboratory located in Juba.

The main reference laboratory in the country is the NPHL, which can perform tests for five out of 10 core tests, including HIV, TB, malaria, measles and cholera. However, only rapid diagnostic tests for HIV and malaria are available at peripheral facilities and all other testing must be referred to national or international level. For HIV and TB programmes, there are well-defined referral pathways, including MoUs with Kenya and Uganda for international referrals. However, samples for testing for IDSR priority diseases are transported to the NPHL on an ad hoc basis, utilizing NGO vehicles and United Nations Humanitarian Air Service flights as available. Recently a sample transport system using a boda boda (public transport system using motorcycles) has been piloted in Juba.

The diagnostic capability at NPHL is affected by frequent reagent stock outs. Capacity to perform classic techniques in microscopy and bacteriology needs development. The NPHL is enrolled in the SLMTA programme and is currently working towards accreditation

Activity	Responsible Authority	Budget in US Dollars
Objective 1: To expand lab capacity at the national human and animal reference laboratories in selected regional sites (Wau, Malakal, Rumbek, and Bentiu) to be able to conduct core tests.		
Conduct a 5 days' workshop for 33 participants at the national level to review the national action plan	Ministry of Health	65626
Conduct two TOT trainings (One human and one animal) for one week for 33 participants to train laboratory focal points in the national reference human and animal lab and selected regional sites (Wau, Malakal, Juba) to enable them to process samples for epidemic prone diseases especially cholera culture.	Ministry of Health	49426
Same above activity (No need for funding)	Ministry of Health	0

Activity	Responsible Authority	Budget in US Dollars
Conduct a workshop to establish the national human and animal laboratory TWG, develop TORs for the TWG; 33 participants and 3 facilitators for 3 days	Ministry of Health	23,675
Same above activity (No need for funding)	Ministry of Health	-
Recruit 2 consultant (International & National) to develop policy and standard for the supply chain and procurement processes (for acquiring necessary equipment, reagents and consumables) for 3 months. SOPS to include both animal health and human health	Ministry of Health	20,440
Identify 5 focal persons for lab need assessment at the national level and selected sites for both human and animal laboratories (one for each site)	Ministry of Health	21140
Conduct a refresher for influenza and Viral Hemorrhagic Fever - training of staff on sentinel surveillance for influenza, scale up the training to include VHFs and other viruses (PCR machine procured already for South Sudan	Ministry of Health	2350
Conduct a refresher for influenza and Viral Hemorrhagic Fever - training of staff on sentinel surveillance for influenza, scale up the training to include VHFs and other viruses (PCR machine procured already for South Sudan	Ministry of Health	300000
Procurement of standardized equipment for NPHL, WAU, Malakal and Juba Teaching Hospitals (3 Teaching hospital laboratories and 1 National Public Health Laboratory)	Ministry of Health	240000
Procurement of standardized reagents for NPHL, WAU, Malakal and Juba Teaching Hospitals (3 Teaching hospital laboratories and 1 National Public Health Laboratory)	Ministry of Health	50000
Procurement of culture media and reagents (antisera, biochemical test) for the laboratories at the selected sites; conduct trainings on culture at the selected sites	Ministry of Health	60000
Construct laboratories with capacities to conduct bacteriological testing and microbiological culturing in Wau; Malakal; and Yambio	Ministry of Health	750000
Procurement of standardized reagents for NPHL, WAU, Malakal and Juba Teaching Hospitals (3 Teaching hospital laboratories and 1 National Public Health Laboratory)	Ministry of Health	140000
Objective 3: To institute an effective system for collection, packag specimens	ing and transport o	of biological
Formation of technical working group (5 members including Ministry MLF, MoE, MoA & MoH) with agreed TOR to guide the implementation of specimen referral system	MoH/MLF/other relevant sectors	0

Activity	Responsible Authority	Budget in US Dollars
Recruit a consultant to do mapping of the laboratory referral system		
at all relevant sectors (Human and animal labs) across the country	MoH/MLF/other	0
for 30 days, followed by a lab networking meeting at the national	relevant sectors	0
level with all the laboratory stakeholders (33 participants)		
Hire 1 international consultant to develop a national guideline to	Ministry of	
regulate the appropriate packaging and referral system for a period	Health	40880
of one month	пеанн	
Hire 1 local consultant to develop a national guideline to regulate	Ministry of	
the appropriate packaging and referral system for a period of one month	Health	9120
Conduct five days' workshop to review and finalize the national		
guideline, SOPs and monitoring tools to regulate the appropriate	Ministry of	20400
packaging and referral system (18 participants for 5 days facilitated	Health	28480
by 2 experts)		
Conduct two days validation workshop for the national guideline,		
SOPs and monitoring tools to regulate the appropriate packaging	Ministry of	8976
and referral system (18 participants for 2 days facilitated by 2	Health	0370
experts)		
Printing of National Guidelines, SOPs, M&E tools, each document,	Ministry of	
3,5USD/ copy, SOP 500 copies @1,20USD/copy, Job aids posters	Health	5400
500 A3 size copies @ 3,5 USD/copy	ricardi	
Conduct five days TOT training for the state Lab focal point at the	Ministry of	28746
national level for 33 participants and 2 experts	Health	20740
Conduct 7 days on-site cascade training in 10 hubs each with 10	Ministry of	350500
participants	Health	330300
Sign agreement with a courier companies (public or private) for	MoH/MLF/other	0
specimen transportation from at least 85% of health facilities	relevant sectors	
Shipment from specimens from peripheral facilities to Regional and	Ministry of	
National Levels. Each package cost 25USD/per facility per week	Health	1950000
from 300 facilities	ricaidi	
Conduct a training for international laboratory focal point for both	Ministry of	
Human and animal health at the national level as per IATA	Health	0
standards for 33 participants for 5 days		
Procure courier services for national and international shipment of	Ministry of	600000
biological samples collected in South Sudan	Health	

Objective 4: To develop or acquire technologies to optimize POCT at all levels (human and animal health)

Activity	Responsible Authority	Budget in US Dollars
One day meeting to form the POCT technical working group (5 members including Ministry MLF, & MOH) with agreed upon TORs to guide the implementation of POCT	Ministry of Health	6640
Hire 1 international and 1 local consultant to develop a POCT national guideline, SOPs and M&E tools for 30days	Ministry of Health	20440
Conduct five days' workshop to review and finalize the national guideline, SOPs and monitoring tools for POCT (10 participants for 5 days facilitated by 2 experts)	Ministry of Health	17800
Conduct two days validation workshop for the national guideline, SOPs and monitoring tools for POCT implementation (10 participants for 2 days facilitated by 2 experts)	Ministry of Health	3704
Printing of National Guidelines, SOPs, M&E tools.	Ministry of Health	4200
Five days dissemination workshop for national guidelines (specimen referral, POCT and others relevant) for 33 participants and 2 national consultants	Ministry of Health	46926
Recruit 2 consultants (International & National) to establish the supply management system for point of use diagnostics for 1 month	MoH/MLF/other relevant sectors	0
Recruit 2 consultant (International & National) to develop an integrated syndromic and laboratory- based POCT algorithm for one month	MoH/MLF/other relevant sectors	0
Objective 5: Institute and operationalized a national quality assura		
environment and food safety including national human and anima	l laboratory Regula	atory Board
Conduct a 5 days' workshop for 33 participants to establish a National Accreditation Board for Testing & Calibration Laboratories (NABL) unit for quality assurance system for human, animal, environment and food safety. With 2 international facilitators from accredited labs and 4 national facilitators	Ministry of Health	130686
Same above activity (No need for funding)	MoH/MLF/other relevant sectors	0
Conduct training on the key elements of documentation, such as document format, authorization of document, issue and withdrawal procedures, document review and change, at the national and state level for 5 days, for 33 participants	Ministry of Health	47926
Train the NABL staff after establishing the board on NABL standards and procedure, etc. Each document should have ID No., name of controlling authority, period of retention, etc. for 33 participants for 5 days	Ministry of Health	47326

Activity	Responsible Authority	Budget in US Dollars
Hire 1 international consultant to develop to prepare QUALITY	Ministry of	F24F6
MANUAL as per ISO 15189 standards.	Health	52456
Conduct a workshop to review and update laboratory standard	Ministry of	0
Operating Procedure for 5 days, for 33 participants	Health	0
Conduct a workshop to prepare QUALITY MANUAL as per ISO 15189	Ministry of	26228
standards for 7 days for 33 participants	Health	20228
Identify regional/international standard reference laboratories for	MoH/MLF/other	0
quality control	relevant sectors	0
Recruit 2 consultants (International and national) for 30 days to		
establish standard laboratory infrastructure (Building, Equipment's, Biosafety units, Sample collection and transfer units, data collection tools and communication materials at the national human and animal laboratories and selected regional sites	Ministry of Health	40880
Hire one International and one national biomedical engineer to calibrate instruments / equipment as per the NABL ACCREDITED CALIBRATION standards for 30 days	Ministry of Health	40880
Train 4 national biomedical engineer to calibrate instruments / equipment as per the NABL ACCREDITED CALIBRATION standards for 6 months	MoH/MLF/other relevant sectors	0
Recruit 4 quality manager (Human, Animal, Food, Environment) to establish standard internal quality control to ascertain the status of the existing quality system and technical competence about NABL standards	Ministry of Health	828000
Recruitment of 3 biometric engineers for the national human and animal reference lab and selected regional sites (Wau, Malakal, Juba)	Ministry of Health	20440
Conduct 5 days' workshop for 33 participants both national and state, with 2 international and 4 national facilitators to develop SOPs on the use of laboratory information management systems	Ministry of Health	27305
Recruit 2 consultants (International & National) to develop and rollout a laboratory information management system to integrate laboratory data from all relevant sectors, need to buy the relevant software	Ministry of Health	40880
Bring the accreditations auditors from South Africa for one month to support facilities already enrolled in SLMTA to get accredited	Ministry of Health	40880

Objective 6: Establish a comprehensive legal and regulatory framework to direct and monitor the delivery of safe, quality laboratory services at all levels of the tier health laboratory system

Activity	Responsible Authority	Budget in US Dollars
Hire one international consultant to support establishment of laboratory council and Association guidelines and checklist laboratory services quality hand standard inspection for 30 days	Ministry of Health	20440
Same above activity (No need for funding)	MoH/MLF/other relevant sectors	0
Hire one consultant to support develop online platform for registration of laboratories and personnel for 30 working months	Ministry of Health	20440
Hire one consultant to support establishment of laboratory council and Association for 30 days	MoH/MLF/other relevant sectors	0
Conduct quarterly inspections of Laboratory services by a multi- disciplinary team of 10 members	Ministry of Health	77600

REALTIME SURVEILLANCE

TARGET

Strengthened foundational indicator- and event-based surveillance systems that can detect events of significance for public health, animal health and health security; improved communication and collaboration across sectors and between sub-national, national and international levels of authority regarding surveillance of events of public health significance; improved country and intermediate level regional capacity to analyze and link data from and between strengthened, real-time surveillance systems, including interoperable, interconnected electronic reporting systems. This system would include epidemiologic, clinical, laboratory, environmental testing, product safety and quality and bioinformatics data; and advancement in fulfilling the core capacity requirements for surveillance per the IHR and OIE standards.

South Sudan level of capabilities

The IDSR strategy has been implemented and is functional, with trained healthcare workers at 80% of the functional health facilities. Further, IDSR and epidemiological bulletins and cholera outbreak situation reports are produced weekly and shared with stakeholders. The country has identified 26 priority diseases for surveillance purposes, where IBS and EBS systems are functional and coordinated under the IDSR strategy. Syndromic surveillance is also conducted, under IDSR for several diseases and conditions including Acute Flaccid Paralysis, Acute Respiratory Illness, VHF, Acute Jaundice Syndrome, Acute Bloody Diarrhea, Acute Watery Diarrhea. The Early Warning Alert and Response Network (EWARN) is operational in areas with high internally displaced persons (IDPs). Indicator based surveillance (IBS) on 14 epidemic-prone diseases is performed in health facilities and reporting is done weekly. Event based surveillance (EBS) is being conducted but currently collects information on events reported through the formal reporting system. The current EBS systems should be expanded to integrate events from the informal reporting channels. The recently introduced Boma Health Initiative will enhance community-based surveillance and reporting.

Data analysis is mainly performed at the national and state levels while capacity is limited at lower levels of the health system. Two platforms are used for reporting and data analysis District Health Information Software (DHIS) 1.4 and Early Warning, Alert and Response System (EWARS), however these applications are not interoperable. Both papers based and electronic data reporting are in place based on the level of health system and

reporting forms capture surveillance, outbreak, and laboratory information.

Activity	Responsible Authority	Budget in US Dollars
Objective 1: Integrate and sustained animal and human health r	eal time surveillanc	e systems
IDSR revised strategy ToT at national level (SSO & EPR team), 40 participants for 5 days. This ToT is to be based on the 3rd Edition of the IDSR technical guidelines and cascading it thereafter to lower levels.	Ministry of Health	11,500
Train 32+1 state surveillance officers on IDSR strategy for 5 days (Modules on EWARS Reporting and EWARN components to be incorporated into the trainings)	Ministry of Health	29,168
Train 80 county surveillance officers on IDSR strategy for 5 days (Modules on EWARS Reporting and EWARN components to be incorporated into the trainings)	Ministry of Health	38500
Train 1700 health workers at facility level, on IDSR strategy for 5 days (Modules on EWARS Reporting and EWARN components to be incorporated into the trainings)	Ministry of Health	56100
Print and distribute IDSR tools and guidelines in all health facilities	Ministry of Health	25000
Conduct quarterly supportive supervisory visits by national level to the state level	Ministry of Health	311280
Conduct monthly supportive supervisory visits by State level to the county level	Ministry of Health	311280
Conduct monthly supportive supervisory visits by county level to the health facilities	Ministry of Health	29440
Conduct annual review meetings at National level facility	Ministry of Health	94910
conduct re-fresher training for32+1 (66) state (SSO & M&E) IDSR data managers at national level by national facilitators for 5 days	Ministry of Health	113188
Recruit an international consultant; to support the development of SOP and train staffs on human and animal EBS/EWARS for one month	Ministry of Health	20440
Conduct stakeholder engagement and validation meeting (MoH, MLF, Wildlife Tourism and Conservation and relevant partners) for 3 days at national level for 30 participants	Ministry of Health	24600
Review and validate the SOP on human and animal EBS after one year of implementation for 2 days for 30 participants	Ministry of Health	3380
Print and distribute SOPs on human and animal EBS on EWARS & DHIS2	Ministry of Health	20000
Conduct dissemination workshop on SOPs, guidelines and tools on animal and human EBS on EWARS and DHIS2 for two days for 40 participants	Ministry of Health	19490

Activity	Responsible Authority	Budget in US Dollars
Train state surveillance officers (32+1 from MoH, 32+1 from MLF) on human and animal EBS (EWARS&DHIS2) for 3 days for 70 participants	Ministry of Health	23740
Train county surveillance officers (80 from MoH, 80 from MLF) on human and animal EBS (EWARS &DHIS2) for 3 days	Ministry of Health	47480
Conduct cross border meeting for Surveillance Officers from MoH and MLF of neighboring countries for 3 days after every 6 months for 60 participants	Ministry of Health	62020
Establish 7 disease surveillance cross border human and animal surveillance at Nimule, Yei, Kapoeta, Renk, Wudkona, Aweil, Twic and 1 screening posts at international airports (Malakal) 1tent, - prefab setup, running costs - consumables	Ministry of Transport - (Civil Aviation)	56000
Establish 4 hotline communication system for human and animal surveillance (Livestock & Health)	Ministry of Health	60000
Share cross border surveillance data between neighboring countries	Ministry of Health	0
Establish a mechanism for information sharing between the sectors quarterly between human and animal sectors. Develop SOPs through multisectoral meetings	Ministry of Health	3,380
Recruit a consultant to evaluate the surveillance system for 30 days (a month)	Ministry of Health	20,440
Objective 2: Develop, integrate and maintain an interoperable, interconnected, electronic real-tire		nic real-time
reporting system, for public health and/or veterinary surveil	-	levels
Develop a common database for the ministries of health, Livestock and Fisheries by international consultant for one month	Ministry of Health	20,440
Re-assign a designated data manager for the common database for the ministries of health, Livestock and Fisheries	Ministry of Health	-
Train 20 national data managers on the use of the common database for the ministries of health, Livestock and Fisheries for 5 days after every 2 years	Ministry of Health	17250
Recruit a consultant to support upgrading DHIS 1 to DHIS 2	Ministry of Health	20440
Train data managers (national = 10, State =32+1,) on DHIS 2 for 5 days	Ministry of Health	32668
Train data managers (80 counties) on DHIS 2 for 5 days	Ministry of Health	20500
using the existing electronic reporting platform (EWARS and DHIS2) to strengthen real-time reporting by buying airtime, bundles, on the job trainings and replacement of the lost electronics.	Ministry of Health	60000

Activity	Responsible Authority	Budget in US Dollars
Training of surveillance and M&E officers in electronic reporting for	Ministry of	30750
5 days	Health	
Objective 3: Strengthen capacity for data analysis at	all levels by 2022	
Train data managers (national = 20, on data analysis surveillance	Ministry of	21000
system (National TOT)	Health	21000
Train data managers - State =66 on data analysis surveillance	Ministry of	86750
system	Health	80730
Train data managers County =160 on data analysis surveillance	Ministry of	131900
system	Health	131900
Procure computers for data managers (national = 20, State =64,	Ministry of	49500
County =160)	Health	49300
Objective 4: Enhance the performance of the syndromic survei	llance system and e	xpertise
Nationwide assessment/survey of syndromic surveillance system	Ministry of	1103520
(county level)	Health	1103320
Training/refresher training for (national = 20, State =64,	Ministry of	183432
surveillance officers in surveillance of critical syndromes	Health	103432
Training/refresher training for County =160) surveillance officers in	Ministry of	115500
surveillance of critical syndromes	Health	113300
Quarterly coordination meetings between zoonotic and human	Ministry of	26200
surveillance technical working groups for 20 people for 2 days	Health	20200
Quarterly joint supportive supervision visits under 1 health (MOH,	Ministry of	572520
MLF) from national staff at the County level	Health	372320
Community and event-based surveillance to be aligned to the BHI.	Ministry of	
A 5-day training on EBS/BHI targeting all Bomas from two high risks	Ministry of Health	31418
counties from all 10 former states.	пеанн	
Community and event-based surveillance to be aligned to the BHI.	Ministry of	
A 5-day training on EBS/BHI targeting all Bomas from two high risks	Ministry of Health	31418
counties from all 10 former states.	Health	

REPORTING

TARGET

Timely and accurate disease reporting according to WHO requirements and consistent coordination with FAO and OIE.

South Sudan Level of Capabilities

Currently the country is using the reporting mechanism prescribed in the IDSR technical guidelines for internal reporting from the community/facility level up to the national level, and IHR annex 2 for the NFP reporting to WHO. However, South Sudan needs to ensure the national system is fully developed to guide reporting to WHO, FAO, and OIE.

Further, South Sudan should embark on training more people to report potential PHEICs to WHO and OIE World Animal Health Information System (WAHIS). The National IHR focal point and OIE delegate are in place but there is no mechanism for sharing information. The NFPs should also have toolkits with best practices, model procedures, reporting templates, and training materials to facilitate rapid (within 24 hours) notification of potential PHEICs.

The IHR NFP is the directorate of International Health and Coordination in the MOH and there is an OIE delegate at the Ministry of Livestock and Fisheries. The OIE delegate was trained on the roles and responsibilities of WAHIS, data management and reporting. There is an MoU between the South Sudan Ministry of Livestock and Fisheries and the Ministry of Agriculture and Animal Industry and Fisheries of Uganda.

Activity	Responsible	Budget
	Authority	in US
		Dollars
Objective 1: Strengthen capacity to identify any potential PHEIC and report w	ithin 24 hours	to
WHO, FAO and OIE		
Identify and orient IHR Focal Points in relevant government		
institutions/Partners (MoH, MoJ, MHADM, MoCA, MLF, MoP, MoE, WHO,	Ministry of	3746
FAO,OIE) for IHR membership to coordinate and monitor the IHR activities	Health	3/40
implementation for 15 people for Two day.		
Organizing a bi-annual review meeting for the IHR committee	Ministry of	353960
Organizing a bi-annual review meeting for the link committee	Health	333900
Restructuring of the national MOH to create a position for the director of IHR	Ministry of	0
under the directorate of international health and coordination.	Health	U
Create office space accessories and provide ICT equipment for the	Ministry of	16800
designated focal points of IHR in all relevant sectors	Health	10000
Train national IHR focal point team on IHR reporting (15ppl x 3 days)	Ministry of	3384
Trail Hational ITIN local point team on ITIN reporting (13pp) x 3 days)	Health	3364

Activity	Responsible Authority	Budget in US Dollars
Conduct biannual simulation/TTX exercise on IHR reporting (34ppl x 2 days)	Ministry of Health	41300
Develop, print and disseminate guidelines and protocols on different sectors specific protocols	Ministry of Health	8892
Provisions for ad hoc meetings of the IHR community to review PHEIC against the Decision Instrument (On needs basis)	Ministry of Health	408280
Objective 2: Develop and establish protocols, processes, regulations and legis reporting of potential public health emergencies of national and international events	_	
Sensitize the stakeholder on different sectors specific protocols, regulations and legislations and reporting guidelines (60 ppl x 5 days) to agree on how to share information across sectors	Ministry of Health	42540
Train IHR Focal Points from (MoH, MoJ, MHADM, MoCA, MLF, MoP, MoE, WHO, FOA, OIE) on protocols, regulations and legislations and reporting guidelines (60 ppl x 5 days)	Ministry of Health	42540
Train national IHR focal point and the State Surveillance Officers, Vet officers on IHR intermediate/ level reporting (34ppl x 3 days)	Ministry of Health	38926
Annual refresher trainings for IHR intermediate level reporting (34 ppl x 3 days)	Ministry of Health	155704

WORKFORCE DEVELOPMENT

TARGET

States Parties with skilled and competent health personnel for sustainable and functional public health surveillance and response at all levels of the health system and the effective implementation of the IHR (2005).

South Sudan level of capabilities

The health workforce capacity of South Sudan is quite low at all the levels in terms of numbers and skill mix of the requisite human resource. The MoH human resource database does not include information on core IHR personnel such as epidemiologists. There is a national human resource development strategy, but it does not cover public health professionals.

Available data indicates that there are 18 field epidemiologists (eight at national level and 10 at sub-national level) that support disease outbreak investigations. The MoH has no establishment for epidemiologists, and as such most of the available epidemiologists are employed in the NGO/UN sectors. No mechanism is in place to track field epidemiology capacity, and staff attrition is high.

The situation regarding biostatisticians and laboratory scientists is similar as well as with animal health experts, veterinarians, and farming/livestock professionals.

Capacity of local training institutions to produce the quality of human resource to meet effective IHR implementation is also low. An initiative to train surveillance officers in field epidemiology with support from US Centre for Disease Control and prevention (CDC) was terminated in 2013. Three public universities are offering medical training and two universities that produce public health officers. Some institutions that train nurses, laboratory assistants and animal/livestock professionals exit.

Actions	Responsible Authority	Budget in US Dollars
Objective 1: Establish a Multidisciplinary Public Health HR capacity at I	National and cou	nty levels by
2022		
A one-day consultative meeting with the relevant line ministries and stakeholders to agree on the need for a comprehensive human resource assessment and mapping (20 PAX for 1 day)	Ministry of Health	320
Recruit 1 international consultant to support the comprehensive HR assessment and mapping of country Human Resource capacity for IHR implementation. The mapping will be done to provide a database of HR and will also inform in the needed capacity or gaps.	Ministry of Health	14,160
Recruit 2 national consultants to conduct the comprehensive HR assessment and mapping of country Human Resource capacity for IHR implementation for 6 months. The mapping to provide a database of HR and will also inform in the needed capacity or gaps.	Ministry of Health	9,120
A one-day meeting with stakeholders to validate the assessment and mapping results to update the national human resource strategy to include relevant Public Health workforce	Ministry of Health	1,300
Based on the mapping and assessment review, hire a consultant for 1 month to develop a program that will support developing a Continuous Professional Development (CPD) plan of the health workforce and review the accreditation process of institutions that produce the health work force	Ministry of Health	14,788
Advocacy for public health HRH strategy to include specialty areas in line with One Health approach. A two days meeting where a Joint position paper of the line ministries to advocate for the One Health Strategy to be presented to senior management of the relevant ministries.	Ministry of Health	1,460
Quarterly stakeholders' meetings to monitor implementations of the public health HRH strategy through the line ministries.	Ministry of Health	2560

Actions	Responsible Authority	Budget in US Dollars
Conduct joint quarterly supportive supervision and monitoring visits implementations of the public health HRH strategy through the line ministries.	Ministry of Health	71200
Two days meeting of stakeholders to review the HR Staffing Norms to determine the required cadres for public health security for all relevant sectors (20 pplx3)	Ministry of Health	1,530
Organize stakeholders and donors engagement workshop for 20x2 days to develop concept and mobilize resources to re-establish Field Epidemiology training program (FETP)in South Sudan.	Ministry of Health	1,960
Half day meeting for stakeholders and key donors at MOH meeting hall at no cost	Ministry of Health	-

RESPOND PREPAREDNESS

TARGET

Development and maintenance of national, intermediate (district) and local/primary level public health emergency response plans for relevant biological, chemical, radiological and nuclear hazards. This area covers mapping of potential hazards, identification and maintenance of available resources, including national stockpiles and the capacity to support operations at the intermediate and local/primary levels during a public health emergency.

South Sudan level of capabilities

The country carried out a national risk assessment in July 2017 and classified diseases and other hazards into four groups: high, moderate, low and very low. An all hazard national emergency preparedness and response plan is yet to be developed, however, some disease specific response plans have been developed (i.e. Ebola Virus Disease, malaria, measles, cholera, hepatitis E and meningitis). The country is yet to carry out a comprehensive resource mapping in line with the identified risks and hazards. A plan is in place to create a directory of the RRTs and relevant human resources, determine the capacities of the different health facilities, map the capabilities, available partners, and decide on locations to stockpile key logistics.

Though RRTs have been constituted at the national, state and county levels, there is limited information on their current availability due to a high attrition rate in the country. Simulation exercises to assess the operational readiness of the National RRT to respond to disease outbreaks

was undertaken in 2015 in readiness for the Ebola virus outbreak that was ravaging several counties in West Africa at the time.

Generally, the available emergency response materials and the capacity for logistics management are partner or donor driven.

Activity	Responsible	Budget in
	Authority	US Dollars
Objective 1:To map the risk, develop and test costed multi-haz	zard NPHEPR plan base	ed on VRAM
findings by 2020 -2022		
Review and update the Risk profiling for the Country using the STAR Tool	Ministry of Health	16900
Hire international consultant to support VRAM	Ministry of Health	33060
Conduct the VRAM workshop - done	Ministry of Health	0
Orientation on the use VRAM exercise	Ministry of Health	7260
Conduct a pilot on the data collection tools in 1 County	Ministry of Health	2340
Conduct a pilot on the data collection tools in 1 County	Ministry of Health	2000
Training of trainers at national level for VRAM	Ministry of Health	4566
Purchase of mobile phones for VRAM data collection	Ministry of Health	7000
Field data collection in former 80 Counties.	Ministry of Health	54744
Hire consultant to Conduct VRAM data analysis for 1 month, P3.	Ministry of Health	61320
Hire data clerk to Conduct VRAM data entry for 1 month.	Ministry of Health	4500
Conduct simulation exercises for 40 participants to test the plan		
(stationaries for the exercises, logistics support, DSA, Internet	Ministry of Health	11520
access)		
One day meeting to Validate the updated plan to be approved by MOH leadership.	Ministry of Health	5520
Printing of 20 copies of the updated plan for the validation meeting to be approve by the MOH	Ministry of Health	900
Objective 2: To implement the costed multi-ha	zard NPHEPR plan	
Launching of the NPHEPR Plan	Ministry of Health	1,575
Printing of the NPHEPR Plan	Ministry of Health	3,000
Train the stakeholders to use the plan at all levels (ToT training)	Ministry of Health	2500
at National level for 30pax.	Ministry of Health	3580
3 days meeting for After Action Review (AAR) following the EOC	Ministry of Hoolth	14760
activation for 30pax.	Ministry of Health	14760
Hire international consultant for one month to write the AAR	Ministry of Health	61320
Report	TVIIIISCI Y OI FICAICII	01320
Objective 3: To map Public Health risks		

Activity	Responsible Authority	Budget in US Dollars
2 days' Workshop to develop resource mapping checklist for 20pax.	Ministry of Health	3,380
3 days for validation and piloting the resource mapping tool in 2 counties.	Ministry of Health	1836
Hire consultant to Analyze the data and Update the checklist based on the field finding.	Ministry of Health	2280
Analyze data and develop strategic plan (consultant for 1 month, P3.	Ministry of Health	20440
validate and launch the strategic plan for resources mobilization	Ministry of Health	4230
Objective 4: To utilize the Public Health resources		
Quarterly review meeting at national level for 20pax.	Ministry of Finance	132200
Two Days Annual Meeting with Donors on resource mobilization	Ministry of Finance	13100
Field level coordination meetings quarterly, all partners, stakeholders', venue, stationery, refreshments)	Ministry of Finance	42400
2 days every four months national level coordination meetings for all partners and stakeholders.	Ministry of Health	98700

EMERGENCY RESPONSE OPERATIONS

TARGET

Country with public health emergency operations center (EOC) functioning according to minimum common standards; maintaining trained, functioning, multisectoral rapid response teams and "real-time" bio surveillance laboratory networks and information systems; as well as trained EOC staff capable of activating a coordinated emergency response within 120 minutes of the identification of a public health emergency.

South Sudan level of capabilities

The South Sudan Emergency Operations Centre (EOC) is currently under construction and is situated within the NPHL in the Public Health Directorate. Multi-sectoral RRTs are in the process of being set up but with the EOC still under construction, only a virtual EOC system is currently in place. This system operates for eight hours daily, although personal contact details including phone numbers are made available and team members respond to emergencies at any time of the day.

There is an established coordination mechanism, with an EOC focal person that can support and convene partners at short notice. South Sudan has case management guidelines for the epidemic prone diseases, and there is continuous capacity building for identified ad hoc EOC personnel. The ad hoc EOC personnel

are drawn from different sectors including the ministries of health, agriculture, environment, animal resources, water and irrigation as well as security agencies.

Capacity gaps exist among ad hoc EOC team members in the areas of information sharing, public communication and coordination. There are no training, exercise or activation plans for emergency response. Resources including funds and emergency supplies are inadequate, with some areas being inaccessible due to insecurity and geophysical factors.

Activity	Responsible Authority	Budget in US Dollars
Objective 1: To enhance capacity to activate en	mergency operations	
Maintain the existing four teams (2 for VHF and 2 for other	Ministry of Health	-
emergency events) of National Rapid Response Team	iviiiistry of Fredicii	
Support the existing four teams (2 for VHF and 2 for other	Ministry of Finance	840,000
emergency events) of national rapid response team	Willinstry Of Finance	
Conduct TOT for the National Rapid Response Teams to		51,510
cascade the training to the 32+1 State level (4 teams the	Ministry of Health	
comprised of 7 members each).		
Conduct RRT Training for the 32+1 states to cascade it to the	Ministry of Health	363,858
lower levels.	iviiiiisti y Oi Fleaitii	
Equip RRT with PPEs, visibility items, patient examination	Ministry of Health	495,000
equipment.	iviiiiistry of Health	
Support the existing staff as per EOC structure & IMS (PHEOC		1,320,000
Manager, Deputy manager, 3 Section heads and 3 Alternates		
i.e. Operations, Planning, Logistics, and Admin & Finance, and 8	Ministry of Finance	
support staff (4 cleaners, 2 guards,1 generator operator, 1		
messengers) under the government payroll		
Comprehensive TOT training for EOC staff on general and		32,200
specific IMS technical areas (5 days trainings each for, 28pax, 2	Ministry of Health	
facilitators)		
Conduct Simulation exercise (Tabletop exercise, Drills for		7,260
National Rapid Response, Full exercise) Simulation exercises for	Ministry of Finance	
all staff (Plans, Stationaries, Facilitators, Mobility, supplies for	Ministry of Finance	
the exercises)		
Objective 2: To have a fully functional EOC operating as per WHO standards		
Expanding the current EOC building (add second floor, three	Ministry of	
stories for and perimeter wall with security wiring and light +	Ministry of Infrastructures	400,000
CCTV cameras)	imiastructures	
Backup generator (50kva, maintenance) + Connecting the EOC	Ministry of Health	17,000
with the city power extension	wiiiiisti y Oi Heaitii	17,000

Activity	Responsible	Budget in US
Activity	Authority	Dollars
monthly maintenance of the generator	Ministry of Health	60,000
Solar backup system (20 panels, 20 batteries of 120watts)	Ministry of Finance	50,000
IT equipment (server, 500 GB internet bundles per month, 4		27,850
monitors, 15 desktop computers, 4 laptop computers, 4 LCD		
Projector, 1Sound system, 25 antivirus, 10 Power extention, 1	Ministry of Finance	
TV Screen,1 IT Monitor Device,1 printer 3 in one,3 small	Ministry of Finance	
printers, ,10 land phones, 20 mobile phones, 5 Satellite phones		
to communicate in hard to reach areas)		
IT equipment (server, 500 GB internet bundles per month, 4		22,100
monitors, 15 desktop computers, 4 laptop computers, 4 LCD		
Projector, 1Sound system, 25 antivirus, 10 Power extention, 1	Namistry of Cinana	
TV Screen,1 IT Monitor Device,1 printer 3 in one,3 small	Ministry of Finance	
printers, ,10 land phones, 20 mobile phones, 5 Satellite phones		
to communicate in hard to reach areas)		
Vehicles (1 land cruiser 5-doors, 2 pick-ups, 2 ambulance, 1		210,000
Minibus for staffs,4 high speed motor bikes, maintenance,	Ministry of Finance	
spare part and fuel)		
Vehicles (2 land cruisers 5-doors, 2 pick-ups, 2 ambulance, 1		390,000
Minibus for staffs,4 high speed motor bikes, maintenance,	Ministry of Finance	
spare part and fuel)		
Furniture (2 meeting tables, 5 office tables, 20 office chair, 10		24,200
office desk, 5 office cabinets, 50 small meeting chairs, 2	Ministry of Finance	
refrigerator 8-10 feet)		
Administrative Cost	Ministry of Health	18,000
Review and update the handbook for PHEOC and incorporate	Ministry of Hoolth	-
some SOPs.	Ministry of Health	
Develop and validate the legal framework for PHEOC		20,440
(consultant fee, legal advisor fee, draft the document and	Ministry of Justice	
present it for endorsement)		
validate the legal framework for PHEOC (consultant fee, legal		
advisor fee, draft the document and present it for	Ministry of Justice	3,180
endorsement)		
Printing of 200 copies of PHEOC handbook for dissemination to	Ministry of Hoolth	12,400
all the three levels (national,33 states and 80 Counties).	Ministry of Health	
Develop emergency respond plan for PHEOC activation,	Ministry of Hoolth	20,440
validate and launch (Consultant for 1months)	Ministry of Health	
Top table exercise for the PHEOC response plan	Ministry of Health	1,480
Train the State level staff on PHEOC handbook to strengthen	Ministry of Haalth	22,552
the coordination	Ministry of Health	

Responsible	Budget in US Dollars
•	
the EOC framework (C	One Health
,	-
Ministry of Health	-
Ministry of Health	-
Ministry of Hoolth	F2 000
Wilnistry of Health	52,000
Ministry of Health	-
,	190,800
Ministry of Health	
	96,000
Ministry of Finance	30,000
Ministry of Hoolth	46.090
·	46,080
,	10,000
·	10,800
Information	
Ministry of Hoalth	196,400
Willistry of Fleatti	
Ministry of Health	25,000
anaged as per standar	d WHO case
Ministry of Finance	20,440
·	33,711
Ministry of Health	23,420
·	
Ministry of Finance	8,750
Ministry of Finance	3,830
Ministry of Health	12,500
Minisher - fll lul	220
iviinistry of Health	320
Ministry of Health	10 550
iviinistry of Health	18,550
	Authority the EOC framework (Company of Health Ministry of Finance Ministry of Health Ministry of telecommunication and post services Ministry of Information Ministry of Health Ministry of Finance

Activity	Responsible Authority	Budget in US Dollars
Establish permanent infectious disease isolation wards/	Ministry of Health	750,000
facilities in at least three high risk locations of Yei River state;		
Gbudue state; and Torit state		

LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

TARGET

Country conducts a rapid, multisectoral response in case of a biological event of suspected or confirmed deliberate origin, including the capacity to link public health and law enforcement, and to provide and/or request effective and timely international assistance, such as to investigate alleged use events.

South Sudan level of capabilities

South Sudan has very limited functional links between public health and security authorities. More effort is needed to raise the capabilities in this technical area for this new ountry to effectively implement the IHR in this technical area. There is very little awareness by some security personnel of their role in coordinating with public health authorities. The JEE team has realized that some security authorities have their health committee which is not linked to the Ministry of Health. As this report is assembled, there is no signed protocol, MoU, or any written agreement linking public health to the security forces. No joint exercises nor simulations by public health and security authorities linked to biological and toxins events have been done. The scarcity of resources hinders the improvement of the country's capability.

However, a joint training exercise was done with the medical corps of the national army for IDSR training. The medical corps from the national army have participated in cholera taskforce meetings. The cholera taskforce has provided training and logistical support to the medical corps to facilitate cholera and Ebola Virus Disease prevention and control in military locations. Additionally, there was representation from other relevant government ministries in cholera and Ebola Virus Disease epidemic taskforce. Security agencies and other bodies informally share information of any suspected diseases outbreaks with the MOH.

Activity	Responsible Authority	Budget in US Dollars
Objective: To have coordinated joint response operations to biological events		
Postuit consultant D2 2 months	SSPDF- (Defense	0.130
Recruit consultant P3, 2 months	Health Services)	9,120

Activity	Responsible Authority	Budget in US Dollars
Validation workshop with stakeholders (20pax, 3 days,	SSPDF- (Defense	3.806
breakfast, lunch, stationary, transport, venue)	Health Services)	3,896
formation of joint committee to oversee the linkage of PH	SSPDF- (Defense	0
and Security interventions	Health Services)	0
Two days training of data collectors (66 pax, venue tea break	SSPDF- (Defense	CE 1/10
stationaries, Lunch, DSA Transport refund	Health Services)	65,448
Joint data collection from 32+1 states	SSPDF- (Defense	E7 600
Joint data collection from 32+1 states	Health Services)	57,600
Data analysis (to be done by consultant)	SSPDF- (Defense	0
Data analysis (to be done by consultant)	Health Services)	0
Develop joint response plan using the findings	SSPDF- (Defense	0
Develop joint response plan using the findings	Health Services)	U
Two day validation Workshop	SSPDF- (Defense	2 420
Two-day validation Workshop	Health Services)	2,420
Print and disseminate SOP to the stakeholders to the 32+1	SSPDF- (Defense	500
states	Health Services)	300
Induction and training (3 days' workshop, 10pax, breakfast,	SSPDF- (Defense	2 690
lunch, supplies like PPE and stationery, 3 facilitators)	Health Services)	2,689
Simulation eversions for all staff (supplies for the eversions)	SSPDF- (Defense	27 420
Simulation exercises for all staff (supplies for the exercises)	Health Services)	37,428
Select 33 focal persons from the institutions involved at	SSPDF- (Defense	0
national and sub national	Health Services)	0
Weekly EPR meetings	SSPDF- (Defense	0
vveckiy LFN illeetiiigs	Health Services)	
Weekly IDSR bulletin	SSPDF- (Defense	0
weekly ID3N bulletill	Health Services)	
Regular communication among focal points	SSPDF- (Defense	0
negular communication among rocal points	Health Services)	

MEDICAL COUNTER MEASURES AND PERSONNEL DEPLOYMENT

TARGETS

National framework for transferring (sending and receiving) medical countermeasures, and public health and medical personnel from international partners during public health emergencies.

South Sudan level of capabilities

South Sudan does not have a national framework for the transfer of medical countermeasures, public health and medical personnel, despite a history of several PHEICs ranging from infectious disease outbreaks to armed conflict. During such emergencies, response is largely supported by relevant government agencies and international partners. This coordination gap leads to duplication of efforts sometimes, as there are no proper coordination and communication mechanisms in place.

The country has yet to sign up for and explore available regional and international agreements for the sending and receiving of medical countermeasures and personnel deployment. However, the country has received and deployed personnel for various responses under the surge support plan of various partners like WHO, UNICEF and International Organization for Migration (IOM).

There are limited national stockpiles of medical countermeasures, and those available are mainly for communicable diseases like measles and meningitis. The country has received large stocks of cholera vaccines periodically to help contain outbreaks.

There are no agreements with international manufacturers of medical countermeasures, but an agreement with Gavi on procurement of vaccines exists. There is limited capacity for logistics management, with storage capacity being available at the national level, but state storage capacities are not known. There are no formal plans for surge staffing for public health response.

Activity	Responsible Authority	Budget in US Dollars
Objective 1: By 2020, strengthen the system for sending and received	ving medical count	ermeasures
during Public Health events		
Postuit international consultant for 2 months to develop the SODs	Ministry of	
Recruit international consultant for 3 months to develop the SOPs	Health	174,360
Conduct data collection on assessment of storage and logistics for	Ministry of	
two days.	Health	33,764
Conduct data analysis on the assessment of storage and logistic	Ministry of	
capacity	Health	-
Draft a national plan to send, receive stockpile and deploy medical	Ministry of	
countermeasures	Health	-
Validation workshop (20pax, 3 days, breakfast, lunch, stationery,	Ministry of	
transport)	Health	10,590
Print and disseminate SOPs & Plan to the stakeholders for the 32+1	Ministry of	
states	Health	2,000
Consultant to review and update legal procedures for medical	Ministry of	
countermeasures	Health	-

Activity	Responsible Authority	Budget in US Dollars
Conduct two days' workshop and testing of data collection checklist	Ministry of	
on legal procedures for medical counter measures.	Health	7,260
Draft a national SOPs for Legal procedures for medical	Ministry of	
countermeasures	Health	-
Boylow relevant hills for 2 days (40 new transport sixtimes)	Ministry of	
Review relevant bills for 3 days (40 pax, transport, airtimes)	Health	18,930
Validation workshop to review and update legal procedures for	Ministry of	
medical countermeasures	Health	10,590
Write MoU for regional cooperation with AFENET and CDC for	Ministry of	
importation of medical counter measures	Health	-
Write MoU for regional cooperation with the neighboring states	Ministry of	
and WHO regional states for deployment of medical personnel	Health	
during emergencies		_
Regular review and update Profile for all staff qualifications in each	Ministry of	
sector quarterly	Health	-
Identify staff for amargancy roster	Ministry of	
Identify staff for emergency roster	Health	-

RISK COMMUNICATION

TARGET

South Sudan uses multilevel and multifaceted risk communication capacity. Real-time exchange of information, advice and opinions between experts and officials or people who face a threat or hazard (health or economic or social wellbeing) to their survival. This exchange allows informed decisions to mitigate the effects of the threat or hazard and to initiate protective and preventive action. This approach includes a mix of communication and engagement strategies, such as media and social media communications, mass awareness campaigns, health promotion, social mobilization, stakeholder engagement and community engagement.

South Sudan level of capabilities

The Health Education and Promotion (HE&P) department in the MoH is responsible for health promotion and community engagement. The department and a national working group implement risk communication activities during outbreaks and emergencies. Membership of the working group is limited but includes health care workers and representatives from civil society organizations, partners, the private sector, and other non-state actors. The last meeting

organizations, partners, the private sector, and other non-state actors. The last meeting of the TWG was in 2016. Ad hoc TWGs for social mobilization and hygiene promotion for cholera exist and their members are mainly national NGOs. These notwithstanding, risk communication to the public is usually coordinated by the office of the President during an emergency. The capacity (human, material and funding) of the HE&P department and at the sub-national levels is very low.

Risk communication is part of disease specific preparedness and response guidelines and plans for VHF, cholera, polio and meningitis. Generally, risk communication activities are ad hoc and not well coordinated at any level. There is neither a national risk communication strategy nor any formal agreements between the agencies that carry out such activities. It appears that there is a mechanism to coordinate communication between hospitals and the national Emergency Preparedness and Response structure at the MoH. There is also an agreement for endorsement/clearing of some risk communication materials between the MoH and some partners. No formalized systems exist for monitoring and addressing media, rumors and other misinformation. Mechanisms for surge staff for risk communication during emergencies are ad hoc.

Activity	Responsible	Budget in US
Activity	Authority	Dollars
Objective 1: To improve the risk communication s	tructure and tools	
Identify and map key multi-sectoral and multi-disciplinary	Ministry of	
stakeholders.	Livestock &	-
	Fisheries	
Merge all relevant and existing TWGs and formally establish a	Ministry of	
unified and umbrella multi-sectoral/multi-disciplinary risk	Livestock &	-
communication TWG.	Fisheries	
Establish a Secretariat to support coordination functions,	Ministry of	
including regular half-day (30 persons) monthly meetings of the	Health	14,400
unified TWG.		
Organize a one-day meeting to review the existing TORs for the	Ministry of	7,050
TWG	Health	,,,,,,
Share TORs for the risk communication working group (Soft Copy)	Ministry of	_
	Health	
Conduct a two-day meeting to review existing draft risk	Ministry of	
communication strategy and mainstream the multi-hazard and	Livestock &	10,380
One Health approach (40 pax, hall hire, refreshments, stationery)	Fisheries	
Meeting to Validate and share the strategy and plan with all the	Ministry of	
stakeholders from all relevant sectors.	Livestock &	10,380
	Fisheries	
Conduct a one-day desktop simulation to test the plan (50 pax,	Ministry of	8,342
refreshment, transport reimbursement 32+1 state pax)	Health	0,342

Activity	Responsible Authority	Budget in US Dollars
Conduct a one-day desktop simulation to test the plan (50 pax,	Ministry of	714
refreshment for 17 national pax)	Health	714
Endorsement of final plan by National Government	Ministry of	
	Health	-
Print 500 copies of the risk communication strategy (printing and	Ministry of	4 000
spiral binding of strategy document)	Health	4,000
Conduct a dissemination and launching meeting in Juba for 50	Ministry of	800
participants (conference hall hire, refreshments)	Health	800
Develop/review/adopt mapping tools and assessment at national		
and sub national levels (hire an international consultant for 8	Ministry of	39,180
weeks to map, assess, analyze, write a report, and present the	Health	39,180
report in technical meeting, DSA, Transport, Professional fee)		
One Consultant Training Expert/Facilitator for 4 weeks	Ministry of	20.240
	Health	20,340
5-day workshop for 15 people for training package development	Ministry of	3,800
	Health	3,800
Printing of training package	Ministry of	1 600
	Health	1,600
TOT of 33 identified trainers for 32+1 states	Ministry of	35,910
	Health	33,910
Conduct risk communication 2-days training in each of the 32+1	Ministry of	
states, targeting 15 participants per state.	Health	144,060
Hiring a consultant for 4 weeks to develop M & E framework &	Ministry of	20,340
monitoring tools	Health	20,340
Two days' workshop with experts from partner agencies for the	Ministry of	2,880
finalization of tools (15 person)	Health	2,880
Hiring a consultant for 3 months to do the desk review of all	Ministry of	59,370
relevant research & conduct a comprehensive KAP survey & FGDs	Health	39,370
Identification, recruitment & orientation of behavioral	Ministry of	
surveillance informants and community engagement workers in	Health	60,000
10 pilot states.	пеанн	
Identification, recruitment & orientation of behavioral	Ministry of	
surveillance informants and community engagement workers in	Health	990,000
additional 23 states	пеанн	990,000
Objective 2: To strengthen partners and stakeholder's coordinate	nation for risk con	nmunication
Conduct a three days' workshop to develop SOPS/Guidelines for	Ministry of	
the one health communication approach (Hotel package for 30	Livestock &	4,920
participants, transport refund for government staff, stationery)	Fisheries	

Activity	Responsible Authority	Budget in US Dollars
Conduct a one-day validation meeting by a wider stakeholder team (one day hotel package for 40 participants, transport refund for government staff, stationery)	Ministry of Health	2,370
Advocacy with MoH senior staff for their approval	Ministry of Health	-
Objective 3: To strengthen public communication with comm	nunities during Pu	blic Health
emergencies		ı
Develop, test and print IEC materials for threat/event specific	Ministry of Health	165,000
Develop a selection criterion for risk Communication focal persons	Ministry of Health	-
Conduct 2 days risk communication training of the focal persons.	Ministry of Health	29,412
Objective 4: To strengthen community engagement during	Public Health em	ergencies
Develop a community engagement costed plan for at high risk communities based on the VRAM findings	Ministry of Health	
Write concept note or proposal to raise funds for risk communication	Ministry of Health	
Hold a two days meeting at national level to develop SOPs for effective community engagement during emergency response (refreshments for 15 people, transport refund, stationery)	Ministry of Health	1,940
Objective 5: To enhance capacity to address rumors and misinfo		uring and after
Public Health emergencies, by 203 Hold a one-day meeting to review/develop a tool for mapping the channels of rumor reporting at all levels	Ministry of Health	1,310
Test and refine the tool (transport refund, Fuel)	Ministry of Health	7,821
Establish network of community-based informants for rumors & community feedback	Ministry of Health	396,000
One day training of informants at State level	Ministry of Health	43,230
National level orientation of 33 state Risk Communication focal persons on rumor/feedback tool, data collection, analysis and response.	Ministry of Health	147,060
Recruit an international consultant to do evaluation rumor management post public health events	Ministry of Health	20,440
Intensification of Risk Communication activities within first 72 hours of an outbreak/event.	Ministry of Health	825,000

OTHER IHR-RELATED HAZARDS AND POINTS OF ENTRY POINTS OF ENTRY

TARGET

States Parties designate and maintain core capacities at international airports and ports (and where justified for public health reasons, a State Party may designate ground crossings) that implement specific public health measures required to manage a variety of public health risks.

South Sudan level of capabilities

The control and containment of diseases and other potential public health risks remains a fundamental element for the implementation of the IHR at designated PoEs. Routine capacities must be in place at designated PoEs including for the assessment and care of ill travelers, trained personnel for the inspection of conveyances, as well as facilities for the holding and transfer of ill travelers. A competent authority must be responsible for the supervision and provision of healthcare at the PoEs. So far in South Sudan there is no port health unit which would oversee health centers and vaccination centers for international travelers in the country. There are four main points of entry in South Sudan earmarked as designated PoEs in the coming two years, they include: Juba International Airport (JIA), Nimule ground crossing with Uganda, Joda ground crossing with Sudan, and Renk river crossing with Sudan. During the JEE assessment, the team visited JIA and Nimule ground crossing, to assess their capacity. The assessment showed that only JIA has three port health personnel, and none of them conduct routine screening for travelers. On the other hand, Nimule has no health personnel at the border crossing. Immigration officers in Nimule sometime asks travelers to show proof of vaccination and they advise them to get vaccinated in Juba for those who do not have it. Currently, the health personnel working in JIA have no designated area for the provision of health services such as vaccinations. JIA is therefore still unable to correctly apply the IHR procedures. Once the new terminal is completed, there will be dedicated space for port health services, already earmarked by the authorities. On the other hand, in Nimule, space for health personnel may be obtained after negotiation between the heads of immigration and health departments.

Activity	Responsible Authority	Budget in US Dollars
Objective 1:To sustain 24 hours routine port health	services in six (6) PoE	s
6 PoEs for assessment, 7 staffs per each Team, days for	N 4 in intervent	
assessment(7 Renk, 4 Nadapal, 3 Nimule, 1 Juba, 3 Nabiapai and	Ministry of	
3 Kaya). Air transport to Renk, Nadapal, Wau, Nabiapai, Kaya,	Transport - (Civil Aviation)	449,400
Nimule and ground facilitation in 6 PoEs. PoE checklist.	Aviation)	

Activity	Responsible Authority	Budget in US Dollars
5day for TWG to develop NPHCP (Juba)	Ministry of Transport - (Civil Aviation)	97,935
Procure 6 ambulance for 6 PoEs. Medical supplies and equipment for the 6 PoEs holding areas, provide renumeration for 50 staff	Ministry of Finance	360,000
Recruit staffs to run the 6 POE in the identified locations	Ministry of Health	750,000
Equipment and food	Ministry of Transport - (Civil Aviation)	4,000
Conduct 5 days training in Juba for 36 PoEs staffs (2 back to back three days trainings): (5 Renk,5 Nadapal, 7 Nimule, 4 Nabiapai,7 Kaya & 8 Juba.)	Ministry of Health	132,405
Objective 2: To develop, implement and test Emergency Commun	nication Plan (ECP) at	4 PoEs
Conduct a one day meeting to develop a position paper on port health services for MOH to be presented to the cabinet.	Ministry of Health	660
Conduct a half day meeting to develop a position paper on port health inspection for ministry of agriculture and animal husbandry to be presented to the cabinet.	Ministry of Agriculture	660
Conduct high level stakeholder's engagement meeting	Ministry of Interior	83,070
Conduct 3 days' workshop for 30 staff to develop the communication plan in Juba	Ministry of Health/ Ministry of Agriculture	11,970
conduct 3 days' workshop for 30 staff to develop IEC Materials in Juba	Ministry of Health	11,970
1 day conduct a field test of the IEC material in 7 selected POEs	Ministry of Health	6,786
Conduct quarterly monitoring and supportive supervision visits at PoEs (3 staffs).	Ministry of Transport - (Civil Aviation)	46,150
Train 50 staff for 3 days on mobility monitoring at 7 POE sites. Procure and train 50 staff on using mobility monitoring equipment.	Ministry of Transport - (Civil Aviation)	231,130
Conduct 2 days national functional simulation exercise (FX) for 50 staff	Ministry of Health	208,230
To establish a dedicated port health services department in MOH	Ministry of Health	120,000

Activity	Responsible Authority	Budget in US Dollars
Procure thermal scanners for JIA and Nimule PoE and designate	Ministry of	
PoE Port Health Authorities for implementation of routine and	Transport - (Civil	30,000
emergency IHR activities	Aviation)	30,000

CHEMICAL EVENTS

TARGET

States Parties with surveillance and response capacity for chemical risks or events. This area requires effective communication and collaboration among the sectors responsible for chemical safety, industries, transportation and safe disposal.

South Sudan level of capabilities

The country has limited overall capacity in this area but has a National Environment Policy (2015-2026). The policy mandates the Ministry of Environment to effectively protect and sustainably manage the environment and natural resources to ensure a quality environment adequate for human health and wellbeing of all those who reside in South Sudan. Additionally, an environmental bill is in draft form and currently under review. The Petroleum Act is in place and contains provisions for "health, safety and protection of environment". The country has oil drilling sites in Upper Nile and Unity states.

In April 2016, a multisectoral investigation was commissioned by government to investigate a chemical event in Paloich oil fields in Melut county. A cluster of 90 individuals assessed reported non-specific symptoms including fevers, general weakness, paresthesia, abdominal pains, and erectile dysfunction.

Toxicological investigations revealed exposure to heavy metals – Mercury, manganese, and selenium.

Activity	Responsible Authority	Budget in US Dollars		
Objective 1: To develop, legal instruments for effective impler	nentation and enforc	ement of		
chemical events to support integrated national environment a	chemical events to support integrated national environment and health surveillance systems			
Conduct 5 days' workshop for policy and SOPs drafting and	Ministry of	22,505		
one day for validation (40 staffs).	Environment	22,303		
One day validation meeting for policy and SOPs (40 staffs).	Ministry of	9,525		
One day validation meeting for policy and 30Fs (40 stans).	Environment	9,323		
Hire an international consultant for 6 months (consultant ToR	Ministry of	51,000		
to be confirmed)	Environment	31,000		

Activity	Responsible	Budget in US
Activity	Authority	Dollars
Laboratory functional; purchase equipment and consumables,	Ministry of	150,000
requirements determined during needs assessment	Environment	130,000
Objective 2: To establish a national chemical surveillance and	response system in re	eal time
reporting at 50%		
Three days' workshop for 30 staffs in Juba	Ministry of	8,995
Three days workshop for 30 starts in Juba	Environment	8,993
Recruit an international consultant to develop the all hazard	Ministry of	20,440
and preparedness plan 1 month	Environment	20,440
One day meeting to establish and inaugurate the TWG (10	Ministry of	780
staffs)	Environment	760
Quarterly meetings of the TWG (10 pax)	Ministry of	14,040
Quarterly meetings of the TWG (10 pax)	Environment	14,040
Recruit an international consultant to develop SOPs and	Ministry of	20,440
guidelines	Petroleum	20,440
Five days' workshop for development of the plan for 30 staffs	Ministry of	20,255
+ additional One day Validation meeting	Petroleum	20,233
One day Validation meeting for emergency response to	Ministry of	8,995
chemical events plan	Environment	6,993
Five days' workshop to develop the guideline (30 staffs) +	Ministry of	20,255
additional One day for Validation	Petroleum	20,233
One day Validation of National guidelines and manuals for	Ministry of	9.005
surveillance, assessment and management of chemical events	Environment	8,995
Recruit an international consultant to develop the reporting	Ministry of	20,440
tools	Environment	20,440
Conduct two days stakeholder meeting for 20 pax to establish	Ministry of	2,420
and agree on the reporting channels	Environment	2,420

RADIATION EMERGENCIES

TARGET

States Parties with surveillance and response capacity for radiological and nuclear hazards/events/ emergencies. This area requires effective communication and collaboration among the sectors responsible for radiological and nuclear emergency management.

South Sudan level of capabilities

South Sudan has limited to no capacity in the area of radiation emergencies, as they are not a priority at the national level in any surveillance, detection or response planning.

Capacity and expertise in this area is lacking in South Sudan and the country needs technical and financial support to build up its resilience at the National and sub-national levels.

Actions	Responsible Authority	Budget in US Dollars
Objective 1: To strengthen surveillance and response to nucle		zards with 50%
routine reporting from identified nuclear and radiological has		
conduct two days stakeholders meeting to form the board	Ministry of	1,940
(15 staff)	Environment	1,5 10
conduct a 1 days meeting with WHO Country office for	Ministry of	780
signing the MOUs (10 Staffs)	Environment	780
Hiring a consultant for 1 month to support the development	Ministry of	
of Radiation emergencies SOPs and guidelines and MOUs,	Environment	20.440
including assessment of centers for testing radiological		20,440
substances		
Conduct a 2 days' workshop to incorporate the radiological	Ministry of	
and nuclear response plan into public health incident and	Environment	3,380
emergency response plan (30 staffs)		
Objective 2: To develop, implement and test a national radia	tion emergency respon	ise plan
Conduct 3 days' workshop for developing the response plan	Ministry of	4.020
(30 staffs).	Environment	4,920
Conduct 5 days training to relevant staffs on Response to	Ministry of	9,000
radiation emergencies (30 staffs)	Environment	8,000
Condust 2 days functional simulation aversion for 20 -t-ff-	Ministry of	
Conduct 2 days functional simulation exercise for 30 staffs.	Environment	10,140
Conduct 3 days' workshop for developing the radiation Ministry of		4.020
emergencies action plan (30 staffs).	Environment	4,920

ANNEXES

ACRONYMS/ABBREVIATIONS

AAR: After Action Review

SSO: State Surveillance Officer

IDSR: Integrated Disease Surveillance and Response

IHR: International Health Regulations

IHRMEF: International Health Regulations Monitoring & Evaluation Framework

JEE: Joint External Evaluation

MDAs: Government Ministries, Departments and Agencies

M&E: Monitoring and Evaluation

NAPHS: National Action Plan for Health Security

NSC: National Steering Committee

SWOT: Strengths Weaknesses Opportunities Threats

ICT: Information Communication Technology

TC: Technical Committee

TTX: Tabletop Exercise

EPR: Emergency Preparedness and Response

EWARS: Early Warning Alert & Response System

EWARN: Early Warning Alert & Response Network

EBS: Event Based Surveillance

BHI: Boma Health Initiative

MoH: Ministry of Health

MoJ: Ministry of Justice

MHADM: Ministry of Humanitarian Affairs and Disaster Management

PHEIC: Public Health Events of International Concern

WHO: World Health Organization

FAO: Food Agriculture Organization

OIE: World Organization for Animal Health

NPHEPR: National Public Health Emergency Preparedness & Response

EOC: Emergency Operations Center

IMS: Incident Management System

USD: United States of American Dollar

PHEOC: Public Health Emergency Operations Center

AGENDA FOR THE VALIDATION AND COSTING WORKSHOP

AGENDA

Workshop to Validate and Cost National Action Plan for Health Security,
From 16th -20th September 2019
Juba Landmark Hotel

Time		Activity		Moderator	
	Day 1				
08.30 - 09.00	Registration				
09.00 - 10:00	Introduction, Opening re	emarks, Objectives, expected Ou	tcomes		
	 Official Opening: Remarks by WHO Representative Remarks by Ministry of Cabinet Affairs Opening remarks by Hon. Minister of Health Objectives and expected outcomes of the workshop: Presenter Dr. Loi From JEEs to National Action Planning, Regional Experience; Presenter: WHO AFRO 		Dr. Loi		
10.00 – 10.30	Administration announcements, Group Photograph and Coffee Break				
30 min	Governance structure of NAPHS monitoring and implementation Presenter: NFP South Sudan/ Dr. Itin				
30min	Introduction of the benchmarks document Presenter: WHO (GVA or AFRO)				
1 hour	NAPHS validation and costing process Presenter: Costing experts WHO				
	The technical area leads will present the activities for their technical area in	Once the activities are finalized, the technical focal points will meet with experts	Once a technical area is reviewed, the technical focal points will meet the costing	Technical Area Leads	

Time		Activity		Moderator
	plenary (15 mins). The presentation will be followed by a guided discussion (30 mins).	in a separate room to finalize the detailed activities	experts in a separate room to finalize costing of the activities.	
	Technical area 1: National legislation, Policy and Financing; Dr. Loi/ Dr. Itin • Presentation (15 mins) • Discussion (30 mins)	No meetings	No meetings	
	Technical area 2: IHR Coordination, Communication and Advocacy; Dr. Loi/Dr. Itin Presentation (15 mins) Discussion (30 mins)	Technical area 1: National legislation, Policy and Financing Detailing activities	No Meetings	
	Technical area 3: Antimicrobial Resistance; Mr. Abe Gordon Presentation (15 mins) Discussion (30 mins)	Technical area 2: IHR Coordination, Communication and Advocacy Detailing activities	Technical area 1: National legislation, Policy and Financing Costing	Technical Area Leads
	Technical area 4: Zoonotic Disease; Min of Livestock& Fisheries Presentation (15 mins) Discussion (30 mins)	Technical area 3: Antimicrobial Resistance Detailing activities	Technical area 2: IHR Coordination, Communication and Advocacy Costing	Technical Area Leads
	Technical area 5: Food safety; Min of Livestock& Fisheries (CODEX FP) Presentation (15 mins) Discussion (30 mins)	Technical area 4: Zoonotic Diseases Detailing activities	Technical area 3: Antimicrobial Resistance Costing	
	Technical area 6: Biosafety Biosecurity; Mr. Abe Gordon Presentation (15 mins) Discussion (30 mins)	Technical area 5: Food safety <i>Detailing activities</i>	Technical area 4: Zoonotic Diseases Costing	
	Technical area 7: Immunization ; Dr. Antony Lako Presentation (15 mins) Discussion (30 mins)	Technical area 6: Biosafety Biosecurity Detailing activities	Technical area 5: Food safety Costing	

Time		Activity		Moderator
	Technical area 8: National Laboratory System; Mr. Michael Lasuba Presentation (15 mins) Discussion (30 mins)	Technical area 7: Immunization Detailing activities	Technical area 6: Biosafety Biosecurity Costing	
	Technical area 9: Real Time Surveillance; Mr. Mathew Tut Presentation (15 mins) Discussion (30 mins)	Technical area 8: National Laboratory System Detailing activities	Technical area 7: Immunization Costing	
	Technical area 10: Reporting; Mr. Mathew Tut Presentation (15 mins) Discussion (30 mins)	Technical area 9: Real Time Surveillance Detailing activities	Technical area 8: National Laboratory System Costing	
	Technical area 11: Workforce Development; MoH/ HR Presentation (15 mins) Discussion (30 mins)	Technical area 10: Reporting Detailing activities	Technical area 9: Real Time Surveillance Costing	
	Technical area 12: Preparedness; Mr. Mathew Tut Presentation (15 mins) Discussion (30 mins)	Technical area 11: Workforce Development Detailing activities	Technical area 10: Reporting Costing	
	Technical area 13: Emergency Response Operations; Mr. Mathew Tut Presentation (15 mins) Discussion (30 mins)	Technical area 12: Preparedness Detailing activities	Technical area 11: Workforce Development Costing	
	Technical area 14: Linking Public Health and Security Authorities; SSD Military Corps Presentation (15 mins) Discussion (30 mins)	Technical area 13: Emergency Response Operations Detailing activities	Technical area 12: Preparedness Costing	
	Technical area 15: Medical Countermeasures and Personnel Deployment; Mr. Mathew Tut	Technical area 14: Linking Public Health and Security Authorities Detailing activities	Technical area 13: Emergency Response Operations Costing	

Time	Activity					
	Presentation (15 mins) Discussion (30 mins)					
	Technical area 16: Risk Communication; Ms Mary Obat Presentation (15 mins) Discussion (30 mins)	Technical area 15: Medical Countermeasures and Personnel Deployment Detailing activities	Technical area 14: Linking Public Health and Security Authorities Costing			
	Technical area 17: Points of Entry; Zacharia Modi Presentation (15 mins) Discussion (30 mins)	Technical area 16: Risk Communication Detailing activities	Technical area 15: Medical Countermeasures and Personnel Deployment Costing			
	Technical area 18: Chemical Events; Ministry of Petroleum Presentation (15 mins) Discussion (30 mins)	Technical area 17: Points of Entry Detailing activities	Technical area 16: Risk Communication Costing			
	Technical area 19: Radiation Emergencies; Ministry of Environment Presentation (15 mins) Discussion (30 mins)	Technical area 18: Chemical Events Detailing activities	Technical area 17: Points of Entry Costing			
		Technical area 19: Radiation Emergencies Detailing activities	Technical area 18: Chemical Events Costing			
			Technical area 19: Radiation Emergencies Costing			
	Review of pending issues					
	NAPHS Coordination: Representation of key programs/agencies on NFP • Presentation of activities (15 mins) • Discussion (75 mins)					
	Presentation of the National Action Plan for Heath Security (Vision, Mission, Core values, Objectives, strategic actions)					
	· · · · · · · · · · · · · · · · · · ·	he National Action Plan for Heat	th Security			
	Way forward (Post NAPHS)					
	 Presentation of activities (15 mins) Discussion (45 mins) 					
	Presenter: MoH/WHO AFRO					
	Closing ceremony					

