SFG2252

REPUBLIC OF SOUTH SUDAN
MINISTRY OF HEALTH

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

FOR

RAPID RESULTS HEALTH PROJECT

Acronyms and Abbreviations

AF	Additional Financing
ANC	Antenatal Care
BPHNS	Basic Package of Health and Nutrition Services
CEN	Country Engagement Note
CHD	County Health Department
CPR	Contraceptive Prevalence Rate
CSDO	Coordination and Service Delivery Organization
DA	Designated Account
DFID	U.K. Department for International Development
EAA	External Audit Agent
EMF	Emergency Medicines Fund
HFA	Health Facility Assessment
HMIS	Health Management Information Systems
HIV	Human Immunodeficiency Virus
HPF	Health Pooled Fund
HRIS	Human Resources Information System
HRRP	Health Rapid Results Project
IDA	International Development Association
IDPs	Internally Displaced Persons
IDSR	Integrated Disease Surveillance & Response
IGAD	Inter-Governmental Authority on Development
IMR	Infant Mortality Rate
IP	Implementation Partner
IPT	Intermittent Preventive Treatment
LLIN	Long-Lasting Insecticidal Net
LQAS	Lot Quality Assurance Survey
M&E	Monitoring and Evaluation

MWMP	Medical Waste Management Plan
MOH	Ministry of Health
MMR	Maternal Mortality Ratio
MTR	Mid-Term Review
NAC	National Audit Chamber
NGO	Non-Governmental Organization
NTDs	Neglected Tropical Diseases
OCHA	Office for the Coordination of Humanitarian Affairs
OP	Operational Policy
PPA	Project Preparation Advance
PHCC	Primary Health Care Center
PHCU	Primary Health Care Unit
PBC	Performance-based Contracting
PBF	Performance-based Financing
PDO	Project Development Objective
PMU	Project Management Unit
QSC	Qualified Supervision Checklist
QVV	Quarterly Verification Visit
RMNCAH	Reproductive, Maternal, Newborn, Child, and Adolescent Health
SCD	Systematic Country Diagnostic
SMOH	State Ministry of Health
SPLM-IO	Sudan People's Liberation Movement-in-Opposition
SSEPS	South Sudan Electronic Payroll System
TA	Technical Assistance
TB	Tuberculosis
TGoNU	Transitional Government of National Unity
U5MR	Under 5 Mortality Rate
UN	United Nations
UNICEF	United Nations Children's Fund

USAID   United States Agency for International Development

WHO   World Health Organization

A. Background Information

1. Introduction

In July 2011, after decades of civil war, South Sudan celebrated its independence from Sudan. Since signing of the Comprehensive Peace Agreement in 2005, the population has grown from 8 to 12 million. The total fertility rate is estimated at 6.7 children per woman, while the average life expectancy at birth for both sexes is 42 years. South Sudan is still characterized by high incidence of poverty, inadequate access to basic services, very limited access to economic opportunities, poor infrastructure, high mortality and morbidity rates and food insecurity. More than half of the population of South Sudan (51%) lives below the poverty line and income disparity is high. More than 90% of the population lives in rural areas.

Decades of conflict, massive displacement of the population, widespread insecurity, and the consistent underinvestment had led to the collapse of the health care system resulting in poor health status of the population by the time of the Comprehensive Peace Agreement in 2005. South Sudan had one of the highest Maternal Mortality Ratio (MMR) in the World, estimated at 2054/100,000 live births[1]. Although close to 69.0 % of pregnant women at least attend one ANC visit, only 27.5% of deliveries are attended by skilled health professionals. Institutional deliveries account for just 27.2% of births, while the contraceptive prevalence rate is 5.0% . The Infant Mortality Rate (IMR) and Under-five Mortality Rate (UMR) were very high at 102 per 1000 live births and 135 per 1,000 live births, respectively.[2]

1. Relevance of the ESMF

ESMF provides general policies, guidelines, codes of practice and procedures to be integrated into the implementation of all projects/programs implemented by MoH. Consistent with the legislations of the Republic of South Sudan (RSS) and World Bank guidelines, the objective of the ESMF is to ensure that activities under the Ministry of Health projects and programs

I.   protect human health; enhance positive environmental and social outcomes;
II.   prevent or mitigate negative environmental impacts as a result of either individual projects/programs or their cumulative effects; and
III. prevent or compensate any loss of livelihood.

In preparing this document, relevant environment and social safeguard practices from theoretical and empirical sources such as RSS and WB were reviewed. The activity included field visits project sites, different level consultations, qualitative and quantitative assessment towards understanding implementation processes of environmental and social safeguard compliance, capacity assessment of MoH, SMoHs and CHDs. The ESMF follows the guidelines provided by the ESSAF which is the national framework for managing

---

[1] SHHS 2006
[2] SSHHS 2010

environmental and social safeguards management of World Bank financed projects in RSS.

2. Objectives of the ESMF

ESMF shall clarify environmental mitigation principles, organizational arrangements and design criteria to be applied to the Rapid Results Health Project (AF). The goal of the ESMF is to improve decision making and to ensure that the health service activities planned under the project are environmentally sound and sustainable.
Specifically, it focuses on:

(i)   Assessing the potential environmental and social impacts of sub-projects (rehabilitation, extension or upgrade of health infrastructures), whether positive or negative, and propose mitigation measures which will effectively address these impacts;

(ii) Establishing clear guidelines for the environmental and social screening of micro-projects to be financed by the project;

(iii) Identifying the environmental policy, regulatory and institutional framework pertaining to the health service projects;

(iv) Informing the project team, the government and participating state governments and other stakeholders involved in implementation of potential impacts of the anticipated sub-projects and relevant mitigation measures and strategies.

The expected output is a report that provides basic information about the scope of adverse environmental and social impacts to be induced by project operations; mitigation and monitoring and actions to be taken and cost implications.

B.   The Ministry of Health

1. Vision

A healthy and productive population living a dignified life

2. Mission
To improve the health status of the people by effective delivery of the Basic Package of Health and Nutrition Services (BPHNS); through provisions of health promotion; disease, injury and disability prevention; treatment and rehabilitation services, with full participation of the people.

3. Goal
A strengthened national health system with partnerships that overcomes barriers to effective delivery of the BPHNS; and efficiently responds to quality and safety concerns of communities while protecting the people from impoverishment and social risk.

4. Values

(i)   Patient, Staff and community Safety shall drive quality improvement decisions
(ii) Health is a human right; equitable access to health services shall be pursued
(iii) Honesty, integrity, transparency and accountability shall govern use of resources in the implementation of National Health Policy.
(iv) Commitment to the vision, mission, goals and objectives shall be pursued through resource allocation, planning and prudent management.
(v)   Dignity and respect for all individuals seeking health care services shall be guaranteed
(vi) Team work and Professional ethics shall underpin health service delivery.
(vii) The environment will be protected and sustained.

5. General Objectives of the Ministry of Health

1. To strengthen health services organization, infrastructure development for effective and equitable delivery of Basic Package of Health and Nutrition Services (BPNS).
2. To strengthen leadership and management of health systems and increase health system resources for improvement of health sector performance.
3. To strengthen partnerships with private sector and other stakeholders to ensure health systems development.

6. Organizational Structure

Ministry of Health is headed by a Minister as the political head of the Ministry. The Under Secretary is the chief executive administrator and an accounting officer of the Ministry. He undertakes day-to day running of the Ministry. The Ministry has nine directorates headed by Director Generals. These include Administration and Finance; Policy, Planning, Budgeting and Research; Primary Health Care; Medical Services; Preventive Health Services; Medical Training and Professional Development; Reproductive Health; Pharmaceuticals and Medical Supplies; and International Health and Coordination. Also, the Ministry has other semi autonomous parastatals which report directly to the Minister. These are: Drug and Food Control Authority (DFCA), Central Medical Stores (CMS), Medical Commission and Medical Council.

Note that the position of the deputy Minister and one adviser were abolished in the recently formed Transitional Government of National Unity.

C. ENVIRONMENTAL AND SOCIAL REQUIREMENTS

1. South Sudan Environmental legislation

Since attainment of Independence in July 2011, the Government of the Republic of South Sudan has adopted a new Republican Constitution, and a number of new policies and legislation, others still being drafted, with the ultimate aim of enhancing sustainable socio-economic development in the country. The policies and laws provide procedures to be followed in the planning and implementation of government activities in order to utilize resources and execute government programs to maximum benefit.

The following sections highlight some selected policies and laws, which are applicable

in the planning and implementation of public sector projects, more especially those projects in the agricultural and forestry sector.

2. Environment Policy of South Sudan, 2010 (Draft)

The policy provides a wide range of guidance in response to emerging environmental management challenges to enable decision makers and resource users make development choices that are economically efficient, socially equitable and environmentally friendly to ensure realization of sustainable development.

The goal of the South Sudan National Environment Policy is to ensure protection and conservation of the environment and sustainable management of renewable natural resources in order to meet the needs of its present population and future generations. The objectives of the RSS environmental policy seek to:

a. Improve livelihoods of South Sudanese through sustainable management of the environment and utilization of natural resources;

b. Build capacity of the government at all levels of governance and other stakeholders for better management of the environment;

c. Integrate environmental considerations into the development policies, plans, and programs at the community, government and private sector levels;

d. Promote effective, widespread, and public participation in the conservation and management of the environment;

This policy is important to this ESMF because it provides general guidelines and principles to be followed in environmental management during the operations of project especially in the agriculture sector. Some of the specific areas of its relevance include protection of aquatic and other sensitive habitats against both encroachment and pollution.

3. The Transitional Constitution of 2011

The Transitional Constitution of the Republic of South Sudan of 2011 incorporates numerous provisions that have a bearing on the environment. Article 41 (1) provides that the people of South Sudan shall have a right to a clean and health environment (2) every person shall have the obligation to protect the environment for the benefit of present and future generations (3) Every person shall have the right to have the environment protected for the benefit of present and future generations, through reasonable legislative action and other measures that:

a. prevent pollution and ecological degradation;
b. promote conservation; and
c. Secure ecologically sustainable development and use of natural resources while promoting rational economic and social development so as to protect the bio-diversity of South Sudan.

Furthermore, Article 166 (6) expects local governments to involve communities in decision making in the promotion of a safe and healthy environment.

4. The Environment Protection Bill, 2010 Cap 7 (Draft)

Section 32 of the Draft Environment Protection Bill, 2010 Cap 7 intends to introduce the requirement for Environmental Audits. An Environmental Audit, according to this Bill, is defined as systematic, documented, periodic and objective evaluation of how well Environmental organization, management and equipment are performing in conserving the Environment and its resources. The guiding principles for an Environmental Audit include:

a. The Owner of the Premises or the operator of a Project shall be responsible for carrying out an Environmental Audit of all activities that are likely to have a significant effect on the Environment, in consultation with the Lead Agency.

b. An Environmental Inspector may enter any land or Premises for the purpose of determining how far the activities carried out on that land or Premises conform to the statements made in the Environmental Impact Assessment in respect of that land or Premises.

c. The Owner of the Premises or the operator of a Project for which an Environmental Impact statement has been made shall keep records and make quarterly and annual reports to the Ministry describing how far the project conforms in operation with the statements made in the Environmental Impact statement.

d. The Owner of Premises or the operator of a Project shall take all reasonable measures to mitigate any undesirable effects not contemplated in the Environmental Impact Statement and shall prepare and submit an Environmental audit report on those measures to the Ministry quarterly and annually or as the Authority may, in writing, may require.

5. The Environmental Protection Act, 2001

The Environmental Protection Act of 2001 has the following objectives: i) To protect the environment in its holistic definition for the realization of sustainable development ii) To improve the environment and the sustainable exploitation of natural resources iii) To create a link between environmental and developmental issues, and to empower concerned national authorities and organs to assume an effective role in environmental protection.

Section III of the Act outlines general policies and principles for the protection of the environment. It is worth noting that these policies and principles are not legally binding, but are guidelines to be observed by the authorities concerned when setting development policies. These guidelines are summarized in articles 17 and 18.

Article 17 calls on any individual who intends to implement any project that is likely to have a negative impact on the environment to present an Environmental Impact Assessment (EIA) for approval by the Monitoring and Evaluation Committee of the HCENR. The study should contain the following information:

a. The anticipated impact of the project on the environment

b. The negative impacts that could be mitigated during implementation of the project

c. Alternative options for the proposed project

d. A clear undertaking that the short-term utilization of natural resources and the environment will not jeopardize their long-term sustainability

e. The precautionary measures to be taken to mitigate the negative impacts of the project

Article 18 lists the duties of the competent authority in complying with the general environmental policies and directives, as follows:

a. To lay down quality control standards for the protection of the environment

b. To preserve water sources from pollution

c. To protect air, food, soil and vegetation cover from pollution and degradation

d. To preserve the flora and fauna from extinction as a result of illegal hunting or any other human threat

e. To protect food from contamination or pollution by chemicals or any other factor

f. To protect the air from pollution caused by physical operations or chemicals

g. To preserve the soil from any pollution resulting from harmful industrial and other types of waste

The EFCRP falls under Category B projects and required an ESA. The EIA regulation also provides for Environmental Audits for all projects for which EIA has been undertaken. An individual/institution who wants to undertake a project ought to ensure that predictions made in the EIA are complied with.

6. Public Health Act of 1975

This Act protects general public health by regulations issued by the Public Health Council, whose members include the Ministries of Agriculture and Forests, Federal Rule, Animal Health and various administration departments of the Ministry of Health.

The activities and operations of the EFCRP ought to take into consideration the provisions of the Public Health Act to ensure health and safety of the local communities where the project is operating within the context of the Project activities and operations.

7. Environment Health Act 1975

The Act covers prevention of water pollution, inspection of drinking water, disposal of waste and sewage, inspection of industrial areas and bakeries, prevention of air pollution and inspection of waste dumping places and brick kilns.

The management of wastes and other activities that may pollute the environment including medical waste and acaricides application is important for the LFDP.

8. Public Health (Water and Sanitation) Acts (2008) for South Sudan

Emphasizes the prevention of pollution of air, water and encourages sanitation. Some of the key areas of emphasis include:

1. Protection of the sanitation of the environment

a) Pollution of Water and air

i) Measures to prevent pollution of water for consumption. ii) Measures destined to prevent pollution of potable water. iii) Anyone who offers the public with water to drink or for human food, and which includes frozen food should ensure that the water conforms to the portability regulations; iv) Management and disposal of hazardous wastes; v) Storage of wastes on the premises of waste generators

b) Atmospheric pollution

i) Enforce regulations and measures necessary to combat all elements of pollution and protect the natural level of the environment and public health; ii) Measures for the prevention and fight against noise and other alternative nuisances have to be observed at the local premise, environment premises and main agglomerations; iii) Allowable toilet systems and excreta disposal methods; iv) Rearing and straying of animals and pets; v) The activities and behavior of individuals and institutions, which cause or are likely to cause environmental pollution or vector breeding; vi) Individual and communal recycling of wastes; vii) Any other matters that demand local regulation to achieve and maintain a clean and healthy environment;

2. Ramsar Convention on Wetlands of International Importance especially as waterfowl habitat (1971)

The Ramsar Convention on Wetlands is primarily concerned with the conservation and management of wetlands and their flora and fauna especially waterfowl by combining far sighted national policies with co-ordinate international action. It was signed at Ramsar, Iran on 2nd February 1971 and amended by the protocol of 3rd December 1982 and the amendments of the 28th May 1987. Parties to the Convention are also required to promote the wise use of wetlands in their territories and to take measures for their conservation by establishing nature reserves in wetlands, whether they are included in the Ramsar list or not. Programs and projects in MAF are expected to adhere to the Ramsar Convention's principles of wise use of wetlands in the project area.

3. Convention on the Conservation of Migratory species

The Convention on Migratory Species (CMS) was adopted to conserve migratory species of wild animals given that migratory species are seen as an international resource. Such species may be terrestrial or marine. The State Members of the Convention endeavor to conclude agreements for the protection and management of migratory species whose conservation status is unfavorable
and of those whose conservation status would substantially benefit from international cooperation deriving from an agreement. The Convention's Agreement on the Conservation

of African-Eurasian Migratory Water birds is specific on the need to protect the migratory water birds' feeding, breeding and wintering habitats, the main ones being wetlands and open water bodies.

4. Important Bird Areas

The South of the River Nile in Jonglei, Unity and Upper Nile States have been identified as an Important Bird Area (IBA) of South Sudan. The Important Bird Areas Programme is a worldwide initiative working for the conservation of biological diversity and the sustainability of human use of natural resources. The project is expected to recognize this IBA and to protect them where they occur in the project area or in the environs.

D. World Bank Safeguard Policies

The Bank requires environmental assessment (EA) and Social Assessment of projects proposed for Bank financing to help ensure that they are both socially and environmentally sound and sustainable, and thus to improve decision making. The World

Bank's environmental assessment policy and recommended processing are described in **Operational Policy (OP)/Bank Procedure (BP) 4.01: Environmental Assessment**. This policy is considered to be the umbrella policy for the Bank's environmental "safeguard policies" which among others include: Natural Habitats (OP 4.04), Forests (OP 4.36), Pest Management (OP 4.09), Physical Cultural Resources (OP 4.11)), and Safety of Dams (OP 4.37). **Operational Policies (OP)** is the statement of policy objectives and operational principles including the roles and obligations of the Client and the Bank, while **Bank Procedures (BP)** is the mandatory procedures to be followed by the Client and the Bank. OP/BP 4.01 issued in January 1999, is the central document that defines the Bank's environmental assessment requirements. Following are the WB's environmental and social/resettlement guidelines:

Environmental Policies

- OP 4.01 Environmental Assessment
- OP 4.04 Conservation of Natural Habitats
- OP 4.09 Pest Management
- OP 4.36 Forestry
- OP 4.37 Safety of Dams
- OP 4.11 Physical Cultural Resources

Social Policies

- OP 4.12 Involuntary Resettlement
- OP 4.10 Indigenous Peoples

Legal policies

- OP 7.50 Projects on International Waterways

- OP 7.60 Disputed Areas

The most relevant policies of World Bank in the Rapid Results Health Project activities is the OP 4.01 Environmental Assessment and Indigenous People's Policies. As part of the ESMF process, proposed Projects activities will be screened for potential impacts and that they comply with the requirements set out under World Bank safeguard policies. The project has triggered both policies.

The ESMF will include a screening process to assess the potential impacts associated with Ministry projects and programs. The screening and review process for projects will therefore, help determine which of the safeguard policies are triggered and what mitigation measures need to be taken to address the potential impacts. The screening and review process determine how and when a particular project will trigger a safeguard policy, and what mitigation measures needs to be put in place. The screening and review process also ensures that projects that may have potentially significant impacts have a more detailed study.

3.2.1 Environmental Assessment (OP 4.01)

Environmental Assessment is one of the ten environmental, social, and legal Safeguard Policies of the World Bank. Environmental Assessment is used in the World Bank to identify, avoid, and mitigate the potential negative environmental impacts associated with Bank lending operations. In World Bank operations, the purpose of Environmental Assessment is to improve decision making, to ensure that project options under consideration are sound and sustainable, and that potentially

affected people have been properly consulted. The Bank requires environmental assessment (EA) of projects proposed for Bank support to ensure that they are environmentally sound and sustainable, and thus to improve decision making. EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. EA takes into account the natural environment (air, water and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples and physical cultural resources); and transboundary and global environmental aspects. The client is responsible for carrying out the EA and the Bank advises the borrower on the Bank's EA requirements.

This OP 4.01 is normally triggered because there is potential that the implementation of the health projects may lead to some negative environmental impacts.

3.1.2 Indigenous Peoples (OP 4.10)

This policy is triggered as the overwhelming majority of people in the project area trigger OP/BP 4.10. Per the requirements of OP/BP 4.10, when Indigenous Peoples are the sole or the overwhelming majority of direct project beneficiaries, the elements of an Indigenous

Peoples Plan (IPP) should be included in the overall project design; a separate IPP is not required.

2. Mainstreaming Safeguard Compliance into Project components Screening

The screening criteria provided in the ESMF includes relevant questions which will help determine if any other safeguard policies are triggered and the measures needed to be taken into account to mitigate impacts. The screening and review process will identify any sub-projects/activities that may have potentially significant impacts which require more detailed study and the need for a sub-project specific Environment Assessment (EA). This will ensure that all concerns related to South Sudan environmental legislation and the Bank's safeguard policies are taken into account during the screening of subprojects for potential impacts, and that the appropriate mitigation measures can be adopted to address them.

4. BASELINE INFORMATION
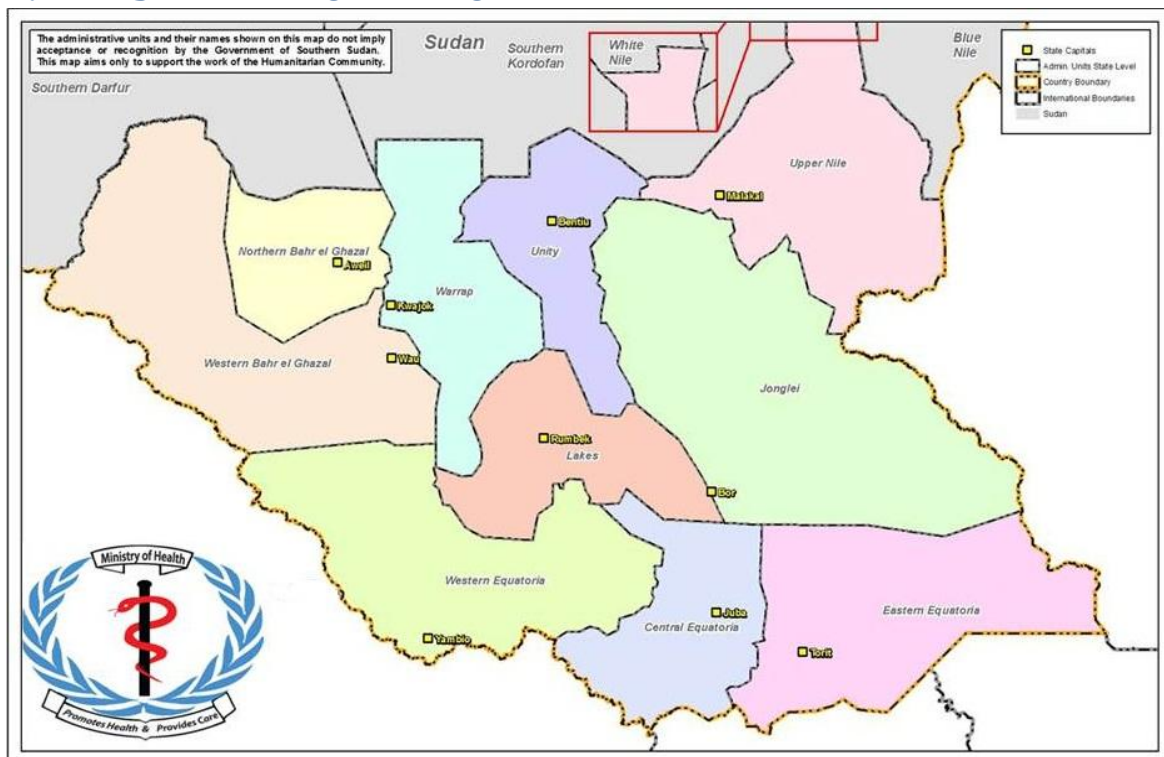
4.1 Country / Project Context

In July 2011, after decades of civil war, South Sudan celebrated its independence from Sudan. Since the Comprehensive Peace Agreement signed with Sudan in 2005, the population has grown from 8 to 12 million. The total fertility rate is estimated at 6.7 children per woman, while the average life expectancy at birth for both sexes is 42 years. South Sudan is still characterized by high incidence of poverty, inadequate access to basic services, very limited access to economic opportunities, poor infrastructure, high mortality and morbidity rates and food insecurity. More than half of the population of South Sudan (51%) lives below the poverty line and income disparity is high. More than 90% of the population lives in rural areas.

Decades of conflict, massive displacement of the population, widespread insecurity, and the consistent underinvestment had led to the collapse of the health care system resulting in poor health status of the population by the time of the Comprehensive Peace Agreement in 2005. South Sudan had one of the highest Maternal Mortality Ratio (MMR) in the World, estimated at 2054/100,000 live births. Although close to 69.0 % of pregnant women attend at least one ANC visit, only 27.5% of deliveries are attended by skilled health professionals. Institutional deliveries account for just 27.2% of births, while the contraceptive prevalence rate is 5.0% . The Infant Mortality Rate (IMR) and Under-five Mortality Rate (UMR) were very high at 102 per 1000 live births and 135 per 1,000 live births, respectively.

The fighting that erupted in December 2013 disrupted service delivery in all sectors and displaced more than 2.3 million people. However, efforts by the international community to mediate peace have continued and after several unfulfilled agreements, a peace agreement brokered by the Inter-Governmental Authority on Development (IGAD) was signed in August 2015. The core of the agreement is the formation of the Transitional Government of National Unity (TGoNU).

The crisis has impacted the health system in the three most conflict-affected states–Unity, Jonglei and Upper Nile–more strongly than in the rest of the country. Insecurity, destruction of facilities, access constraints for personnel and medical supplies, rampant malnutrition and massive population displacements have put a significant stress on an already weak health system. In the two states supported by the World Bank, the number of fully functional facilities was more than halved during the first year of conflict. Consequently, health outputs such as vaccination coverage (DPT3 and measles declined. In the other 8 states covered by USAID and the Health Pooled Fund , service delivery was less affected by the conflict (with the notable exception of Unity).

4.2   Project Area and Location:

Administratively, Southern Sudan is sub-divided in to 10 States; namely, Central Equatoria,
Eastern Equatoria, Jonglei, Unity, Upper Nile, Western Equatoria, Lakes, N. Bahr El Ghazal, Warrap, and Western Bahr El Ghazal States.

4.3   Physical Environment of Jonglei and Upper Nile (project locations)

4.3.1   Population

According to the disputed results of the 2007 Population and Housing Census of Sudan, South Sudan has a total population of 8, 260,490 with an average household size of 6.3. The sex composition of the population reveals that the proportion of male is slightly higher (about 52 %) than females (about 48 %). In terms of ethnic composition there are many tribes in South Sudan of which the Dinka, Nuer, Murle, Mundari, Toposa and Boya are the main agro-pastoralist groups.

The distribution of population across the states, presented in Figure 3.2 demonstrates that Jonglei where 16.4 % of South Sudan's population living, Central Equatoria (13.4 %), Warrap (11.8), and

Upper Nile (11.7 %) are relatively densely populated states. While Northern Bahr-El-Ghazal, Unity, Lakes and Eastern and Western Equatoria are moderately populated. On the other hand, Western Bahr-El-Ghazal is the sparsely populated State (Figure 5.12).

4.3.2 Project Description

The project provides additional resources for an ongoing project of Rapid Results Health Project. The Program Development Objectives of the Project are (i) to improve the delivery of high impact primary health care services in recipient's states of Jonglei and Upper Nile; and (ii) to strengthen coordination and monitoring and evaluation capacities of the Ministry of Health.

Component 1 of the project is delivery of high impact Primary Health Care services. Activities under this component include maternal and child health services such as vaccination, prenatal care, skilled birth attendance, distribution of pharmaceuticals and other inputs.

This would support the MOH's performance-based contract with a Coordination and Service Delivery Organization (CSDO) to improve the delivery of high impact primary health care services including maternal and child health services such as vaccination, prenatal care, skilled birth attendance, etc.

Component 2a: Strengthening implementation capacity of MOH at the national level has two sub-components as follows: (i) strengthening Grant and Contract Management: this sub-component supports the strengthening of the MOH capacity to plan, manage, and monitor grants and contracts; and (ii) bolstering the M&E function: this sub-component ensures that there is a steady stream of independent and credible data on health and sector performance.

5.3 Activity Type   Typical Features

Primary Health Care services Vaccination, delivery services, prenatal care, nutrition, Long Lasting Insecticide Treated Nets (LLITNs), (Curative services for under five; Malaria, Pneumonia and Diarrhea; Tuberculosis and HIV)
Procurement and distribution of drugs:

a. Procurement, storage and distribution of drugs
b. Infrastructure Rehabilitation/Expansion Only maintenance and expansion of existing structures
c. Institutional Strengthening
d. Strengthening grant and contract management
e. Strengthening M and E systems

5: POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

The project will improve access to health services through improving supply of drugs, increasing outreach and expansion of basic health services to children and women, improved coordination of service providers and strengthening of the grant management and monitoring capacity of the implementation agency. .

Since all sub-activities and beneficiary communities are yet to be identified, the impact assessment is based on potential impacts from anticipated project activities. Site specific project impact would be detailed for each site before the commencement of activities as part of the Environmental and Social Management Plan implementation.

5.1   Environmental benefits

The project delivering substantive gains, particularly with respect to environmental health and sanitation.. Overall, the environmental benefits expected of the operation include a less polluted environment due to improved medical waste management practices and improved access to health services.

5.2   Adverse environmental impacts and risks

5.2.1   Medical waste management

The main adverse impact pertains to the generation of *medicinal and healthcare waste and use and disposal of insecticides* used for vector-borne disease control. A separate medical waste management plan has been prepared to identify and address all risks related to medical waste.

5.2.2   Physical infrastructure construction and rehabilitation

The project will do rehabilitation existing health facilities. The environmental risks due to rehabilitation these facilities is considered minimal, site specific, and time bound given the size, and number of facilities to be constructed over the life of the project. As such, the risk rating for these impacts is considered to be "low

a. **Pressures on existing water sources** is deemed to be a minor risk as the early screening and siting practices, if applied properly, can ensure sufficient supply of water for construction and operation of the individual health center without detracting from other users of the same water source.

b. **Noise pollution** may result if construction guidelines and regulations are not followed. This risk is rated as "low" since it can be easily mitigated by following well-established guidelines.

c. **Water-borne disease vectors** could have a breeding ground in stagnant pools of water at construction sites. This risk is deemed to be "low. Through diligent application of good practice civil works construction guidelines, this risk can be eliminated.

d. **Natural habitats and physical cultural resources** are at risk if early screening and appropriate siting for the health centers is not undertaken or carried out properly (i.e., no chance-finds procedures established). This risk is considered to be "low" to "moderate". The capacity of local staff to conduct proper early

site screening for each health center may be limited and require technical support to ensure that the screening adequately addresses this risk.

5.3   Social Benefits, Impacts and Risks

The project is expected to improve access to health services to communities and internally displaced people in Jonglei and Upper Nile. The services are expected to contribute to reduction of child mortality, maternal mortality, reduce spread of vector diseases and general improvement in the quality of health service delivery in the two counties..

The project undertakes maintenance and renovation of existing health infrastructure. No land acquisition is expected from the renovation as it is confined within the compounds of existing premises that are owned by government.

The project has triggered the indigenous peoples' policy (OP 4.10) as most of the peoples of South Sudan including communities living in the project area are indigenous. The project is designed in line with the principles of the policy. It applies extensive community consultation activities through local facilitators of implementing partners who can speak local languages and are familiar with the context. Community outreach programs ensures the inclusion of vulnerable communities and households. Health facilities provide services to local communities as well as IDPs. Village health committees are established with representation of women and other vulnerable groups actively participate in monitoring of disease outbreaks, distribution of malaria nets and community outreach activities.

5.4   Adverse Environmental and Social Impacts and Mitigation Measures

Table: Key Issues, Mitigation Measures and Responsible person

Issues	Mitigation Measures	Responsibility
Requirements for mainstreaming of ESMF	a. Appoint county and state personnel b. Annual and environmental progress reports	a. SMoH b. Consultant
Weak capacity for environmental and social management at the state and county levels	a. Develop partnerships with NGOs and CBOS for environmental and social management b. Stimulate operations of Payam and county (Health committees and Public health Officers)	a. SMOH b. County officials c. NGOs
Opportunity to contribute to positive impact on natural resources management	Assign sufficient budget for suport to programme activities	SMoH
Mainstreaming WB safeguard policies in operation areas	provide sufficient training and support to county officials to understand and apply WB safeguard policies	SMoH

Issues	Mitigation Measures	Responsibility
Cumulative impacts on soem environmental resources	a. carry out assessments of cumulative impacts on ground water, surface water resources, pastoral resources and biodiversity b. sensitize health committees on issue of cumulative impacts	NGOs SMOH
Optimum integration of technical advice with a demand-driven , participatory approach	Sensitize communities to the range of technical advice available and their responsibility to choose which technical advice they require	Public Health officer (County Health Department) NGOs
Issues on relevant environmental laws to the communities	provide information on relevant environmental laws to health committees and local communities	SMOH Public Health Officers

6.   REPORTING AND RESPONSIBILITIES FOR THE ESMF

This chapter sets out the reporting systems and responsibilities of the officers in implementing the ESMF. The chapter commences with details of the issues that will be addressed by the ESMF, and the specific steps to be taken to ensure adherence to the ESMF. It then describes the various elements of the ESMF including:

a.   flowchart for reporting and advice;

b.   screening checklist for sub-projects;

c.   annual environmental and social progress report format; and

d.   Description of roles.

1. Key Environmental Issues and Proposed Actions for Implementation of ESMF

6.1.1Action for Implementation of the ESMF

Service providers (CBOs, NGOs, health workers), will work with communities to identify and fill out sub-project applications/proposals by conducting environmental and social analysis. This will be done by using the screening checklist in the ESMF (table 6.1), the

table on potential environmental and social impacts and mitigation measures, as well as the resources sheets.

The application for the sub-projects will clearly state the environmental and social mitigation measures. If a sub-project requires a separate EMP for specific mitigation measures, then the sub-project application will also have an EMP along with it. *The environmental management plan will be accompanied by the medical waste management*

All these are sent to the County Health offices for review at the local level, which will have environmental and social expertise (e.g. Public Health Officer, Waste Management Officers).

Once review is complete, the reviewers will sign off and forward for approval at the State MoH.

At the national level, the MoH Directorate of Preventive Health will provide lead coordination and ensure that the results meet the targets set by the project.

Day-to-day coordination of project activities will be handled by the County Public Health Officers.

6.2   Flow for Reporting and Advice

At the facility level the Waste Management Officers will report to the county through the already existing public officers at the county health department and where absent maybe employed, shall have the overall responsibility of waste management practices and will report to the State MoH. The State shall have a designated officer who will be the focal person and will be reporting to the national MoH through the Directorate of Preventive Health Services. All the officers will be trained by the MoH on appropriate waste management practices as well as provided with available guidelines and policies.

6.3   Duties and Responsibilities of MOH

The RSS Ministry of Health has the overall responsibility to provide health services and should also have the overall responsibility of ensuring proper medical waste management.

The Department of Preventive Medicine of the RSS Ministry of Health has the role to provide leadership in establishing and encouraging safe, efficient, and cost effective medical waste management in the country.

The RSS Ministry of Health is responsible for:
   a. Development, implementation and regular update of the National Medical Waste Management Plan.
   b. Development of guidelines on medical waste management.
   c. Facilitation and coordination of the implementation of the Policy and the Plan.
   d. Mobilization of national and international funds to implement the medical waste management program.
   e. Building and upgrading capacity in medical waste management for technical staff on all administrative levels.
   f. Establishing a national training program for medical and logistic staff on medical

waste management.

g. Increasing public awareness on the adverse impacts on unsafe handling of medical waste.

h. Reporting to Government of the Republic of South Sudan on the implementation of the National Medical Waste Management Plan.

i. Sectoral coordination with other public/private entities involved in waste management.

6.4 Description of Roles and responsibility in the MOH and other actors

The roles proposed under this ESMF are summarized as follows:

a) The national MOH will provide lead coordination at the national level and ensure that the results meet the targets set by MOH activities, programs and projects;

b) The County Public Health Officers will handle day-to-day coordination of MoH activities at the counties;

c) The implementing NGOs and County Public Health Officers will be responsible for ensuring that the environmental and social screening and review systems set out in this chapter are integrated into the MOH activities and that it is implemented;

d) Sensitization of health workers and communities about environmental and social issues will be a significant part of ensuring this integration, as will partnerships with government offices associated with the MoH activities;

e) The County Public Health Officers will draw on the technical advice of government officers in other departments, and NGOs or upon traditional technical knowledge particularly of waste management practices and the use of indigenous plant and animal resources;

f) The State MoH officials will provide backstopping technical advice in environmental and social screening of MOH activities and projects and sign off proposals and applications before they are submitted to MoH   for approval;

g) The County Public Health Officers will coordinate inputs from NGOs etc and provide the key link between the State MoH projects and national MoH;

h) An independent team will prepare an end phase social and environmental audit report for submission to MoH/MAF Secretariat. This audit report will be shared with NGOs, the World Bank and other relevant government and other non-Governmental agencies.

6.4.1   Duties and Responsibilities of SMoH

At the state level, State Ministry of Health shall be responsible to ensure implementation of safe practices and proper waste management. SMoE duty to include also preparation of an annual report on Medical Waste Management in the State.

6.4.2 Duties and Responsibilities of County health departments

The CHD shall have the overall responsibility for the supervision of the medical waste management system in the specific county. At least two persons of the department shall have the qualification of medical waste officer (MWO). The task of the CHD shall include but shall not be limited to:

a. Supervision and monitoring of the healthcare institution in the county in regard to medical waste management.

b. Supporting county hospitals and PHCCs in the setup of medical waste management system and providing of medical waste training courses.

c. Supporting healthcare facilities in the organization of the treatment and disposal of hazardous waste.

d. Organization of the transport, treatment and disposal of special medical waste streams such as pharmaceutical waste or chemical waste.

e. Collection of relevant data and information such as waste generation rates, accidents, etc.

f. Monitoring the healthcare provider by regular inspecting of checklist and monitoring waste generation and waste treatment.

g. Evaluation of data and preparation of an annual report of the actual medical waste situation in the county.

h. Coordination of all activities with the State Ministry of Health to ensure a coherent system throughout rural areas.

6.4.3 The duties and responsibilities of the Waste Management Officer can be summarized as follows:

1. Information:
   a. Informing stakeholders, staff, patients and the public about waste management activities in health facilities.
   b. Carrying out medical waste training and awareness program.
   c. Sensitization of facility staff in medical waste matters

2. Initiative and Innovation:
   a. Stimulation of the new and better waste management and treatment methods
   b. Make recommendations and give advice on purchasing of environmentally-friendly disposables and investment goods
   c. Introduction of environmental friendly procedures, replacement of disposables, mercury, collection of valuable waste, etc.

3. Monitoring and Supervision:
   a. Supervision of the internal waste logistics including segregation, collection, storage and disposal
   b. Supervision of the supply of waste collection material

4. Reporting and Documentation:
   a. Reporting on accidents and incidents related to waste
   b. Carrying out waste audits
   c. Prepare environmental and social progress reports

5. Operational waste management:
   a. Organization and management of daily waste services
   b. Responsibility for setting up and carrying out waste collection schemes
   c. Responsibility for safe treatment and disposal of collected medical waste

6.5   Screening for projects

This ESMF includes a screening process to assess the potential environmental and social impacts associated with projects. The purpose of the ESMF is to cover the unknowns. Using the screening and review process for project identification presented here will, therefore, help determine which of the safeguard policies are triggered and what measures will need to be taken to address the potential impacts.

This screening and review process will determine how and when a particular project will trigger a safeguard policy, and what mitigation measures will need to be put in place. It will also ensure that projects that may have potentially significant impacts will be studied in greater detail. The need for project specific EAs will also be identified by this screening and review process. The project to avoid or minimize adverse environmental and social impacts. They will use a checklist (Format 6.1) together with information on typical project impacts and mitigation measures. The checklist contains a certification by the community and extension team that the application includes all measures required to avoid or minimize adverse environmental and social impacts. The projects will be given an environmental rating.

In order to ensure proper implementation of environmental and social screening, and mitigation measures, the MOH will undertake environmental training and institutional capacity building. Environmental training and sensitization will be required implementing partners and health workers.. The screening criteria outlined in this ESMF includes relevant questions which will help determine if any other safeguard policies are triggered and the measures need to be taken to mitigate impacts. This will ensure that projects that may have potentially significant impacts and require more detailed study receive national level approval as well as district (county or district?) level approval. Where an EA has to be carried out, this will be done by a qualified EA expert. Figure 2 depicts the process that the county assistant commissioners (thinking of county public health officers) and the extension team (CBOs and NGOs) will apply in working with the communities and farmer groups (or health implementers instead of farmers) to avoid or mitigate negative environmental impacts for projects.

6.6   Baseline information on the development of ESMF for the proposed MoH projects (Screening Checklist)

1.0	Background Information		
1 a	Name of County		
1 b	Name of Monitoring officer		

			Yes	No
1c	Subproject location (Payam & Boma)			
1d	Approx size of land/feddans available for the project			
1e	Activities/enterprises undertaken			
2.0	Environmental Issues			
	Will the subproject/activity:		Yes	No
2a	Create a risk of increased soil degradation or erosion?			
2b	Divert the water resource from its natural course/location?			
	Cause pollution of aquatic ecosystems of aquatic ecosystems by sedimentation and agrochemicals?			
2d	Introduce exotic plants and animals?			
2e	Involve drainage of wetlands and other permanently flooded areas?			
2f	Cause poor water drainage and increase the risk of water-related diseases such as malaria?			
2g	Reduce the quantity of water for the downstream users?			
hi	Result in the lowering of groundwater level or depletion of groundwater?			
2i	Create waste that could adversely affect local soils, vegetation, rivers and streams or ground water?			
	If the answer to any of the above is 'yes', there will be need to include an EMP with subproject/activity application			
3.	Socio-economic issues			

0			
	Will the subproject/activity:	**Yes**	**N o**
3 a	Displace people from their current settlement?		
3 b	Interfere with normal health and safety of the worker/employee?		
3 c	Reduce the employment opportunities for the surrounding communities?		
3 d	Reduce settlement?		
3 e	Reduce income for the local communities?		
3f	Increase exposure of the community to HIV/AIDS?		
4.	Will the subproject/activity:	**Yes**	**N o**
4a	Be located within or near environmentally sensitive areas (e.g. intact natural forests, wetlands) or threatened species?		
4b	Adversely affect environmentally sensitive areas or critical habitats?		
4c	Affect indigenous biodiversity (flora and fauna)?		
4d	Cause any loss or degradation of any natural habitats, either directly (through project activities) or indirectly?		
4e	Does the project affect the aesthetic quality of the landscape?		

		Yes	No
4f	Does the subproject reduce people's access to the pasture, water, public services or other resources that they depend on?		
4g	Increase human –wildlife conflicts?		
	If the answer to any of the above is 'yes', there will be need to include an EMP with subproject/activity application		
5.0	**Pesticides, fertilizers and agricultural chemicals**		
	Will the subproject/activity:	**Yes**	**No**
5a	Involve the use of pesticides, fertilizers or other agricultural chemicals, or increase existing use?		
5b	Cause the contamination of water courses by chemicals and pesticides?		
5c	Cause the contamination of soil by agrochemicals and pesticides?		
	If the answer to any of the above is 'yes', there will be need to prepare an IPMP for the subproject/activity application		
6.0	**Indigenous Peoples**		
	Are there:	**Yes**	**No**