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# MIZORAM HEALTH SYSTEMS STRENGTHENING PROJECT

(P173958)

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## Environmental and Social Management Framework (ESMF)

Draft Report

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## ABBREVIATIONS

ADC	Autonomous District Council
ANC	Antenatal care
ANM	Auxiliary nurse midwife
ASHA	Accredited social health activist
BMW	Bio-medical Waste Management
BMWM	Bio-medical Waste Management
CBMWTF	Common Bio-medical Waste Treatment Facility
CERC	Contingent Emergency Response Component
CHC	Community Health Centre
CMO	Chief Medical Officer
CPCB	Central Pollution Control Board
CPHC	Comprehensive Primary Health Care
CTF	Common treatment facility
DH	District Hospital
DOHFW	Department of Health and Family Welfare
E&S	Environmental and Social
EIA	Environmental Impact Assessment
ESF	Environmental and Social Framework of World Bank
ESG	Environmental, Health, and Safety Guidelines
ESMF	Environmental and Social management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
ETP	Effluent Treatment plant
FPIC	Free, Prior, and Informed Consultation
GBV	Gender Based Violence
GDP	Gross Domestic Product
GoI	Government of India
GoM	Government of Mizoram
GRM	Grievance Redress Mechanism
HCF	Health Care Facility
HR	Human Resource
HRH	Health Human Resource
HWC	Health and Wellness Centre
ICC	Internal Complaints Committee
ICT	Information and communication technology
IEC	Information, Education, and Communication
IMR	Infant Mortality Rate
IPA	Internal performance agreement
IPF	Investment Project Financing
IPM	Internal Performance Management
IT	Information Technology
JSSK	Janani Shishu Suraksha Karyakaram
LCC	Local Complaints Committee
LDHF	Low-dose-high-frequency
LMP	Labor Management Procedure
MH	Maternal Health
MHCS	Mizoram Health Care Scheme
MMR	Maternal Mortality Rate

MO	Medical Officer
MOHFW	Ministry of Health and Family Welfare
MS	Medical Superintendent
MSPCB	Mizoram State Pollution Control Board
NCD	Non-communicable diseases
NGO	Non-governmental Organization
NHM	National Health Mission
NQAS	National Quality Assurance Standards
OHS	Occupation and Health Safety
OOPE	Out-of-pocket expenditure
OSC	One Stop Centre
PDO	Project Development Objective
PHC	Primary Health Centre
PMU	Project Management Unit
PPE	Personal Protective equipment
PPP	Public Private Partnership
RKS	Rogi Kalyan Samiti
SBCC	Social and Behaviour Change Communication
SC	Sub-Centre
SEA	Sexual exploitation and abuse
SEP	Stakeholder Engagement Plan
SH	Sexual harassment
SOP	Standard Operating Procedure
STP	Sewage Treatment Plant
TFR	Total Fertility Rate
TNA	Training need assessment
VC	Village Council
VHSNC	Village health, nutrition and sanitation committee
VHND	Village Health and Nutrition Day
WCD	Women and Child Development
WHO	World Health Organization

# **Mizoram Health Systems Strengthening Project**

## **Environmental and Social Management Framework**

### **Executive Summary**

*The World Bank is planning to provide support to the Government of Mizoram (GOM) for Strengthening the public health system in the state.* The proposed project will benefit the entire state of Mizoram with primary focus on improving institutional system and processes of health care delivery system as well as focus on strengthening the 10 District Hospitals and 2 Sub-District Hospitals, 7 CHCs and 38 PHCs across the state. Systems will also be strengthened in the MHIS which is currently used by 56 percent of families in the State. The project will also benefit the health sector staff, specifically at the secondary and primary levels, by strengthening their capacity and provide them skill-based training. The investment at the health facility level to improve (a) infrastructure, (b) private sector partnerships, (c) technology solutions, and (d) improved working conditions of the health sector staffs and improve their efficiency and satisfaction level towards providing better quality care. The community level intervention that follows the integrated approach for child development will also provide focused health and nutrition service for mothers. This will benefit the women and children through focused intervention.

The key implementing agency for the project is the Department of Health & Family Welfare (DOHFW), Government of Mizoram. The project development objective (PDO) is “to improve accountability, health insurance program and quality of health services in Mizoram”. The project has the following components:

**Component 1: Improving accountability and strengthening governance through Internal Performance Agreements.** This component focuses on reforms in governance and management structures through IPAs between the DoHFW and its subsidiaries at the state and sub-state levels. This RBF approach marks a paradigm shift in the financing relationship between state and the sub-state level implementing units.

**Component 2: Improve design and management of Health insurance programs.** This component shall support the state insurance program and its linkages with the PM-JAY to reduce financial barriers in accessing hospital services, prevent catastrophic out-of-pocket expenditures (OOPE) for health by poor families, and expand coverage.

**Component 3: Quality of health service and innovations.** This component will improve the quality of health services by: developing a comprehensive quality assurance system; biomedical waste management, augmenting systems for human resource management, and piloting innovations.

**Component 4: Contingent Emergency Response Component.** Provision of immediate response to an Eligible Crisis or Emergency, as needed.

**The project will finance a range of activities.** The proposed project activities and interventions will improve management and accountability of the healthcare system in the State by strengthening the structure and system associated with health care delivery, enhancing capacities of healthcare providers and healthcare managers, integrating and improving the health management information system and improving the quality of and access to health services. In hard-to-reach and remote areas, community-driven and public-private partnership approaches will be introduced to ensure access to and quality of healthcare services. The project will support the investment at the health facility level to improve (a) HCF infrastructure, (b) private sector partnerships, (c) technology solutions, and (d) improved working conditions of the health sector staff, which in turn is expected to improve their efficiency and satisfaction level towards providing better quality care. Project will also support community level intervention by improving the infrastructure and services at Health Wellness Centre (HWC) at pilot

level. The overall strengthening of the health sector delivery in Mizoram will also include (a) strengthening the administrative structures including technical support and training of administrators at the state and district levels on planning, management and technical issues; (b) performance based contracting and result based financing at HCF level for quality improvement, emphasize on capacity building of hospital and facility staff on techno-managerial skills; and (c) support development of a plan for improving management and disposal of all biomedical waste generated by both government and private health facilities.

***Since the project aims to strengthen a large number of HCFs, and given the current COVID-19 pandemic situation, the specific location and detailed information about the subprojects are not available, and hence an Environmental and Social Management Framework (ESMF) has been prepared for managing the identified risks and impacts.*** An Environment and Social Commitment Plan (ESCP) and a Stakeholder Engagement Plan (SEP) have also been prepared and will be agreed and disclosed at the DoHFW website locally in Mizoram and on the World Bank's external website. Given COVID-19 pandemic related travel restrictions and social distancing advisories, limited field visit could be done and most of the consultations were virtual. Consultations covered aspects of Health service delivery and related biomedical waste management (BMWM) practices, and role of community in improving health services. The ESMF, SEP and ESCP may be updated as required during the implementation of the project when the wider stakeholder consultations are conducted.

***Based on the identified potential environmental and social risks and impacts, the project's E&S risks are rated as 'Moderate'.*** The key social risks emerge from risks of exclusion and access to services by vulnerable populations; risk to occupation and health safety issues from repair and renovation activities – though small in nature but at dispersed locations; and weak or non-existent grievance redress mechanisms. The project does not anticipate any land acquisition and/or involuntary resettlement as the infrastructure improvement activities are limited to repair, renovations, and minor expansion within the existing footprint of the health facilities. To mitigate these risks, screening will be conducted for each of the subprojects to avoid any adverse social impacts including potential impacts on informal/ illegal settlers residing within the health facility premises/ land (if any). The key environmental risk emerges from the fact that with improved utilization of health services through the project, the quantity of bio-medical waste will increase incrementally. This in the backdrop of the present bio-medical waste management practices in the State poses some risks. However, the project plans to invest on improving the overall ecosystem for bio-medical waste management that includes segregation, disinfection, collection and disposal that largely safeguards the environment and contributes in improving the quality of health service and patient safety. Given that the incremental increase in BMW is dependent on increased patient footfall, which is further dependent of many factors including infrastructure upgradation of HCFs, capacity enhancement of HCF staffs, and SBCC to mobilise communities, and hence not expected to happen during the first two years of the project. Along with HCF infrastructure upgradation, infrastructure for BMWM will also be assessed and will be part of the quality enhancement plan for upgradation. Similarly, the BMWM related capacity building will also be part of the overall capacity building plan. The overall upgradation of BMWM system has been scheduled in line with any expected increase of bio-medical waste. In the meantime, the existing BMWM practices with recommended onsite disposal methods using deep burial pits for infectious wastes, sharp pits for sharp wastes, and disinfection of liquid waste before being released in the drain/ soak-pits will be followed which are in line with national guidelines and regulations.

***Six out of ten World Bank Environment and Social Standards (ESSs) are considered 'relevant' to the project.*** The relevant E&S standards are: ESS1 - Assessment and Management of Environmental and Social Risks and Impacts, ESS2 - Labor and Working Conditions, ESS3 - Resource Efficiency and Pollution Prevention and Management, ESS4 - Community Health and Safety, ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and ESS10 - Stakeholder Engagement and Information Disclosure.

***This ESMF is exhaustive and covers all the critical aspects for managing the potential environmental and social risks of the project.*** The ESMF includes an analysis of the national/subnational legal and regulatory framework, an environmental and social baseline, screening checklists for risk categorization of subprojects, negative list of investments, due diligence procedures and processes, mitigation actions with responsible agencies against each action and provides procedures relevant to the development of the subprojects, a generic Environmental and Social Management Plans (ESMP), and further guidance for developing the Bio-Medical Waste Management Plan (BMWMP) (Annex-III), and the Labor Management Procedure (LMP) (Annex II) in accordance with the World Bank's Environmental and Social Framework (ESF). It includes a summarized SEP and details out the institutional arrangements required for E&S risk management, including the requirements for qualified experts and a capacity building plan. The ESMP includes mitigation measures related to OHS and community health and safety measures including for civil works. The EMSF includes a Grievance Redress Mechanism and refers to a range of COVID-19 related guidelines. The project's SEA/SH risk has been rated as low, however with given prioritization by the state on addressing GBV, a guidance on addressing SEA/ SH has been prepared (Annex-VI) as part of the ESMF.



# **ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF) FOR MIZORAM HEALTH SYSTEMS STRENGTHENING PROJECT (P173589)**

## **1 INTRODUCTION**

### **1.1 Background**

Mizoram which means the "land of the Mizo people" is one of the "Seven Sisters" (Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram, Nagaland, and Tripura) in North Eastern India. The state shares borders with Tripura, Assam, Manipur and with the neighbouring countries of Bangladesh and Myanmar. The total area of the state is 21081 sq kms and is located in the north-eastern part of the country between 22°19' to 24°19' North latitudes and 92°16' to 93°26' East longitudes. Mizoram was the part of Assam until 1972, then it was made the Union Territory and on 20 February 1987 became the twenty-third state of India. Aizawl is the capital of Mizoram and the largest city of the state. At present, Mizoram has eleven districts i.e. Aizawl, Lunglei, Champhai, Lawngtlai, Mamit, Kolasib, Serchhip, Saiha and three new districts carved out on 3<sup>rd</sup> June 2019 i.e. Hnahthial (from earlier Lunglei district), Khawzawl (from earlier Champhai district), and Saitual (from earlier Aizawl and Champhai districts), and three Autonomous District Councils (ADCs).

Total population of Mizoram as per 2011 census is 1,097,206 (0.09 percent of India's population) of which 50.6 percent are males and 49.4 percent are females. Out of total population of Mizoram, 52.11% people live in urban regions and 47.89 percent in rural areas. The total population growth from 2001-2011 was 23.5 percent. Average density of Mizoram is 52 per sq. km. Mizoram is a land of rolling hills, valleys, rivers and lakes. As many as 21 major hill ranges or peaks of different heights run through the length and breadth of the state, with plains scattered here and there. About 76 percent of the state is covered by forests, 8 percent is fallows land, 3 percent is barren and considered uncultivable area, while cultivable and sown area constitutes the rest.

About 95 percent of current Mizoram population is of diverse tribal origins who settled in the state, mostly from southeast Asia, over waves of migration starting about 16<sup>th</sup> century but mainly in 18<sup>th</sup> century. This is the highest concentration of tribal people among all states of India, and they are currently protected under Indian constitution as a Scheduled Tribe. The tribes converted from Animist religions to Christianity over the first half of 20<sup>th</sup> century. Mizoram is one of three states of India with a Christian majority (87%). Its people belong to various denominations, mostly Presbyterian in its North and Baptists in South.

With the Independence of India, the Lushai Hills was made an autonomous district under the sixth schedule of the Constitution of India. A regional Council was created in 1953 for the region inhabited by the Pawi, the Lakher and the Chakma. In 1954, the Lushai Hill District was renamed as Mizo District by an Act of Parliament called Lushai Hills District (change of name) Act 1954. The next year i.e. in 1955 the Chieftainship was abolished and was replaced by the 'Village Council'.

### **1.2 Environmental Profile of Mizoram**

Mizoram is a landlocked state in North East India with 722 kilometres long international borders with Myanmar and Bangladesh in its south, and it borders with Manipur, Assam and Tripura in the north. It is the fifth smallest state of India with 21,087 sqkm and extends from 21°56'N to 24°31'N, and 92°16'E to 93°26'E. Mizoram is a land of rolling hills, valleys, rivers and lakes. As many as 21 major hill ranges or peaks of different heights run through the length and breadth of the state, with plains scattered here and there. The average height of the hills to the west of the state are about 1,000 metres (3,300 ft). These gradually rise up to 1,300 metres (4,300 ft) to the east. Some areas, however, have higher ranges which go up to a height of over 2,000 metres (6,600 ft). The hills of Mizoram are highly fragile. Mizoram consists of several almost north-south longitudinal valleys containing series of small and flat

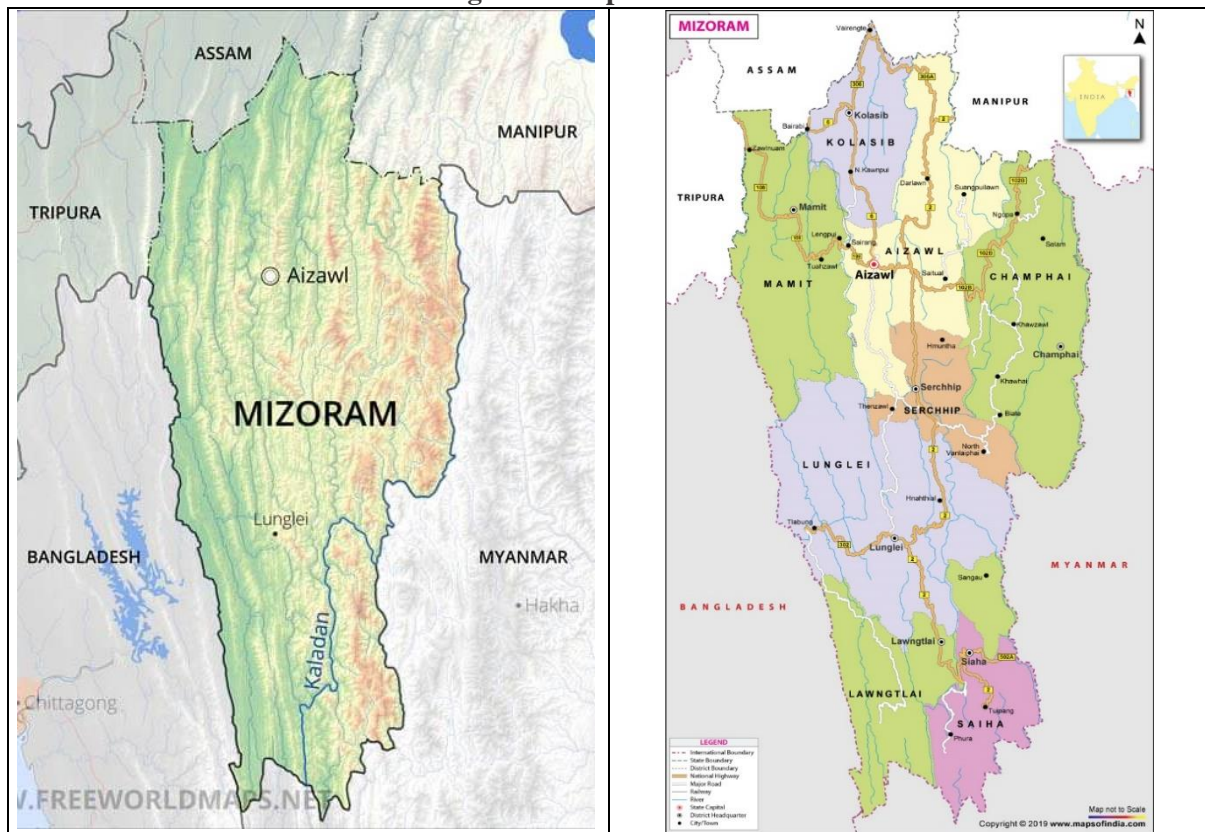
hummocks, mostly anticlinal, parallel to sub-parallel hill ranges and narrow adjoining synclinal valleys with series of topographic highs. Mizoram mainly has four types of physical features—structured hills, valley fills, flood plains, and linear ridges. Structural hills are further divided into three categories—high structural hills, medium structural hills, and low structural hills.

**Table (1): Physical Features of Mizoram**

S. no.	Geographical unit	Altitude (M)	Area (Sq. km)	%	Location
1	High structural hill	>1200	1732.1	8.2	Eastern part of the longitudinal half largely and central part of the state with limited distribution
2	Medium structural hill	800–1200	4350.6	20.6	Found in surrounding of the high structural hills and comprises of foothills
3	Low structural hill	<800	13013.3	61.7	They cover almost the entire area of the state
4	Valley fill	Along the valleys	574.3	2.7	The unconsolidated sediments deposited by streams or rivers in a narrow fluvial valley
5	Flood plain	Low-lying plains	78.4	0.4	Formed by deposition of recent alluvium—gravel, sand, and silt
6	Linear ridge	Parallel and linear ridges	1338.3	6.4	Low-dissected, parallel, and linear ridge of uniform heights and dimensions, found along the western and southwestern parts of the state stretching from Lawngtlai district in the south to Mamit district in the north

Source RSAC (2009)

**Figure 1: Map of Mizoram**



Mizoram has vast natural resources including forests and wildlife. According to India State of Forest Report (ISFR)- 2015, an area of 18,748 sq. km which is 88.93% of the total geographical area (21,087 sq km) of the State is under forest cover in Mizoram. Of this, about 138 sq km is Very Dense Forest (VDF), 5,858 sq km Moderately Dense Forest (MDF) and 12,752 sq km of Open Forest (OF). Besides, about 535 sq. km of the area is under tree cover. Thus, total forest and tree cover area of State account for 19,283 sq. km. which is about 91.42% of the total geographical area of the State<sup>1</sup>.

### 1.3 Socio-Cultural and Demographic Profile of Mizoram

#### 1.3.1 Demographic Profile

As per Census 2011, the state has a population of 1.09 million comprising 50.63 percent male and 49.37 percent female populations. The sex ratio stands at 975 females per thousand male populations. The decadal growth of population was 22.8 percent during 2001-2011. The population in the age group of 0-6 years constitutes 15.36 percent of the total population. The Scheduled Caste population comprises 0.11 percent, whereas tribal population constitutes 94 percent of the total population. The population density is 52 persons/ sq. km as compared to 382 persons/ sq. km at national level (Census 2011). The overall literacy rate (91.58 percent) of Mizoram is one of the highest in the country (against All India figure of 74 percent). The Female literacy rate in Mizoram is 89.3 percent compared to national average of 64.6 percent. The district wise demographic profile is presented in Table (2) below.

District	No. of Villages	No of Households	% ST	Population Density (Person/ Sqkm)	% Literacy	% Male Literacy	% Female Literacy
Mamit	86	17,731	95.0%	52.0	84.9%	89.1%	80.4%
Kolasib	34	17,270	87.7%	28.6	93.5%	94.6%	92.4%
Aizawl	94	82,524	93.3%	60.7	97.9%	98.1%	97.7%
Champhai	83	25,520	98.2%	111.9	95.9%	97.2%	94.6%
Serchhip	35	12,622	96.8%	39.5	97.9%	98.3%	97.5%
Lunglei	161	33,058	95.1%	45.7	88.9%	92.0%	85.5%
Lawngtlai	159	22,984	95.3%	35.6	65.9%	74.1%	57.1%
Saiha	52	11,144	96.6%	46.1	90.0%	92.6%	87.3%
<b>State Total</b>	<b>704</b>	222,853	94.4%	40.4	91.3%	93.3%	89.3%

Source: Census 2011

Mizoram is the cradle of diverse communities like the Lusei, Ralte, Paite, Bete, Powi, Lakher, Hmar, Riang, Tlanglau, Pangs, Bawm, Bru, Chakma and others. They are mostly of Mongoloid race. The entire population is designated as “Scheduled Tribes”, as per Schedule VI of the Constitution. The Mizos are a close-knit society with no class distinction and no discrimination on grounds of sex. A very

<sup>1</sup> State of Environment Report Mizoram 2016. Available at <https://forest.mizoram.gov.in/uploads/attachments/fee48ed5b2e8f6f05ec63f5308035a31/pages-205-soer-mizoram-2016.pdf>

large majority of them are cultivators and the village exist like a big family. Christianity is predominant religion of the state. Inhabitants of other religions include Buddhists, Hindus, Muslims and others.

As per the 2011 Census, Christianity is the predominant religion in Mizoram. Regarding religion, the Mizo are the followers of Christian 87%, Buddhist 8.5%, Hindu 2.75%, and Muslim 1.3%.

### 1.3.2 Tribes of Mizoram

The great majority of Mizoram's population consists of several ethnic tribes who are either culturally or linguistically linked. These ethnic groups are collectively known as Mizos and consists of several ethnic groups. Mizo is not just one tribe as normally presumed but the term represents several tribes taken together. The term Mizo means “the “men who live in the hills” (Mi- men; Zo- hills) or the Highlanders. Mizo comprises of 5 major tribes and 11 minor tribes known under the common name Awzia. The 5 major tribes are- Lushei, Ralte, Hmar, Paihte, Pawi (or Poi). While major tribes maintained their respective dialects, the 11 minor tribes either lost their distinctive dialects as a result of association with larger tribes. These tribes are subdivided into numerous clans, and these clans are further sub-divided into sub-clans. These clans sometimes have slight linguistic differences.

The fabric of social life in the Mizo society has undergone tremendous changes over the years. Before the British moved into the hills, for all practical purposes the village and the clan became units of the Mizo society. The Mizo code of ethics or dharma moved round “Tlawmngaihna” an untranslatable term meaning on the part of everyone to be hospitable, kind unselfish and helpful to others. Tlawmngaihna to a Mizo stands for selfless service for others.

### 1.4 Autonomous District Councils in Mizoram

As provided in paragraph 2(6) of the Sixth Schedule to the Constitution of India, the Govt. of Mizoram had enacted the Mizoram Autonomous District Council (Constitution and Conduct of Business of the District Councils) Rules, 1974, which then became the guiding principles of governance for the three ADC's of Mizoram. Further, the Government of Mizoram also created a separate department, in the Secretariat known as ‘District Council Affairs Department (DCA)’, to look after the affairs of the three ADC's of Mizoram, and funds for the District Councils are channelized through this department. There are three Autonomous District Councils (ADCs) for ethnic tribes in Mizoram, namely Chakma Autonomous District Council (in the southern part of state, bordering Bangladesh), Lai Autonomous District Council (LADC) for Lai people in the southern part of the state, and Mara Autonomous District Council (MADC) for Mara people in the southern-eastern corner.

### 1.5 Protected Areas

Forest is an integral part of the culture and tradition of Mizoram as its existence maintains the ecology of the State. Forest covers 19,054 sq. km. that is 90.38 percent of the State’s geographical area. In terms of forest canopy density classes, the State has 138.00 sq. km. very dense forest, 5900 sq.km. moderately dense forest and 13,016 sq. km. open forest. The recorded forest area of the State is 16,717. sq. km. Reserve Forest constitute 7909 sq. km, Protected Forests constitute 3568 sq. km and un-classed forests constitute 5240 sq. km of the total Forest Area.

Mizoram has 10 protected area, out of which 2 are National Park (NP), 1 Tiger Reserve and remaining 7 are Wildlife Sanctuaries (WLS) covering an area of 1240.75 sq. km, which is 5.88% of total geographical area. Lists of protected area including its size, location are presented in Table (3) below.

<b>Sl.No.</b>	<b>Protected Area</b>	<b>Area in Sqkm</b>	<b>Located in District</b>
1	Murlen National Park	100	Champhai
2	Phawngpui National Park	50	Lawngtlai

<b>Sl.No.</b>	<b>Protected Area</b>	<b>Area in Sqkm</b>	<b>Located in District</b>
3	Dampa Tiger Reserve	500	Mamit
4	Ngengpui Wildlife Sanctuary	110	Lawngtlai
5	Khawnglung Wildlife Sanctuary	35.75	Lunglei
6	Lengteng Wildlife Sanctuary	60	Champhai
7	Tawi Wildlife Sanctuary	35	Aizawl
8	Thorangtlang Wildlife Sanctuary	50	Lunglei
9	Pualreng Wildlife Sanctuary	50	Kolasib
10	Tokalo Wildlife Sanctuary	250	Saiha
<b>Total</b>		<b>1240.75</b>	

## **1.6 Health Status in Mizoram**

Mizoram has been categorized a front runner for ranking first in the NITI Aayog state health index score among smaller states leading by 14 points with its health index improving from 73.70 to 74.97 points from 2015-16 to 2017-18<sup>2</sup>. However, it also showed the least incremental improvements in two rounds. The state has delivered a mixed performance with a significant decline in the Health outcomes by 7.5 percent points (92.97 to 85.48) and an improvement in the key inputs/ processes by 13 percent points (44.64 to 57.64) from FY 15-16 to FY 17-18. The material & child health program indicators have declined or marginally improved. The proportion of low birth weight among new-born infants have marginally improved from 4.6 percent to 4.7 percent, institutional deliveries dropped from 96.3 percent to 95.1 percent, full immunization coverage dropped by almost 9 percentage points from 100 percent in 2016-17 to 90.8 percent in 2017-18. Beyond maternal health, the treatment success rate of new microbiologically confirmed tuberculosis has dropped from 90.6 percent to 73.5 percent during the same reference period which is mainly due to diminishing returns in health systems.

Key health indicators in Mizoram are comparable to or better than national averages. In 2014-15, the total fertility rate (TFR) of 2.3 in Mizoram was similar to the rate of 2.2 nationally; under-five mortality in Mizoram was 46 per 1,000 live births, compared to 50 nationally; and the prevalence of stunting among under-five children was 28.1 percent, compared to the national figure of 38.4 percent. At the same time, there are significant rural-urban disparities in Mizoram: under-five mortality in rural areas was 58 per 1,000, compared to 35 in rural areas; and prevalence of child stunting was 33.7 percent in rural areas, compared to 22.7 percent in urban areas. The proportion of assisted births (by a doctor/nurse/LVH/ANM/other health professionals) was as high as 97.9 per cent in the urban areas and 68.2 per cent in the rural areas along with a maternal mortality rate of 135 for the state.

While coverage of maternal health care services in Mizoram is comparable to or better than national averages, child immunization coverage is significantly lower. In 2015-16, 61.4 percent of mothers had at least four antenatal care visits and 79.7 percent gave birth in a health facility, compared to national figures of 51.2 and 78.9 percent respectively. Full immunization coverage in Mizoram was 50.7 percent, compared to 62.0 percent nationally. While maternal health care coverage in rural areas of Mizoram is lower than in urban areas, child immunization coverage levels are similar. In rural areas, 61.4 percent of births were in health facilities, compared to 97.2 percent in urban areas, while full immunization coverage was 51.6 percent among rural children and 49.8 percent among urban children. The state is currently ranked at 21 in the SDG index.

<sup>2</sup> Healthy States Progressive India - Report on the Ranks of States and Union Territories, June 2019, by Niti Ayog. Available at [http://social.niti.gov.in/uploads/sample/health\\_index\\_report.pdf](http://social.niti.gov.in/uploads/sample/health_index_report.pdf)

The burden of communicable diseases persists along-side the threat of resurgent infectious diseases. The state has the highest estimated HIV prevalence (2.04 percent among adults) and among the highest cancer incidence in the country,<sup>3,4</sup> with age-adjusted rates of 175 and 136 per 100,000 population for male and female, respectively. The district of Aizawl has the highest cancer burden in anywhere in India with 270 and 207 for 100,00 male and female, respectively.<sup>5,6</sup> According to the India State-level Disease Burden Initiative, Malaria, Lower respiratory tract infection and COPD are the top three causes of years of life lost in both male and female, the top two causes of deaths among the age groups 0-14 years (accounting for 12 per cent of total deaths) includes diarrhea, lower respiratory infections (36 per cent), neonatal disorders (34 per cent). In the age group, 15-39 (13.7 per cent of total deaths) includes diarrhea, lower respiratory infections (13.8 per cent) and HIV/AIDS and TB (13.8 per cent).<sup>7</sup> Although anemia levels in the state are not very high (22.5 per cent in women; 17.7 per cent in children below 5 years; 10 per cent in men), 21 per cent of men and women in the state belong to overweight or obese category which is higher than the national average. Overall, NCDs are responsible for more than 50 per cent of the disease burden in the state.<sup>8</sup> It is pertinent to note that NSSO 75 indicates 3.4% people responding as ailing, highest among all the North Eastern states.

<b>Table (4): Key Health Indicators</b>					
District	% pregnant women registered for ANC in 1st trimester	% pregnant women who took IFA tablets for at-least 100 days	Four or More ANC visits	Institutional Delivery	% Children between 12-23 months Fully immunized
Aizawl	74.8	59.7	47.8	96.2	55.3
Champhai	60.3	52.6	32.2	80.6	48.3
Kolasib	67.5	60.5	46.3	87.7	51.5
Lawngtlai	50.5	42.8	25.3	46.0	42.2
Lunglei	57.8	40.4	26.3	74.6	46.4
Mamit	60.6	51.2	32.8	58.6	40.4
Saiha	63.3	54.7	28.9	60.6	55.0
Sarchhip	67.1	63.3	46.8	88.3	60.9
<b>State Total</b>	<b>65.7</b>	<b>53.8</b>	<b>38.5</b>	<b>80.1</b>	<b>50.5</b>
Source: NFHS-4 (2015-16)					

<sup>3</sup> Government of India. 2017. India HIV Estimations 2017: Technical Report. National AIDS Control Organization and Indian Council for Medical Research – National Institute of Medical Statistics, Ministry of Health and Family Welfare. [http://naco.gov.in/sites/default/files/HIV%20Estimations%202017%20Report\\_1.pdf](http://naco.gov.in/sites/default/files/HIV%20Estimations%202017%20Report_1.pdf)

<sup>4</sup> Government of India. 2017. A Report on Cancer Burden in North Eastern States of India, 2017. National Centre for Disease Informatics and Research and Indian Council of Medical Research. [http://www.ncdirindia.org/NE\\_report.aspx](http://www.ncdirindia.org/NE_report.aspx)

<sup>5</sup> HIV Estimation report – 2017, National AIDS Control Organization, Government of India

<sup>6</sup> Three-year report of population-based cancer registry 2012-14, Indian council of medical research. [http://ncdirindia.org/NCRP/ALL\\_NCRP\\_REPORTS/PBCR\\_REPORT\\_2012\\_2014/ALL\\_CONTENT/PDF/Printed\\_Version/Chapter1\\_Printed.pdf](http://ncdirindia.org/NCRP/ALL_NCRP_REPORTS/PBCR_REPORT_2012_2014/ALL_CONTENT/PDF/Printed_Version/Chapter1_Printed.pdf)

<sup>7</sup> The burden of Disease initiative report: Mizoram [http://www.healthdata.org/sites/default/files/files/Mizoram\\_-\\_Disease\\_Burden\\_Profile%5B1%5D.pdf](http://www.healthdata.org/sites/default/files/files/Mizoram_-_Disease_Burden_Profile%5B1%5D.pdf)

<sup>10</sup> health expenditure-<http://www.cbhidghs.nic.in/WriteReadData/1892s/Chapter%204.pdf>

<sup>8</sup> Indian Council of Medical Research, Public Health Foundation of India and Institute for Health Metrics and Evaluation. 2017. India: Health of the Nation's States – The India State-Level Disease Burden Initiative. Mizoram: Disease Burden Profile, 1990 to 2016. [http://www.healthdata.org/sites/default/files/files/Mizoram\\_-\\_Disease\\_Burden\\_Profile%5B1%5D.pdf](http://www.healthdata.org/sites/default/files/files/Mizoram_-_Disease_Burden_Profile%5B1%5D.pdf)

<sup>10</sup> Government of India. 2019a. National Health Profile 2019, 14<sup>th</sup> Issue. Central Bureau of Health Intelligence, Ministry of Health and Family Welfare. <https://www.cbhidghs.nic.in/index1.php?lang=1&level=1&sublinkid=75&lid=1135>



## 1.7 Health Care Facilities in Mizoram

The levels of healthcare in Mizoram in terms hierarchy of lowest to highest is (1) Sub- Centres (SC), (2) Primary Health Centres (PHC) and Urban PHC, (3) Community Health Centres (CHC), and (4) Sub-District Hospitals (SDH) and (5) District Hospitals (DH). The district wise distribution of these HCFs is presented in the Table (4). The government health system is composed of 10 District Hospitals, 2 Sub-District Hospitals, 7 Community Health Centres, 58 functional Primary Health Centres, 372 Sub-Centres and 169 Clinics.

Sl.No.	District	State Referral Hospital	District Hospitals	Sub-District Hospitals	CHC	PHC	UPHC	SC	Clinic
1	Aizawl	1	1	1	1	11	6	81	66
2	Saitual		1					8	5
3	Champhai		1		2	11		60	27
4	Khawzawl								
5	Kolasib		1		1	5		26	10
6	Lawngtlai		1		1	4		33	20
7	Lunglei		1	1		5	2	54	13
8	Hnahthial		1			5		18	2
9	Mamit		1		1	8		39	8
10	Saiha		1			4		24	12
11	Sarchhip		1		1	5		29	5
<b>State Total</b>		<b>1</b>	<b>10</b>	<b>2</b>	<b>7</b>	<b>58</b>	<b>8</b>	<b>372</b>	<b>169</b>

Source: DoHFW, GoM.

In 2017, there were 437 doctors in government service in the state. Among these, there were only 59 generalists and no specialists working in Community Health Centres (CHC), hampering referral care in rural areas.<sup>9</sup> In 2017-18, while 16 percent of specialist positions at District Hospitals (DH), and 20 percent of auxiliary nurse-midwife positions in Sub-Centres were vacant, only 2 percent of Medical Officer positions in Primary Health Centres (PHC) and only 7 percent of staff nurse positions in Primary Health Centres and Community Health Centres were unfilled. The average tenure of three key state-level administrative positions was only 14 months, while that of District Chief Medical Officers was about two years.<sup>10</sup>

<sup>9</sup> Government of India. 2019a. National Health Profile 2019, 14<sup>th</sup> Issue. Central Bureau of Health Intelligence, Ministry of Health and Family Welfare. <http://www.cbhidghs.nic.in/showfile.php?lid=1147>

<sup>10</sup> Government of India. 2019b. Healthy States Progressive India: Report on the Ranks of States and Union Territories, Health Index June 2019. NITI Aayog. <http://social.niti.gov.in/>

## 1.8 Purpose of the ESMF

The main purpose of this ESMF is to ensure that the implementation of the project is carried out in an environmentally and socially sustainable manner. The ESMF seeks to:

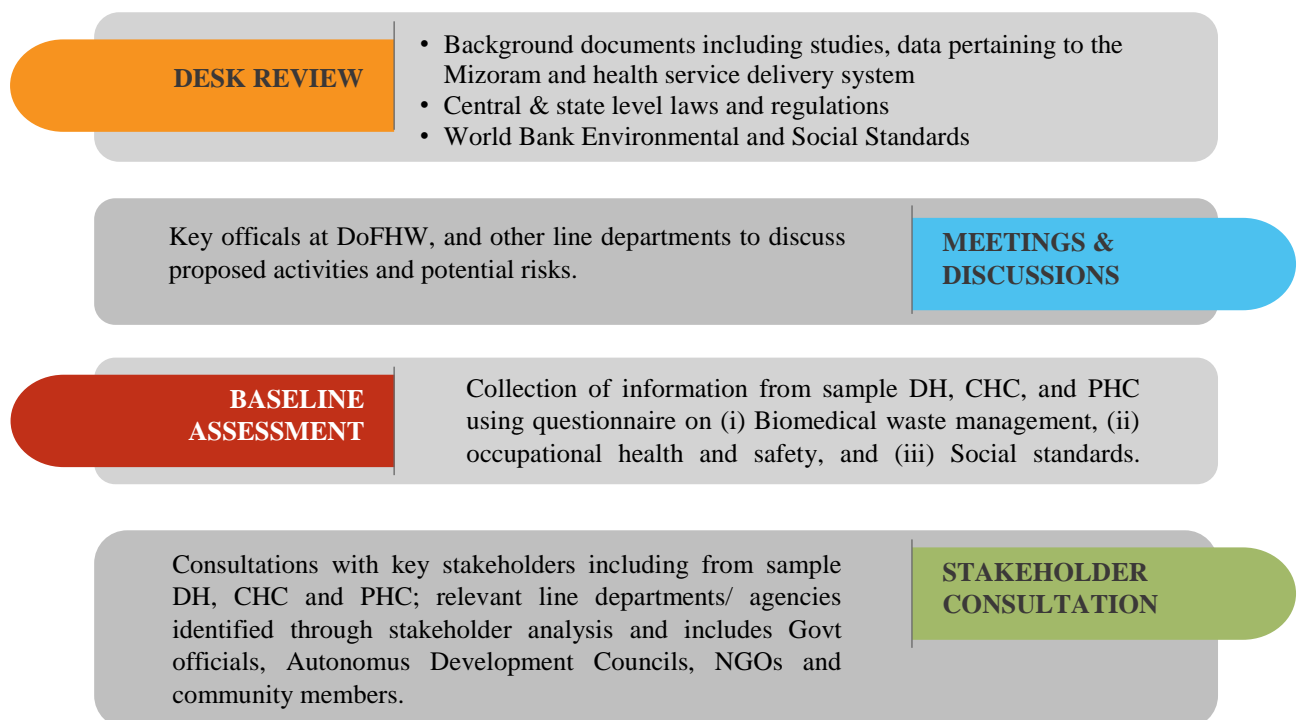
- Establish clear procedures and methodologies for environmental and social planning, review, approval and implementation of subprojects to be financed under the Project.
- Provide practical guidance for planning, designing and implementing the environmental and Social management measures.
- Specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and related social concerns of the sub-projects.
- Determine the institutional arrangements, including those related to training, capacity building and technical assistance (if required) needed to successfully implement the provisions of the ESMF.

The ESMF also supports the compliance with applicable government laws and regulations as well as the requirements of relevant Bank standards on environment and social aspects.

## 1.9 Approach and Methodology

This ESMF has been prepared in accordance with all relevant World Bank Environmental and Social Standards (ESSs), Policies, Guidance Notes, IFC ESG (Environmental, Health, and Safety Guidelines) sector guidelines, and the Government of India, Mizoram State and Local Government relevant regulations, acts, laws, standards and guidelines. A participatory and consultative approach has been adopted to prepare the ESMF. The methodology involved desk review of secondary information, along with discussion and consultation with various stakeholders in a virtual manner, and collection baseline information from sample health facilities. Given the COVID19 situation and travel restrictions and advisories on social distancing etc., primary field assessment at HCF level were largely relied upon sharing and collecting information checklist with sample HCFs and further consultations with a sub-set of them. The figure below presents the approach.

**Figure 1: Methodology for the Development of ESMF**





## 2 PROJECT DESCRIPTION

The proposed project development objective (PDO) is to “**to improve accountability, health insurance program and quality of health services in Mizoram**”. More specifically, the project will improve the quality and responsiveness of health services among public facilities at primary health center (PHC), community health center (CHC) and district hospital levels. This shall be done by creating an ecosystem of increased accountability through intra-governmental Internal Performance Agreements (IPA). IPAs shall be designed both as a management and financing tool for enabling a culture of accountability, which will over time improve utilization of health services. The progress towards achievement of the PDO will be measured by the following results indicators:

- a. Percentage of administrative units and facilities signed internal performance agreement. (Percentage) (accountability)
- b. Percentage of local fund utilization (including performance grants and Insurance reimbursements) in targeted hospitals. (Percentage) (accountability and health insurance)
- c. Increase in percentage coverage of households under health insurance scheme. (Percentage) (health insurance)
- d. Increase in percentage of targeted public health facilities getting National Quality Assurance certification. (Percentage) (quality)

The proposed project will benefit the entire state of Mizoram as it aims to strengthen the state public health system. The primary focus will be on strengthening the 10 District Hospitals and 2 Sub-District Hospitals, 7 CHCs and 38 PHCs across the state. Systems will also be strengthened in the MHCS which is currently used by 56 percent families in the State.

The project will also benefit the health sector staff, specifically at the secondary and primary levels, by strengthening their capacity and provide them skill-based training. The investment at the health facility level to improve (a) infrastructure, (b) private sector partnerships, (c) technology solutions, and (d) improved working conditions of the health sector staffs and improve their efficiency and satisfaction level towards providing better quality care.

The community level intervention that follows the integrated approach for child development also provide focused health and nutrition service for mothers. This will benefit the women and child through focused intervention.

### 2.1 Project Components

**Component 1: Improving accountability and strengthening governance through Internal Performance Agreements.** This component focuses on reforms in governance and management structures through IPAs between the DoHFW and its subsidiaries at the state and sub-state levels. This RBF approach marks a paradigm shift in the financing relationship between state and the sub-state level implementing units. Institutions and health facilities will be incentivized against the performance indicators achieved, instead of sole reliance of line item budgets. The IPAs will foster a spirit of more accountable government, and results-based monitoring, leading to improvements in overall public health function at state level and improve quality of service delivery. The arrangement shall be modelled around the principal-agent as there exists a complete convergence of objectives between participating entities. Receipts through this approach at the facility level will provide resources with a larger pool of flexible funds thereby bypassing the rigidities inherent in the traditional PFM systems within health. This approach will further strengthen ownership of decentralized structures and their autonomy. The arrangements will align the objectives of participating entities.

The IPA approach is implemented at all three levels namely State, District and health facility level. Each of these levels have a role to play that strengthens the accountability in the system, augment the implementation of health insurance program and quality of health services. Overall, 90 such performance indicators are developed that are strategically mapped at different level that strengthens their role and contribution to the key objective areas of PDO. About one thirds of the indicators are linked to improving accountability of which majority of them are at health facility level followed by State and district level; one fourth of the indicators are linked to quality indicator which are mainly at health facility level that plays critical role in improving quality and the rest contributes to health insurance and certain processes that enables better accountability and quality of services.

The strategic approach for achieving this are outlined below:

- a. **IPAs will be signed at three levels of the state public health system.** Entities with which the DoHFW will sign such agreements are (i) the Directorates and their subsidiary departments including two directorates and Mizoram Health Care Scheme (MHCS); (ii) district-level health administrations and district hospitals; and (iii) health facilities, at both the referral (CHCs) and primary levels (PHCs).
- b. **The Directorates will be supported in identifying existing sector-wide gaps in quality of health services and health insurance program, determining the most suitable approaches to address these gaps, developing action plans, and operationalizing those plans.** Funding will be provided to the Directorates, the district-level health offices, eligible subsidiary divisions, and the health insurance program, which will meet pre-conditions reflecting a minimum level of capacity and interest, including development of action plans with agreed targets. This process will build institutional capacity of the decentralized health administrative units at the state and sub-state levels in need-based planning and management of health services.
- c. **Performance will be measured against results defined via key indicators that contribute to improved quality of health services and efficiency in health insurance program.** The health insurance programs will be restructured to ensure coordination and synergy with the national program, improve overall design, implementation reforms and achieve accountability and sustainability through reforms. Key indicators will capture human resources for health, timely supply of resources at the district level, availability of medicines at the facility level, regulation of biomedical waste and monitoring of health services. Performance indicators will also include health facility quality scores reflecting the results of health staff knowledge tests, indicators of infection prevention and control and biomedical waste management, and metrics related to the quality accreditation process.
- d. **Performance measurement and verification system.** The achievement of performance indicators reported by the administrative units and health facilities who are parties to the IPAs will be confirmed in two ways. (1) An internal verification mechanism will use an existing pool of human resources that are currently tasked with various quality assurance activities. (2) An external verification mechanism will involve a pool of contracted consultants who will independently assess a sample of the reported results as well as the use of financial incentives by different levels. Indicators and targets will be revised based on implementation experience. The health facilities will be empowered to use these incentives for activities that contribute to improvements in health services.

Under Component 1, the project will finance the incentives to institutions, health facilities and individuals against achievement of results as per the IPF. The incentives will be used for implementation of activities that support approved improvement plans that includes quality of health services and overall accountability in the health system. The IPF will be executed and managed as follows:

- a. Agreements will be signed between different levels of health service management set up as laid down in the table below:

No.	Contracting authority	Contracted party
Principal Agreement (Level 1)		
1	DoHFW	Directorate of MPH
2	DoHFW	Directorate of HME
3	DoHFW	State Insurance Agency
Sub-Agreements (Level 2)		
4	Directorate of MPH	District Health Society
5	Directorate of HME	Selected District Hospital & higher level facilities
6	State Insurance Agency	District Health Society
7	State Insurance Agency	Selected District Hospital & higher level facilities
Sub-sub-Agreements (Level 3)		
8	District Health Society	Selected CHCs & PHCs

- b. IPA at each level will contain primary objective of the results and indicators and financial milestones for each indicator.
- c. The contracting party shall prescribe the action plan for achieving each milestone, along with guidelines for reporting progress. Reporting structures shall be aligned to the extent possible to the existing HMIS and reporting structures to avoid duplications and additional administrative burden.
- d. Contracting Authority at each level shall be responsible for oversight, mentoring and financing the contracted party as per the agreements.
- e. Means of verifying the indicators shall also be included in the IPAs.
- f. Capacities for the contracting authority at all levels shall be developed under the project to manage the IPAs.

**Component 2: Improve design and management of Health insurance programs:** This component shall support the state insurance program and its linkages with the PM-JAY to reduce financial barriers in accessing hospital services, prevent catastrophic out-of-pocket expenditures (OOPE) for health by poor families, and expand coverage. For this, architectural corrections are required in the two health insurance schemes that are running in parallel. The project will finance investments in such corrections at three levels: (a) strengthening policy and design for increased operational efficiency; (b) strengthening institutional capacity, systems and processes of the State insurance agency for greater accountability; and (c) community interventions for improving coverage and demand.

- a. ***Strengthening policy and design for increased operational efficiency.*** This will include reviewing benefit packages, exploring options for converging benefit packages between the two schemes, exploring options for convergence in the schemes, converting state schemes into a cashless benefit for end-users, maximising the provisions of the PMJAY and reduce financial burden on the MHCS, without losing the distinct identity of the MHCS. Strategies for progressive reduction of enrolment fee under the state scheme shall be explore as a part of design restructuring.
- b. ***Strengthening institutional capacity, systems and processes:*** Investments will be made in strengthening operational convergence of the two schemes, investing in IT architecture and capacity to convert the state scheme (MHCS) into a paperless transaction system like the central scheme (PM-JAY), and all other systems like the beneficiary identification, hospital empanelment, referrals, portability structures and mechanisms, claim adjudication, financial management, grievance redressal, service quality audits, and overall monitoring. Systems,

tools and skills (technical, managerial and soft) shall be developed among scheme administrators at the state, district and facility levels, which may include but not be limited to investments in additional human resource and infrastructure of the scheme administering agency, and learning missions to states / countries with matured health insurance programs.

- c. ***Community interventions for improving coverage and demand:*** Comprehensive communication campaign and demand side interventions will be supported to improve enrolment under the scheme and increase demand for services. This may include household enumeration. In addition, community-driven pilots in selected districts will be supported by the project to increase awareness about health issues including enhanced focus on health insurance scheme. The interventions will leverage the existing platforms and structures for the same e.g., Village health, sanitation and nutrition committees (VHSNCs), women self-help groups (SHGs) and village health and nutrition day (VHND).

Under Component 2, the project will finance (a) part of claim paid by MHCS for services provided to beneficiaries (disbursement will be done against achievement of agreed results as mentioned under component 1); (b) hiring of individual consultants; (c) training; (d) hiring of consultancy and non-consultancy services; (e) investments in office and IT infrastructure; and (f) comprehensive evaluations of the schemes.

**Component 3: Quality of health service and innovations:** This component will improve the quality of health services by: developing a comprehensive quality assurance system; biomedical waste management, augmenting systems for human resource management, and piloting innovations. These investments will improve the capacity of the state government health system to respond to the ongoing COVID-19 pandemic as well as increase preparedness for future outbreaks. Under this component, the project will support development of the HR policy that will clearly define the career pathway, define roles and competency and gender responsive to address specific concerns. Along with quality of services, this component will focus on human resource strengthening and infection prevention as they are, among other areas, important prerequisites for ensuring quality of services.

- a. ***Improvements in the delivery and quality of health services provided by district hospitals, CHCs and PHCs.*** The project will support quality assurance program at the PHC, CHC and district hospital level. This involves implementation of health facility improvement plan, training of teams responsible for periodic assessments, and training of district-level administrators. The project will build on other initiatives supported by the State and central governments, notably NQAS. The project will support preparation of additional health facilities for accreditation. This will involve gap analysis and the necessary training and investments to fill the identified gaps. The project will support Facility Improvement Teams to implement quality initiatives by recruitment of hospital managers and strengthen the district teams. The NQAS quality index used to measure results include among others indicators related to major & minor surgeries, all in-patients procedures, c-sections, quality of facility-based NCD screening in the outpatient and inpatient departments.
- b. ***Strengthening of biomedical waste management:*** The project will develop a strategy for improving management and disposal of biomedical waste generated by both government and private health services, in collaboration with the state Pollution Control Board and municipalities. Improving the biomedical waste management system will be undertaken through a range of activities that will include developing evidence-based strategies and plans, investing in infrastructure and equipment (including maintenance), exploring private sector engagement options, capacity building, and deploying personal protective equipment, infection prevention measures and immunization for health care providers.
- c. ***Health human resource development:*** The project will support a multi-pronged approach to institutionalize and strengthen health human resource development and management, starting with support to development of a state level policy for health human resources. The project

will support improvements in pre- and in-service training, including quality accrediting, NAC, for college of nursing, revamping training institutions and developing programs for continuing medical and para-medical education. The project will also support the state in developing and implementing strategies to address human resource shortages, including specialists. Human resource management systems will be improved, including through developing and implementing performance metrics for health cadres, and building the capacity of the Department of Health for data-based management of human resources.

- d. ***Testing innovations in service delivery through pilot interventions.*** The project will support design, development and piloting of innovative models for service delivery outreach focusing on quality and comprehensiveness of services. Such areas may include but not be limited to engaging community platforms and frontline workers, community / home based palliative care, NCD screening including screening for breast and cervical cancers, comprehensive primary care services through wellness centers (HWC), PPP pilots, use of drones for emergency supplies, use of technology for consultation (telemedicine, etc.).

Under Component 3, the project will finance (a) hiring of consultant support; (b) minor civil works; (c) goods and equipment; (d) Training; (e) hiring of additional human resource (such as hospital managers and other technical staff); and (f) hiring of non-consultancy services for clinical and non-clinical work.

**Component 4: Contingent Emergency Response Component:** Provision of immediate response to an Eligible Crisis or Emergency, as needed.

### 3 LEGAL AND REGULATORY FRAMEWORK

This Chapter outlines and provides a review of existing policies, legislations and regulations. It identifies the requirements that guide the implementation of the ESMF. There are several relevant Indian Acts and Regulations that are relevant to this project. Also, as this Project is being financed by the World Bank, its guidelines are paramount and are discussed. There must be harmony between both sets of frameworks, but should there be any discrepancies between these, the guidelines of the World Bank shall supersede those of the country.

#### 3.1 Indian National Regulations and Standards

Table (6) presents the various regulations, acts and policies of the Government of India (GOI) and GoM, their purpose and the applicability.

<b>Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project</b>				
<b>S. No</b>	<b>Act/Law</b>	<b>Agency Responsible</b>	<b>Key provisions and purpose</b>	<b>Relevance to the project</b>
1	The Constitution of India (especially, Articles 15, 16 and 46)	Govt. of Mizoram	The Indian Constitution (Article 15) prohibits any discrimination based on religion, race, caste, sex, and place of birth. Article 16 refers to the equality of opportunity in matters of public employment. Article 46 directs the state to promote with special care the educational and economic interests of the weaker sections of the people, particularly of the Scheduled Castes and the Scheduled Tribes and also directs the state to protect them from social injustice and all forms of exploitation.	Relevant to the overall Program
2	Biomedical Waste Management (Amendment) Rules, 2018	Mizoram State Pollution Control Board/ DoHFW	Schedule 1: Categorization and Management Schedule 2: Standards for treatment and disposal of BMW Schedule 3: Prescribed Authority and duties	As per Accreditation requirements, healthcare facilities are required to develop Standard Operating Procedures (SOPs) in the handling of medical solid, liquid and radioactive wastes.

**Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
			<p>Schedule 4: Label of containers, bags and transportation of Bio-Medical waste</p> <p>The provisions under the rules provide for both solid and liquid medical wastes.</p> <p>Liquid waste should be treated with 1% hypochlorite solution before discharge into sewers.</p> <p>Hospitals not connected to municipal CTFs should install compact on-site sewage treatments (i.e. primary and secondary treatment, disinfection) to ensure that wastewater discharges meet applicable thresholds.</p>	<p>Mizoram at present do not have a common treatment facility which collects BMW from different facilities mainly up to CHC level.</p> <p>PHC and SC requires strengthening to meet the necessary requirements as per the legislation in terms of segregation, storage, transportation, treatment and handling of hazardous waste.</p> <p>There is a need for continuous training of the staff at the health facilities regarding the BMW.</p>
3	Biomedical Waste (Management and Handling) Rules 2016	Mizoram State Pollution Control Board/ DoHFW	The Act mandates for the collection, segregation, processing, treatment and disposal of these bio-medical wastes in an environmentally sound management thereby, reducing the bio- medical waste generation and its impact on the environment.	BMW activities especially handling, storage, transportation and treatment of BMW.
	E-Waste (Management and Handling) Rules 2011 as Amendment up to 2018	Mizoram State Pollution Control Board/ DoHFW	There are policies governing the responsible disposal of e-waste generated by bulk consumers to address leakage of e-waste to	It is applicable for the HCFs especially PHC and upwards. Given the range of electronic equipment at the HCFs and their

**Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
			informal sector at all the stages of channelization. The 2016 Amendment brought health care facilities (with turnover over INR 20 crore or more than 20 employees).	consumables, it becomes important to adhere to the said rules. Training regarding the disposal of e-waste is critical and procedures for collection and reported annually.
3	Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules 2008  Hazardous and Other Wastes (Management and Trans boundary Movement) Amendment Rules, 2016.	Mizoram State Pollution Control Board/ DoHFW	These Rules outline the responsibilities of the generator, transporter and recycler/re-processor of the hazardous wastes for handling and management in a manner that is safe and environmentally sound.  To address the appropriate management of all x-ray wastes developer so that they are safely handled and disposed.	The operation phase of the project will result in generation of some quantities of hazardous waste, mostly in the form of waste/used oil from Water Treatment Plant operation. Project developer needs to obtain consent from Mizoram SPCB for storage of transformer oil, if required. All the hazardous waste generated due to the project should be stored and disposed as per the requirements of rules.  Storage on a paved surface in a designated area with adequate secondary containment, with adequate labelling and before it is disposed to an SPCB approved vendor.
4	Plastic Waste Management Rules 2016	Mizoram State Pollution Control Board/ DoHFW	All institutional generators of plastic waste shall segregate and store the waste generated by them in accordance with the Solid Waste	HCFs are generators of large quantity of plastics, including non-reusable types.



**Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
			Management Rules, and handover segregated wastes to authorized waste processing or disposal facilities or deposition centres, either on its own or through the authorized waste collection agency.	
5	The Epidemic Diseases Act 1897  The Epidemic Diseases (Amendment) Ordinance, 2020	DoHFW	The Epidemic Diseases Act 1897 provides for better prevention of the spread of dangerous diseases.  The Epidemic Diseases (Amendment) Ordinance, 2020 was promulgated on April 22, 2020. The Ordinance amends the Epidemic Diseases Act, 1897. The Act provides for the prevention of the spread of dangerous epidemic diseases. The Ordinance amends the Act to include protections for healthcare personnel combating epidemic diseases and expands the powers of the central government to prevent the spread of such diseases.	To ensure safety of communities, workers and project staff especially during this period of COVID pandemic.
6	The Water (Prevention & Control of Pollution) Act 1974.  The Air (Prevention & Control of Pollution) Act 1981.	Mizoram State Pollution Control Board/ DoHFW	Provisions are largely to prevent air and water pollution by not releasing untreated effluents and harmful emissions from Generator sets and incinerators. Most provisions are already discussed under the Bio-Medical Waste Rules.	Applicable  Relevant to all HCFs and Central Biomedical Waste Treatment Facilities (where established).

**Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
	Environment Protection Act (and Rules), 1986 and 1996  Environment (Protection) Second Amendment Rules 2002		The Act mandates to control and abate water pollution.  The Diesel Generator sets installed during construction should comply with maximum permissible noise levels and noise control measures for diesel generators up to 1000 KVA capacity as specified in the Act.	Relevant, based on the project scale of minor civil works and BMWM activities.
7	Environmental Impact Assessment (EIA) Notification 2006 & and subsequent amendments, including Draft Notification March 2020	Department of Environment and Forests, Mizoram	Based on The EIA Notification 2006 and its subsequent amendments, Water supply project is exempt from obtaining prior Environmental Clearance from the regulatory authorities.	The project does not need prior Environmental Clearance.
8	CPCB Guidelines for CBWTFs (2003).  CPCB Guidelines for BMW Incinerators (2003). Draft Guidelines for Biomedical Waste Incinerator, 2017	Mizoram State Pollution Control Board/ DoHFW	Any activities from BMW temporary storage, transportation, disposal/treatment requires valid license.  CPCB has also notified Revised Guidelines for Common Bio-medical Waste Treatment and Disposal Facilities which covers the location setting of the incinerator, operational and maintenance performance standards and monitoring.	Relevant but may not be fully applicable.  BMW is listed as hazardous waste due to its infectious characteristics. But the state is not fully covered through CBMWTF and these guidelines regulate the functioning of CBMWTFs so may not be fully applicable.

**Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
	Guidelines for Management of Healthcare Waste in Health Care Facilities as per Bio Medical Waste Management Rules, 2016 Guidelines for Bar Code System for Effective Management of BioMedical Waste Standards for treatment and disposal of Bio medical waste by Incineration Environmentally Sound Management of Mercury Waste Generated from Health Care Facilities.		The State Pollution Control Board plays an important role in granting consent to establish and operate license to the CTF operators, which are largely private sector players.	
9	The Mizoram Air (Prevention and Control of Pollution) (Amendment) Rules, 2010	Mizoram State Pollution Control Board/ DoHFW	The Rules state for the need to seek consent from the board on any activity on air pollution control area.	Relevant. MoU, TORs of vendors to include this aspect.
10	Noise (Regulation and Control) Rules 2000 amended in 2010	Mizoram State Pollution Control Board/ DoHFW	The Rules stipulate ambient noise limits during daytime and night time for industrial, commercial, residential and ecologically sensitive areas. The rules apply both during the construction and operation of the project. Violation of the standards for assessing the	Relevant as since minor to moderate noise emission is expected from the retrofitting activities that are planned under the project.

**Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
			noise quality due to the project will lead to penalty as under the EP Act 1986.	
11	National Disaster Management Act 2005	National Disaster Management Authority/ State Disaster Management Agency	Provides for the timely and effective response to disaster. It lays down guidelines to be followed by the State Authorities in drawing up the State Plans.	Applicable when project implementation is during or encounters natural disaster or is relevant under current circumstances of COVID pandemic.
12	The Building and Other Construction Workers' (Regulation of Employment and Conditions of Service) Act 1996 and the associated Central Rules, 1998	Department of Labour and Employment, GoM/ DoHFW	This Act provides for safety, health and welfare measures of buildings and construction workers in every establishment which employs or employed during the preceding year ten or more such workers. These measures include fixing hours for normal working day, weekly paid rest day, wages for overtime, provision of basic welfare amenities like drinking water, latrines, urinals, crèches, first aid, canteens and temporary living quarters within or near the work site. This Act also requires application of the following: Building or other construction workers' (regulation and Employment Conditions of Service) Central Rules 1998 & Workman's compensation Act, 1923 to buildings and other construction workers. These will be followed by contractor &	Ensure through Contractors that basic amenities are provided to the project labourers; all Vendors employed should have valid labour license: compensation of workers should not be lower than the daily wage rate as prescribed by Government.

**Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
			developer during construction and operation phase.	
13	Workmen’s Compensation Act, 1923 & Rules 1924	Department of Labour and Employment, GoM/ DoHFW	The Act provides for compensation in case of injury by accident arising out of and during employment.	As some of the activities require repair and renovation of existing infrastructure of HCFs and hence will involve construction activities.
14	Minimum Wages Act, 1948	Department of Labour and Employment, GoM/ DoHFW	This Act provide for fixing minimum rates of wages in certain employments and requires the employer to provide to every worker engaged in a scheduled employment to be paid wages at a rate not less than the minimum rate of wages fixed by such notification for that class of employees in that employment without any deductions except as may be authorized within such time and subject to such conditions as may be prescribed.	The Minimum Wages Act is applicable, and the contractor is mandated to provide compliance as per the act.
15	Payment of Wages Act 1936; and Equal Remuneration Act 1976:	Department of Labour and Employment, GoM/ DoHFW	The payment of wages act lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.	These Acts are applicable, and the contractor will be mandated to provide compliance as per agreed terms of payment of Wages.
16	The Child Labour (Prohibition and Regulation) Act, 1986	Department of Labour and	The Act prohibits employment of children in certain occupation and processes. The Act also	No child labour will be engaged at site for construction or operation works either directly or by the sub-contractors. Health Department should include a clause in the

**Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
		Employment, GoM/ DoHFW	specifies conditions of work for children, if permitted to work.	subcontractor agreements prohibiting employment of child labour.
17	Sixth Schedule Areas in the Constitution of India	DOHFW	The scheduled areas under the Constitution has special provisions for the administration of the tribal dominated areas and autonomous regions with certain legislative and judicial powers. In the Scheduled Areas, involvement of tribal councils and communities, incorporating their views and culture specific needs will enhance their participation in the Program.	Relevant to the overall Program for enhancing access to services in tribal areas and participation of tribal population in the program
18	Right to Information Act, 2005	DoHFW	Provides a practical regime of right to information for citizens to secure access to information under the control of Public Authorities.  The act sets out (a) obligations of public authorities with respect to provision of information; (b) requires designating of a Public Information Officer; (c) process for any citizen to obtain information/disposal of request, etc. (d) provides for institutions such as Central Information Commission/State Information Commission	Relevant as all documents pertaining to the Program requires be disclosed to public.
19	Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.	DoFHW	An act that aims at providing a sense of security at the workplace that improves women’s participation in work and results in their economic empowerment. It requires an employer to set up an “Internal Complaints	Relevant and applicable to all health directorates and most of the health care facilities

**Table (6): Environmental, Health, Safety and Social Regulations applicable to the Project**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
			Committee” (ICC) and the Government to set up a ‘Local Complaints Committee’ (LCC) at the district level to investigate complaints regarding sexual harassment at workplace and for inquiring into the complaint in a time bound manner. The ICC need to set up by ever organization and its branches with more than 10 employees.	

### 3.2 Mizoram State Specific Laws and Regulations

In addition to national laws and regulations, there are state specific laws and regulations applicable to the project and presented in Table (6) below.

**Table (7): State-specific regulations/ Acts/ Laws**

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
1	Mizoram Autonomous District Council (Constitution and Conduct of Business of the District Councils) Rules, 1974	GoM	Provides guidance for operational rules of business and functions for all the Autonomous District Councils in Mizoram. Based on which each of the three ADCs i.e. Lai Autonomous District Council (LADC), the Mara Autonomous District Council (MADC), and the Chakma Autonomous District Council (CADC) form their rules and regulations.	Applicable as project area includes all the DC areas.
2	The Mizoram (Land Revenue) Act, 2013	GoM/ Revenue Department	It provides for allotment, occupation, use or setting apart of land other than any land which is a notified forest or wildlife sanctuary, for	Will become applicable, if any land transfer required for HCF.

S. No	Act/Law	Agency Responsible	Key provisions and purpose	Relevance to the project
			<p>agricultural and non-agricultural purposes, for allotment or assignment of rights in or over such land, for land tenures, transfer and alienation, for assessment and collection of revenue and taxes in respect of such land and building, etc and to consolidate the laws to all such lands relating to Land Revenue Administration in the State of Mizoram.</p>	



### 3.3 The World Bank’s Environmental and Social Standards (ESS)

The World Bank’s Environmental and Social Standards (ESS) are a cornerstone to its support to sustainable development. The Environmental and Social Standards set out the requirements for Borrowers relating to the identification and assessment of environmental and social risks and impacts associated with projects supported by the Bank through Investment Project Financing. The objective of these policies is to prevent and mitigate undue harm to people and their environment in the development process. Any project that is likely to pose any form of adverse environmental impact will trigger the relevant ESSs. The ESSs relevant to this project are given below in Table (8).

<b>ESS</b>	<b>ESS Objectives</b>	<b>Relevance to the Project</b>
ESS 1 Assessment and Management of Environmental and Social Risks and Impacts	<ul style="list-style-type: none"> <li>• To identify, evaluate and manage the environment and social risks and impacts of the project in a manner consistent with the ESSs.</li> <li>• To adopt a mitigation hierarchy approach to:               <ul style="list-style-type: none"> <li>(a) Anticipate and avoid risks and impacts;</li> <li>(b) Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;</li> <li>(c) Once risks and impacts have been minimized or reduced, mitigate; and</li> <li>(d) Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.</li> </ul> </li> <li>• To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project.</li> <li>• To utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate.</li> </ul>	<p><b>Relevant.</b></p> <p>The project aims at improving quality and utilization of health services through strengthening institutional, financing, human resource, informational technology and community related reform actions.</p> <p>The project does not involve any major civil works. However, in order to improve quality as well as meeting the BMW regulations, some amount of repair, renovations, and/or retrofitting involving minor civil works in the Health care facilities (HCFs) will be supported by the project.</p> <p>No significant adverse environmental and social impacts are anticipated with proposed activities based on the assessment conducted during project preparation.</p> <p>The project also supports health systems and service augmentation measures, these interventions will result in greater footfall at the facility level which will result in an incremental increase in bio-medical and other wastes, and risks arising from handling and disposal of healthcare wastes and other products (clinical and infectious waste materials, needles and sharps, and wastewater). This could lead to adverse</p>

**Table (8): Applicability of World Bank’s Environmental and Social Standards**

ESS	ESS Objectives	Relevance to the Project
	<ul style="list-style-type: none"> <li>• To promote improved environmental and social performance, in ways which recognize and enhance Borrower capacity.</li> </ul>	<p>impacts to the environment and human health if not managed appropriately.</p> <p>There are no potential largescale, significant or irreversible impacts associated with the proposed project. The risks and impacts associated with minor civil works for repair and rehabilitation will be localized and temporary.</p>
ESS 2: Labour and Working Conditions	<ul style="list-style-type: none"> <li>• To promote safety and health at work</li> <li>• To promote the fair treatment, non-discrimination and equal opportunity of project workers.</li> <li>• To protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate.</li> <li>• To prevent the use of all forms of forced labor and child labor.</li> <li>• To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.</li> <li>• To provide project workers with accessible means to raise workplace concerns through a worker-specific GRM.</li> </ul>	<p><b>Relevant.</b></p> <p>As mentioned above the project also aims to strengthen human resources and their availability and capacity at the project target facilities. Also, given the HCFs may require minor civil works and thus will involve contact labor for the same.</p> <p>While the direct workers such as government civil servant, doctors, nurses, paramedics, other support staffs will be working, which is fully compliant with the national/ state labor management regulations; there will be construction workers though small in numbers and at dispersed locations for undertaking minor civil works. And hence, a Labor Management Procedure (LMP) is prepared. As per GoI and GoM, no Child labor and/or forced labor will be working on the project.</p>
ESS 3: Resource Efficiency & Pollution Prevention and Management	<ul style="list-style-type: none"> <li>• To promote the sustainable use of resources, including energy, water and raw materials.</li> <li>• To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.</li> <li>• To avoid or minimize project-related emissions of short and long-lived climate pollutants.</li> </ul>	<p><b>Relevant.</b></p> <p>Different types of wastes are generated by the HCFs including medical waste, infectious waste, human waste, and e-waste etc. Use of plastic-based materials, and their improper waste management may lead to land and water pollution. Also, disposal of wastewater generated in the facilities may act as hazard for transmission of disease and chemical toxicities due to dissolved chemicals such as laboratory re-agents,</p>

**Table (8): Applicability of World Bank’s Environmental and Social Standards**

ESS	ESS Objectives	Relevance to the Project
	<ul style="list-style-type: none"> <li>• To avoid or minimize generation of hazardous and non-hazardous waste.</li> <li>• To minimize and manage the risks and impacts associated with pesticide use.</li> </ul>	<p>disinfectants, corrosives etc. The waste management plan shall address the above risks and suggest appropriate mitigation measures.</p>
ESS 4 Community Health and Safety	<ul style="list-style-type: none"> <li>• To anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and nonroutine circumstances.</li> <li>• To promote quality and safety, and considerations relating to climate change, in the design and construction of infrastructure, including dams.</li> <li>• To avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials.</li> <li>• To have in place effective measures to address emergency events.</li> <li>• To ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities.</li> </ul>	<p><b>Relevant.</b></p> <p>The communities may be exposed to health and safety hazards if these wastes are not properly managed and treated. The risk is further accentuated in the current COVID pandemic situation. Also, small repair activities may expose communities to minor noise, air pollution risks. Hence, community health and safety measures will be prepared, adopted and implemented under the project. Further, a Grievance Redress Mechanism (GRM) will also be enacted to address issues with grievances by all stakeholders.</p> <p>Given the scale and magnitude of construction limited to minor civil works, no labor influx is anticipated.</p>
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	<ul style="list-style-type: none"> <li>• To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives.</li> <li>• To avoid forced eviction.</li> <li>• To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by:               <ol style="list-style-type: none"> <li>1. providing timely compensation for loss of assets at replacement cost</li> <li>2. assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels</li> </ol> </li> </ul>	<p><b>Not Currently Relevant.</b></p> <p>The project does not anticipate any land acquisition. Any repair, renovation and expansion is expected within the existing footprint of the health facilities. However, a site-specific screening will be carried out before any civil work and in case adverse impacts on squatters and encroachers are found, relevant resettlement instruments will be prepared and implemented.</p>

**Table (8): Applicability of World Bank’s Environmental and Social Standards**

ESS	ESS Objectives	Relevance to the Project
	<p>prevailing prior to the beginning of project implementation, whichever is higher.</p> <ul style="list-style-type: none"> <li>• To improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure.</li> <li>• To conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant.</li> <li>• To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.</li> </ul>	
<p>ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</p>	<ul style="list-style-type: none"> <li>• To protect and conserve biodiversity and habitats.</li> <li>• To apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity.</li> <li>• To promote the sustainable management of living natural resources.</li> <li>• To support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities.</li> </ul>	<p><b>Not Currently Relevant.</b></p> <p>Even though Mizoram has 88.93% of its land under forests and therefore having rich biodiversity, there is no indication that the proposed project will have any adverse impacts on biodiversity, natural habitats or living natural resources. Any adverse impacts arising due to waste management in healthcare facilities shall be addressed through ESS1.</p>
<p>ESS7: Indigenous peoples</p>	<ul style="list-style-type: none"> <li>• To ensure that the development process fosters full respect for the human rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of Indigenous Peoples.</li> <li>• To avoid adverse impacts of projects on Indigenous Peoples, or when avoidance is not possible, to minimize, mitigate and/or compensate for such impacts.</li> </ul>	<p><b>Relevant.</b></p> <p>Mizoram is a Scheduled VI state under the Indian Constitution with more than 94% of population being scheduled tribe population. The five major tribes in Mizoram are- Lushei, Ralte, Hmar, Paihte, Pawi (or Poi). The project activities will benefit the local population with improved health care delivery system, and it is not expected that any of</p>

**Table (8): Applicability of World Bank’s Environmental and Social Standards**

ESS	ESS Objectives	Relevance to the Project
	<ul style="list-style-type: none"> <li>• To promote sustainable development benefits and opportunities for Indigenous Peoples in a manner that is accessible, culturally appropriate and inclusive.</li> <li>• To improve project design and promote local support by establishing and maintaining an ongoing relationship based on meaningful consultation with the Indigenous Peoples affected by a project throughout the project’s life cycle.</li> <li>• To obtain the Free, Prior, and Informed Consent (FPIC) of affected Indigenous Peoples in the three circumstances described in this ESS.</li> <li>• To recognize, respect and preserve the culture, knowledge, and practices of Indigenous Peoples and to provide them with an opportunity to adapt to changing conditions in a manner and in a timeframe acceptable to them.</li> </ul>	<p>the activities related to the project will have any direct or indirect negative impacts on the tribal communities.</p> <p>The project will ensure free and prior informed consultations for activities impacting them and take necessary consent where needed to work towards reducing the risk of exclusion of vulnerable groups from access to project benefits and proposed measures to provide meaningful engagement with vulnerable groups and ethnic minorities.</p>
ESS 8 Cultural Heritage	<ul style="list-style-type: none"> <li>• To protect cultural heritage from the adverse impacts of project activities and support its preservation.</li> <li>• To address cultural heritage as an integral aspect of sustainable development.</li> <li>• To promote meaningful consultation with stakeholders regarding cultural heritage.</li> <li>• To promote the equitable sharing of benefits from the use of cultural heritage.</li> </ul>	<p><b>Not Currently Relevant.</b></p> <p>Any physical cultural assets are not likely to be affected by the proposed activities as currently envisaged. However, screening of subproject will be conducted to avoid any risk associated.</p>
ESS 9 Financial Intermediaries	<ul style="list-style-type: none"> <li>• To set out how the FI will assess and manage environmental and social risks and impacts associated with the subprojects it finances.</li> <li>• To promote good environmental and social management practices in the subprojects the FI finances.</li> </ul>	<p><b>Not Relevant.</b></p> <p>FIs are not involved in this project.</p>

**Table (8): Applicability of World Bank’s Environmental and Social Standards**

ESS	ESS Objectives	Relevance to the Project
	<ul style="list-style-type: none"> <li>To promote good environmental and sound human resources management within the FI.</li> </ul>	
ESS 10 Stakeholder engagement and information disclosure	<ul style="list-style-type: none"> <li>To establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties.</li> <li>To assess the level of stakeholder interest and support for the project and to enable stakeholders’ views to be taken into account in project design and environmental and social performance.</li> <li>To promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them.</li> <li>To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format.</li> <li>To provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow Borrowers to respond to and manage such grievances.</li> </ul>	<p><b>Relevant.</b></p> <p>The project involves a wide range of stakeholders including officials from DoHFW, target HCFs, key line departments/ agencies including (such as State pollution control board, Social Welfare and Tribal Affairs Department, Women and Child Development Department, Autonomous development Councils, community groups, traditional and local governance institutions, elected representatives and public at large.</p> <p>Stakeholder engagement, consultation and communication, including grievance redress management and disclosure of information will be required throughout the project life. A Stakeholder Engagement Plan (SEP) has been prepared to address this.</p>

### 3.4 Guidance Related to COVID19

**Ministry of Health and Family Welfare (MOHFW), Government of India has also issued several national policies and guidelines specific to COVID-19 pandemic and applicable to all States and UTs including Mizoram.** Since the outbreak of COVID19, India has proactively taken several measures for containing the disease which are in line with guidance from WHO, CDC and other international best practices guidance and learning. While many of these policies are evolving based on the COVID19 pandemic situation in India, some of the guidance relevant to environmental and social measures are as below:

- i. Advisory on Social Distancing – March 2020 – MOHFW
- ii. Advisory on Mass Gatherings – March 2020 – MOHFW

- iii. Guidelines for home quarantine – March 2020 – MOHFW
- iv. Guidelines for handling, treatment and disposal of waste generated during treatment, diagnostics and quarantine of COVID19 patients – March 2020 and April 2020 – Central Pollution Control Board
- v. Strategy of COVID19 Testing in India – March 17, 2020, from Indian Council of Medical Research
- vi. Standard Operating Procedures for Passenger Movement Post Disembarkation (including SOP for Quarantine) – March 2020 – MOHFW
- vii. Guidelines for Notifying COVID19 Affected Persons by Private Institutions – March 2020 – MOHFW
- viii. Gazette Notification – Essential Commodities Order 2020 – with regards to masks and hand sanitizers
- ix. National Pharmaceutical Pricing Authority (NPPA) Order regarding Masks, Hand Sanitizers and Gloves
- x. COVID19 Guidelines on Dead Body Management – March 15, 2020 – Director General of Health Services (DGHS), MOHFW (EMR Divisions)
- xi. Office Memorandum on Preventive Measures to be taken to contain the spread of Novel Coronavirus (COVID19) – March 16, 2020 – Department of Personnel and Training), Ministry of Personnel, Public Grievances and Pensions
- xii. Guidance document on appropriate management of suspect/confirmed cases of COVID-19 - Types of Covid-19 dedicated facilities
- xiii. Guidelines for Quarantine facilities COVID-19
- xiv. Guidance for COVID-19 & Pregnancy & Labour Management
- xv. Guidance document on appropriate management of suspect/confirmed cases of COVID-19 - Types of Covid-19 dedicated facilities
- xvi. Advisory issued by Ministry of Rural Development to the State Rural Livelihoods Missions on actions to be taken to address the COVID 19 outbreak
- xvii. Norms of assistance from State Disaster Response Fund (SDRF) in wake of COVID-19 outbreak
- xviii. Containment Plan for Large Outbreaks of COVID-19
- xix. Model Micro plan for containment of local transmission of COVID19
- xx. Advisory for quarantine of migrant workers
- xxi. Various mass awareness generation activities and guidance
- xxii. Various audio visuals and print material on Psycho-Social support along with setting up toll free helpline-08046110007
- xxiii. Ordinance to protect healthcare workers form abuse and assault
- xxiv. Guidelines on preventive measures to contain spread of COVID-19 in workplace settings
- xxv. Advisory for managing Health care workers working in COVID and Non-COVID areas of the Hospital
- xxvi. Guidance note for Immunization services during and post COVID outbreak

### **World Health Organization (WHO) Guidelines**

*Several WHO resources are available for reference and adoption during project implementation.* To help countries navigate through the challenges of COVID-19, WHO has updated operational planning guidelines in balancing the demands of responding directly to COVID-19 while maintaining essential health service delivery and mitigating the risk of system collapse. This includes a set of targeted immediate actions that countries should consider at national, regional, and local level to reorganize and maintain access to high-quality essential health services for all. In response to COVID-19 India has also updated several national guidelines that are aligned with those of the WHO. The WHO is maintaining a website specific to the COVID-19 pandemic with up-to-date



country and technical guidance. Some of the technical guidance available are: (i) [laboratory biosafety](#), (ii) [infection prevention and control](#), (iii) [rights, roles and responsibilities of health workers, including key considerations for occupational safety and health](#), (iv) [water, sanitation, hygiene and waste management](#), (v) [quarantine of individuals](#), (vi) [rational use of PPE](#), (vii) [oxygen sources and distribution for COVID-19 treatment centers](#). A list of all relevant guidelines is presented in Annex- VIII. As the situation remains fluid it is critical that those managing both the national response as well as specific health care facilities and programs keep abreast of guidance provided by the WHO. The dedicated WHO website can be accessed at <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>. Some of the key guidance includes as below.

### **Advice for the public**

- WHO advice for the public, including on social distancing, respiratory hygiene, self-quarantine, and seeking medical advice, can be consulted on this WHO website: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

### **Technical guidance**

- [Infection prevention and control during health care when novel coronavirus \(nCoV\) infection is suspected](#), issued on March 19, 2020
- [Recommendations to Member States to Improve Hygiene Practices](#), issued on April 1, 2020
- [Severe Acute Respiratory Infections Treatment Center](#), issued on March 28, 2020
- [Infection prevention and control at health care facilities \(with a focus on settings with limited resources\)](#), issued in 2018
- [Laboratory biosafety guidance related to coronavirus disease 2019 \(COVID-19\)](#), issued on March 18, 2020
- [Laboratory Biosafety Manual, 3rd edition](#), issued in 2014
- [Laboratory testing for COVID-19, including specimen collection and shipment](#), issued on March 19, 2020
- [Prioritized Laboratory Testing Strategy According to 4Cs Transmission Scenarios](#), issued on March 21, 2020
- [Infection Prevention and Control for the safe management of a dead body in the context of COVID-19](#), issued on March 24, 2020
- [Key considerations for repatriation and quarantine of travelers in relation to the outbreak COVID-19](#), issued on February 11, 2020
- [Preparedness, prevention and control of COVID-19 for refugees and migrants in non-camp settings](#), issued on April 17, 2020
- [Coronavirus disease \(COVID-19\) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health](#), issued on March 18, 2020
- [Oxygen sources and distribution for COVID-19 treatment centers](#), issued on April 4, 2020
- [Risk Communication and Community Engagement \(RCCE\) Action Plan Guidance COVID-19 Preparedness and Response](#), issued on March 16, 2020
- [Considerations for quarantine of individuals in the context of containment for coronavirus disease \(COVID-19\), issued on March 19, 2020](#)
- [Operational considerations for case management of COVID-19 in health facility and community](#), issued on March 19, 2020
- [Rational use of personal protective equipment for coronavirus disease 2019 \(COVID-19\)](#), issued on February 27, 2020
- [Getting your workplace ready for COVID-19](#), issued on March 19, 2020
- [Water, sanitation, hygiene and waste management for COVID-19](#), issued on March 19, 2020
- [Safe management of wastes from health-care activities](#), issued in 2014



- [Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus \(COVID-19\) outbreak](#), issued on March 19, 2020
- [Disability Considerations during the COVID-19 outbreak](#), issued on March 26, 2020

#### **WORLD BANK GROUP GUIDANCE**

- [Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings](#), issued on March 20, 2020
- [Technical Note: Use of Military Forces to Assist in COVID-19 Operations](#), issued on March 25, 2020
- [ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects](#), issued on April 7, 2020
- [Technical Note on SEA/H for HNP COVID Response Operations, issued in March 2020](#)
- [Interim Advice for IFC Clients on Preventing and Managing Health Risks of COVID-19 in the Workplace](#), issued on April 6, 2020
- [Interim Advice for IFC Clients on Supporting Workers in the Context of COVID-19](#), issued on April 6, 2020
- [IFC Tip Sheet for Company Leadership on Crisis Response: Facing the COVID-19 Pandemic](#), issued on April 6, 2020
- [WBG EHS Guidelines for Healthcare Facilities](#), issued on April 30, 2007

## **4 ENVIRONMENTAL AND SOCIAL BASELINE**

### **4.1 Key Health Sector Challenges in Mizoram**

Generation, handling, treatment and disposal of hazardous wastes in the healthcare facilities during delivery of services is the key risk and poses challenge for its safe management to protect human health and environment. The main hazardous wastes generated include infectious and sharps wastes, hazardous chemicals e.g. cytotoxic drugs, mercury wastes etc. Bio-Medical Waste Management (BMWM) in the healthcare facilities (HCFs) is the primary responsibility of the health facilities as generator of wastes. The Mizoram State Pollution Control Board is responsible for the monitoring and ensuring compliance of the HCFs in the state through Bio-Medical Waste (Management and Handling) Rules 2016 and further amendments in 2018. Aizawl Municipal Council (AMC) is the implementing agency responsible for handling and disposal of general solid wastes from the HCFs.

The health facilities in Mizoram include one Mizoram State Cancer Institute (MSCI), twelve District Hospitals (including three newly notified District Hospitals), two Sub-District Hospitals, nine Community Health Centres, sixty-one Primary Health Centres, three hundred seventy-four Sub-Centres and one hundred seventy-two clinics across the state.

The key gaps and challenges in the management of BMW in the state include:

- Deficient organizational structure at the central and district levels to plan, implement and monitor the biomedical waste management and inadequate support to the health facilities on BMW management.
- Lack of a biomedical waste management plan for implementation by health facilities at different levels of functioning, leading to inefficient and hazardous waste management practices e.g. burning of wastes, mixing of biomedical wastes with general wastes and disposal in dumps etc.
- Lack of options for treatment and final disposal of biomedical wastes in the health facilities. This includes constraints in the use of deep burial pits as an option for final disposal of BMW as evident from the use of deep burial pits as final disposal options, even by the larger health facilities such as district hospitals in the state.
- Constraints in supervision and monitoring of waste management in the health facilities due to absence of monitoring indicators and adequately trained human resources for monitoring and supervision.

### **4.2 Waste Management in Mizoram**

The primary study was conducted in sample health care facilities through questionnaire administration covering environmental and social aspects to the PMU and HCFs and holding consultations with the project stakeholders in the month of July-August 2020. The study was carried out to gather baseline information about the status of environment and social aspects as relevant to the project, so as to help towards designing and developing suitable environmental and social measures as appropriate to the nature and scale of the aspects identified on the ground. In view of the Covid-19 pandemic, the information collection and discussions were conducted remotely through internet facilities and web communication. The findings of the baseline study are discussed in the following sections.

#### **4.2.1 Bio-Medical Waste Management**

The organizational setup at the state and facilities level for managing BMW in the state includes following:

- The Nodal Officer for BMWM from Directorate of Health Services has been assigned by the state, who is supposed to be assisted by another officer from Directorate of Hospital & Medical Education.

- There is a state level coordination committee under the Chairmanship of the Secretary, Health & Family Welfare with members from other departments including State Pollution Control Board, EF&CC, UD&PA.
- The budget head in state budget for BMW management is grossly inadequate for planning and managing BMW across the health facilities.
- BMWM component is yet to be linked with the State Health Care MIS

The organizational arrangements as set by the state need to be strengthened in the form of specifications of roles and responsibilities, terms of reference, strengthening of resource allocation, coordination and consultation mechanisms etc for developing and implementing an effective BMWM plan effectively through different levels of state facilities.

#### 4.2.2 Segregation and Collection of Waste

The study findings suggest that the segregation practices and equipment required for collection of medical waste practices as per norms exist in the majority of District Hospitals (DH), CHC and PHCs. Needle destroyers, necessary for protection of health workers from the risk of Hepatitis B and HIV infections are available in majority of HCFs. Mercury spill treatment kits and procedures for spill management are also available in HCFs to a good extent. Incidents of mixing of BMW waste with other wastes are reported by 12% of all HCFs. Effluent treatment plants for handling and treatment of wastewater is absent in the large HCFs e.g. DHs. Practice of liquid wastes being treated before discharge into sewers seems to be in place in majority of HCFs i.e. 90% of HCFs.

State and District Advisory Committee for management of Bio- Medical waste Management have been formed and a total of 5 meeting convened so far. Among larger HCFs, infection prevention & control committees are established with head of the institution as Chairperson, responsible for management of BMW. In small facilities, BMWM responsibility is assigned to an official as the nodal person.

The Health and Sanitation Committees at the village level are also responsible for the monitoring of the health facilities in their areas and report issues of non-compliance to the Block Development Office or the CHC/PHC management committees.

Table (9) below presents the availability of equipment and consumables and practices of segregation in different types of health facilities.

Sl. No.	Indicators	DH	CHC	PHC	Total
1	Segregation Being Done	91%	100%	97%	96%
2	Containers/ Bins Available	100%	100%	98%	99%
3	Colour coded containers as per BMWM rules 2016 (Amended 2018)	91%	100%	98%	96%
4	Needle destroyers available	100%	100%	100%	100%
5	Is Mercury spill treatment kit available	91%	100%	86%	92%
6	Does the HCF have SOP for mercury spill management	100%	100%	95%	98%
7	BMW mixed with other waste	18%	11%	8%	12%

Sl. No.	Indicators	DH	CHC	PHC	Total
8	Is liquid waste being treated before discharge into sewers.	91%	89%	91%	90%
9	There is a committee/ Nodal person assigned for BMW Management	91%	100%	88%	93%
Total Sample		11	9	64	84

Source: Primary Study, July/August 2020

#### 4.2.3 Storage and Transportation of Bio-medical Waste

The Table below presents the current practices of storage and transportation of BMW in different type of HCFs. The primary data suggests that the clearance of waste takes more than 48 hours in more than 1/4<sup>th</sup> of all HCFs. While there is separate storage facility for BMW in majority of District hospitals, many CHC and PHC lack in this. A dedicated separate route for transporting waste in order to avoid patient areas seems to be lacking in the facilities in general. Procedures for recording waste generation, transportation, handling and weighing are lacking in many CHCs and PHCs., The regulatory compliance through submission of annual report to the state PCB is followed by majority of HCFs.

Sl. No.	Indicators	DH	CHC	PHC	Total
1	Is any waste being stored at the facility for more than 48 hours	27%	44%	13%	28%
2	Record of every day's waste generation available	27%	56%	33%	39%
3	Separate dedicated BMW storage area	91%	78%	58%	76%
4	Separate route for the waste transport through the HCF	36%	56%	27%	40%
5	Vehicle carrying BMW is authorized for such specialised work	73%	78%	39%	63%
6	HCF have policy on the waste type, collection time and weighing of waste	91%	78%	73%	81%
7	Annual Report to SPCB/ PCC	100%	100%	98%	99%
Total Sample		11	9	64	84

Source: Primary Study, July/August 2020

#### 4.2.4 Treatment and Disposal of Bio-medical Waste

Common Treatment facility for BMW is currently being under planning process. Preparation of Detailed Project Report (DPR) is being undertaken through Aizawl Smart City Ltd. DPR has been

prepared and Environmental clearance from Mizoram Pollution Control Board (MPCB) is being sought and awaited. The Government has allocated land for the establishment of CBMWTF at Tuirial, Aizawl.

In the absence of a common treatment facility for BMW management in the state, most of the HCFs including district hospitals across the state rely on in-situ treatment using sharp pits, and deep burial pits that are present in majority of the HCFs. Also, availability of equipment such as autoclave and microwave, dedicated for the treatment of BMW are lacking across the HCFs. Their use being limited to disinfection of some equipment and articles only. The options for recycling of waste materials e.g. plastics, metals etc are also lacking in the state.

The Aizawl Municipal Corporation has designated staff and vehicles for collection of COVID-19 waste from COVID- 19 quarantine and Treatment facilities.

<b>Table (11): Treatment and Disposal of Bio-medical Waste</b>					
<b>Sl. No.</b>	<b>Indicators</b>	<b>DH</b>	<b>CHC</b>	<b>PHC</b>	<b>Total</b>
1	There is a sharps pit(s) for on-site disposal of sharps wastes	91%	100%	95%	95%
2	Facility have a deep burial pit(s) for on-site disposal of the infectious waste	91%	100%	94%	95%
3	HCF uses microwave/ autoclave to treat BMW on site	64%	56%	72%	64%
Total Sample		11	9	64	84
Source: Primary Study, July/August 2020					

#### **4.2.5 Occupational and Health Safety Measures**

The practice of worker's health and safety (WHS) measures such as issue of PPEs while handling wastes appears to be in place among the facilities. The procedures for recording and reporting of the incidents appears deficient across all levels of the HCFs. Procedures for preventive activities e.g. Post Exposure Prophylaxis (PEP) and immunization of workers against Hepatitis B are deficient in PHCs as compared to DHs and CHCs. Health check-up of workers, an important surveillance procedure is being carried out in 87% of facilities on an annual basis. Regular upkeep of medical records of waste handlers is deficient among DHs and PHCs. Training of new workers and on periodical basis needs to be strengthened. During the pandemic the Department has also been providing training programmes for management of COVID-19 associated BMW. Table (12) below presents the status of various indicators on WHS across different type of HCFs in Mizoram. These suggest the need for improving practices and procedures health care facilities especially with regard to recording and reporting of incidents and keeping of training and medical records.

<b>Table (12): Occupational and Health Safety Measures</b>					
<b>Sl. No.</b>	<b>Indicators</b>	<b>DH</b>	<b>CHC</b>	<b>PHC</b>	<b>Total</b>
1	Employees wear protective equipment (PPE) while on the job including handling wastes	91%	89%	94%	91%

<b>Table (12): Occupational and Health Safety Measures</b>					
<b>Sl. No.</b>	<b>Indicators</b>	<b>DH</b>	<b>CHC</b>	<b>PHC</b>	<b>Total</b>
2	Past incidence of occupational injury/ accident	27%	0%	11%	%
3	Keep record of such injury/ injury/ accident	27%	56%	33%	44%
4	HCF has a procedure for Post Exposure Prophylaxis (PEP) for follow up and management of needle stick injuries	91%	100%	83%	91%
5	HCF staffs and those involved in handling of BMW are immunized (against the Hepatitis B and Tetanus)	82%	100%	77%	86%
6	Health check-up of all the employees being conducted regularly (at least once in a year)	73%	100%	88%	87%
7	BMWM training manual for staff available	100%	100%	67%	75%
8	Training on BMWM conducted on the induction of new employees	73%	100%	83%	85%
9	Training on BMWM conducted on regular basis	82%	78%	72%	77%
10	Record of employee's training on BMWM available	91%	100%	78%	90%
11	Medical record of waste handlers available at HCF	73%	100%	69%	81%
Total Sample		11	9	64	84
Source: Primary Study, July/August 2020					

#### **4.2.6 Other Environmental Aspects**

The HCF generally lack in having valid consent to operate under Air act and Water act. Disposal of general wastes from many HCFs seems to be done through open burning, a practice that is hazardous to the environment through generating air pollution, that may lead to respiratory illnesses as well as long term effects e.g. cancers due to Dioxins and furans released during burning.

The ICT, Department, Govt. of Mizoram has been appointed as the nodal department to implement the E- waste Management in the state. Aizawl Municipal Corporation has initiated setting up of e-waste collection centre for Aizawl city near Rianganval Thlanmual area, Zemabawk. The procedures and options for resource recovery from plastic wastes and battery wastes etc are lacking in the health facilities and need to be explored.

Many HCFs across the states reported rainwater harvesting schemes being implemented in the facilities. Such initiatives are encouraged to be implemented by the project across all HCFs.

#### **4.2.7 Infrastructure Condition and Access**

About a third of District hospitals and a fifth of CHC have squatters in their premises. While most district hospitals and CHCs have all weather roads, however, some of the PHCs lack this and majority

of Sub-centres are not connected with all-weather roads. Also, a good number of District hospitals, PHCs and SCs lack in basic infrastructure facilities with respect to toilets for men and women, and safe drinking water for patients. The HCFs do have health committee in line with Rogi Kalyan Samitis with community participation and may require strengthening for better accountability.

<b>Table (13): Infrastructure Condition and Access</b>						
<b>Sl. No.</b>	<b>Indicators</b>	<b>DH</b>	<b>CHC</b>	<b>PHC</b>	<b>SC</b>	<b>Total</b>
1	Land owned by HCF and have ownership paper/ documentation	27%	22%	25%	69%	38%
2	HCF land ownership paper demarcate boundary	91%	78%	81%	3%	58%
3	Are there any squatters (including residential, commercial units) on the HCF land	36%	22%	11%	11%	14%
4	Health facility connected with all-weather road free of obstacles	91%	100%	84%	8%	63%
5	Health facility have a boundary wall	55%	44%	17%	75%	40%
6	Health facility have separate functional toilets for men and women in adequate numbers	55%	100%	66%	14%	52%
7	Health facility have adequate safe drinking water for patients	91%	100%	97%	6%	69%
8	Health facility have health committee with community participation to oversee the overall functioning of the facility	82%	100%	92%	31%	73%
<b>Total Sample</b>		<b>11</b>	<b>9</b>	<b>64</b>	<b>36</b>	<b>120</b>
Source: Primary Study, July/August 2020						

### **4.3 Status of Women in Mizoram**

Among the north-eastern states, Mizoram shows relatively lesser degree of gender inequality in terms of work participation, literacy, infant mortality and sex ratio. However, Mizo society, is a patriarchal and patrilineal society where women had no authoritative power in the family. The father/ husband was the head and in charge of all the family affairs. As a patrilineal society, the rule of descent is strictly based on the male line only. In the traditional system, a woman was recognised even after marriage, by her patri-clan name. Thus, all the children acquired membership in their father's clan group which might be a localised group or might spread horizontally over many villages and could never acquire membership in their mother's clan group. Among all clans, the rules of succession required that the youngest son should be the proper heir, although other male children also had a share in the family property. Women do not have any legal claim on the family property except a small share at the marriage which they carried with them as a form of dowry. Even in the absence of a male child, a daughter could not claim, as a matter of right, the family property, but would normally go to the nearest male relative. Until recently the economic role of women did not attract much attention in Mizoram because much of women's work was done at home or outside the formal economy.

However, the advent of Christianity and the expansion of education brought about tremendous changes in the status of the Mizo women. Women are no longer considered inferior to their male counterparts. Women, today, are self-confident and self-reliant. They have made contributions to the political, social and economic upliftment of the Mizo society. The bride price is still prevalent because they seek to preserve the customs that were once practiced by their grandparents. Today women's participation and suggestions are respected by men. Women hold respectable jobs from primary school teachers to officers' rank in government services and universities. They actively participate in several social activities for promoting the living standards and better social conditions of the Mizo society in general, and the women in particular<sup>11</sup>.

The phrase "Women's Empowerment" has become an important topic of discussion amongst the academicians and policy makers in the state. The Government of Mizoram like the Central Government has undertaken many women related policies for the empowerment of women<sup>12</sup>.

#### **4.3.1 Women work participation rate**

Women's participation in the workforce in Mizoram is higher than the national average, whereas men's participation is seen to be lower than the national average. According to the Census of India, around 42.5 percent of women in rural Mizoram and 37.8 percent of women in urban Mizoram are in the labour force. The all India figures of labour force participation are 53 percent and 30 percent respectively for men and women, which is lesser than the state figures.

#### **4.3.2 Gender Based Violence**

The issue of Gender Based Violence is serious and has been found in Mizoram with cases of domestic violence, rape & molestation etc were also registered. The key measures are in place and includes:

- Under 'The Protection of Women from Domestic Violence Act, 2005', Protection Officers are designated in every District (Except 3 new districts) and are in place.
- As per Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, Internal Complaints Committee and Local Complaints Committee were set up.
- Training, awareness and sensitization programme on Gender Based Violence is frequently organised for concern persons, service providers, and women group etc.

In addition, the following Schemes are function in the State to combat Gender Based Violence:

1. **Universal Women Helpline (WHL):** provides referral services to the women affected by violence. The Scheme of Universalisation of Women Helpline is intended to provide 24 hours immediate and emergency response to women affected by violence through referral (linking with appropriate authority such as police, One Stop Centre, hospital) and information about women related government schemes and programs across the country through a single uniform number.
2. **One Stop Centre (OSC):** Operates in 8 districts in Mizoram (i.e. Aizawl, Lunglei, Siahla, Champhai, Kolasib, Serchhip, Lawngtlai, and Mamit) to provide rescue and referral services to the women affected by violence. The OSC will support all women including girls below 18 years of age affected by violence, irrespective of caste, class, religion, region, sexual orientation or marital status. The facilities at OSC in Mizoram includes being 24x7 functionality, shelter for women,

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<sup>11</sup> The Status and Role of Women in Mizo Society. Journal of North East India Studies Vol. 4(1), Jan.-Jul. 2014, pp. 30-42. (2014). <https://works.bepress.com/jneis/43/>

<sup>12</sup> Role of Women in the Socio-Economic Development in Mizoram. Department of Public Administration, Mizoram University. 2013. [http://mzuir.inflibnet.ac.in/bitstream/123456789/66/1/Jasmine%20Lalremmawii%20\(P.A\)%20-%202013.pdf](http://mzuir.inflibnet.ac.in/bitstream/123456789/66/1/Jasmine%20Lalremmawii%20(P.A)%20-%202013.pdf)



support to case registration, psychosocial counselling, legal counselling, medical assistance, help lodge FIR, police assistance, video conference facility, and basic security. So far 274 cases registered since the OSCs became functional since October 2016 in Aizawl, 2018 in Champhai and August/ September 2019 onwards in rest of the districts.

- Mahila Police Volunteer (MPV):** Implemented in 2 districts (Aizawl & Lunglei) as a pilot project. MPV serve as a public-police interface in order to fight crime against women. The broad mandate of MPV s is to report incidences of violence against women such as domestic violence, child marriage, dowry harassment and violence faced by women in public spaces.

Swadhar Greh Home is running in 11 places by the State Government and NGOs. A list of the same is as below.

**Table (14): Swadhar Greh Homes in Mizoram**

Sl.No.	District	Name of Swadhar Home	Swadhar Home run by
1	Aizawl	State Social Welfare and Rehabilitation Centre (SSW &RC), Aizawl	Social Welfare and Tribal Affairs Department, Govt. of Mizoram
2		Swadhar Greh Home, Kelsih	Zoram Drivers Ramthim Board (ZDRB)
3		Swadhar Greh Home, Moumual, Aizawl	VOLCOMH
4	Lunglei	Swadhar Greh Home, Lunglei	MHIP Sub-headquarter, Lunglei
5	Saiha	Swadhar Greh Home, Saiha	MHIP Sub-headquarter, Saiha
6	Champhai	Swadhar Greh Home, Champhai	MHIP Sub-headquarter, Champhai
7	Kolasib	Abigail Swadhar Greh Home, Kolasib	MHIP Sub-headquarter, Kolasib
8		Swadhar Greh Home, Vairengte	MHIP Sub-headquarter, Vairengte
9	Serchhip	Thlamuanna In. Swadhar Greh Home, Serchhip	MHIP Sub-headquarter, Serchhip
10	Lawngtlai	Swadhar Greh Home, Lawngtlai	MHIP Sub-headquarter, Lawngthai
11	Mamit	Bethany Solace Home, Mamit	Bethany Sisters, Mamit

#### 4.4 Current Information Education and Communication (IEC) Mechanism

The current IEC activities are linked to NHM implementation. IEC material is available on the national NHM website under the headings of (1) Print materials, (2) Audio Materials (3) Video Materials, (4) Training materials, (5) SBA Presentations (6) LaQshya. Table below presents the IEC material available on NHM site in different types of media and thematic area. They are downloaded and further adapted to local language and culture.

Table (15): IEC Materials Available at NHM Site for Different Thematic Areas		
S.No.	Type of Media	Thematic Area
1	Print Media	Maternal Health, MH Logo, MH Game, MH Hoarding, MH Posters, MH Wall-painting.

<b>Table (15): IEC Materials Available at NHM Site for Different Thematic Areas</b>		
<b>S.No.</b>	<b>Type of Media</b>	<b>Thematic Area</b>
		Making Abortion Safer: ASHA ANM Booklet, Flip and answer book, Kalyani Poster, Leaflet
2	Audio Materia	MH Song, 48hours Stay , ANC, IFA, JSSK
3	Video Materials	Making Abortion Safer, Safe Motherhood, 48-hrs Jaldbazi, ANC , IFA Tablet, JSSK
4	Training Materials	SBA Training Videos - Module 1 to module 5
		SBA presentations: 1b Infection Prevention, 2a Quality Antenatal Care, 2b Antenatal Check-Up History taking, 2d Antenatal Check-Up Abdominal Examination, 3a Antenatal Care Laboratory Investigations, 3b Antenatal Care Interventions, 3c.i Antenatal Care Counselling, 3d Intrapartum Care Assessment, 4 Intrapartum Care during labour, 5b Resuscitation of New born, 5c Postpartum Care, 6b Quality of care

## 5 ASSESSMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

The proposed project will bring significant health benefits to the local population by improving the quality and utilization of the health services in the state.

**Table (16): Environment and Social Risks and Impacts**

Sub-Components/ Areas	Main Activities	Risks/ Impacts	Potential Mitigation Approach
<b>Component 1: Improving accountability and strengthening governance through Internal Performance Agreements</b>			
IPAs will be signed at three levels of the state public health system	<ul style="list-style-type: none"> <li>• State and subsidiary departments – focus on Policy reforms</li> <li>• The Directorates will be supported in identifying existing sector-wide gaps in quality of health services and health insurance program, determining the most suitable approaches to address these gaps, developing action plans, and operationalizing those plans</li> <li>• Incentive strategy will be designed and used to promote improving the utilization and quality of health services and practices</li> <li>• Performance will be measured against results defined via key indicators that contribute to improved quality of health services and efficiency in health insurance program</li> <li>• Signing of Internal performance Agreements (IPAs) at three levels – i.e. State/ Directorate level, District level, and CHC/PHC level</li> <li>• Strengthening monitoring, coordination and timely supply of resources</li> </ul>	<ul style="list-style-type: none"> <li>• The performance management activities will improve the utilization and quality of health services and practices, not only at the facility level but also at the individual level, which will have overall a positive impact of the project.</li> <li>• Given the Internal Performance Management (IPM) is new to Mizoram – both HCF staffs as well as community may not fully understand the efficacy of it and hence for better positive outcome there is a need for building awareness among the key stakeholders and target community. This will impact in having more trust in the system and increased footfalls.</li> <li>• With increased footfall, there will be an incremental increase solid, biomedical and liquid waste streams (chemical</li> </ul>	<ul style="list-style-type: none"> <li>• HCFs in backward and remote districts and blocks to be also undertaken for IPM activities to improve access to performance link quality health care in those areas.</li> <li>• Project specific Social and Behaviour change communication (SBCC) strategy to be prepared and implemented incorporating communicating performance management system and its results. SBCC will be prepared based on rapid assessment of health seeking behaviours of the target population, awareness and access to MHCS, and the health staffs’ perception on quality of services delivered. The SBCC aims towards making positive behaviour change and to create demand for quality health</li> </ul>

Sub-Components/ Areas	Main Activities	Risks/ Impacts	Potential Mitigation Approach
	<ul style="list-style-type: none"> <li>• Improving the MHCS to capture information aiding the performance monitoring mechanism</li> <li>• Developing quality scoring and indexing system in relation to key functions of the institution/ facility</li> <li>• Capacity building of hospital and health facility staff on techno-managerial skills and aligning incentives to perform better</li> <li>• Piloting performance-based incentives and rewards</li> <li>• Defining performance measurement and verification system – both internal and external</li> </ul>	<p>reagents, wastewater effluents). And, if waste streams are not adequately treated or disposed, there could be impacts/ contamination to surrounding soil, water and air environments and on nearby communities.</p> <ul style="list-style-type: none"> <li>• While women tend to access services geared towards maternal care and childcare, they often delay treatment seeking behaviour for diseases such as diabetes, hypertension, breast, cervical and oral cancers etc. This can be for a variety of reasons including well-documented time-poverty, double burden of unpaid domestic work and often put the health of their children and male members of the family at a higher priority than their own health.</li> </ul>	<p>services. The SBCC shall be prepared within first six months of the project being effective and before the IPA is signed.</p> <ul style="list-style-type: none"> <li>• Preparation of SBCC strategy shall also address the misconceptions and spread awareness about NCDs such as cervical cancer and promote utilization of HCFs for the same.</li> <li>• BMWM to be strengthened as per measures elaborated in BMWM sub-component</li> </ul>
<b>Component 2: Improve design and management of Health insurance programs</b>			
Strengthening policy and design for increased operational efficiency of the Mizoram Health Care	<ul style="list-style-type: none"> <li>• Reviewing benefit packages, exploring options for converging benefit packages between the two schemes i.e. PMJAY and MHCS</li> </ul>	<ul style="list-style-type: none"> <li>• No specific environmental risk associated with this activity.</li> <li>• This will help support the coverage of population under the MHCS and PMJAY. However, in</li> </ul>	The SBCC strategy for the project to incorporate communication on mechanism to access and take benefit of the MHCS and PMJAY by eligible

Sub-Components/ Areas	Main Activities	Risks/ Impacts	Potential Mitigation Approach
Scheme (MHCS) and PMJAY	<ul style="list-style-type: none"> <li>• Strengthening institutional capacity, systems and processes including strengthening operational convergence of the two schemes</li> <li>• Community interventions for improving coverage and demand <ul style="list-style-type: none"> <li>○ Comprehensive communication campaign and demand side interventions</li> <li>○ Community-driven pilots in selected districts</li> <li>○ Leverage the existing platforms and structures for the same e.g., Village health, sanitation and nutrition committees (VHSNCs), women self-help groups (SHGs) and village health and nutrition day (VHND).</li> </ul> </li> </ul>	<p>order to ensure coverage of marginalized and vulnerable population, it requires good outreach to them in building awareness about the scheme.</p>	<p>population including marginalized and vulnerable population.</p>
<b>Component 3: Quality of health service and innovations</b>			
Developing a comprehensive quality assurance system - biomedical waste management, augmenting systems for human resource management, and piloting innovations	<ul style="list-style-type: none"> <li>• Improvements in the delivery and quality of health services provided by district hospitals, CHCs and PHCs <ul style="list-style-type: none"> <li>○ Implementation of health facility improvement plan,</li> <li>○ Training of teams responsible for periodic assessments, and</li> <li>○ Training of district-level administrators</li> </ul> </li> <li>• Quality certification (NQAS) of health facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Overall, the activities will have positive environmental and social impact by improving the quality of basic infrastructure facilities in HCFs.</li> <li>• The project does not support any large-scale construction and is restricted to minor repair and renovations within the existing footprint of the facilities, and hence no land acquisition or need</li> </ul>	<ul style="list-style-type: none"> <li>• Screening to be done for infrastructure upgradation of HCFs/ other project facilities e.g. Nursing school/ college to avoid any land acquisition or involuntary resettlement.</li> <li>• Screening will also be conducted to rule-out any adverse impacts related to resettlement of squatters and non-title holders.</li> </ul>

Sub-Components/ Areas	Main Activities	Risks/ Impacts	Potential Mitigation Approach
		for any additional land is anticipated.	
Strengthening of biomedical waste management	<ul style="list-style-type: none"> <li>• Develop a strategy for improving management and disposal of biomedical waste generated by both government and private health services.</li> <li>• Improving the biomedical waste management system <ul style="list-style-type: none"> <li>○ Developing evidence-based strategies and plans</li> <li>○ Investing in infrastructure and equipment (including maintenance)</li> <li>○ Capacity building, and</li> <li>○ Deploying personal protective equipment</li> <li>○ Infection prevention measures, and</li> <li>○ Immunization for health care providers</li> </ul> </li> <li>• Exploring private sector engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Quality certification process involves improving the BMW and other environmental hygiene, so it will be beneficial.</li> <li>• This will help strengthen the overall management of BMW. Given if waste streams (chemical reagents, wastewater effluents) are not adequately treated or disposed, there could be impacts /contamination to surrounding soil, water and air environments and on nearby communities. Also, there is potential long-term risk could be associated with poor operations and maintenance of waste treatment and disposal technology.</li> </ul>	<ul style="list-style-type: none"> <li>• Set up mechanism for building and sustaining BMW management, sanitation and hygiene standards.</li> <li>• SOP to be prepared for upkeep and O&amp;M of equipment installed and related OHS practices.</li> <li>• Waste characterization exercise covering identification of types and quantities of different wastes generated during healthcare activities in the health facilities to be conducted at the initiation of implementation.</li> <li>• Building capacity of HCF staffs on bio-medical waste management – both solid and liquid waste.</li> <li>• All waste streams (solid and liquid waste will be managed in accordance with the principles of the biomedical waste management rules, 2016 (amended 2018), and their implementation guidelines.</li> <li>• SOPs for management of e-waste, plastics, pharmaceuticals, and hazardous waste (x-ray developer)</li> </ul>

Sub-Components/ Areas	Main Activities	Risks/ Impacts	Potential Mitigation Approach
			<p>in accordance to the relevant rules to be developed and implemented.</p> <ul style="list-style-type: none"> <li>• SoP for notification and disposal of expired medicines and other hazardous chemicals so that it is not disposed in regular solid and liquid waste streams.</li> <li>• Checklist and SOP for infection control measures to be developed.</li> <li>• Health and safety requirements to be included in the service contract of various service providers e.g. sanitation services, bio-medical services, and laboratory services etc.</li> <li>• As part of the bio-medical waste management plan, effluent Treatment Plants (ETP) should be provided to treat the washing and other wastewater generated from larger health facilities.</li> <li>• For smaller health facilities, wastewater from key generating areas shall be neutralized and / disinfected near the source and discharged externally in safe manner.</li> <li>• Provisions e.g. septic tank for safe treatment and disposal of sewage from health facilities to be developed in areas where sewerage system is lacking.</li> </ul>

Sub-Components/ Areas	Main Activities	Risks/ Impacts	Potential Mitigation Approach
			<ul style="list-style-type: none"> <li>• No-run-off from site should allow to get into rivers/ water streams or accumulate at site or nearby areas without confirming to safe standards of discharges, as per BMW Rules, 2016.</li> <li>• To ensure compliance and facilitate the implementation of the regulation on Bio- Medical Waste Management Rules, the following mitigation actions should be in place: <ul style="list-style-type: none"> <li>a. Labeling of waste containers as per specifications. Segregation of wastes near to their source of generation, transportation to designated storage area within the facility.</li> <li>b. The requirements for transfer and reporting of medical wastes within the HCF and between the disposal center.</li> <li>c. Emergency mitigation measures for accidents/ leakages/ spills and release of medical waste</li> <li>d. Protection/OHS for workers during the sorting, collection, transportation and temporary storage.</li> </ul> </li> </ul>



Sub-Components/ Areas	Main Activities	Risks/ Impacts	Potential Mitigation Approach
			<p>e. Where facilities are too remote and not viable to be connected to CBMWTF, decentralized systems such as deep burial pit will be constructed on site.</p> <p>f. In all health facilities, segregation of liquid chemical wastes at the source, pretreatment and neutralization before mixing with other effluents from the facilities will be carried out, as per BMW Rules.</p> <p>g. For larger facilities, ETP will be established in DH. For smaller facilities with no sewerage connection, suitable arrangements such as liquid disinfection, septic tank and soak pit will be introduced.</p> <ul style="list-style-type: none"> <li>• The project will also provide capacity building support to ensure occupational safety measures are followed by healthcare staff in facilities.</li> </ul> <p>Follow WHO and MOHFW guidance in management of Covid-19 waste.</p>
Health human resource development	<ul style="list-style-type: none"> <li>• Strengthen health human resource development and management, starting with</li> </ul>	<ul style="list-style-type: none"> <li>• No specific environmental and/or social risks associated</li> </ul>	<ul style="list-style-type: none"> <li>• Training of HCF staffs and Nodal officers on BMW based on</li> </ul>

Sub-Components/ Areas	Main Activities	Risks/ Impacts	Potential Mitigation Approach
	<p>support to development of a state level policy for health human resources.</p> <ul style="list-style-type: none"> <li>• Support improvements in pre- and in-service training</li> <li>• Developing and implementing strategies to address human resource shortages</li> <li>• Developing and implementing performance metrics for health cadres, and</li> <li>• Building the capacity of the Department of Health for data-based management of human resources</li> </ul>		<p>training need assessment (TNA) conducted and informed the training module.</p> <ul style="list-style-type: none"> <li>• HCF staff's training and capacity building programs to include occupational health and safety (OHS) measures, Covid19 specific measures, GRM, SEA/SH, and other such areas.</li> <li>• Strengthening of the capacity of the Project PMU on BMWM and other hazardous waste management through orientation and exposure to other organizations/ states with good environmental management practices.</li> </ul>
<b>Component 4: Contingent Emergency Response Component</b>			
Provision of immediate response to an Eligible Crisis or Emergency, as needed		ESMF will be update as and when CERC is invoked for any activity to assess the risk and impacts.	<p>Provisions for safe handling and disposal of the wastes generated to be applied to safeguard environment. and community health.</p> <p>Provisions for the safety and health of health workers and other emergency responders to be implemented, based upon the type of hazards exposed.</p>

The project's SEA/SH risk has been rated as low as the project will not include any major civil work. However, given that the State has prioritized women in their programs and schemes, and gender based violence is one of the important area that the state plans to address, the health professionals and health systems play an important role in caring for survivors of sexual violence, it is important to build capacity of health care professionals by sensitizing them to sexual exploitation and abuse (SEA) and sexual harassment (SH) issues and measures as part of their training, and address mandatory provisions of 'The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013' in DOHFW and in project facilities such as Internal complaint committees (ICC) for reporting any sexual violence and taking necessary measures. All the Government Offices of Govt. of Mizoram and all districts are directed to constitute the Internal Complaints Committee by the directorate of Women and Child Development, and most of the government departments/ Directorates and other offices are in compliance with this instruction/ request and thereby forming the Internal Complaint Committee within their offices; constituting of Chairman and other members. Also, Ministry of Women and Child Development (WCD), Government of India had initiated setting up One Stop Center (OSC) to deal with women facing sexual harassment and are intended to support women affected by violence, in private and public spaces, within the family, community and at the workplace, and 8 such OSCs are in different districts of Mizoram along with 11 Swadhar Greh Homes are in place in 8 districts (except in 3 new districts), and designated Protection officers as under 'The Protection of Women from Domestic Violence Act, 2005', in every districts (except the 3 new districts). In addition, Government of Mizoram has initiated Women helpline and Mahila Police Volunteer (MPV) piloted in 2 districts (Aizawl & Lunglei) to serve as a public-police interface in order to fight crime against women. The Annex-VI provides further guidance in addressing SEA/ SH risks within the project context.

***Component 4 of the project is a Contingent Emergency Response Component (CERC).*** The project ESMF will be updated in the event the contingency component becomes activated during project implementation. In addition, a CERC operations Manual will be prepared during project implementation to govern the operation of the component, this document will be aligned with the ESMF at the time of preparation and include provisions to ensure environmental and social due diligence in line with the requirements of the ESF. A list of typical positive and negative activities associated with CERC implementation will also be developed and included in the updated ESMF and the CERC manual.

## 6 ENVIRONMENT AND SOCIAL MANAGEMENT PLAN (ESMP)

The project involves various stages of planning and design for improvement of health care services at different levels of health care facilities. As part of improvement, a number of health facilities will undergo minor repair, renovations and retrofitting for infrastructural improvement. The ESMP (Table-17) discusses the risks and impacts and required mitigation measures as well as outlines the responsibilities and timelines for applying the suggested mitigation measures.

**Table (17): Environment and Social Management Plan (ESMP)**

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
IPAs will be signed at three levels of the state public health system	<ul style="list-style-type: none"> <li>The performance management activities will improve the utilization and quality of health services and practices, not only at the facility level but also at the individual level, which will have overall a positive impact of the project.</li> <li>Given the Internal Performance Management (IPM) is new to Mizoram – both HCF staffs as well as community may not fully understand the efficacy of it and hence for better positive outcome there is a need for building awareness among the key stakeholders and target community. This will impact in having more trust in the system and increased footfalls.</li> <li>With improvements in service capacities and their utilization</li> </ul>	<ul style="list-style-type: none"> <li>HCFs in backward and remote districts and blocks to be also undertaken for IPM activities to improve access to performance link quality health care in those areas.</li> <li>Project specific Social and Behaviour change communication (SBCC) strategy to be prepared and implemented incorporating communicating performance management system and its results. SBCC will be prepared based on rapid assessment of health seeking behaviours of the target population, awareness and access to MHCS, and the health staffs' perception on quality of services delivered. The SBCC aims towards making positive behaviour change and to create</li> </ul>	<ul style="list-style-type: none"> <li>HCFs in backward and remote areas/ districts are also selected for IPA in proportionate manner.</li> <li>SBCC strategy and action plan prepared and adopted by the PMU/DOHFW.</li> <li>IPA performance rating shall also include BMWM related indicators.</li> </ul>	PMU-DOHFW/ HCF	Within 6 months of project effectiveness

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
	<p>by community, there is likelihood of increased footfall to the health services. As a result, there will be an incremental increase in biomedical and other hazardous wastes generation e.g. infectious, sharps, chemicals and wastewater etc. And, if waste streams are not adequately treated or disposed, there could be impacts/contamination of surrounding soil, water and air environments and adverse impacts on the health of communities.</p>	<p>demand for quality health services.</p> <ul style="list-style-type: none"> <li>• BMWW is also planned to be to be strengthened as part of the project and as per measures elaborated in BMWW plan for the project.</li> <li>• Strategies for resource conservation based upon the principals of reduce, reuse and recycle shall be explored for implementation in health facilities at all levels of functioning for management of the general non-hazardous wastes e.g. water, plastics, paper etc.</li> </ul>			
<p>Strengthening policy and design for increased operational efficiency of the Mizoram Health Care Scheme (MHCS) and PMJAY</p>	<ul style="list-style-type: none"> <li>• This will help support the coverage of population under the MHCS and PMJAY. However, in order to ensure coverage of marginalized and vulnerable population, it requires good outreach to them in building awareness about the scheme.</li> </ul>	<ul style="list-style-type: none"> <li>• The SBCC strategy for the project to incorporate communication on mechanism to access and take benefit of the MHCS and PMJAY by eligible population including marginalized and vulnerable population.</li> </ul>	<ul style="list-style-type: none"> <li>• SBCC strategy and action plan has specific strategy to address MHCS/ PMJAY.</li> </ul>	<p>PMU-DOHFW</p>	<p>Within 6 months of project effectiveness</p>
<p>Improvements in the delivery and quality of health</p>	<ul style="list-style-type: none"> <li>• With increased footfall, there will be an incremental increase solid, biomedical and liquid</li> </ul>	<ul style="list-style-type: none"> <li>• Screening to be conducted for sub-projects (i.e. infrastructure upgradation of HCFs/ other</li> </ul>	<ul style="list-style-type: none"> <li>• All sub-projects screened using Screening format as</li> </ul>	<p>PMU-DOHFW/ HCF</p>	<p>Year-1 and continue as per the quality</p>

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
<p>services provided by district hospitals, CHCs and PHCs.</p>	<p>waste streams (chemical reagents, wastewater effluents). And, if waste streams are not adequately treated or disposed, there could be impacts/contamination to surrounding soil, water and air environments and on nearby communities.</p> <ul style="list-style-type: none"> <li>• The project does not support any large-scale construction and is restricted to minor repair and renovations within the existing footprint of the facilities, and hence no land acquisition or need for any additional land is anticipated.</li> <li>• While women tend to access services geared towards maternal care and childcare, they often delay treatment seeking behaviour for diseases such as diabetes, hypertension, breast, cervical and oral cancers etc. This can be for a variety of reasons including well-documented time-poverty, double burden of unpaid domestic work and often put the health of their children and male members of the family at</li> </ul>	<p>project facilities) to avoid any land acquisition and to rule-out any adverse impacts related to resettlement of squatters/ non-title holders prior to initiation of any civil works.</p> <ul style="list-style-type: none"> <li>• Training on conducting Screening and applying the mitigation measures to HCF in-charges and District CMOs by PMU E&amp;S specialists.</li> <li>• Safety norms as per GoI/ GoM to followed for any repair, renovation and/or retrofitting activities.</li> <li>• Preparation of SBCC strategy shall also address the misconceptions and spread awareness about NCDs such as cervical cancer and promote utilization of HCFs for the same.</li> <li>• BMWM to be strengthened as per measures elaborated in BMWM plan for the project</li> </ul>	<p>per Annex-1 prior to any civil work.</p> <ul style="list-style-type: none"> <li>• Proper OHS measures are being followed during civil works.</li> <li>• SBCC strategy and Action plan addresses the NCD gap areas.</li> </ul>		<p>improvement plan of the project during the project life</p>

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
	a higher priority than their own health.				
Strengthening planning, management, and monitoring functions	<ul style="list-style-type: none"> <li>The risk emerges from not having any dedicated environmental or social specialist in DOHFW to support the project.</li> </ul>	<ul style="list-style-type: none"> <li>An Environmental specialist with experience on BMWW, and a Social Specialist with experience in stakeholder engagement to be placed in PMU to oversee the implementation environmental and social standards due diligence activities as per ESMF including periodic monitoring and reporting on E&amp;S activities throughout the project life.</li> <li>Monitoring of BMWW system in the facilities shall be an integral part of Quality Assurance and shall be a continuous activity at different levels of health system functioning.</li> </ul>	<ul style="list-style-type: none"> <li>Placement of Environmental specialist and Social Development Specialist in PMU.</li> <li>Percentage of facilities having improved bio medical waste score/index. (Percentage). The performance of the facilities on BMWW shall be assessed through two criteria indices: i.e. Biomedical waste Management Index and Hand Hygiene Index</li> </ul>	PMU-DOHFW	Within Six months of project being effective
Development of Human Resource for health	<ul style="list-style-type: none"> <li>Though adequate human resources and capacity building across the implementation chain (both at HCF and at Directorate level) will have positive E&amp;S impact, provided they are sensitized with E&amp;S issues and have capacity to apply</li> </ul>	<ul style="list-style-type: none"> <li>Training of HCF staffs and Nodal officers on BMWW based on training need assessment (TNA) conducted and informed the training module.</li> </ul>	<ul style="list-style-type: none"> <li>TNA conducted and informed training/ capacity development program for BMWW.</li> <li>Training modules and training calendar incorporates training</li> </ul>	PMU-DOHFW	TNA in year-1 followed by annual training calendar over the project life

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
	mitigation measures as per ESMF.	<ul style="list-style-type: none"> <li>HCF staff's training and capacity building programs to include occupational health and safety (OHS) measures, Covid19 specific measures, GRM, SEA/SH, and other such areas.</li> <li>Strengthening of the capacity of the Project PMU on BMWM and other hazardous waste management through orientation and exposure to other organizations/ states with good environmental management practices.</li> </ul>	on BMWM, OHS measures, and exposure visits to other states with good practices.		
Strengthening of biomedical waste management	<ul style="list-style-type: none"> <li>Inadequate biomedical waste management capacity within Directorate and HCFs.</li> <li>Given if waste streams (chemical reagents, wastewater effluents) are not adequately treated or disposed, there could be impacts/ contamination to surrounding soil, water and air environments and on nearby communities.</li> <li>Also, there is potential long-term risk could be associated with poor operations and</li> </ul>	<p><u>On Improving BMWM</u></p> <ul style="list-style-type: none"> <li>Waste characterization exercise covering identification of types and quantities of different wastes generated during healthcare activities in the health facilities to be conducted at the initiation of implementation.</li> <li>Formation of State and District Advisory Committee for the management of Bio-Medical Waste Management.</li> </ul>	<ul style="list-style-type: none"> <li>Waste Characterization study conducted covering different types of HCFs and inform measures required to plug gaps.</li> <li>Formation status of State and District Advisory Committee for the management of BMWM.</li> <li>Inventory level of functional BMWM equipment and</li> </ul>	PMU-DOHFW/ HCF	<p>Waste Characterization Study completed within 6 months of project being effective.</p> <p>Year-1 for strengthening measures.</p> <p>Continue throughout the project life</p>



Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
	maintenance of waste treatment and disposal technology.	<ul style="list-style-type: none"> <li>• Building capacity of HCF staffs on bio-medical waste management – both solid and liquid waste.</li> <li>• All biomedical waste streams i.e. infectious and sharp wastes will be managed in accordance with the principles of the biomedical waste management rules, 2016 (amended 2018), and their implementation guidelines.</li> <li>• Checklist and SOP for infection control measures to be developed.</li> <li>• Health and safety requirements to be included in the service contract of various service providers e.g. sanitation services, bio-medical services, and laboratory services etc.</li> <li>• Adequate supply of equipment and other resource materials to HCFs including PPE, Bins, bags etc including provision for surge in BMW generation due to disease outbreaks such as Covid-19.</li> </ul>	<p>resource material at HCF</p> <ul style="list-style-type: none"> <li>• Filing of necessary reports by HCFs in due format as per BMWM rule 2016.</li> <li>• Occupational health and safety provisions at HCFs and their implementation e.g. PEP availability, immunization status of health functionaries etc.</li> <li>• Incidents and accidents monitoring reports filed regularly.</li> <li>•</li> </ul>		

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
		<ul style="list-style-type: none"> <li>• As part of HCF BMWM improvement plan under the project, Effluent Treatment Plants (ETP) should also be part of it to treat the washing and other wastewater generated from larger health facilities.</li> <li>• For smaller health facilities, wastewater from key generating areas shall be neutralized and / disinfected near the source and discharged externally in safe manner.</li> <li>• Provisions e.g. septic tank for safe treatment and disposal of sewage from health facilities to be developed in areas where sewerage system is lacking.</li> <li>• No-run-off from site should allow to get into rivers/ water streams or accumulate at site or nearby areas without confirming to safe standards of discharges, as per BMWM Rules, 2016 (amended 2018).</li> <li>• To ensure compliance and facilitate the implementation of the regulation on Bio- Medical Waste Management Rules, 2016 (amended 2018), the</li> </ul>			

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
		<p>following mitigation actions should be in place:</p> <ul style="list-style-type: none"> <li>a. Labeling of waste containers as per specifications. Segregation of wastes near to their source of generation, transportation to designated storage area within the facility.</li> <li>b. The requirements for transfer and reporting of medical wastes within the HCF and between the disposal center.</li> <li>c. Emergency mitigation measures for accidents/ leakages/ spills and release of medical waste</li> <li>d. Protection/OHS for workers during the sorting, collection, transportation and temporary storage.</li> <li>e. Where facilities are too remote and not viable to be connected to CBMWTF, decentralized systems such as deep burial pit will be constructed on site.</li> </ul>			

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
		<p>f. In all health facilities, segregation of liquid chemical wastes at the source, pretreatment and neutralization before mixing with other effluents from the facilities will be carried out, as per BMWM Rules.</p> <p>g. For larger facilities, ETP will be established in DH. For smaller facilities with no sewerage connection, suitable arrangements such as liquid disinfection, septic tank and soak pit will be introduced.</p> <p>h. Records and reports to be submitted and maintained as prescribed by BMWM rules, 2016 e.g.</p> <ul style="list-style-type: none"> <li>• Accident reporting (Form1)</li> <li>• Application for authorization or renewal of authorization (Form II)</li> <li>• Authorisation for operating a facility for</li> </ul>			

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
		<p>generation, collection, reception, treatment, storage, transport and disposal of biomedical wastes (Form III)</p> <ul style="list-style-type: none"> <li>• Annual Report (Form IV)</li> <li>• The project will also provide capacity building support to ensure occupational safety measures are followed by healthcare staff in facilities.</li> <li>• For further details refer Annex-III.</li> </ul>			
Bio-medical waste management, during COVID-19 situation	<ul style="list-style-type: none"> <li>• Risk of mixing of Covid-19 biomedical waste with other medical and general waste.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow WHO and MOHFW guidance in management of Covid-19 waste.</li> </ul>	<ul style="list-style-type: none"> <li>• Audits reports of sample facilities for adherence to the Covid-19 guidelines.</li> </ul>	PMU-DOHFW/ HCF	With immediate effect during Covid-19 pandemic time.
Management of other hazardous wastes from health facilities	<ul style="list-style-type: none"> <li>• Health facilities in the process of healthcare delivery generate large amount of plastics, electronic wastes, used batteries and general waste e.g. paper, food leftovers etc.</li> <li>• Plastic is able to persist for long in the environment and poses risks to the environment, as well as uses up natures</li> </ul>	<ul style="list-style-type: none"> <li>• Waste characterization study shall also include other hazardous wastes along with BMW.</li> <li>• The requirements under specific applicable regulations for the wastes other than those included under BMWM rules, shall be identified and procedures for their handling,</li> </ul>	<ul style="list-style-type: none"> <li>• SOPs developed and adopted by PMU/DOHFW for (a) plastic waste, (b) e-waste, (c) disposal of expired medicines, (d) phasing out of Mercury based equipments, and (e) purchase of</li> </ul>	PMU-DOHFW/ HCF	SOPs to be developed within 6 months of project effectiveness.  Year-1 for strengthening measures.

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
	<p>petroleum resources during its production.</p> <ul style="list-style-type: none"> <li>• Electronic wastes generated from use of computers, mobiles, monitors etc in the facilities also consume natural resources e.g. petroleum-based plastic, metals etc. and pose occupational health and safety risks during dismantling activities and environmental pollution.</li> <li>• Used lead-acid batteries pose serious occupational health and safety risks during their dismantling and environmental risks due to contamination of soil and water etc.</li> </ul>	<p>treatment and disposal shall be developed, to comply with the respective rules.</p> <ul style="list-style-type: none"> <li>• SOPs for management of e-waste, plastics, pharmaceuticals, and hazardous waste (x-ray developer etc) to be developed and implemented.in accordance to the relevant rules</li> <li>• SoP for notification and disposal of expired medicines and other hazardous chemicals so that it is not disposed in regular solid and liquid waste streams.</li> <li>• SoP for purchase of Mercury free equipment e.g. B.P. apparatus, thermometers, dental amalgams, batteries, etc.</li> <li>• SoP for purchase of environmentally safe material and chemicals to be developed and implemented.</li> <li>• Protocol for handling and disposal of plastic wastes to approved recycles, approved by Mizoram Pollution Control</li> </ul>	<p>environmentally safe chemicals.</p> <ul style="list-style-type: none"> <li>• Number of facilities with arrangements for recycling of wastes e.g. plastics, e-waste and batteries waste etc.</li> </ul>		<p>Continue throughout the project life</p>

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
		<p>Board (MPCB) to be developed and implemented in accordance with Plastic Wastes</p> <ul style="list-style-type: none"> <li>• Protocol for safe disposal of e-wastes to be developed in consultation with MPCB, as per e-Wastes rules.</li> </ul>			
Occupational Health & Safety (OHS) and Community Health & Safety during construction	<ul style="list-style-type: none"> <li>• Health and safety risks to construction workers and others Sanitary related problem</li> </ul>	<ul style="list-style-type: none"> <li>• The contractor (in cases of civil works) shall prepare a site-specific Action Plan for managing construction related workplace occupational health and safety, community health and safety risks and those associated with Covid-19 infections.</li> <li>• Provide relevant PPE to all workers with onsite toilet and washing facilities</li> <li>• Cordon off areas under construction and provide signage to warn of ongoing construction works</li> <li>• Plan and implement awareness sessions for workers and community on health and safety hazards and risks and their role in their management including their responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>• Site specific action plan is prepared by contractors and reviewed and approved by PMU.</li> <li>• Civil work follows the OHS norms and standards as set in the contract.</li> </ul>	Contractor, HCF	During construction

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
		<ul style="list-style-type: none"> <li>The guidance provided in the World Bank Guidance Note for borrowers on ESS4: Community health and safety, to be utilized</li> </ul>			
Addressing access to services for the poor, vulnerable and marginalized social groups	<ul style="list-style-type: none"> <li>Risk of inadequate access to healthcare services for people below poverty and in remote locations</li> <li>Lack of accessibility for persons with special needs in existing healthcare facilities</li> </ul>	<ul style="list-style-type: none"> <li>Health care providers sensitized towards services to poor and vulnerable including providing psychosocial support where needed</li> <li>All healthcare facilities to be compliant with universal access provisions through retrofitting.</li> <li>Mechanism for provision of health services in an inclusive manner that addresses the differential needs of the vulnerable population including risk of receiving a disparity on the basis of financial or social characteristics such as age, race, gender, ethnicity, sexual orientation, spirituality, disability, or socioeconomic or insurance status. Also, wherever possible linkages with other government departments and schemes to be</li> </ul>	<ul style="list-style-type: none"> <li>Universal access provisions are put in place in project HCFs for differentially abled people.</li> <li>HCF staffs sensitized on provision of inclusive services as part of training and capacity building measures.</li> </ul>	PMU-DOHFW/ HCF	Throughout project implementation



Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
		done to address the differential needs of the vulnerable groups.			
Quality certification (NQAS) of health facilities	<ul style="list-style-type: none"> <li>Overall, the activities will have positive environmental and social impact by improving the quality of basic infrastructure facilities in HCFs.</li> <li>Quality certification process involves improving the BMWM and other environmental hygiene, so it will be beneficial for occupational health and safety of health workforce, patient safety during and after treatment and for communities visiting and living near the healthcare facilities.</li> <li>The project does not support any large-scale construction and restricted to minor repair and renovations within the existing footprint of the facilities, and hence no land acquisition or need for any additional land is anticipated.</li> </ul>	<ul style="list-style-type: none"> <li>Set up mechanism for building and sustaining BMW management, sanitation and hygiene standards.</li> <li>SOP to be prepared for upkeep and O&amp;M of equipment installed and related OHS practices.</li> <li>Screening to be done for infrastructure upgradation of HCFs/ other project facilities to avoid any land acquisition.</li> <li>Screening will also be conducted to rule-out any adverse impacts related to resettlement of squatters and non-title holders.</li> </ul>	<ul style="list-style-type: none"> <li>Screening as per Annex-1 is conducted prior to any civil work in HCF undergoing for NQAS certification.</li> <li>SOP prepared and adopted for ensuring O&amp;M of equipments and hygiene standards along with BMWM.</li> </ul>	PMU-DOHFW/ HCF	As per quality improvement plan
Pollution management during repair,	<ul style="list-style-type: none"> <li>Risk of pollution from civil works including construction solid waste, dust, wastewater,</li> </ul>	<ul style="list-style-type: none"> <li>Use screens or nets to avoid flying debris and dust and use</li> </ul>	<ul style="list-style-type: none"> <li>Civil work follows the norms and standards as per the guidance in</li> </ul>	Contractor, HCF	During construction

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
renovation and retrofitting	noise, lubricants and oils, air emissions from diesel generators	<p>of regular water sprays to suppress dust</p> <ul style="list-style-type: none"> <li>• Hazardous waste separated from nonhazardous waste on site and disposed off to designated sites</li> <li>• Measure and report noise (decibel) levels regularly</li> <li>• Manage oil leaks/spills from diesel generators and machineries</li> <li>• ESMP for each construction activity to be prepared separately as highlighted by E&amp;S screening.</li> </ul>	Table (18) for different stages of construction.		
Labor management for repair, renovation and retrofitting activities especially during Covid-19 situation	<p>Though no labor influx anticipated given the small scale of civil work and that too in dispersed locations. Key labor related concerns especially in Covid-19 situation will include:</p> <ul style="list-style-type: none"> <li>• Workers coming from Covid-19 infected areas</li> <li>• Co-workers becoming infected</li> <li>• Workers introducing infection into community/general public</li> </ul>	<ul style="list-style-type: none"> <li>• Adequate hand washing and sanitization facilities provided during construction.</li> <li>• Consider ways to minimize/control movement in and out of construction areas/site.</li> <li>• If workers are accommodated on site, require them to minimize contact with people outside the construction area/site or prohibit them from</li> </ul>	<ul style="list-style-type: none"> <li>• Contractors and labor are sensitized with Covid19 guidance.</li> <li>• Contract management should have section and indicators related to labor management and additional norms during Covid19 situation.</li> </ul>	Contractor, HCF	During construction

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
	<ul style="list-style-type: none"> <li>• Arrangements for employment and accommodation of workers to be engaged in project activities, and issues relating to working conditions (including in relation to periods of sickness and quarantine), particularly if these are impacted by emergency legislation</li> <li>• Involvement of child labor and/or forced labor</li> </ul>	<ul style="list-style-type: none"> <li>leaving the area/site for the duration of their contract</li> <li>• Implement procedures to confirm workers are fit for work before they start work, paying special to workers with underlying health issues or who may be otherwise at risk</li> <li>• Check and record temperatures of workers and other people entering the construction area/site or require self-reporting prior to or on entering</li> <li>• Provide daily briefings to workers prior to commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene and distancing measures.</li> <li>• Require workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor if they have symptoms or are feeling unwell</li> <li>• Prevent a worker from an affected area or who has been in contact with an infected</li> </ul>			

Key Area/ Activities	Potential E&S Risks and Impacts	Proposed Mitigation Measures	Monitoring	Responsibilities	Timeline
		<p>person from entering the construction area/site for 14 days</p> <ul style="list-style-type: none"> <li>• Sensitization construction workers and health care staffs involved</li> <li>• No child labor or forced labor is allowed to work as per the GoI norms and legislation.</li> <li>• Setting up gender-sensitive infrastructure such as segregated toilets and well-lit living areas/ camps (if any).</li> <li>• Ensuring safety of women from any sexual exploitation and abuse (SEA) and sexual harassment (SH), sensitizing health care staffs on SEA/ SH, and mechanism to access redressal services including building linkages to One-stop center (where available).</li> <li>• Follow Labor Management Plan</li> </ul>			

**TABLE (18): CONSTRUCTION RELATED ENVIRONMENT AND SOCIAL ACTION PLAN**

S.NO	ACTIVITY	PARAMETER	MITIGATION (AS APPLICABLE)	RESPONSIBILITY	MONITORING
<b>Planning Phase</b>					
1	General Site and Worker Safety	Notification and Worker Safety	<ul style="list-style-type: none"> <li>i. The local communities/ public has been notified of the works through appropriate notification and/or at publicly accessible sites</li> <li>ii. All legally required permits (to include not limited to resource use, dumping, sanitary inspection permit have been acquired for construction and/or rehabilitation</li> <li>iii. All work will be carried out in a safe and disciplined manner designed to the site to minimize impacts on neighbouring residents and environment.</li> <li>iv. Workers' PPE will comply with international good practice (hardhats, as needed masks and safety glasses, harnesses and safety boots)</li> <li>v. Appropriate signposting of the sites will inform workers of key rules and regulations to follow.</li> <li>vi. Sanitation facilities shall be provided for all site workers.</li> </ul>	<p>Contractor responsibility at site;</p> <p>PMU to ensure relevant clauses being included in the contract document.</p>	Site level monitoring by HCF In-charge
2	Physical and Cultural Properties	Historic sites	<ul style="list-style-type: none"> <li>i. If the HCF is located very close to such a structure, or located in a designated historic district, notify and obtain approval/permits from ASI/local authorities and address all construction activities in line with local and national legislation</li> <li>ii. Ensure that chance finds provision is activated in case any artefact is encountered in excavation</li> </ul>	<p>Screening will be conducted by the HCF In-charge.</p> <p>CMO/PMU to facilitate in getting the respective permissions</p>	By CMO
<b>Implementation phase</b>					

S.NO	ACTIVITY	PARAMETER	MITIGATION (AS APPLICABLE)	RESPONSIBILITY	MONITORING
3	General Rehabilitation and/ small civil works Activities	Air quality / Dust	<ul style="list-style-type: none"> <li>i. Keep demolition debris in controlled area and spray with water mist to reduce debris dust</li> <li>ii. Suppress dust during pneumatic drilling/wall destruction by ongoing water spraying and/or installing dust screen enclosures at site</li> <li>ii. Keep surrounding environment (sidewalks, roads) free of debris to minimize dust</li> <li>iv. There will be no open burning of construction / waste material at the site</li> <li>v. There will be no excessive idling of construction vehicles at sites</li> </ul>	<p>Contractor responsibility at site;</p> <p>PMU to ensure relevant clauses being included in the contract document</p>	HCF in charge/ Hospital Administrator and CMO
4		Noise	<ul style="list-style-type: none"> <li>i. Construction noise will be limited to restricted times agreed to in the permit.</li> <li>ii. During operations the engine covers of generators, air compressors and other powered mechanical equipment should be closed, and equipment placed as far away from residential areas as possible.</li> <li>iii. Materials such as sand, cement, or other fine particles should be kept properly covered. And moistened with sprays of water.</li> <li>iv. Unpaved, dusty roads should compact and then wet periodically.</li> </ul>	<p>Contractor responsibility at site;</p> <p>PMJU to ensure relevant clauses being included in the contract document</p>	HCF in charge/ Hospital Administrator and CMO
5		Drainage	<ul style="list-style-type: none"> <li>i. The worksite site will establish appropriate erosion and sediment control measures to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers.</li> <li>ii. Keep all drains clear of silt and debris</li> </ul>	<p>Contractor responsibility at site;</p> <p>PMU to ensure relevant clauses being included in the contract document</p>	HCF in charge/ Hospital Administrator and CMO

S.NO	ACTIVITY	PARAMETER	MITIGATION (AS APPLICABLE)	RESPONSIBILITY	MONITORING
		Construction waste management	<ul style="list-style-type: none"> <li>i. Waste collection and disposal pathways and sites will be identified for all major waste types expected from works activities.</li> <li>ii. wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.</li> <li>iii. Construction waste will be collected and disposed properly by licensed collectors</li> </ul>	<p>Contractor responsibility at site;</p> <p>PMU to ensure relevant clauses being included in the contract document</p>	HCF in charge/ Hospital Administrator and CMO
6	Toxic Materials	Toxic / hazardous waste management	<ul style="list-style-type: none"> <li>i. There will be no waste dumping in adjacent areas to the HCF.</li> <li>ii. Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information</li> <li>iii. The containers of hazardous substances should be placed in leak-proof container to prevent spillage and leaching.</li> <li>iv. The wastes are transported by specially licensed carriers and disposed in a licensed facility</li> <li>v. Paints with toxic ingredients or solvents or lead-based paints will not be used</li> </ul>	HCF in charge/ Hospital Administrator	CMO and PMU
7		Asbestos Management	<ul style="list-style-type: none"> <li>i. If asbestos is located on the project site, the following provisions will apply</li> <li>ii. Mark clearly as hazardous material</li> <li>iii. When possible, the asbestos will be appropriately contained and sealed to minimize exposure.</li> <li>iv. The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust Asbestos will be handled and disposed by skilled and experienced professionals</li> </ul>	HCF in charge/ Hospital Administrator	CMO and PMU

S.NO	ACTIVITY	PARAMETER	MITIGATION (AS APPLICABLE)	RESPONSIBILITY	MONITORING
			v. If waste asbestos material is to be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately vi. The removed asbestos will not be reused and will follow the IS 11768 (1986) Recommendations for disposal of asbestos waste material and CPCB Hazardous waste rules, 2016 (amended 2018).		
<b>Operations Phase</b>					
8	Disposal of Bio-medical Waste		i. In compliance with national regulations the rehabilitated health care facilities should include sufficient infrastructure for medical waste handling and disposal; this includes and not limited to: <ul style="list-style-type: none"> <li>a. Special facilities for segregated healthcare waste (including soiled instruments “sharps”, and human tissue or fluids) from other waste disposal:               <ul style="list-style-type: none"> <li>• Clinical waste: yellow bags and containers</li> <li>• Sharps – Special puncture resistant containers/boxes</li> <li>• Domestic waste (non-organic): black bags and containers</li> </ul> </li> <li>b. Appropriate storage facilities for medical waste are in place</li> <li>c. If the activity includes facility-based disposal, such as burial pits, the appropriate disposal options are in place and operational.</li> </ul> ii. Develop SOPs for managing bio-medical and other wastes within healthcare facilities (HCF) to ensure the proper standard operating procedures based on the NQAS accreditation standards are followed and implemented.	HCF in charge/ Hospital Administrator at the facility level;  CMO and PMU for capacity building  PMU for SOPs	CMO and PMU



S.NO	ACTIVITY	PARAMETER	MITIGATION (AS APPLICABLE)	RESPONSIBILITY	MONITORING
			iii. Build capacity of healthcare workers to manage medical facilities and ensure good technical support in implementing effective waste management system.		
9	Wastewater Treatment Systems	Water Quality	<ul style="list-style-type: none"> <li>i. The approach to handling wastewater from larger HCFs (installation or reconstruction) must be approved by a qualified engineer.</li> <li>ii. Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal quality criteria set out by national guidelines/ WBG guidelines on effluent quality and wastewater treatment</li> <li>iii. Monitoring of new wastewater systems (before/after) will be carried out.</li> </ul>	HCF in charge/ Hospital Administrator and CMO	PMU
10	Community Health and Safety	Exposure to hazardous health care waste	<ul style="list-style-type: none"> <li>i. Avoid mixing general health care waste with hazardous health care waste to reduce disposal costs;</li> <li>ii. Segregate waste containing mercury for special disposal Management of mercury containing products and associated waste should be conducted as per the CPCB guidelines.</li> <li>iii. Segregate waste with a high content of heavy metals (e.g. arsenic, lead) to avoid entry into wastewater streams</li> <li>iv. Transport waste to storage areas on designated trolleys /carts, which should be cleaned and disinfected regularly</li> <li>v. Separate residual chemicals from containers and remove to leak-proof containers resistant to chemical corrosion effects. Return unused chemicals to supplier</li> </ul>	HCF in charge/ Hospital Administrator	CMO and PMU

S.NO	ACTIVITY	PARAMETER	MITIGATION (AS APPLICABLE)	RESPONSIBILITY	MONITORING
			<ul style="list-style-type: none"> <li>vi. Facilities should have permits for disposal of general chemical waste (e.g. sugars, amino acids, salts) to sewer systems.</li> <li>vii. Larger quantities of chemical wastes are to be transported to appropriate facilities for disposal, and not be encapsulated or landfilled.</li> <li>viii. Aerosol cans and other gas containers should be segregated to avoid disposal via incineration and related explosion hazard.</li> <li>ix. HCFs should have impermeable floor with drainage and designed for cleaning / disinfection.</li> <li>x. Treatment Facilities receiving hazardous health care waste should have all applicable permits and capacity to handle specific types of health care waste.</li> </ul>		
11	Worker Health and Safety		<ul style="list-style-type: none"> <li>i. Development of Facility policies, procedures and protocols (including SOPs), and awareness on infection control policies, supervision and management</li> <li>ii. Trainings should be provided to all healthcare and sanitation workers on use of PPE, handling of infectious materials and wastes (e. g. blood).</li> <li>iii. The NQAS accreditation process support implementation of the IMEP guidelines, project will ensure the standardization of necessary procedures and protocols (SOPs) will be carried out to safeguard the workers in the facility.</li> </ul>	Environmental and Social Consultant at PMU	PMU
12	Management hygiene within HCF		<ul style="list-style-type: none"> <li>i. Hygiene promotion is important for health care workers and patients. They should be given constant reminders and information of the importance of infection control such as handwashing points.</li> </ul>	HCH in charge	CMO

S.NO	ACTIVITY	PARAMETER	MITIGATION (AS APPLICABLE)	RESPONSIBILITY	MONITORING
			<ul style="list-style-type: none"> <li>ii. Toilets should be cleaned whenever they are dirty, and at least twice per day, with a disinfectant used on all exposed surfaces.</li> <li>iii. Water points, with soap and adequate drainage, should be provided for all toilets, and their use should be actively encouraged</li> <li>iv. Toilets should be designed, built and maintained so that they are hygienic and acceptable to use and do not become centres for disease transmission. This includes measures control fly and mosquito breeding, and a regularly monitored cleaning schedule.</li> <li>v. Posters and other visual information should be used to promote infection control among healthcare workers and patients.</li> </ul>		
13	Management of Labor for civil work		<ul style="list-style-type: none"> <li>i. Adequate hand washing and sanitization facilities at the construction site.</li> <li>ii. Consider ways to minimize/control movement in and out of construction areas/site.</li> <li>iii. If workers are accommodated on site, require them to minimize contact with people outside the construction area/site or prohibit them from leaving the area/site for the duration of their contract</li> <li>iv. Implement procedures to confirm workers are fit for work before they start work, paying special to workers with underlying health issues or who may be otherwise at risk especially during Covid-19 situation</li> <li>v. Check and record temperatures of workers and other people entering the construction area/site or require self-reporting prior to or on entering</li> <li>vi. Provide daily briefings to workers prior to commencing work, focusing on COVID-19 specific</li> </ul>		

S.NO	ACTIVITY	PARAMETER	MITIGATION (AS APPLICABLE)	RESPONSIBILITY	MONITORING
			<p>considerations including cough etiquette, hand hygiene and distancing measures.</p> <p>vii. Require workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor if they have symptoms or are feeling unwell.</p> <p>iii. Prevent a worker from an affected area or who has been in contact with an infected person from entering the construction area/site for 14 days</p> <p>ix. Sensitization construction workers and health care staffs involved.</p> <p>x. No child labor or forced labor is allowed to work as per the GoI norms and legislation.</p> <p>xi. Setting up gender-sensitive infrastructure such as segregated toilets and well-lit living areas/ camps (if any).</p> <p>xii. Ensuring safety of women from any sexual exploitation and abuse (SEA) and sexual harassment (SH), sensitizing health care staffs on SEA/ SH.</p> <p>xiii. Follow Labor Management Plan</p>		

## **6.1 Negative list of Activities Under the Project**

Project will not support activities that are with high risks and will involve:

- Any land acquisition and/or involuntary resettlement including resettlement or eviction of squatters/ non-titleholders
- Use of child labor and/or forced labor
- Any adverse impact to any physical and/or cultural resources
- Any risk/ impact/ disturbance to forests and/ or protected areas e.g. sanctuaries, notified wetland, or any eco-sensitive area because of subproject activities
- Activities requiring diversion of forest land to non-forestry purposes (or infringement in eco-sensitive areas)
- Any construction within 200 meters of cultural, historic, religious site/ buildings designated as Archaeological sites
- Any territorial dispute between two countries in the subproject area and its ancillary aspects and related activities
- If subproject and related activities involve the use or potential pollution of, or be located in international waterways

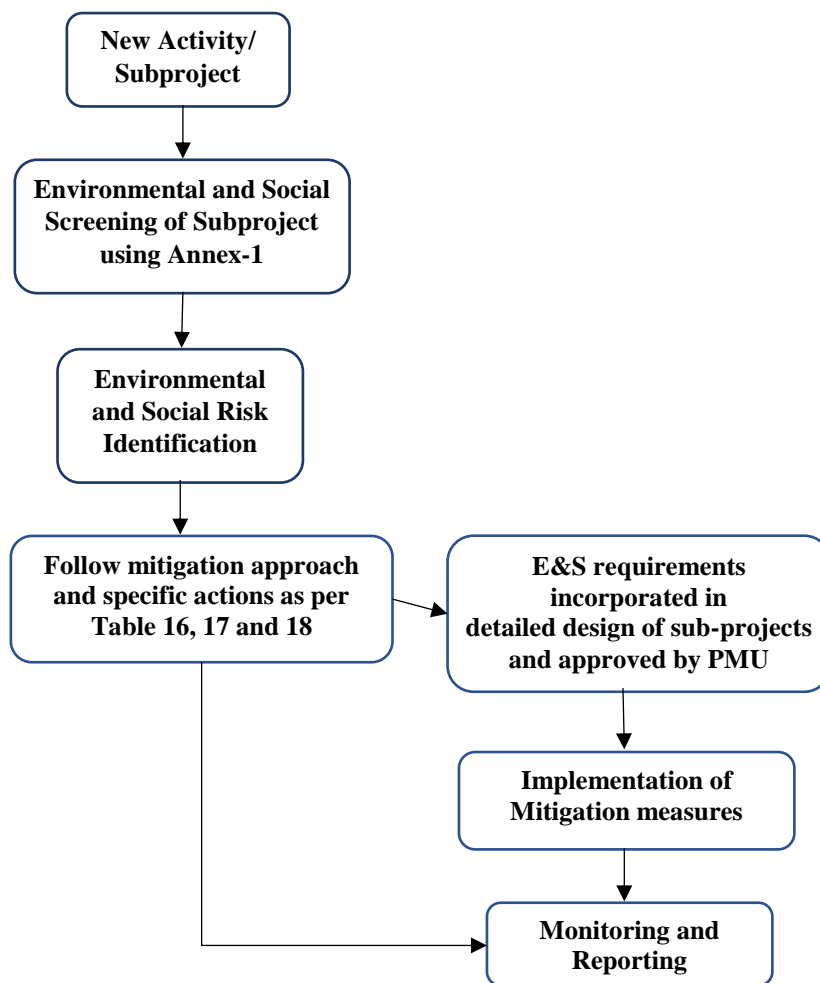
## **7 FRAMEWORK PROCEDURES FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT**

This chapter contains a summary of the screening procedure, capacity building activities, ESMP and implementation budget. It also provides necessary procedures and tools for screening and assessing environmental and social impacts. The environmental and social assessments need to be carried out based on the provisions of the National/ State laws and the relevant World Bank's Environmental and Social Standards and to be followed by the project through PMU and any hired contractors including those for civil works. The bid documents for any supply of goods or services, as well as for civil work shall also include the relevant documentation on this aspect as required by the nature of work to be procured. The Bio-medical waste management plan as mentioned in ESMP and Annex-III, the labor management procedure (as per Annex-II), and the stakeholder engagement plan specifies the key action that the PMU and the contractors need to follow during implementation. Any high-risk activities as mentioned under the prohibited list of activities (as per section 6.1) is not supported by the project. The Environment and Social Management Framework Procedure specifies measures for addressing the adverse risks and impacts and for enhancing the positive impacts. In addition, organisational capacity and training requirements, required to check and ensure effectiveness of the plan throughout the lifecycle of the project, have also been discussed.

### **7.1 Environmental and Social Management procedures**

The overall environmental and social management procedure is shown in the figure 4 below. After a sub-project has been developed with outline design and location/alignment options, screening of environmental and social risks can be done. This will help in the preparation of E&S instruments such as ESIA and ESMP. The recommendations from these E&S documents need to be incorporated by the detailed design team and also incorporated into the tender (bidding) documents. After selection of the contractor(s), site preparation activities will commence and at the same time ESMP implementation will begin. This will involve carrying out the proposed mitigation measures, monitoring and reporting activities for the sub-project.

#### **Figure 4: Environmental and Social Management procedure**



**Table (19): Procedures to Address Environmental and Social Issues**

Identified Activity	Procedure	Responsibility
Any new activity for infrastructure improvement/ sub-project	Screen for potential E&S risks and impacts and classifying each subproject according to risk (Annex 1, Screening Form)  Any activity categorized as High or Substantial is ineligible for the project.	HCF In-charge MO/ Chief Medical Officer at the District level
Consultation and Disclosure	All E&S plans and instruments will be consulted with relevant stakeholders including the HCF – Rogi Kalyan Samiti (RKS) periodically and disclosed whenever a new update is available. All consultation will follow the Stakeholder Engagement Plan (SEP) for the project.	HCF In-charge MO/ Chief Medical Officer at the District level

Identified Activity	Procedure	Responsibility
Management of Staff and workers	All E&S plans involving management of health care facility staffs and/ or construction workers will follow the Labor Management Plan (LMP) for the project.	HCF In-charge MO/ Chief Medical Officer at the District level
Review and approval of E&S plans and instruments	All E&S plans and instruments will be approved by the PMU-DOHFW prior to disclosure	Project Director, Environmental and social specialist at PMU
Implementation and monitoring of mitigation measures in ESMF	All mitigation action will be monitored, documented and reported to the PMU  World Bank to monitor during regular Implementation Support Missions	Chief Medical Officer at the District level/ Environmental and social specialist at PMU

Given the incremental increase in BMW is dependent on increase patient footfall, which is further dependent of many factors including infrastructure upgradation of HCFs, capacity enhancement of HCF staffs, and SBCC to mobilise community, and hence not expected to happen before the first two years of the project. This is expected once the HCFs get upgraded infrastructure as per quality enhancement plan which will be prepared for each of the target HCF during first 6-12 months of the implementation at the earliest, and following which the procurement process will start for civil work and leading to actual infrastructure upgradation. The patient footfall will also be impacted with other activities along with infrastructure upgradation such as enhanced capacity of HCF staffs. With the range of activities to commence before any change in increased patient footfall, and hence incremental increase in bio-medical waste, it will take at least the first two years of implementation. Along with HCF infrastructure upgradation, infrastructure for BMWM will also be assessed and will be part of the quality enhancement plan for upgradation. Similarly, the BMWM related capacity building will also be part of the overall capacity building plan. The overall upgradation of BMWM system is timely scheduled and in line with any expected increase of bio-medical waste. In the meantime, the existing BMWM practices with recommended onsite disposal methods using deep burial pits for infectious wastes, sharp pits for sharp wastes, and disinfection of liquid waste before being released in the drain/ soak-pits will be followed which are in line with national guidelines and regulations.

## 7.2 Sub-project Screening and Categorization

The proposed project will have subprojects mainly related to HCF upgradation or upgradation of Nursing school by repair, renovation and/or retrofitting to improve basic infrastructure of the facility for quality services. All sub-projects will require screening, which will be conducted by the HCF in-charge under the guidance of Chief Medical Officer (CMO) at district level, before submission to PMU for review and approval. The environmental and social assessment will commence with the Environmental and Social Screening of proposed interventions. Screening formats are given in Annex-1. Though, the given scale of subproject activities is expected to be low to moderate as these subprojects potentially have limited or minimal adverse social or environmental risks or/and impacts that are generally site-specific, largely reversible and can be managed locally using environmental and social mitigation plan, however, for the purposes of complete understanding, the rationale for risk rating is as below.

The outcome of the screening process is to also categorize the sub-project in terms of its environmental and social risks. Below is the key consideration for risk rating.



- **High Risk:** Projects with potential significant adverse social or environmental risks or/and impacts that are diverse, irreversible or unprecedented.
- **Substantial Risk:** Projects with potential moderate adverse social or environmental risks and/or impacts that are moderate in number, mostly irreversible and possible addressed through mitigation measures.
- **Moderate Risk:** Projects with potential limited adverse social or environmental risks and/or impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures.
- **Low Risk:** Projects with minimal or no adverse social or environmental risks and/or impacts.

Any activity categorized as ‘High’ or ‘Substantial’ risk will be ineligible for the project.

### **7.3 Sub-project Implementation, Monitoring and Reporting**

Based on screening and following ESMP (Table 16 and Table 17), the sub-project will prepare a site specific ESMP in consultation with RKS/ HCF health committee and HCF management and share with PMU for approval. All E&S plans and instruments will be consulted with relevant stakeholders periodically and disclosed whenever a new update is available. Once the site specific ESMP is approved, it will be followed for implementation. All E&S plans involving management of health care facility staffs and/ or construction workers will follow the Labor Management Plan (LMP) for the project (Annex-II). The site specific ESMP will be prepared by HCF in-charge under the guidance of E&S specialist(s) at the PMU. The HCF In-charge will monitor the site specific ESMP implementation and report on monthly basis to PMU. In addition, the sub-project will follow the norms and reporting as applied under the national/ state laws and guidance.

## 8 STAKEHOLDER ENGAGEMENT AND GRIEVANCE REDRESS MECHANISM

### 8.1 Key Stakeholders

Three types of key stakeholders identified under the project and includes (1) Affected parties – such as the DOHFW and its Directorates, target HCFs and HCF staffs, other support workers engaged in target HCFs including those handling waste, and beneficiary community of the target HCFs; (2) Interested parties – are those who have some interest in the project such as Elected representatives, other line departments and agencies, ADCs, and public at large, and (3) Vulnerable groups – who may get disproportionately impacted and who often do not have a voice to express their concerns or understand the impacts of the project. These are further detailed out in the Stakeholder Engagement Plan (SEP) prepared for the project.

### 8.2 Stakeholder Consultation During Preparation

To inform project design, different consultation meetings and discussions were conducted with key officials in DoFHW and with other stakeholders including Mizoram State pollution control board, Social Welfare and Tribal Development Department, Women and Child Development Department, all three Autonomous development Councils (Lai Autonomous District Council, Mara Autonomous District Council, Chakma Autonomous District Council) in a virtual manner. In addition, consultation happened with a sample of doctors at District hospitals, CHCs and PHCs; NGOs/CBOs and community representatives such as village headman. The key issues and concerns, and suggestions voiced during the consultation is as below.

**Table (20): Key Issues and Concerns, and Suggestions voiced during consultation**

Stakeholder Group	Key Issues and Concern	Key Suggestions Received
Mizoram State Pollution Control Board	<p><u>Biomedical Medical Waste Management in HCFs</u></p> <p><u>Key issues and factors for an effective BMWM include</u></p> <ul style="list-style-type: none"> <li>• The workers involved in the management of bio-medical wastes must be properly trained and made aware of the importance of BMW.</li> <li>• Provision of Sufficient supply and procurement of consumables/ materials for segregation, treatment and disposal of BMW with installation of full-fledged ETP for liquid waste.</li> <li>• Establishment of public grievance helpline or centre in which the public can submit their grievance on BMW in hospitals</li> </ul>	<p>BMW Management</p> <p>For improving the BMW Management first and foremost step is by conducting physical verification or inspection of each facilities or conducting complete inventory in order to quantify and chalk out a policy or plan for developing an environmentally sound and economically feasible waste management practices.</p> <p>In order to improve the Bio- Medical waste management the following plan is proposed by the Board:</p> <ol style="list-style-type: none"> <li>i. A separate cell in the Health Department for Bio-Medical Waste Management.</li> </ol>

Stakeholder Group	Key Issues and Concern	Key Suggestions Received
	<p>thereby also creating awareness about BMW Management among the public.</p> <p><u>Key concerns of the board:</u></p> <ul style="list-style-type: none"> <li>• Lack of awareness and training among the employees in health care facilities pose problem in management of BMW.</li> <li>• The written reports from Departments of Health are lacking. Some individual hospitals have mentioned in the Annual Reports of training within their own establishments. The MPCB has organized two state level training in the past year and participated in certain training programs hosted by the hospitals and in workshops under Kalyakalp Scheme as resource. During the pandemic the Department has also been providing training programmes for management of COVID-19.</li> <li>• Provision of adequate funds for procurement of equipment for treatment and disposal of BMW. The existing amount of INR 10000/ in the allocated budget is grossly insufficient.</li> <li>• Improper segregation and collection of wastes in facilities. Though equipment for collection and storage are available, but the colour coded bags are often not available, weighing machines for wastes weighing purpose and autoclave for wastes are lacking, leading to poor waste management practices.</li> </ul> <p><u>Covid-19 wastes</u></p> <ul style="list-style-type: none"> <li>• Poor registration in the COVID19 apps and make daily entries of BMW Management. Only 5 facilities have registered in the COVID-19 apps so far.</li> <li>• The health facilities need to ensure proper segregation and disposal of COVID-19 waste in quarantine facilities and</li> </ul>	<ul style="list-style-type: none"> <li>ii. Dedicated staff and committee for waste management in all health care facilities.</li> <li>iii. Strengthening of staff for checking or verifying the status of waste management in all facilities.</li> <li>iv. Proposal of funds either from the Central or State Government for management of Bio- Medical wastes.</li> <li>v. Routine employee training, continuing education, and hospital management evaluation processes for systems and personnel involved in bio-medical waste management.</li> <li>vi. Physical inspection of health care facilities in the whole state for the purpose of inventory and chalking out the plan/ policies for proper management of BMW.</li> <li>vii. Providing all necessary aid in setting up of CBMWTF.</li> <li>viii.Co-ordinate with Government department for development of an environmentally sound and cost-effective infrastructure for BMW / Solid Waste &amp; hazardous treatment, disposal and recycling facilities.</li> <li>ix. Develop a web system where all Health care Facilities make daily entries of BMW generated and treated per day.</li> <li>x. Conducting waste audits in Health Care facilities.</li> </ul> <p><u>e-waste and other hazardous wastes management</u></p>

Stakeholder Group	Key Issues and Concern	Key Suggestions Received
	<p>provide yellow coloured bags. However, no report received by the Board in this regard.</p> <p><u>e-waste and other hazardous wastes management in HCFs</u></p> <ul style="list-style-type: none"> <li>• Lack of awareness among consumers, bulk consumers &amp; stakeholders.</li> <li>• Lack of technical knowhow in the management of e- waste.</li> <li>• Improper segregation and collection of wastes.</li> <li>• No collection, dismantling or recycling facility in the state. Aizawl Municipal Corporation is reported to have initiated setting up of collection centre for Aizawl city. As there is no collection centre in the state, the Mizoram Pollution Control Board has been encouraging two CPCB approved Producer Responsibility Organizations (PRO) to set up centres for management of e-waste.</li> </ul>	<ul style="list-style-type: none"> <li>• Creating awareness at consumer, village and government levels.</li> <li>• To make a system of inventory of e-wastes in the state</li> <li>• Setting up of proper Collection centre</li> <li>• Proper segregation of e-waste</li> <li>• Strict implementation of buy-back system and channelization of e-waste by the dealer.</li> </ul>
Indian Medical Association (IMA), Mizoram	<ul style="list-style-type: none"> <li>• Both communicable diseases and non-communicable diseases are increasing at alarming rate.</li> <li>• The health care delivery especially in rural and remote areas have poor accessibility. Also, HCF staffs deployment and vacant posts in these areas need to be reviewed properly.</li> <li>• While there is good improvement in private sector in providing health care in urban areas, the public health care services need to improve in providing affordable quality health care. In rural areas and even district hospitals excluding those in bigger towns need substantial improvement especially with placement of key specialists.</li> </ul>	<ul style="list-style-type: none"> <li>• Partnership with other agencies like NGOs and CBOs can help in strengthening the system.</li> <li>• Continued medical education of the staffs are important and need to be strengthened.</li> <li>• Capacity building of health care providers through specialized training is very much needed to improve quality of services.</li> </ul>

Stakeholder Group	Key Issues and Concern	Key Suggestions Received
	<ul style="list-style-type: none"> <li>• CHC, PHC, and UHCs need to be improved both in terms of staffing and basic diagnostic services. Also, referral system needs to be strengthened.</li> </ul>	
<p>Health Care Facilities - District Hospitals, CHCs, PHCs and UHCs.</p>	<ul style="list-style-type: none"> <li>• The key challenges include - follow up with patients, registration system, IT management, staff constraints, and infrastructure related issues. It includes, space constraint, overcrowding, lack of group-D staff, lack of technical manpower (Lab Tech, X-ray tech etc), weak centralized hospital information management system.</li> <li>• RKS is in place and involved in decision making, management of HCF, monitoring performance, resource mobilization, cleanliness drive and other such matters. Though, many HCFs report minimal involvement.</li> <li>• Hospitals do have Grievance redressal Committee, Suggestion/ Complaint Box including for HCF staffs and public/ patients, and patient satisfactory survey for both OPDs and IPDs.</li> <li>• IPHS norm not being followed for staffs in Sub-district hospitals and CHCs with limited or no specialists.</li> <li>• Lack of awareness about utilization of healthcare services - poor health seeking behavior among community.</li> <li>• Inadequate provision of healthcare workers, hospital equipment and laboratories in other than district hospitals.</li> <li>• Inadequate infrastructure for infection management as with crowding the risk factor increases.</li> <li>• Village council and community is very supportive, however, there is no mechanism for sustained collaboration.</li> </ul>	<ul style="list-style-type: none"> <li>• The project could focus on improving upon Emergency Medical Services (EMS); Infrastructure, Equipment, Technical Manpower.</li> <li>• Infrastructure at HCF needs to be improved including sanitation facilities, waiting areas, diagnostic services etc.</li> <li>• At least a minimum set of specialists (e.g. medicine, gynaecologist, paediatrician, and a surgeon) should be posted in SDHs and CHCs.</li> <li>• Expand RKS with more community members and include RKS members in planning, review/ update and project implementation meetings.</li> <li>• Role and responsibility of RKS need to be reviewed and members need to be made aware of the same.</li> <li>• Setting up of diagnostic and investigatory facilities in close proximity with the OPD for easy access for the patient.</li> <li>• Changing and rest rooms for doctors and other staff at the vicinity of the OPD to serve better.</li> <li>• Infrastructure improvement required looking at the serviced provision mechanism and proximity to the place they are needed.</li> </ul>

Stakeholder Group	Key Issues and Concern	Key Suggestions Received
	<ul style="list-style-type: none"> <li>• Power supply is an issue and need proper backup system to function smoothly.</li> <li>• Most of the HCFs lack labor room and operation theatre as prescribed under IPHS norms, where it has to maintain clean and sterile zone with bathroom and changing room attached.</li> <li>• Shortage of basic equipments and medicines are there in most of the HCFs</li> <li>• Many HCF lack proper biomedical waste management system as well as and general wastes as there is no proper waste collection system in place. Also, there is no proper drainage for liquid waste.</li> </ul>	<ul style="list-style-type: none"> <li>• Services and equipment needs to be provided such as Ultrasound, ECG, ICU beds etc.</li> <li>• BMWM to be improved in all HCFs</li> </ul>
<p>CBOs/ NGOs (Mizo Hmeichhe Insuihkhawm Pawl (MHIP) - Women's group; Mizo Upa Pawl (Elderly group), Young Mizo Association (YMA))</p>	<ul style="list-style-type: none"> <li>• There is lack of awareness regarding the risk factors for diseases among women.</li> <li>• Cleanliness and hygiene management are a big concern in HCFs</li> <li>• Many people find it difficult to communicate adequately with healthcare staffs, and even feel intimidated sometimes.</li> <li>• There is a lot of difference in how poor and rich are treated in the HCFs</li> </ul>	<ul style="list-style-type: none"> <li>• There is need to conduct awareness program about risk factors and diseases to make behaviour change.</li> <li>• Department can take help of NGOs in awareness generation.</li> <li>• Cleanliness and hygiene management need to improve in HCFs</li> <li>• HCF staffs needs to be oriented to be inclusive and sensitive towards patients.</li> </ul>
<p>Village Council members</p>	<ul style="list-style-type: none"> <li>• Level of awareness among Village council members and people in general is quite low about RKS or any other health committee associated with HCF.</li> <li>• Diagnostic services are inadequate in PHCs. Also, there is lack of medicine at PHCs. And hence, many people have to go to district headquarters to access care.</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure and human resource in all HCFs require immediate attention.</li> <li>• Placement of staffs to be reviewed and ensured their availability at the HCF.</li> <li>• Review of essential list of medicines from time to time.</li> </ul>

Stakeholder Group	Key Issues and Concern	Key Suggestions Received
	<ul style="list-style-type: none"> <li>• Given Sub-centres work only for mother and childcare, for all other health needs people go to private clinics.</li> <li>• Shortage of health care staffs at PHCs and CHCs are a major concern.</li> <li>• The diagnostic and ambulatory services also need improvement at CHCs and PHCs.</li> <li>• Infrastructure of HCFs mainly CHCs, PHCs, and SCs are quite in poor condition and need urgent repair, and renovation.</li> <li>• Vacancy/ Absenteeism of health staffs in the HCFs in remote areas are another big concern.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p>Autonomous District Councils – (1) Lai ADC; (2) Mara ADC; (3) Chakma ADC</p>	<ul style="list-style-type: none"> <li>• Though health &amp; nutrition as a subject is not within the purview of Autonomous District Councils (ADCs), there are many needs such as repair and renovation of HCFs and living quarters as being in bad shape; hygiene management is a priority area for improvement; better cold chain equipments to ensure quality vaccination; good transport arrangement for vaccination drive; awareness campaign on behavior change required to deal with many diseases; and health staffs absenteeism is cited as a major concern in some of the remote area.</li> <li>• Some ADCs have also provided financial support for running of HCFs and are concerned about the overall resource provisioning to HCF for proper health care.</li> <li>• Most HCFs need to improve on diagnostic services, also, the diagnostic equipment such as X-ray machine etc are quite old and non-functional in some cases.</li> </ul>	<ul style="list-style-type: none"> <li>• The key suggestions includes improvement in infrastructure condition, proper placement of health staffs in all areas, and improvement in diagnostic care along with necessary equipment.</li> </ul>

<b>Stakeholder Group</b>	<b>Key Issues and Concern</b>	<b>Key Suggestions Received</b>
Department of Social Welfare (Women and Child Development, Social Justice and Empowerment, Tribal Affairs and Minority Affairs)	<ul style="list-style-type: none"> <li>• Training/ Workshops and awareness programmes is found to be inadequate for sensitizing on gender and GBV and has not reached to some areas and the target population.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Training/ sensitizing HCF Staff on gender and gender-based violence needed.</li> <li>• Large scale awareness program to be initiated for gender sensitization and GBV for awareness among target population.</li> <li>• Additional guidance to be provided to department along with directives for formation of ICC under sexual harassment at workplace act.</li> </ul>



### **8.3 Stakeholder Engagement Plan (SEP)**

The Stakeholder Engagement Plan (SEP) prepared for the project is to ensure consultations under the project to be carried out with stakeholders throughout the project cycle to inform them about the project, including their concerns, feedback and complaints about the project and any activities related to the project.

The Social specialist responsible for social standards due diligence in the PMU at DoHFW will be the nodal person to anchor the SEP implementation. This will involve engaging with health care providers, existing health and community-based networks, media, local NGOs, community groups, local government institutions using a consistent mechanism of communication. A large-scale community engagement strategy for social and behaviour change approaches will be undertaken as defined in the SBCC.

For stakeholder engagement relating to the specifics of the project and project activities, different modes of communication will be utilized. Policymakers and influencers will be reached through formal official communication, meetings/ workshops; with health care providers it will also use social media (such as WhatsApp, Facebook, Twitter etc) in addition to formal communication and meetings/ workshops; and for larger community and other stakeholders it will use mass media communication methods along with Text messages for mobile phones, hand-outs and brochures in community and health centres, community health boards, billboards etc.

### **8.4 Grievance Redress Mechanism**

The existing grievance redress mechanism (GRM) in Mizoram is using the complaint registration to district CMO and/or to the Health Directorate. The details of the grievance redressal centre including the district wise phone numbers and emails of the concerned officials is also available at [www.health.mizoram.gov.in](http://www.health.mizoram.gov.in). The complaints can be lodge complaints using phone, email, and/or manually in person. The district CMO at district level and the designated nodal person at the Directorate level is responsible for screening, forwarding, tracking and addressing the grievances including responding to the complainant. However, it lacks in systematic mechanism of tracking the grievances, system of escalation, and monitoring and reporting system. In addition, Department of Personnel and Administrative Reforms (DP&AR), government of Mizoram also have centralised public grievance redress mechanism whereby one can register their grievances online and track the same for its redressal at <https://pgportal.gov.in/Home/LodgeGrievance>. Grievances received by this online system is then screened and forwarded to respective department/ directorate/ agencies for addressing.

For health care staffs, as per the GoM notification (vide No.B.12011/20/2009-HFW/ dated 27<sup>th</sup> August 2015), constituted a Staff Grievance Redressal Committee under National Health Mission (NHM) which is similar in nature with the Tribunal System of the Government, and playing the role of help desk as well for all staff, partners and members of the State Health Society, under the chairmanship of Principal Secretary, DoHFW along with Principal Director (DOHFW) as vice-chairman, Joint Mission Director NHM as the member secretary. The Committee consisting of members including (i) High Power Committee of State Program Management Unit (SPMU) of NHM, (ii) Joint Secretary, Health & Family Welfare, (iii) Representative from Department of Personnel and Administrative Reforms (DP&AR), (iv) Member of Bar Association, and (v) CSO representative. The terms of reference of the committee includes (a) to respond to any grievance of valid nature within 24 hours of receipt; (b) to settle dispute within the sphere of NHM functionaries and its partners, etc; (c) to resolve policies for prevention, care and reduction of staff and beneficiaries grievances; (d) to meet at least once in 3 months; (e) to submit its report on cases and resolution to the State Health Mission Committee. Any grievance by the health staffs can be registered to the Joint Director- Health Services (JDHS) through phone (+91-389-2328045), mail (dhs Mizoram@gmail.com; drvanalsoma@gmail.com), and/or written complaint manually/ in-person to JDHS office in Aizawl.

Under the project, the GRM system will be further strengthened and will be supported both by a traditional and technology-based approach, for early resolution of complaints and will be applicable for both internal as well as external stakeholders. The SEP further details out the processes to be followed. Till such time, the existing system to be followed including for sub-projects. In addition, social accountability measures such as patient satisfaction surveys, citizen scorecard/ report card or health committees scorecard/ report card will be used for acquiring feedback on performance and recording citizens' recommendations.

## 8.5 Process of Disclosure

A preliminary strategy for information disclosure is given in Table (21) below:

<b>Table (21): Preliminary Strategy for Information Disclosure for the Project</b>			
<b>Project stage</b>	<b>Target stakeholders</b>	<b>List of information to be disclosed</b>	<b>Methods and timing proposed</b>
Preparation of ESMF	Government entities; local communities; vulnerable groups; NGOs and academics; health workers; media representatives; health agencies; others	Project documents, ESMF, SEP, ESCP, and other relevant E&S documents, GRM procedure, regular updates on Project development	Dissemination at DOHFW website and World Bank website prior to appraisal
Preparation of Social and Behavior Change Communication (SBCC) strategy	Government entities; local communities; vulnerable groups; NGOs; health workers; media representatives; health agencies; others	Project documents, SBCC Strategy document	Dissemination at DoHFW website (within 6 months of project being effective)
During project implementation	Affected persons/ community, workers at construction sites, public health workers	SEP, relevant E&S documents; LMP, GRM procedure; regular updates on Project development	Public notices at HCF site; Consultation with affected community and vulnerable groups (As and when sub-project is initiated)
HCF Performance Audit Scores	Government entities; local communities; vulnerable groups; NGOs and academics; health workers; media representatives; health agencies; others	Compiled performance audit scores of target HCFs	Dissemination at DOHFW website (Annual basis after the first performance audit)

## 9 INSTITUTIONAL ARRANGEMENTS, RESPONSIBILITIES AND CAPACITY BUILDING

### 9.1 Institutional Arrangement

The Department of Health and Family Welfare of Government of Mizoram will be responsible for the implementation of the proposed project. The existing DoHFW governance and management structures and departments will be used for project implementation. The DoHFW will house the Project Management Unit (PMU) of the project. The Principal Director, Health will be the Project Director and will lead the Project Management Unit (PMU). The PMU will be responsible for the project implementation, including its regular monitoring and supervision. The PMU will have staffs deputed from (i) Directorate of Health Services, and (ii) Directorate of Medical Education. The PMU will have staffs deputed from all three health directorates. The PMU will have about 10 staff including for social and environmental specialists who will be responsible for overseeing the implementation of E&S activities, monitor and report to PMU on monthly/ quarterly manner at the state level

At the health facility level, the Medical Officer (MO) in charge will be responsible for environmental and social standards due diligence activities under the guidance of Chief Medical Officer (CMO) at the district level. The HCF will report on E&S activities to CMO on monthly basis and CMO office will compile the HCF wise E&S monitoring report and share with PMU on monthly/ quarterly basis.

### 9.2 Training and Capacity Building

**The project will provide a range of training and capacity building support on managing environmental and social risks associated with the project.** Several training and capacity building programs/ modules would be provided to HCF staffs, waste management workers and cleaners, as well as third-party waste management service providers (if any), including those involved in transporting the biomedical wastes. The training provided under NHM on biomedical waste management will continue and will be strengthened further. A training calendar will be developed for the project. Awareness and orientation on World Bank's ESF will also be provided. A list of potential training and capacity building efforts are given below.

- BMWM training to all healthcare workers across all HCF facilities in the state.
- Orientation training on implementing the various provisions of ESMF, including an introduction to the World Bank's ESF
- Training on OHS/Community Health and Safety, SEA/SH, Covid19 related measures, use of PPE etc. including for contractors and the labors/workers engaged with civil works.

### 9.3 Indicative Budget

An indicative budget is prepared for implementing the ESMF. Mitigation actions to be deployed during civil work etc. will be part of the detailed project reports and their specific ESMPs.

<b>S.No</b>	<b>Item</b>	<b>Estimate (USD)</b>
1.	E&S Mitigation activities	800,000
2.	Human Resource and management	300,000
3.	E&S related capacity building	300,000
4.	Establishment of a GRM mechanism	300,000
5.	Implementation of SEP	300,000
6.	Preparation of ESMPs*	
<b>Total</b>		<b>2,000,000</b>

<b>Table (22): Indicative Budget for ESMF Implementation</b>		
<b>S.No</b>	<b>Item</b>	<b>Estimate (USD)</b>
Note: *Will be part of the sub-project detailed project report and budget		

## ANNEXURES

### ANNEX I: SUB-PROJECT SCREENING FORMAT FOR POTENTIAL ENVIRONMENTAL AND SOCIAL ISSUES

The Screening checklist is applicable to any civil work activities leading to repair, renovation, and expansion in the HCFs under the project. This form is to be used by health care facility in-charge (ANM/ MO/ MS as applicable) to rule out any adverse environment and social impacts due to program intervention under the guidance of the Project Management Unit (PMU) to screen for the potential environmental and social risks and impacts of a proposed subproject.

Name of the District	
Name of the Block/ Town	
Category of health care facility/ Laboratory	
Name of health care facility	

Sl.No.	Key Question	Answer		Risk Category	Due diligence/ Actions
		Yes	No		
1	Is there any risk/ impact/ disturbance to forests and/ or protected areas because of subproject activities?			High	If yes, any interventions should be avoided.
2	Is the health facility within 100 meters of any cultural, historic, religious site/ buildings?			High	If yes, any interventions should be avoided <sup>13</sup> .
3	Is the health facility between 100 - 200 meters of any cultural, historic, religious site/ buildings?			Substantial	If yes, due permission to be taken from ASI for any construction. Where there is no impact, chance finds procedures would be applicable and ASI norms would need to be followed.
4	Does the subproject involve additional land for upgradation/ expansion and/ or new construction through land acquisition or direct purchase and/or restrictions on land use?			High	If yes. It is not supported by the project. Alternate options to be explored.
5	Does the subproject involve additional land for upgradation/ expansion through transfer from another government department?			Moderate	If yes. Follow government norms for transfer. Construction activities can be initiated only after transfer is completed.

<sup>13</sup>Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, 2010 there is ban on construction within 100 metres of a centrally protected monument and regulated construction within 100-200 metres construction. Any construction activity within 100-200 meters of the monument requires ASI permission.

Sl.No.	Key Question	Answer		Risk Category	Due diligence/ Actions
		Yes	No		
6	Does the subproject require any informal/ illegal occupants' removal in case of any upgradation/ expansion in HCF			Substantial/ High (if numbers are large)	If yes, any interventions should be avoided. Alternative options to be explored. However, if completely unavoidable, approval from World Bank to be taken and necessary assessment and environmental and social tools to be prepared as per ESS 5.
7	Does the subproject involve recruitment of workers <sup>14</sup> including direct, contracted, primary supply, and/or community workers?			Moderate	If yes, follow construction stage ESMP as per Table (17) of this report.  Also, follow the Labor Management Procedure as per Annex-II.
8	Is there civil works/building rehabilitation envisaged at the facility? <sup>15</sup> <ul style="list-style-type: none"> <li><input type="checkbox"/> Increase in dust and noise from demolition and/or construction</li> <li><input type="checkbox"/> Generation of construction waste</li> <li><input type="checkbox"/> Impacts on accessibility to the facility</li> <li><input type="checkbox"/> Excavation impacts and soil erosion</li> <li><input type="checkbox"/> Increase sediment loads/wastewater discharges in receiving water</li> <li><input type="checkbox"/> Removal and disposal of toxic and/or hazardous substances<sup>16</sup></li> <li><input type="checkbox"/> Increase in soil erosion or changes in local drainage pattern</li> </ul>			Moderate	If yes, follow construction stage ESMP as per Table (17) of this report.  Also, follow the Labor Management Procedure as per Annex-II.
9	Does the subproject have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?			Moderate	If no, follow ESMP as per Table (16 and 17) of this report.
10	Does the subproject have a GRM in place, to which all			Moderate	If no, follow ESMP as per Table (17) of this report

<sup>14</sup> Given the scale of operation in highly dispersed locations across the state to undertake any repair, renovation, and/or upgradation of HCF, it does not attract any large labor influx.

<sup>15</sup> It is expected that the HCFs to be renovated/refurbished will pass the screening criteria with no problem and will be found suitable for improvements and any small civil works required. In such cases the standard mitigation measures would be all that is needed to minimize any risk of negative environmental and social impact. The generic Environmental and Social Management Plan (ESMP) of this ESMF would apply in these cases.

<sup>16</sup>Toxic / hazardous material includes and is not limited to asbestos, toxic paints, removal of lead paint, etc.

Sl.No.	Key Question	Answer		Risk Category	Due diligence/ Actions
		Yes	No		
	workers have access, designed to respond quickly and effectively?				
11	Does the subproject have had Free and Prior informed consultation with the Health Committee and/or larger beneficiary community, and have their consent towards it?			Moderate	If no. A free and prior informed consultation with Health Committee involving community members and/or with larger beneficiary community to inform them about the sub-project, its pros and cons, seek their suggestions and record their consent as part of site specific ESMP preparation. If, the consent is not in favour of the sub-project, avoid the sub-project.
12	Does the facility have an Individual wastewater treatment system?			Moderate	If yes, ensure that discharges into receiving waters meeting adequate water quality standards as prescribed by State pollution Control Board/ Central Pollution Control Board.
13	Is there adequate provision of clean water and sanitation services at the facility?			Moderate	If no, specify the mitigation measures to be adopted to provide adequate supplies of potable drinking water.
14	Is there adequate STP-ETP/ Soak Pit if facilities are not connected to the municipal wastewater scheme?			Moderate	If No, adequate wastewater treatment and disposal systems, such as package treatment plants and chlorination, where appropriate for the size, capacity, and services offered at the health facilities.
15	Is BMW being suitably segregated?  (this includes clinical waste, sharps, pharmaceutical products, cytotoxic and hazardous chemical waste, radioactive waste, organic domestic waste, non-organic domestic waste)			Moderate	If No, then specify the on-site measures/ equipment needed for waste segregation and follow CPCB guidelines on  (i) <a href="#">CPCB Implementation Guidelines for Management of Healthcare Waste in Health Care Facilities as per Bio Medical Waste Management Rules, 2016</a>  (ii) <a href="#">Guidelines for Management of Healthcare Waste as per Biomedical Waste Management Rules, 2016</a>  (iii) <a href="#">Guidelines for Bar Code System for Effective Management of Bio-medical Waste</a>
16	Is the HCF connected to an offsite CBMWTF?			Moderate	If No, then specify the on-site measures for waste disposal.

Sl.No.	Key Question	Answer		Risk Category	Due diligence/ Actions
		Yes	No		
17	Is all Biomedical equipment in good working condition?			Moderate	If no, specify how this will be mitigated.
18	Are appropriate colour coded Bins/ bags provided for bio-medical waste disposal?			Moderate	If no, specify how consumables will be provided at HCF level, and follow CPCB <a href="#">Guidelines for Bar Code System for Effective Management of Bio-medical Waste</a>
19	Is there SOP to manage accidents/ spills at HCF level including mercury			Moderate	Develop SOP for accident management and systems for reporting and recording: <ul style="list-style-type: none"> <li>i. Occupational accidents and diseases</li> <li>ii. Dangerous occurrences and incidents</li> <li>iii. These systems should enable workers to report immediately</li> <li>iv. Follow CPCB guidelines on management of mercury.<sup>17</sup></li> </ul>
20	Are healthcare and sanitation workers provided with necessary and appropriate health screening, precautionary measures and immunizations?			Moderate	If no, ensure the following practices are implemented: <ul style="list-style-type: none"> <li>i. Yearly health screening of all HCF and Sanitation staff</li> <li>ii. Immunization for staff members as necessary (e.g. vaccination for hepatitis B virus, tetanus)</li> <li>iii. Provisions of gloves, masks, and gowns</li> <li>iv. Adequate facilities for hand washing are available. If hand washing is not possible, appropriate antiseptic hand cleanser and clean cloths / antiseptic towelettes should be provided.</li> <li>v. Adequate procedures and facilities for handling dirty linen and contaminated clothing</li> </ul>
21	Does the facility have appropriate fire safety Infrastructure and norms?			Moderate	If No, Fire safety recommendations applicable to occupational areas are presented under 'Occupational Health and Safety' in the <a href="#">WBG General EHS Guidelines</a> <sup>18</sup>  Additional recommendations for fire safety include:

<sup>17</sup>[http://cpcb.nic.in/uploads/hwmd/Guidelines\\_for\\_ESM\\_MercuryW\\_fromHCFs.pdf](http://cpcb.nic.in/uploads/hwmd/Guidelines_for_ESM_MercuryW_fromHCFs.pdf)

<sup>18</sup><https://www.ifc.org/wps/wcm/connect/9aef2880488559a983acd36a6515bb18/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES>



Sl.No.	Key Question	Answer		Risk Category	Due diligence/ Actions
		Yes	No		
					i. Installation of smoke alarms and sprinkler systems ii. Maintenance of all fire safety systems in proper working order, including ventilation ducts, escape doors. iii. Training of staff for operation of fire extinguishers and evacuation procedures iv. Development of facility fire prevention or emergency response and evacuation plans with adequate guest information (this information should be displayed in HCF main locations and clearly written in relevant languages).
22	Is there any territorial dispute between two or more countries in the subproject and its ancillary aspects and related activities?			Substantial	<i>(Refer OP7.60 Projects in Disputed Areas)</i> Governments concerned agreement/ notification will apply.
23	Will the subproject and related activities involve the use or potential pollution of, or be located in international waterways <sup>19</sup> ?			Substantial	<i>(OP7.50 Projects on International Waterways)</i> Governments concerned agreement/ notification will apply.

**In-charge of Health care facility (MS/ CMO/ MO/ ANM)**

Name.....

Designation: .....

Phone No. ....

Signature .....

Date: .....

<sup>19</sup>International waterways include any river, canal, lake or similar body of water that forms a boundary between, or any river or surface water that flows through two or more states.

## ANNEX-II: LABOR MANAGEMENT PROCEDURES (LMP)

### A. OVERVIEW OF LABOR USE ON THE PROJECT

#### *Type of Workers*

1. The ESS2 (Labor and Working Conditions) categorizes workers into direct workers, contracted workers, community workers, and primary supply workers. However, only the two categories of workers are expected for this project i.e. Direct Workers and Contracted Workers.

2. **Direct Workers:** The project will be implemented by the Department of Health and Family Welfare (DOHFW), Government of Mizoram (GoM). The project will be managed by the PMU housed within DOHFW. The PMU will have staff deputed from the two directorates - (i) Directorate of Health Services; and (ii) Directorate of Medical Education. Approximately 10 staff and consultants will be included in PMU. The PMU is assisted by a Technical Assistance provider to augment the PMU's capacity in administrative and technical areas.

3. Direct workers will comprise project staff hired by DOHFW, civil servants and other government employees at various Directorates of the DOHFW in this project, and includes health care workers (including Doctors, Nurses, Paramedics, Hygiene workers, Technicians, Auxiliary Nursing Midwives (ANMs) etc) at the target health facilities. These employees are as per the employment norms set by the government and conforming to prevailing employment regulations and labor laws in Mizoram.

4. **Contract Workers:** Also, site specific contract workers will be employed as deemed appropriate by contractors, sub-contractors, and other intermediaries under the project that may involve construction, expansion, rehabilitation and/or operation of healthcare facilities. The contract workers are of two types: (a) contract staff at the health facility which may include Doctors, Nurses, Paramedics, Hygiene workers, Technicians etc., and (b) contract workers for civil work.

5. The contract worker for functioning of health care facility are generally a long term contract workers with periodic renewal of their employment terms and providing day-to-day services often because of increased patient load in particular hospital(s)/ health facility(ies) or to temporarily fill the vacant position till the time proper recruitment is conducted by the state government. These workers also meet the necessary employment eligibility for the particular position that they are filling in absence of permanent employee. The civil work on the other hand is undertaken by the civil contractor/ sub-contractor for repair, refurbishing, upgrading and/or building new healthcare facilities and often employing small number of labor given the scale of operation expected under the project. The civil construction will be undertaken on a need base to enhance the quality services as necessary in particular HCFs and will be dispersed at various locations across Mizoram.

### B. ASSESSMENT OF KEY POTENTIAL LABOR RISKS

6. **Labor Risk associated with Health Care Workers:** The potential risk to the health care workers (both regular employee and contracted staff) is associated with treatment of infectious diseases. This risk to health care workers is largely related to risks of exposure to pathogen. The occupational health and safety issues related to availability of adequate no. of PPE for health care workers; and risk related to handling, transportation, and disposal of health care waste.

7. **Labor Risk associated with Contract workers for civil works:** For civil construction workers risk are the occupational health and safety risks in dealing with construction activities. Given the civil work related to repair, refurbishing, upgrading will require small number of labor employed locally, hence no large labor influx is expected.

### C. BRIEF OVERVIEW OF LABOR LEGISLATION: TERMS AND CONDITIONS

8. The terms and conditions of employment/ engagement for the direct and contract workers is presented below.

Type of Worker	Terms and Condition
Direct Workers	The direct workers are governed by the employment terms and condition as defined by the State government under the Department of Personnel and Administrative Reform. The state specific services rules apply to them. The employment code, wages, working hours, overtime, leave and benefits, disputes and grievances are all governed by the service rules.
Contract staff at Health Facilities (include Doctors, Nurses, Paramedics, Hygiene workers, Technicians etc.)	<p>The contract staffs are governed by the terms set out in their contractual appointment for their employment. These contracts are regulated by The Indian Contract Act 1872 and its Amendments (last updated in December 2018) and provisions of Payment of Wages Act, 1936; Minimum Wages Act, 2020; Employer’s Liability Act, 1938; the Workmen Compensation Act, 1923 and The Employees’ Compensation (Amendment) Act, 2017; Industrial Disputes Act, 1947; Maternity Benefit Act, 2017 and other relevant Acts.</p> <p>In case of contract staffs at the health facilities, employment code, wages, working hours, overtime, leave and benefits, disputes and grievances are all governed by the contractual obligations as set out in the contracts. However, the contractual staffs at the health facilities are also guided by the same occupational health and safety norms as set for all employees.</p>
Contract workers for civil work	The key legislation governing the contract worker for civil work is ‘The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996’ and ‘The Building and Other Construction Workers (Regulation of Employment and Condition of Services) Central Rules, 1998’. This is a social welfare legislation that aims to benefit workers engaged in building and construction activities across the country and regulates the employment and conditions of service of building and other construction workers and to provide for their safety, health and welfare measures and for other matters connected therewith or incidental thereto.

### D. BRIEF OVERVIEW OF LABOR LEGISLATION: OCCUPATIONAL HEALTH AND SAFETY

9. Given there is no major civil work under the project and it is limited to minor repair, renovation and retrofitting, the occupational health and safety risks largely emerge from the current Covid19 pandemic situation and with minor civil works under the project. The key occupational health and safety guidelines specific to dealing with construction workers is provided in ‘The Building and Other Construction Workers (Regulation of Employment and Condition of Services) Central Rules, 1998’ and now in the process of being further updated with labor law reforms through ‘The Occupational Safety, Health and Working Conditions Code, 2019 bill in the parliament which consolidates and updates codes for 13 odd labor laws in the country. A range of Covid19 related guidance is provided by Ministry of Health and Family Welfare (MOHFW), Government of India in line with guidance form WHO, CDC and other international best practices and learning. A reference of the same provided in Section 3.4.

### E. RESPONSIBLE STAFF

10. The overall responsibility of LMP implementation rests with the PMU at DOHFW. The Social Specialist at the PMU will oversee the LMP implementation through HCF In-charges and CMOs. And will be responsible for the following:

- Implement this labor management procedure

- Ensure that civil works contractors comply with these labor management procedures, and also adhere to occupational health and safety measures
  - Ensure the contracts with the contractors are developed in line with the provisions of this LMP and the project's ESMF
  - Monitor to verify that contractors are meeting labour and OHS obligations toward contracted and subcontracted workers
  - Monitor contractors and subcontractor's implementation of labor management procedures.
  - Monitor compliance with occupational health and safety standards at all health care facilities and all workplaces
  - Monitor and implement training on LMP and OHS for project workers.
  - Ensure that the grievance redress mechanism for the project is established and implemented and workers are informed of its purpose and how to use it.
  - Have a system for regular monitoring and reporting on labor and occupational health and safety performance
  - Monitor implementation of the Worker Code of Conduct
11. The Contractors will be responsible for the following:
- To obey requirements of the national and state legislation and this labor management procedure;
  - Maintain records of recruitment and employment process of contracted workers;
  - Communicate clearly job description and employment conditions to contracted workers;
  - Have a system for regular review and reporting on labor, and occupational safety and health performance.
12. In addition, the Project Implementation Manual (PIM) and ESMF includes the standard clauses for inclusion in civil works contracts and includes LMP, OHS aspects, and the contractor's role and obligations towards them. This includes (but not limited to):
- The general obligations of the contractor with respect to maintaining the health and safety of the workers
  - Ensuring no child labor and/or forced labor at the construction site for any works
  - Equal pay/wage for men and women labors
  - All laborers engaged at construction site to be provided with the required Personal Protection Equipment (PPE)
  - Providing health and safety training/orientation on COVID19 to all workers and staffs
  - In relation to COVID19, masks, adequate hand washing/ sanitization, clean drinking water and sanitation facilities to be provided at construction site
  - Adherence to MOHFW advisories and all workers/labor to be regularly checked for symptoms before allowing entry to the work site. Paid leave to be mandatorily given if labor contacts COVID-19 and/or any other contagious disease while working at the construction site or in the labor camp
  - Steps necessary to prevent labor harassment, including sexual harassment, gender-based violence and any discrimination based on religious, political and/or sexual orientation
  - Basic facilities at labor camps (in case any labor camp is setup)
  - Establishing Grievance Redress Mechanism (GRM) with GRM having provisions for receiving, registering, following up and resolution system for any complaint/grievance received during the construction period. And, ensuring workers awareness about GRM.

## **F. POLICIES AND PROCEDURES**

### ***Policy and Procedure for Direct Workers***

13. For proper functioning of health facilities, follow guidelines as issued by DOHFW and Ministry of Health and Family Welfare (MOHFW) including for COVID-19. In addition, some of the key procedure emphasized in this LMP is ensuring

- (a) Sufficient PPE kits for health facility staffs
- (b) Parity with respect to usage of PPE among all workers irrespective of being regular or contracted;
- (c) Health and hygiene training and orientation for all;
- (d) Safety of women from any sexual exploitation and abuse (SEA) and sexual harassment (SH) and mechanism to access redressal services such as services provided by One Stop Centre (OSC) among others

***Policy and Procedure for Contract Workers for Civil Work***

14. The key procedure at the construction site includes as follows:

- (i) Equal pay/wage for men and women labors.
- (ii) No child labor and/or forced labor at construction site for all works
- (iii) Prepare a detailed profile of the project work force and key work activities
- (iv) All laborers to be provided with photo ID cards for accessing the construction site.
- (v) All laborers engaged at construction site to be provided with the required Personal Protection Equipment (PPE) – safety helmet and shoes, secured harness when working at heights, electrical gloves, eye protection for welding etc., without which entry to the construction site shall not be allowed.
- (vi) Limiting the number of workers on site at any one time
- (vii) Adequate hand washing and sanitization facilities provided during construction
- (viii) Health and hygiene training and orientation for all;
- (ix) Consider ways to minimize/control movement in and out of construction areas/site
- (x) Maintain a roster of workers/staff at work site indicating their health condition and symptoms and ensure screening procedures (non-physical temperature measurement) at work sites.
- (xi) Implement procedures to confirm workers are fit for work before they start work, paying special to workers with underlying health issues or who may be otherwise at risk
- (xii) Steps necessary to prevent labor harassment, including sexual harassment, gender-based violence and any discrimination based on religious, political and/or sexual orientation.
- (xiii) Depute and assign monitoring and reporting responsibilities on environmental management, health and personnel safety.

***Policy and Procedure in Covid-19 Situation***

- (i) Provide health and safety training/orientation on COVID19 to all workers and staff and other employees of the sub-contractor (tips on cough etiquette, hand hygiene and social distancing).
- (ii) Place posters and signages at/around the site, with images and text in local languages relating to personal safety, hygiene and on COVID-19 symptoms and guidelines.
- (iii) In relation to COVID19, masks, adequate hand washing/ sanitization, clean drinking water and sanitation facilities to be provided at construction site.
- (iv) All workers/labor to be regularly checked for symptoms before allowing entry to the work site.
- (v) Provide daily briefings to workers prior to commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene and distancing measures.
- (vi) Segregate lunch hours at worksite of workers to maintain social distancing.
- (vii) Securing the construction site with entry only for authorized personnel and disinfecting of the worksite to be undertaken at close of work every day or as may be required.
- (viii) Check and record temperatures of workers and other people entering the construction area/site or require self-reporting prior to or on entering
- (ix) Require workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor if they have symptoms or are feeling unwell
- (x) Prevent a worker from an affected area or who has been in contact with an infected person from entering the construction area/site for 14 days

- (xi) Preventing a sick worker from entering the construction area/site, referring them to local health facilities if necessary or requiring them to isolate at home for 14 days
  - (xii) Paid leave to be mandatorily given if labor contacts COVID-19 and/or any other contagious disease while working at the construction site or in the labor camp.
  - (xiii) If workers are accommodated on site, require them to minimize contact with people outside the construction area/site or prohibit them from leaving the area/site for the duration of their contract
15. The key procedure to be followed at the labor camp (if setup):
- Contractor to provide hygienic living conditions and safe drinking water.
  - Separate toilets for male and females and adequate hand washing/sanitization facilities.
  - Small creche and/or play areas for children with helper, when labor is away at work.
  - Fireproof wiring and good quality electricals to be used inside the camp.
  - Cooking gas and/or electric/induction plate to be provided for each labor household.
  - Monthly/weekly health check up to be organized at the camp for all labors/family.
  - Organize awareness campaign for social distancing and general health and hygiene
  - Limit labor dormitory occupancy to ensure social distancing norms
  - Labor camps to be cleaned and disinfected on daily basis
  - Adequate hand washing and sanitization facilities provided in common areas
  - Social gathering to be restricted and recommended protocols for health hygiene to be maintained
  - Place posters and signages at/around the site, with images and text in local languages relating to personal safety, hygiene and on COVID-19 symptoms and guidelines.
  - Providing cleaning staff with adequate cleaning equipment, materials and disinfectant
  - Contractor shall include security measures to be provided at the camps which may include fencing, locks, alarms, pass card systems, badge and pass system, access points, safe transport of personnel as appropriate.
  - In addition, Health advisories of MOHFW and State Government to be followed

## **G. AGE OF EMPLOYMENT**

16. In accordance with the Constitution of India, no child below the age of fourteen years shall be employed to work in any factory or mine or engaged in any other hazardous employment. Employment of child under 14 years of age is strictly prohibited in any establishment. Adolescents between the age of 14 – 18 years cannot be employed in any hazardous occupation as per the Child Labour (Prohibition and Regulation) Amendment Act, 2016. Given the nature of occupation in health care settings and risk to infections, the minimum age of employment is 18 years.

17. Contractors will be required to verify and identify the age of all workers. This will require workers to provide official documentation, which could include a birth certificate, ratio card, Aadhar card and other national identification cards, passport, or medical or school record. If a minor under the minimum labour eligible age is discovered working on the project, measures will be taken to immediately terminate the employment or engagement of the minor in a responsible manner, taking into account the best interest of the minor.

## **H. TERMS AND CONDITIONS OF EMPLOYMENT**

18. The terms of employment of the direct project workers of regular category is governed by the All India Service rules/ State specific service rules, the terms of employment of the contractual staffs at the health facilities is governed by their terms of contract as mentioned above and in all cases the principles of non-discrimination and equal opportunity apply.

19. The terms of employment of the contract workers for civil work is also based on the terms of contract and governed by the larger policies laid down by the government specifically ‘The Building and Other Constructions Workers (Regulation of Employment and Conditions of Service) Act, 1996’

and ‘The Building and Other Construction Workers (Regulation of Employment and Condition of Services) Central Rules, 1998’. The act specifies that no worker employed in building or construction work shall be required or allowed to work for more than nine hours a day or forty-eight hours a week. Over that s/he shall, in respect of overtime work, be entitled to wages at double the ordinary rate of wages.

## **I. GRIEVANCE MECHANISM FOR LABOR ENGAGED IN CONSTRUCTION WORK**

20. The Sub-projects will use the existing grievance redress mechanism of DOHFW. The existing grievance redress mechanism (GRM) in Mizoram is using the complaint registration through phone and email to district CMO and/or to the Health Directorate. The details of the grievance redressal centre is also available at [www.health.mizoram.gov.in](http://www.health.mizoram.gov.in) where one can lodge complaints using phone, email, and/or manually in person. However, it lacks in systematic mechanism of tracking the grievances, timebound redressal, system of escalation, and monitoring and reporting system. Under the project, the GRM system will be further strengthened and will be supported both by a traditional and technology-based approach, for early resolution of complaints and will be applicable for both internal as well as external stakeholders.

21. The main objective of a Grievance Redress Mechanism (GRM) is to assist to resolve complaints and grievances in a timely, effective and efficient manner that satisfies all parties involved. Construction Site Specific Grievance Mechanism to be setup by the contractor/ sub-contractor. It shall include site specific Grievance Focal Point (GFP) assigned by the Contractor who will file the grievances and appeals of contracted workers and will be responsible to facilitate addressing them. If the issue cannot be resolved at contractor’s level within 7 working days, then it will be escalated to HCF Management and then to CMO at district level and finally to the contract issuing authority.

22. The GFP will register the grievances in a formal manner in register or in electronic format to be easily tracked for its resolution. The GRM will include the process of screening, investigation, resolution of grievances, documentation, and reporting of grievances as the steps mentioned below.

*Step 0:* Raising and registering the grievances using various mechanism including through written or verbal complaints and registered in grievance logbook at the construction site at healthcare facility; or using the MOHFW mechanism as mentioned in Section 9.

*Step 1:* Grievance raised is screened by the GFP and based on its severity/ jurisdiction forwarded to respective contractor/ sub-contractor for redressing

*Step 2:* Grievance discussed at the GFP/ respective contractor/ sub-contractor level, and addressed

*Step 3:* If not addressed in stipulated period it is escalated to next level at HCF Management, and then to CMO and finally to contract issuing authority

*Step 4:* Once addressed, feedback is given/ sent to the complainant

*Step 5:* If not satisfied, appeal to the other public authorities

23. Once all possible redress has been proposed and if the complainant is still not satisfied then they should be advised of their right to legal recourse.

24. Quarterly report on the grievances received at each of the subproject is submitted to the contracting authority at the state level and a compiled summary of the same by the State E&S Nodal Officer to NPMU on quarterly basis.

## **J. CONTRACTOR MANAGEMENT OF CIVIL WORKS**

25. While the appropriate contract issuing authority will oversee the implementation of contract as per the terms and clauses mentioned in the contract. The Environmental Specialist and Social specialist at the PMU in association with CMO at district level/ or through HCF In-charge will manage and monitor the E&S performance of contractors in relation to contracted workers, focusing on compliance

by contractors with their contractual agreements (obligations, representations, and warranties) and labor management procedures. This may include periodic audits, inspections, and/or spot checks of the sub-project locations and work sites as well as of labor management records and reports compiled by the contractors.

26. Contractors' labor management records and reports that may be reviewed would include representative samples of employment contracts or arrangements between third parties and contracted workers, records relating to grievances received and their resolution, reports relating to safety inspections, including fatalities and incidents and implementation of corrective actions, records relating to incidents of non-compliance with national law and the labor management procedures, and records of training provided for contracted workers to explain occupational health and safety risks and preventive measures.



## **ANNEX-III: GENERIC BIOMEDICAL WASTE MANAGEMENT PLAN**

### Introduction

Biomedical waste management (BMWM) Plan is a management tool for effective management of BMW and associated risks on health functionaries and communities. It is an essential requirement for managing environmental aspects and their impacts under Environment and Social Management Framework (ESMF) of a health sector project funded by the World Bank.

The Component 2: “Strengthening Systems to Sustain Quality of health service” of the project includes quality certification of identified facilities and strengthening the capacity of different aspect of health systems that are prerequisites for delivering quality services. As part of the overall quality improvement, the element “Strengthening of biomedical waste management” contains the provision of facility based Biomedical Waste Management Plan to be developed as part of overall Environment Management under Environment and Social Management Framework for Mizoram.

The project will support development of such a plan for improving management and disposal of all biomedical waste generated by both government and private health facilities, in collaboration with the State Pollution Control Board and municipalities. The project will finance implementation of the plan, including investments in necessary infrastructure, equipment and training, private sector engagement, IEC, infection prevention measures and immunization for health care providers.

### Current status of the health sector and BMWM in the state of Mizoram

On the basis of the baseline study conducted to gather status of the health facilities with regard to management of social and environmental aspects associated with healthcare service delivery by the facilities, the key gaps and challenges in the management of BMW in the state include following:

- Deficient organizational structure at the central and district levels to plan, implement and monitor the biomedical waste management and inadequate support to the health facilities on BMW management.
- Lack of a biomedical waste management plan for implementation by health facilities at different levels of functioning, leading to inefficient and hazardous waste management practices e.g. burning of wastes, mixing of biomedical wastes with general wastes and disposal in dumps etc.
- Lack of options for treatment and final disposal of biomedical wastes in the health facilities. The state does not have a common treatment facility for the treatment and disposal of BMW generated from healthcare facilities. This has led to constraints in the use of deep burial pits as an option for final disposal of BMW even by the larger health facilities such as district hospitals in the state.
- Constraints in supervision and monitoring of waste management in the health facilities due to absence of monitoring indicators and adequately trained human resources for monitoring and supervision.
- Lack of information about the true estimates of biomedical and other wastes being generated from the healthcare facilities. This gap in the knowledge hinders planning and designing of waste handling, treatment and disposal options in the state.

### Framework of regulatory and other mechanisms for BMW management

The framework includes information about the various international and national regulatory and other mechanisms governing environmental aspects in health sector. Such instruments set the boundaries for managing BMW at national and local levels. These include but not limited to following:

- international multilateral environmental agreements such as Minamata Convention, Stockholm convention,

- WHO guidelines on BMW Management and outbreaks management e.g. Covid-19 pandemic etc.
- World Bank best practices and specific guidance.
- National regulation on BMWM e.g. BMWM Rules, 2016 and associated Central pollution control board guidelines, public health guidelines etc.
- Other environmental regulations e.g. Air act 1974, Water act 1981, etc.

### Organizational arrangements

#### At the state level (PMU)

The organizational arrangements include a nodal officer appointed with the responsibility for BMW Management. The nodal officer shall be provided resources and authority for planning and managing activities across the department with the help of support team. The roles and responsibilities of the nodal officer and BMWM team shall be specified at the outset.

The Nodal Officer for BMWM from Directorate of Health Services has been assigned by the state, with responsibility for BMWM, who shall be assisted by another officer from Directorate of Hospital & Medical Education. Their roles and responsibilities and resource allocation to them shall be further specified.

At the state level, constitution of a state level BMWM Coordination committee is required to monitor BMW management and coordinate among stakeholders. The committee shall include representatives from stakeholder organizations such as state departments e.g. pollution control board, labour inspectorate, NGOs, Professional associations- doctors, nursing, dentists etc., medical and nursing educational institutions, NGOs etc.

There is a state level coordination committee formed under the Chairmanship of the Secretary, Health & Family Welfare with members from other departments including State Pollution Control Board, EF&CC, UD&PA etc. The TOR of the committees shall be further defined.

#### Facility level

BMWM Committee at facilities: For larger facilities e.g. medical college, district hospital etc, such committee shall have representatives from different clinical, pathology, laboratory and engineering / sanitation departments etc. The TORs covering roles and responsibilities shall be specified in the plan. For smaller facilities, smaller teams with representatives from clinical area, laboratory and sanitation to be constituted.

The existing Infection Prevention and Control committees / teams in the health facilities may be strengthened and assigned role and responsibilities for BMWM.

### Implementation of waste management in health facilities

#### Waste characterization study:

At the stage of initiation of implementation activities of the project, a study shall be carried out in a sample of healthcare facilities, to collect quantitative information about the quantities and types of wastes generated in the healthcare facilities during delivery of healthcare services.

The quantitative estimates of biomedical and other wastes management being generated in the state healthcare facilities shall serve as a sound baseline for designing of biomedical and other wastes management strategies and plans.

The implementation plan covers details of options and mitigative measures to be implemented at the facility level including special provisions for meeting requirements during outbreaks, covering following:

- Generation of waste

- Segregation
- Handling and storage within the facilities
- On-site treatment of wastes e.g. disinfection, microwaving, incineration, deep burials etc.
- Transportation to external facilities
- End treatment
- Final disposal

The handling, storage and disposal procedures shall be as per the requirements specified in BMW Rules, 2016.

#### Resources and tools for BMW management

Effective management of wastes such as sharps and infectious wastes cannot be achieved without provision of safety to waste handlers and proper equipment for storage and transportation of wastes. Therefore, an account of various BMW tools and other resources e.g. waste collection bags, trolleys, needle cutters, personal protective equipment, disinfectants etc., shall be included in the plan, based on the specifications of BMW rules, 2016.

Occupational health and safety provisions to be implemented at health facilities, shall be based upon the requirements specified under BMW Rules, 2016. Following aspects of OHS measures shall be implemented covering:

- Infection, prevention and Control (IPC) protocols for biological hazards, with special emphasis for high risk infectious diseases agents for health sector workers e.g. MERS, SARSCov2, Ebola etc.
- Safe work practices for hazardous works e.g. handling sharps, cytotoxic drugs, radiation work, environmental sanitation, etc.
- Preventive immunization of health workers against Hepatitis B
- Availability of Post Exposure Prophylaxis against HIV infections.

Key points for daily supervision of BMW implementation by Nodal officer / members of Waste Management Committee, to cover following aspects:

- Segregation of waste into appropriate bags and bins.
- Availability and use of needle cutters, waste collection and transportation materials etc.
- Availability and use of personal protective gears by waste handlers.
- Regular environmental cleaning e.g. cleaning of walls, surfaces and equipment etc by housekeeping staff.
- Regular transport of biomedical wastes from wards / clinics to central wastes storage area (if present) or to deep burial site / common treatment facility and quantities of wastes disposed.

#### Monitoring and evaluation mechanism

Monitoring and evaluation mechanisms shall be specified at state, district and facility levels, with role and responsibilities and resources available for carrying out activities. The monitoring activities and organization shall be aligned to the Quality Assurance activities for patient safety. BMW shall be an integral part of overall quality assurance system. For effective management, the BMW information shall be linked with the state Health Management Information System (HMIS).

Details of procedures for supervision and monitoring of BMW shall include but not be limited to following key aspects of BMW Management:

- Organizational set up at state and facilities level- Human, Financial and technical resources
- Institutional mechanisms across departments and various disease control programs for coordination of BMW management.

- BMW material and equipment resources at facilities level. This includes additional supplies e.g. PPE, Bins, bags etc for surge in BMW due to disease outbreaks such as Covid-19.
- NMW Management practices e.g. segregation levels, sharps management systems, duration of storage of BMW in facilities, etc.
- Occupational health and safety provisions at facilities and their implementation e.g. PEP availability, immunization status of health functionaries etc.
- Incidents and accidents monitoring including sharps injuries, hospital acquired infections, mercury spills and their management etc.
- Training and capacity building at various levels of the healthcare delivery system on BMW Management.
- Availability and use of clean water and proper sanitation in health facilities
- Number of health facilities accredited with Quality certification.

#### Reporting and recording requirements for ensuring compliance to BMW Rules, 2016

Following reports and records shall be maintained by the nodal officer in-charge of the healthcare facility as part of compliance:

- Accident reporting (Form I)
- Application for authorization or renewal of authorization (Form II)
- Authorisation for operating a facility for generation, collection, reception, treatment, storage, transport and disposal of biomedical wastes (Form III)
- Annual Report (Form IV)

#### Training and capacity building

Assessment of training needs of different categories of health workers at different tiers of functioning shall be carried out by the BMW team at the state level for different levels of facilities and categories of health functionaries. . Based on the identified needs, training plan for awareness and training on BMW management covering state health facilities shall be developed and put in place. The training sessions shall be designed for specific groups e.g. medical officers, nursing and supporting caregivers, sanitation workers etc.

An Information, Communication and Education (IEC) plan covering types of communication modes, target populations and messages etc. to be prepared and implemented across the state targeted to health workers, visitors and patients and general community living near the health facilities. The plan shall cover clear messages on BMW in the facilities and its impacts as well as responsibilities of various stakeholders. The IEC shall also include information about grievance redressal mechanisms available to the communities on project activities related to BMW management.

Measures for the strengthening of capacity of PMU shall be identified and specified. Examples of such measures may include following:

- planning of study visits to Centres of excellence or facilities implementing best practices,
- enrolment of nodal officers in six months Certificate course on Healthcare waste management conducted by Indira Gandhi National Open University.
- Orientation of the Nodal officer and team on World Bank requirements on ESMF including BMW, regulatory and other requirements and technical measures required for BMW management.
- Availability of budgetary provisions for BMW Management with clear indication of measures planned as per the BMW plan shall be put in place.

## ANNEX-IV: STAKEHOLDER CONSULTATIONS DURING PREPARATION

Below is the list of stakeholders consulted during the project design.

SL No	Name	Designation	Department/Organization
<b>Line Departments and Agencies</b>			
1	Mr. C. Lalduhawma	Member Secretary	Mizoram Pollution Control Board
2	Ms. P.C. Lalmuanpuii	Assistant Environmental Engineer	Mizoram Pollution Control Board
3	Mrs. Vanlalpianpuii	Director	Women & Child Development
4	Mrs. Aileen Vanlalzawni	Joint Director	Social Welfare & Tribal Affairs
5	Mr. N. Resik	Chief Executive Member	Chakma Autonomous District Council
6	Mr. LZ Tluanga	Deputy Secretary	Lai Autonomous District Council
7	Mr. K. Hrahmo	Executive Member	Mara Autonomous District Council
<b>Medical Association</b>			
8	Dr. Chawnglung-muana	Hony. Secretary	Indian Medical Association, Mizoram State Branch
9		President	Mizoram Government Doctor's Association (MGDA)
<b>Health Care Facilities</b>			
10	Dr. John Zohmingthanga	Deputy Medical Superintendent	Aizawl Civil Hospital, Aizawl
11	Dr. Lalnunpuii	Medical Officer	Lunglei Civil Hospital, Lunglei
12	Dr. C. Lalrosanga	Medical Superintendent	Siaha Civil Hospital, Siaha
13	Dr. Lalnithanga	Senior Medical Officer	Tlabung Sub-District Hospital, Tlabung
14	Dr. Lalrengpuii	Medical Officer i/c	Hnahthial Sub-District Hospital, Hnahthial
15	Dr Lalremruata	Medical Officer i/c	Kawrthah CHC
16	Dr Lalruatfela	Medical Officer i/c	Sakawrdai CHC
17	Dr. Benjamin Lalramchuana	Medical Officer	Farkawn PHC
18	Dr. C Lalnunpuia	Medical Officer	Kawnpui PHC
19	Dr. Johnny	Medical Officer	Bungtlang South PHC
20	Dr. Laldinpuii	Medical Officer	East Lungdar PHC
21	Dr. Mary	Medical Officer	Sihphir PHC
22	Dr Lalnunzira	Medical Officer	ITI UPHC
23	Ms. Lalrinzuali	Health & Wellness Officer	Chaltlang Sub-Centre Health & Wellness Centre
24	Ms. Julie Lalrinpuii	Health & Wellness Officer	Hriphaw Sub-Centre Health & Wellness Centre
<b>Traditional Community Heads</b>			
25	Mr. Lalawmpuia	Chairman	Zarkawt Local Council
26	Mr. Lalramliana	President	Farkawn Village Council
27	Mr. R. Lalrammawia	President	Vairengte Village Council
28	Mr.	President	Lawipu Local Council
29	Mr. Vanlalaluanga	President	Buarpu Village Council

<b>SL No</b>	<b>Name</b>	<b>Designation</b>	<b>Department/Organization</b>
30	Mr. Lalvula Jongte	President	Phuldungsei Village Council
31	Mr. Laltanpuia	President	N Vanlaiphai Village Council
32	Mr. Beireithai	President	Chakhei Village Council
<b>Civil Society - CBOs and NGOs</b>			
33	Mrs. Lalthlamuani	President	Mizo Hmeichhe Insuihkawm Pawl (MHIP) - Women's Group
34	Mrs. Biaksailovai	Vice-President	Mizo Hmeichhe Insuihkawm Pawl (MHIP) - Women's Group
35	Mr. Zahlira Ralte	General Secretary	Mizo Upa Pawl (MUP)
36	Prof. Lalnuntluanga	General Secretary	Young Mizo Association (YMA)

## **ANNEX-V: DRAFT TOR OF WASTES CHARACTERIZATION STUDY**

### **Introduction:**

In order to improve medical waste management in the healthcare facilities and to develop a successful biomedical management strategy and management of other hazardous waste management for the state of Mizoram under the project, it is important that along with the information about the organization, structure and practices for biomedical waste management, an estimate of approximate amounts of different types of wastes being generated in the facilities is also made available before planning state-wide strategy and plan for managing biomedical and other wastes from the health facilities in the state. This is crucial as at present, the information regarding medical waste management is insufficient, treatment and final disposal options of wastes are limited.

### **Objective:**

To collect quantitative information about the quantities and types of wastes generated in the healthcare facilities during delivery of healthcare services.

The quantitative estimates of biomedical and other wastes management being generated in the state healthcare facilities shall serve as a sound baseline for designing of biomedical and other hazardous waste management strategies and plans.

### **Methodology**

#### **Sample facilities:**

Out of total healthcare facilities, following healthcare facilities of different types and sizes shall be included in the study so as to get an appropriate and adequate sample size:

Mizoram State Cancer Institute (MSCI)-One, District Hospitals-Three, Sub-District Hospital-One, three Community Health Centres and nine Primary Health Centres

#### **Activities:**

- The administrative in-charge of the facilities shall be informed about the proposed study benefits, methodology and schedule of data collection etc. by the PMU.
- In each facility, the healthcare facility nodal officer for BMW and the sanitation supervisor shall be selected for involvement in the study for data collection activities.
- A one-day orientation workshop shall be arranged by PMU for the study team to make them familiar with the methodology, site assessment using questionnaire and the procedures for wastes segregation, weighing and recording the results etc.
- The qualitative information about the organization, type of services, bed occupancy and services availability and manpower etc would be collected using an assessment questionnaire. This shall also include specific information about medical waste generation, collection, segregating, storage, transportation, disposal methods etc.
- All generated waste shall be categorized into hazardous–infectious, general and sharps waste and shall be weighed separately using a suspension spring scale to determine the quantity (kg/ day) and rate of waste generation (kg/bed/day)
- The information shall be collected for a duration of 7 to 10 days in each study facility for BMW. In order to determine the composition of the medical waste, the waste

collected waste shall be sorted into plastics, food waste, textiles, paper/cardboard, glass, metals and others. These waste categories shall be weighed separately, and the results would be recorded.

- The information shall be assessed to determine the following parameters:
  - Quantity of wastes generated (kg/day)
  - Rate of waste generation (kg/bed/day), for different types of health facilities
  - Percentage of hazardous, infectious, sharps wastes in the total biomedical waste stream
- Finally, the data form and questionnaires shall be compiled, analysed and a report prepared.
- The report shall be submitted to PMU.
- The results of the study shall be shared with the healthcare facilities by the PMU
- The results generated from the study shall serve to plan and implement waste management plan and procedures under the project activities plan.

#### **Human and other resources:**

- The PMU BMWWM Nodal officer shall be the overall in-charge of planning, implementation and developing the report of the study

- Study team:

The study team shall include BMWWM focal official and senior sanitation worker/supervisor from each facility. The study team shall implement waste segregation, weighing and recording activities on the required forms with the help of facility sanitation workers.

- Materials and equipment:

Spring balance of capacity 20 kg, sorting sheets of stainless steel for sorting of wastes, weighing balance, waste collection bags, personal protective equipment for waste handlers e.g. gloves, eye goggles, face medical mask, apron and boots.

#### **Tentative schedule:**

##### Preparatory phase:

- Communication from PMU to the study health facilities about the objectives, activities under the study, benefits and their roles and responsibilities, leading to their nomination of study team of BMWWM focal person and sanitation supervisor in their respective facilities for the study.

##### Week 1:

- One day training workshop for the study team members, at PMU to brief them about the objectives and contents of the study and study methods to be followed.

##### Week 2 and 3:

- Field collection of data through survey questionnaire and weighing and segregation of wastes



Week 4 and 5:

- Compilation and analysis of information and submission of draft report to PMU and WB.

**Limitations:**

- The waste characterization shall be limited to the key waste categories under BMWM Rules, 2016 only i.e. infectious, sharps and general wastes.
- The volume of the wastes, moisture contents and chemical analysis of waste constituents shall not be carried out.
- Wastewater and liquid wastes estimation shall not be a part of the present study.
- The duration of waste collection and study shall be for two weeks maximum.

## Annex VI: GBV, Sexual Exploitation and Abuse (SEA)/ Sexual Harassment (SH) Guidance

The project’s SEA/SH risk has been rated as low as the project will not include any major civil work. However, given that the State has prioritized women in their programs and schemes, and gender based violence is one of the important area that the state plans to address, the health professionals and health systems play an important role in caring for survivors of sexual violence, it is important to build capacity of health care professionals by sensitizing them to sexual exploitation and abuse (SEA) and sexual harassment (SH) issues and measures as part of their training, and address mandatory provisions of ‘The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013’ in DOHFW and in project facilities such as Internal complaint committees (ICC) for reporting any sexual violence and taking necessary measures. [To further address the SEA/SH risk](#), the key measures include:

1. **Sensitization of Health care staffs** on preventing GBV, SEA/ SH.
2. **Orienting health care staffs mainly doctors, nurses, and para medics** and using ‘Guidelines and Protocols for Medico-legal care for survivors/\_victims of sexual violence’ by MOHFW (<https://main.mohfw.gov.in/sites/default/files/953522324.pdf>) illustrating the need to play the dual role of responding to the survivors of sexual assault, by providing required medical treatment and psychological support, and at the same time assist survivors in their medico-legal proceedings by collecting evidence and ensuring a good quality documentation.
3. **Setting up gender-sensitive infrastructure** such as segregated toilets for men and women; and well-lit quarantine and isolation centers, with adequate human resource deployment and security measures.
4. **Implementation of measures as mandated by Government of India as provided under 'The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 (also known as POSH Act)** by establishing ‘Internal Complaints Committee (ICC)’ at [Directorate level and at health facility levels](#) (as applicable) to investigate complaints regarding sexual harassment at workplace.
5. **Creating awareness and building linkages to services addressing the larger need of the victim of GBV, SEA/SH** such as One-stop centers, Universal Women Helpline (WHL), Mahila Police Volunteer (MPV) in Aizawl and Lunglei districts, and State Commission for Women, [and/or](#) civil society organizations working on GBV [in the state](#).
6. **Monitoring GBV, SEA/ SH cases** in project facilities by the [Social Expert in PMU](#) in a periodic manner i.e. six monthly/ annual.

The key measures applicable at the facility level and at subprojects will include as below.

Sl. No.	Facilities/ Subproject sites	Key Measures Applicable	Responsibility
1	<a href="#">PMU and Target Health Facilities under the project</a>	a. Ensuring establishment of ICC as mandated by GoI under POSH Act b. <a href="#">Setting up gender sensitive infrastructure</a> c. Sensitization of Health care staffs on GBV, SEA/ SH d. <a href="#">Creating awareness about GBV, SEA/SH services that one can access.</a> e. Orienting health care staffs on Protocols for Medico-legal care for	<a href="#">Social Development expert at PMU</a> with the help of <a href="#">CMO</a> at districts and <a href="#">MO In-charge at HCF</a>

Sl. No.	Facilities/ Subproject sites	Key Measures Applicable	Responsibility
		survivors/ victims of sexual violence by MOHFW f. Building linkages to services addressing the needs of the victim of GBV, SEA/SH	
<u>2</u>	Subprojects/ construction sites for expansion or new construction of hospitals/ laboratories	a. Ensuring safety of women from any sexual exploitation and abuse (SEA) and sexual harassment (SH) b. Setting up gender-sensitive infrastructure for laborers especially where labor camp is set-up c. Sensitization of contractor's key staffs on prevention of GBV, SEA/SH d. <a href="#">Creating awareness about GBV, SEA/SH services that one can access.</a>	Contractor; with supervision from <a href="#">MO In-charge</a> / CMHO