



**INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT**

**ENVIRONMENT AND SOCIAL SYSTEMS ASSESSMENT**

**FOR**

**PROPOSED LOAN IN THE AMOUNT OF US\$350 MILLION EQUIVALENT TO INDIA**

**FOR THE**

**SYSTEMS REFORM ENDEAVOURS FOR TRANSFORMED HEALTH ACHIEVEMENTS IN  
GUJARAT (SRESTHA-G)**

**July 18, 2022**

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>I. INTRODUCTION .....</b>	<b>7</b>
A. ENVIRONMENT AND SOCIAL SYSTEMS ASSESSMENT: PURPOSE AND OBJECTIVES.....	7
B. ESSA METHODOLOGY .....	8
C. ORGANIZATION OF ESSA REPORT.....	14
<b>II. PROGRAM DESCRIPTION AND POTENTIAL ENVIRONMENTAL AND SOCIAL EFFECTS .....</b>	<b>16</b>
A. PROGRAM CONTEXT.....	16
B. THE GOVERNMENT PROGRAM.....	18
C. BANK FINANCED PROGRAM SCOPE, OBJECTIVES, AND KEY RESULTS AREAS .....	18
D. PROGRAM EXPENDITURE FRAMEWORK.....	28
E. PROGRAM IMPLEMENTATION ARRANGEMENTS .....	29
F. DESCRIPTION OF PROGRAM ACTIVITIES AND IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL EFFECTS .....	33
<b>III. ASSESSMENT OF ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEMS AND IMPLEMENTATION CAPACITY .....</b>	<b>54</b>
A. INTRODUCTION .....	54
B. PROGRAM SYSTEMS: LEGAL, REGULATORY SYSTEMS AND FRAMEWORKS.....	55
C. PROGRAM CAPACITIES: INSTITUTIONAL AND ORGANIZATIONAL ASSESSMENT .....	63
D. ASSESSMENT OF CORE PRINCIPLES.....	69
<b>IV. CONSULTATION AND DISCLOSURE.....</b>	<b>78</b>
A. SUMMARY OF DISCUSSIONS AND CONSULTATIONS.....	78
B. SUMMARY OF MULTI-STAKEHOLDER CONSULTATION .....	80
C. DISCLOSURE.....	82
<b>V. CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>83</b>
A. INTRODUCTION .....	83
B. RECOMMENDATIONS FOR PROGRAM EXCLUSIONS.....	85
C. KEY RECOMMENDATIONS .....	85
D. RECOMMENDATIONS TO BE INCLUDED IN THE PAP.....	87
<b>ANNEXURES.....</b>	<b>89</b>
ANNEX 1: LIST OF DOCUMENTS REVIEWED .....	89
ANNEX 2: DESCRIPTION OF ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM AND CAPACITY AND PERFORMANCE ASSESSMENT .....	92
ANNEX 3: GOI PUBLIC HEALTH AND ENVIRONMENTAL STANDARDS FOR PHC .....	97
ANNEX 4: ENVIRONMENTAL AND SOCIAL BASELINE DATA CHECKLIST .....	101
ANNEX 5: LIST OF APPLICABLE REGULATIONS AND GUIDELINES TO THE PROGRAM .....	105
ANNEX 6: WORLD BANK HEALTH SECTOR IMPLEMENTATION EXPERIENCE OF PROGRAM STATES .....	106
ANNEX 7: STATE LEVEL ANALYSIS OF SOCIAL SYSTEMS.....	107
ANNEX 8: ASSESSMENT OF BIO-MEDICAL WASTE MANAGEMENT IN GUJARAT .....	114
ANNEX 9: LIST OF PARTICIPANTS AT ESSA CONSULTATION WORKSHOP JUNE 23, 2022.....	123
ANNEX 10: ENVIRONMENTAL AND SOCIAL SCREENING.....	125

## List of Tables

Table 1 Key Government Programs .....	9
Table 2 PDO-Level Indicators .....	19
Table 3 DLIs with prior results and annual allocations .....	27
Table 4. Alignment of Government program with the PforR Program.....	27
Table 5: Summary of PEF .....	28
Table 6 Program Budget Composition by economic classification .....	28
Table 7 Program Budget Composition by spending unit .....	29
Table 8. Classification of health care centers in Gujarat .....	31
Table 9: Responsibility of HoDs and Other Divisions in Implementation of DLIs .....	33
Table 10. Environmental effects from Program activities .....	37
Table 11. Environmental effects by results areas .....	43
Table 12. Assessment of social risks, benefits and opportunities of Program Activities.....	47
Table 13. Applicable Gol policies and regulations .....	55
Table 14. Institutional capacity gaps on EHS .....	63
Table 15 List of Consultations Undertaken.....	78
Table 16. List of officials met during preparation' .....	82
Table 17. Recommended environmental and social actions for PAP .....	87
Table 18. Implementation experience of Program states .....	106
Table 19 Status of BMW and IPC inclusive trainings 2021-22 .....	118
Table 20. Monitoring of EHS aspects in HCFs under NHM .....	120

## List of Figures

Figure 1. Methodology adopted for ESSA.....	14
Figure 2. PforR Program boundary .....	19
Figure 3. Program theory of change .....	20
Figure 4. Institutional Structure SRESHTA-G.....	31
Figure 5 Location of CBMWTF in the State .....	115
Figure 6 Collection and disposal of other wastes .....	117

## LIST OF ACRONYMS

AB-HWC	Ayushman Bharat-Health and Wellness Centre
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
BIS	Bureau of Indian Standards
BMW	Biomedical Waste
BMWM	Biomedical Waste Management
BPHU	Block Public Health Unit
BPMU	Block Program Management Unit
CBMWTF	Central Biomedical Waste Treatment Facility
CHC	Community Health Center
CPCB	Central Pollution Control Board
CPHC	Comprehensive Primary Health Care
CSS	Centrally Sponsored Scheme
CTF	Common Treatment Facility
DLI	Disbursement-Linked Indicator
DLR	Disbursement-Linked Result
DoHFW	Department of Health and Family Welfare
DPMU	District Program Management Unit
EHS	Environment, Health, and Safety
EHSD	India's Enhanced Health Service Delivery
EPC	Empowered Programme Committee
ERP	Emergency Response and Preparedness
ESSA	Environment and Social Systems Assessment
FC	Finance Commission
FM	Financial Management
FMR	Financial Management Report
FRU	First Referral Unit
GDP	Gross Domestic Product
GKS	Gaon Kalyan Samiti(s)
GOG	Government of Gujarat
GoI	Government of India
GMSCCL	Gujarat Medical Services Corporation Limited
GPCB	Gujarat Pollution Control Board
HIV	Human Immunodeficiency Virus
HFWD	Health and family Welfare Department
HWC	Health and Wellness Centre
IEC	Information, Education, and Communication
IMEP	Infection Management and Environmental Plan Framework
ITDA	Integrated Tribal Development Agency
JAS	Jan Arogya Samiti(s)
JS	Joint Secretary

KPI	Key Performance Indicator
L&FS	Life and Fire Safety
MAS	Mahila Arogya Samiti(s)
MCH	Maternal and Child Health
MoHFW	Ministry of Health and Family Welfare
MoEFCC	Ministry of Environment and Climate Change
MSG	Mission Steering Group
NCD	Noncommunicable Disease
NGO	Nongovernmental Organization
NHM	National Health Mission
NHP	National Health Policy
NHSRC	National Health Systems Resource Centre
NITI Aayog	National Institution for Transforming India Aayog
NRHM	National Rural Health Mission
NUHM	National Urban Health Mission
OCEMS	Online Continuous Emission Monitoring System
OHS	Occupational Health and Safety
OOP	Out-of-Pocket
OPD	Outpatient Department
PAP	Program Action Plan
PEF	Program Expenditure Framework
PDO	Program Development Objective
PforR	Program-for-Results
PGC	Program Governing Committee
PHC	Primary Health Center
PIP	Program Implementation Plan
PM-ABHIM	Pradhan Mantri-Ayushman Bharat Health Infrastructure Mission
PM-JAY	Pradhan Mantri Jan Arogya Yojana
PMU	Program Management Unit
PPE	Personal Protective Equipment
PWD	Public Works Department
RKS	Rogi Kalyan Samitis
RMNCAH	Reproductive-Maternal-Neonatal-Child and Adolescent Health
RNTCP	Revised National TB Control Program
SC	Scheduled Castes
SDMA	State Disaster Management Authority
SHC	Sub Health Center
SHG	Self-Help Group
SOP	Standard Operating Procedure
SIHFW	State Institute of Health and Family Welfare
SHSRC	State Health Systems Resource Centre
SEC	State Empowered Committee
STSU	SRESTHA-G Technical Support Unit
SPCB	State Pollution Control Board
SPMU	State Program Management Unit
ST	Scheduled Tribe

TA	Technical Assistance
TSU	Technical Support Unit
UNIDO	United Nations Industrial Development Organization
VHSC	Village Health and Sanitation Committee
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization
XV-FC	Fifteenth Finance Commission

# Systems Reform Endeavours for Transformed Health Achievements in Gujarat

## (SRESTHA-G)

### ENVIRONMENT AND SOCIAL SYSTEMS ASSESSMENT

#### EXECUTIVE SUMMARY

#### INTRODUCTION

1. An Environment and Social Systems Assessment (ESSA) was conducted by the World Bank environmental and social team for the proposed Systems Reform Endeavour for Transformed Health Achievements in Gujarat Program supported by a Program-for-Results (PforR) financing instrument of the World Bank. The ESSA was carried out to assess the existing institutional, operational and regulatory systems and capacities to manage Environmental and Social (E&S) risks, identify gaps if any and recommend measures for strengthening them. The ESSA process involved a desk review of relevant documents, technical studies/reports, and information related to working of the Government of Gujarat, Department of Health and Family Welfare policies, regulatory frameworks, and ongoing programs for the environmental and social aspects of the participating state health societies. A multistakeholder consultation was conducted based on the draft ESSA to share the findings and recommended actions for the Program Action Plan (PAP) and the Program Implementation Plan (PIP) on 23 June, 2022 at Indian Institute of Public Health, Gandhinagar, Gujarat. The draft ESSA report was disclosed at the World Bank external website and at the HFWD (GoG) website on June 30, 2022 (<https://gujhealth.gujarat.gov.in/srestha-gujarat.htm>) for further feedback and suggestions from public and a wide range of stakeholders. The Final ESSA report will be redisclosed on the World Bank's external website and HFWD website prior to negotiation.

#### POTENTIAL ENVIRONMENTAL AND SOCIAL EFFECTS OF THE PROGRAM

2. Consistent with the requirements of the World Bank PforR Policy, the proposed PforR operation does not support activities that pose high social or environmental risks. There will be no large-scale infrastructure, only minor refurbishments, and upgrade-related works within health facilities. Any major civil works and capital costs on health facility infrastructure is excluded from Program boundary. The refurbishments will be carried out within the existing footprint of the health facilities. While the Program does not have a significant environmental footprint, and no land acquisition implications, risks to cultural properties, and involuntary resettlement, its programmatic approach under PM-ABHIM provides an opportunity to improve systemic implementation of environmental and social practices related to the functioning and operations of HWCs. Additionally, grievance redressal systems under at the federal, state, and community levels were found to be functional and will be monitored under the Program for redressal of grievances and complaints related to Program interventions.

#### Environmental effects.

The key environmental effects of the Program include the following:

3. The Program supports expansion of CPHC service packages, which will encompass service level improvements and upgrade/refurbishments in the health care facilities. These improvements will be undertaken within existing HCF premises—The proposed small-scale interior construction works for the refurbishing of existing HCF facilities, and the associated environmental impacts would be limited and typically include dust, noise, on-site safety, and waste management. At this stage, the expected number of generated wastes cannot be estimated. Considering the small scale of such interventions,

the expected quantities of refurbishing-related waste can be properly managed in accordance with the current practices and norms. All the above impacts are to be successfully mitigated through the application of good engineering and construction practices. The Program will not support construction of new buildings, but only interventions to the existing ones under the same footprint.

4. However, the key environmental effect of the Program is the increase in BMW generation, wastewater, and liquid waste generation due to the potential increase in the number of HWC facilities delivering improved CPHC services. The inappropriate management of infectious wastes and improper disposal (through burning or through mixing with other wastes) pose the greatest risk to the environment and public health through the Program. The increased waste would (a) require better multi-sector planning to ensure connections with Central Biomedical Waste Treatment Facility (CBMWTF) and decentralized disposal (especially for the SC level which is not currently connected fully) (b) ensure that no waste is disposed incorrectly through open dumping or burning, and (c) ensure that liquid wastes and wastewater are appropriately treated and disposed to an ETP or centralized STP so that they do not pose risk to human health and the environment. Other induced environmental impacts include the increased generation of e-waste, plastic waste, non-recyclable waste ( medication blister packaging) from health care facilities as they are modernized and upgraded, which will require attention for its proper handling and disposal and to be appropriately recycled.

5. The HCFs will also depend on several contracted staff and outsourced agencies for cleanliness, housekeeping, and BMW handling, so there will be increased risk of occupational exposure to chemicals, biological pathogens, infectious wastes, sharps, disinfectants, and insecticides if workers are not trained adequately in handling and safety procedures. Safety of health care workers and patient needs to be ensured so that infections are abated, and sanitation and hygiene is maintained in the health care centers. To ensure the safety, these workers would need structured training in OHS practices, accident prevention, safe handling of infectious wastes, safe operating of medical equipment such as autoclaves, safe use of reagents and disinfectants, and appropriate use of different types of PPE.

6. There are several opportunities presented through the Program results and DLIs' national legislation and Program guidelines which promote higher standards of environment, health, and safety (EHS) management: (a) maintain infection free, clean, and hygienic conditions with sound occupational health and safety (OHS) practices and proper disposal of infectious wastes and wastewater to ensure safety of workers, inpatients, and visitors; (b) develop a safe and hazard-free building with universal and safe accessibility, emergency response mechanisms, and fire safety; and (c) conserve energy and natural resources, by procuring energy-efficient equipment. There are also opportunities to build capacity across the board of all stakeholders on aspects of OHS and improve the performance of sectors that contribute to the efficient performance of the HCWs (such as water and sanitation, disaster management, and energy).

### **Social effects**

7. The activities supported by the Program are likely to provide considerable social benefits such as (a) increased community ownership and management of HWCs through Village Health and Sanitation Committees (VHSCs), Jan Arogya Samitis (JAS), and Mahlia Arogya Samitis (MAS); (b) enhanced quality primary health care services including addressing the growing need for NCD, and adolescent girl's health; (c) enhanced accountability and transparency through district and state health assemblies among other mechanisms; (d) increased number of operational/functional HWCs providing expanded health care service delivery packages of CPHC, including in tribal and backwards



districts and blocks; and (e) increased utilization of public health facilities by women-headed households and SC/ST households.

8. The key social risks of the Program are associated with the risks of exclusion particularly for STs and vulnerable groups in tribal and backward districts and blocks. These can be broadly divided into two pillars: *I. Risks of exclusion in tribal and backward blocks* due to (a) poor uptake and utilization of health facilities by traditionally vulnerable groups in underserved areas including tribal blocks in the state; (b) poor utilization of health facilities by women-led households and adolescent girls for reproductive health care, NCD screening, and preventive care; and (c) lack of access to quality health care for the urban poor and marginalized, including migrants and informal workers. And *II. Sub-optimal Functionality of community-level platforms (JAS, MAS) in tribal districts and blocks* due to low institutional capacities of JAS and MAS in tribal/underserved areas to manage health facilities, coordinate with VHSNCs, and act as grievance redressal platforms as per JAS Guidelines.

## **KEY FINDINGS FROM ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEMS ASSESSMENT**

### **Environment**

9. Overall, the applicable environmental management systems are generally adequate to address underlying environmental and social risks, and noteworthy strengths are strong regulations and guidelines on BMW, general waste management, infection control, and building and worksite safety. The Program safeguard systems are robust, with clear regulatory framework, implementation arrangements, budget, and Program activities to mitigate negative impacts on environment and people, especially from BMW and infection risks. The stakeholders have adequate capacity to deal with likely issues from implementation.

10. Institutional and technical capacity and multisector planning coordination need to be strengthened for the existing systems. While the provisions of the Biomedical Waste (Management and Handling) Rules and Infection Management and Environment Policy Framework (IMEP) are being implemented, provisions of other relevant environmental acts such as hazardous, solid, plastic, and e-waste rules applicable to the Program require additional oversight. Additionally, as there will be more outsourced agencies and contract workers under PPP schemes, it is critical that they undergo structured trainings on OHS, waste management, and infection control practices.

### **11. Following gaps were identified during the assessment:**

Gap 1: The capacity to manage BMW and IC rests with the Quality control officer in HFWD. Quality officer also looks at fire safety, radiological safety, and compliance with national programs such as NQAS, Kayakalp and Swachh Bharat Abhiyan. The quality control officer does not look at occupational health and safety aspects for workers.

Gap 2: All HCFs (with > 30 beds) should be treating their liquid wastes by installing ETP in their premises itself. Only those HCFs, which are connected to a public sewer leading to an STP are exempted from ETP, after pre-treatment of chemical/lab waste. One of the key gaps is that not all facilities (>30 beds) have independent ETPs or are connected to centralized STPs. The state needs to take a long-term planning view of this and design strategy (over short-medium term) over all HCFs would have access to sanitary wastewater disposal facilities (either through independent ETPs, or sewerage connections) and apply appropriate practices of disinfection. The strategy/ plan will allow for adequate budget to be set aside to account for this additional infrastructure to be built.

Gap 3: The health department is still to fully implement the bar codes for BMW collection. The bar coding enables tracking of the BMW and ensures that it is collected and disposed at the right locations.

Gap 4: Through strengthening and expansion of CPHC services, and attainment of quality standards such as NQAS and NABH, HCFs would need to manage all BMW appropriately. While the state has unutilized capacity in the central treatment facilities, and most facilities are connected to CBMWTF, there is a need for future planning especially for decentralized waste disposal facilities and areas that do not have access to CBMWTF due to accessibility, disaster zones, and weather conditions. This would require appropriate siting of deep burial pits, and septic tank and soak pit system so that they do not pose risk to the environment or nearby communities.

Gap 5: There is no mechanism for early screening for identifying any potential environmental and social issues before undertaking works. However, given the nature of the works proposed under the program (maintenance, repairs and minor refurbishments) the impacts are predictable (dust, noise, debris) and temporary, and measures can be worked into the contract bill of quantities (such as fencing, screens, watering, low-noise equipment) to mitigate accordingly.

Gap 6: There is scope to broaden public-private partnerships (PPPs) in the state for CPHC service delivery (sanitation, security, housekeeping, IEC and targeted intervention) which may not fall under the ambit of the formal training programs under NHM/ HFWD. Trainings need to be provided to all outsourced agency teams on infection control practices and BMW handling to ensure health and safety of workers and patients.

Gap 7: As per the BMW Rules, 2016, every HCF is supposed to get an authorization (along with Consents to operate) under the BMW rules from the concerned SPCB. As per information gathered from PMU, most of the sub-centres (SCs) are sending their BMW to the PHCs under different arrangements at their own level. It needs to be ensured that the transportation of the waste to the PHC level is done in compliance with BMWM rules and ensuring occupational health and safety of the workforce involved. There is an existing number of HCFs at the SC level (smallest and lowest level) that are not currently connected to CBMWTFs. The waste is being transported to the PHC level for disposal. As these SCs are being upgraded to HCWs, they have applied for authorization for BMW disposal, they need to be supported with good operational and technical guidelines (specific to the state) to segregate the waste tie up with BMW operators that will collect the waste.

Gap 8: All bedded healthcare facilities need to develop a separate page/web link on their websites for displaying the information pertaining to EHS (BMW generated and monthly records; CBWTF through which waste is disposed of; immunisation of workers; and training conducted on BMWM)

## Social

12. The applicable social management systems are generally adequate to address underlying social risks. The approach of HFWD towards ensuring equitable and inclusive health services is well grounded with local situation, however, it requires further strengthening especially in tribal and backwards areas for desired outcomes and moving towards social sustainability. The Program is limited to repair and refurbishments of HCFs and will be carried out on the existing footprint of the health facilities, and hence no land acquisition and/or involuntary resettlement is anticipated. No social conflicts or social fragility is present in the Program areas. The Program will not support activities with significant environmental and social impacts.

13. **The key social gaps includes:** (a) While the effort to enhance transparency and accountability through citizen engagement by instituting health assemblies, it is important that these assemblies have representation from all community groups including marginalized groups, SC and ST population groups, and women to ensure their voices are also heard to ensure inclusion; (b) No focused strategy to address equitable health care service provision and utilisation in tribal pockets, and for migrant/

informal workers; and (c) Low institutional capacities of JAS and MAS in tribal/unserved areas to manage health facilities, coordinate with VHSNCs, and act as grievance redressal platforms as per JAS Guidelines.

**KEY RECOMMENDATIONS:**

The key recommendations are made a part of the Program Action Plan (PAP) and include following:

Action description	Responsibility	Timing	Completion measurement
Designation of environmental expert, and social expert as a part of the SRESTHA-G Program to institutionalize best practices (BMWM, infection control, HCW safety, cleanliness, access and inclusion, and accountability and transparency)	HFWD	After 6 months of effectiveness	Designating qualified staff, scope of work including preparation of environmental and social guidance and monitoring the implementation of environmental and social actions and reporting protocols, and relevant templates
Development and adoption of a short- medium term state level strategy for liquid waste management from HCFs. <sup>1</sup>	HFWD	After 12 months of effectiveness	Strategy prepared and disclosed on HFWD website
Issue state specific guidelines to SC level HCWs for collection and transport of waste, following authorisation from GPCB for waste to be collected by CBMWTF.	HFWD	After 12 months of effectiveness	Guidelines issued and disclosed on HFWD website
Development and adoption of strategy addressing equitable health service provision in tribal and backward areas customized to local situation and challenges - including addressing local beliefs and traditions along with institutional capacity and coordination mechanism	HFWD	Within 12 months of effectiveness	Tribal Health Strategy prepared and adopted addressing (a) equitable health provision; (b) Detailing community engagement processes towards behaviour change and addressing local belief and traditions; (c) indicators for monitoring progress
Health Assembly strategy to clearly spell out constitution of assemblies to include representation from marginalized community groups including SC	HFWD	Within 12 months of effectiveness	Health assembly strategy includes representation from marginalized community groups including SC and ST groups, CSOs/ NGOs, and women community members

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<sup>1</sup> The strategy will apply to all bedded HCFs >30 beds. The strategy will provide the HFWD and associated departments ( water and sanitation, environment, and rural development) a common framework in which the state can plan to establish the needed infrastcrture to treat wastewater from these facilities to the applicable standards before discharge.This will also include, where applicable, strategies for the segregation of liquid effluents in order to limit the volume of water requiring specialized treatment, and Identify opportunities to prevent or reduce wastewater pollution through such measures as recycle/reuse within their facility.

Action description	Responsibility	Timing	Completion measurement
and ST groups, CSOs/ NGOs, and women community members			
Existing Grievance Redress Mechanisms (GRM) system to be further strengthened and streamlined for consolidated monitoring and reporting at district and state level	HFWD	Within 12 months of effectiveness	Consolidated report generated on grievances received and resolved at district and state level.

## I. INTRODUCTION

### A. ENVIRONMENT AND SOCIAL SYSTEMS ASSESSMENT: PURPOSE AND OBJECTIVES

1. **An Environment and Social Systems Assessment (ESSA) was carried out in line with the World Bank policy and procedure for Program-for-Results (PforR) financing for the identified Program.** This was undertaken to (a) identify the possible benefits, risks, and environmental and social impacts applicable to the interventions of the Program; (b) review the policy and legal framework related to the management of the environmental and social impacts of Program interventions; (c) assess the institutional capability regarding environmental and social management systems within the Program system; (d) assess the performance of the Program system with respect to the basic principles of the PforR instrument and identify gaps; and (e) submit recommendations and Program Action Plans (PAPs) to address gaps and improve performance during the Program's implementation.

2. The ESSA covered an assessment of the Health and Family Welfare Department (HFWD) of Gujarat and its Directorates including State Health Systems Resource Centre (SHSRC), and Women and Child Development Department (WCD), and Gujarat Pollution Control Board (GPCB). The ESSA identified opportunities for strengthening the existing institutional, operational, and regulatory systems and capacities pertaining to environmental and social issues in the health sector. The findings of the ESSA are based on use of checklists to assess BMWM, environmental health and safety measures, equity and Access related issues, and discussions with key stakeholders, including officials from HFWD and its directorate including SHSRC in Gujarat. The ESSA also benefited from the experience of ongoing World Bank-financed projects: project Gujarat Outcomes for Accelerated Learning (GOAL) (P173704), and preparation of other health sector projects such as Transforming India's Public Health Systems for Pandemic Preparedness (PHSPP) (P175676), and India's Enhanced Health Service Delivery Program (P178146).

3. This ESSA assesses or considers the extent to which the Program's environmental and social management systems are adequate for and consistent with six core environmental and social principles (hereafter, Core Principles), as may be applicable or relevant under PforR circumstances. The Core Principles are listed below and further defined through corresponding Key Planning Elements in Chapter III.

- **Core Principle 1: Environmental and Social Management.** Environmental and social management procedures and processes are designed to (a) avoid, minimize, or mitigate against adverse impacts; (b) promote environmental and social sustainability in program design; and (c) promote informed decision-making related to a program's environmental and social effects.
- **Core Principle 2: Natural Habitats and Physical Cultural Resources.** Environmental and social management procedures and processes are designed to avoid, minimize, and mitigate any adverse effects on natural habitats and physical and cultural resources resulting from the program.
- **Core Principle 3: Public and Worker Safety.** Program procedures ensure adequate measures to protect public and worker safety against the potential risks associated with (a) construction and/or operations of facilities or other operational practices developed

or promoted under the program and (b) exposure to toxic chemicals, hazardous wastes, and otherwise dangerous materials.

- **Core Principle 4: Land Acquisition.** Land acquisition and loss of access to natural resources are managed in a way that avoids or minimizes displacement, and affected people are assisted in improving, or at least restoring, their livelihoods and living standards.
- **Core Principle 5: Indigenous Peoples and Vulnerable Groups.** Give due consideration to the cultural appropriateness of, and equitable access to, program benefits, giving special attention to the rights and interests of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and to the needs or concerns of vulnerable groups.
- **Core Principle 6: Social Conflict.** Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

4. An additional purpose of this ESSA is to inform decision-making by the relevant authorities in the borrower country and to aid the World Bank's internal review and decision process associated with the **Systems Reform Endeavours for Transformed Health Achievement in Gujarat (SRESTHA-G)**. The findings, conclusions, and opinions expressed in this document are those of the World Bank and the recommended actions that flow from this analysis will be discussed and agreed with counterparts in HFWD will become legally binding agreements under the conditions of the new loan.

## **B. ESSA METHODOLOGY**

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5. The ESSA was primarily a desk-based exercise with virtual and hybrid interactions and consultations with client departments due to the impacts of COVID-19 and travel restrictions. The ESSA included a review of the borrower's systems including policies, guidelines, regulations, standards, procedures, and systems and capacities for environmental and social management were compared against the Core Principles and Key Planning Elements to identify gaps that could affect Program performance (a complete list of the government policies and documents reviewed is included in annexes 3 and 5). Detailed consultations with nodal officials in HFWD, and GPCB were conducted utilizing the possibility of virtual platforms. The ESSA team also ensured consultations were evenly spread across the hierarchy by consulting biomedical waste management (BMWM) focal points, nodal persons for community strengthening initiatives, and officials in charge of infection control and safety. Because of the COVID-19 situation, all the interviews and consultations were conducted through online videoconferencing or telephone. The World Bank team reviewed the capacity of existing systems at the state level, district and block level (specifically for tribal and backwards districts and blocks) to plan and implement effective measures for environmental and social management of the Program and determine if any measures will be required to strengthen it to manage risks and enhance benefits.

6. The ESSA refers both to the process for evaluating the acceptability of a borrower's system for managing the Program's environmental and social risks in the operational context and to the final report that is an output of that process. The ESSA process for the SRESTHA-G. Program is a multistep methodology in which the World Bank team analyzes the environmental and social effects, including indirect and cumulative effects, of activities associated with the defined Program; analyzes the borrower's systems for managing the identified environmental and social effects, including reviewing practices and the performance track record; compares the borrower's systems—laws, regulations, standards, procedures—and implementation performance against the Core Principles and Key Planning Elements to identify any significant differences between them that could affect Program

performance; and recommends measures to address capacity and performance on policy issues and specific operational aspects relevant to managing the Program risks such as staff training, implementing institutional capacity-building programs, and developing and adopting internal operational guidelines.

7. The World Bank ESSA team and the borrower worked closely to identify and consider the range of environmental and social effects that may be relevant to the Program both at the central and state levels. The PforR approach distinguishes specific roles and responsibilities regarding major steps and tasks at the various phases of the Program cycle.

8. The World Bank team prepared this ESSA report that provides an overview and analysis of the GoI and GoG policies and regulatory frameworks for the environmental and social aspects and legislations for the health sector in India. Apart from the national legislations, there are a few state-level environment regulations and social inclusion guidelines which are also considered before implementing activities in any state.

9. The ESSA evaluates modalities at the national and state levels to help improve access and quality of health service delivery in tribal blocks of the states—specifically for vulnerable groups, Scheduled Caste and Scheduled Tribe (SC/ST) households, and women-headed households. The ESSA also focuses on land management aspects and labor and safety standards as well as inclusionary strategies adopted by states.

10. The methodology focused on the understanding the Program activities, benefits, and risks associated with various activities, environmental and social conditions, the existing institutional mechanism at various levels for implementation, management, policies, and regulatory aspects. It also focused on understanding the gaps and recommending an action plan to not only address the gaps but also ensure sustainable environmental and social effects under the Program.

11. Toward this, an assessment of the Government’s program and various associated activities was made; mainly focusing on the proposed upgrade of facilities and services and BMW which has a higher probability of risks and impacts. The assessment also considered locational differences of activities, compliance to applicable policies and regulations, institutional capacities, and tools to support these. This helped in understanding the gaps and formulate the required actions to ensure that the proposed Program meets the environmental and social requirements.

12. The following tasks were involved in shaping the report.

**Task 1: Screening and scoping of environmental and social risks of proposed activities**

- *Subtask 1.1: Understanding the Government Program*

The government program (“p”) includes parts of the NHM and other sub-directorates of HFWD.

**Table 1 Key Government Programs**

<b>Name of Program</b>	<b>Key activities under Program</b>
Ayushman Bharat (AB) – Health and Wellness Centers (HWCs)	HWCs throughout state, population empanelment and population-based screening, expanded package of services including for NCDs, entry by ASHAs of key household data via mobiles (TeCHO and CPHC-NCD), telemedicine linkages; School Health and Wellness Program
Niramay Gujarat	Various activities at different levels to combat Non-Communicable Diseases (NCDs)
PM-JAY MA Yojana	Insurance scheme for poorer families’ hospitalization services



Maternal Health	Pradhan Mantri Surakshit Matritva Abhiyaan (antenatal services), Janani Shishu Suraksha Karyakram (diagnostics and treatment), Obstetric ICUs (emergency obstetric care), Janani Suraksha Yojana (financial aid for poorer mothers), Chiranjeevi Yojana (involving private gynaecologists), blood storage units
Child Health and Nutrition	Rashtriya Baal Swasthya Karyakram (screening children for birth Defects, Deficiencies, Diseases, Development delays), Kuposhan Mukh Gujarat (screening and treatment for malnutrition), Special Newborn Care Units for sick infants, Bal Sakha 3 Yojana (involving private paediatricians), Intensified Diarrhoea Control Fortnight, Social Awareness and Actions to Neutralize Pneumonia Successfully, Khilkhilat (special ambulances for mothers and infants).
Community-Based Newborn + Young Child Care	Home-based care for new-borns & young children (including on nutrition, care for preterm/low-birthweight babies, building mothers' skills), through visits by ASHAs.
Community-Based Newborn + Young Child Care	Home-based care for new-borns & young children (including on nutrition, care for preterm/low-birthweight babies, building mothers' skills), through visits by ASHAs.
Adolescent Health and Nutrition	Rastriya Kishor Swasthya Karyakram (RKSK) Adolescent friendly clinics, adolescent interventions on health and nutrition at community, facility and school level; Anemia Mukh Bharat (AMB)
Mental Health	Various mental health activities, especially at community level
Telemedicine – e-Sanjeevani	Telemedicine with physicians and specialists
Mukhyamantri Nidaan Yojana	Essential diagnostic services and medical testing
Quality Assurance Schemes at Health Facility Level	National Quality Assurance Standards accreditation, Kayakalp Swachh Bharat (certification for hygiene and infection control practices), LaQshya (quality of care during delivery and post-partum), MusQan (ensuring child-friendly services), state-level certification for SUMAN (free care for maternal and newborn services).
Mera-Aspataal	Platform for capturing voice of patients on quality of services
PPP models	PM-JAY, diagnostic services, dialysis services, Information/Education/Communication (malaria), medical colleges, ambulance services, others
Kayakalp Award to Public Health Facilities	Kayakalp Award Scheme aims to improve Cleanliness, Hygiene and Waste Management practices in Public Health Facilities. Facilities go through internal, peer and external assessment process against a predetermined criterion. The best facilities are given cash award as well as felicitation at state and National level.
NQAS- National Quality Assurance Standards	Quality Certification program for public health facilities has been launched with aim of recognizing the good performing facilities as well improving credibility of public hospitals in community. Certification is provided against National Quality Assurance Standards (NQAS) on meeting pre-determined criteria. Certified facilities are also provided financial incentives as recognition of their good work.
LaQshya- Labor Room Quality Improvement Program	It is estimated that approximately 46% maternal deaths, over 40% stillbirths and 40% newborn deaths take place on the day of the delivery itself. A transformational change in the processes related to delivery is required to achieve tangible results. Intervention is required during intrapartum and immediate postpartum period, so preventable death may be reduced in place where birth take place that is Labour room & Maternity OT. To ensure Quality of Care during intrapartum & immediate post-partum period in healthcare facility, MoHFW has launched Labour room Quality Improvement initiative named as LaQshya.

- *Subtask 1.2: Review of locational aspects and sensitivities of the ongoing and proposed Program (including site sensitivities, community/stakeholder-related sensitivities)*



13. The objectives of the program include strengthening grassroots public health institutions to deliver universal CPHC, active community engagement and improved risk communication, health education and prevention and to strengthen public health institutions and public health governance capacities for meeting challenges posed by the current and future pandemics/epidemics with capacities for comprehensive diagnostic and treatment. Diagnoses of state-led initiatives on community engagement, tribal health programming, inclusion initiatives to reach women-headed households, and monitoring of works are found to be robust.

14. While the Health and Family Welfare Department (HFWD) of Gujarat manages several programs and sub-departments under its jurisdiction, key programs considered to achieve the above goals are largely centered around the following – National Health Mission (NHM), Medical and Public Health, Family Welfare, Medical Services and Medical Education (excluding Employees' State Insurance-ESI, AYUSH-Indian systems of medicine, and Food & Drugs Control-FDC). The NHM remains a key platform for resources and technical inputs to deliver on HWCs, quality of care, NCDs, community engagement, disease surveillance, digital health etc., while the other sub-directorates of the Government of Gujarat ensure the provision of a basic platform to deliver on these services. The recently launched PM-ABHIM scheme would further strengthen the infrastructure for delivery of healthcare services, including strengthening HWCs, in urban and rural areas and this will be complemented by FC-XV grants to local government bodies. Preliminary discussion with the Govt of Gujarat suggests that both PM-ABHIM and FC-XV grants would be routed through the NHM.

15. The ESSA also includes a list of ineligible activities, excludes the same under the Program, and outlines the steps (action plan) to be followed by the borrower to mitigate potential adverse risks and impacts.

## Task 2: Review of regulatory aspects

- *Subtask 2.1: Applicable regulatory/policy-related aspects to various Program activities (including construction, consultancies, capacity development)*

16. The ESSA undertook a review of priority policies and operational guidelines applicable to the health sector and public health service delivery in India. The ESSA notes the following policies and government guidelines are directly relevant to the Program.

17. **National Health Policy (NHP) 2017.** Its primary aim is to inform, clarify, strengthen, and prioritize the role of the Government in shaping health systems in all its dimensions—investments in health, organization of health care services, prevention of diseases and promotion of good health through cross-sectoral actions, access to technologies, development of human resources, encouragement of medical pluralism, building of knowledge base, development of better financial protection strategies, and strengthening of regulation and health assurance.

### *Equity, Accountability, and Universality are Core Principles of the NHP*

18. *Equity:* Reducing inequity would mean affirmative action to reach the poorest. It would mean minimizing disparity on gender, poverty, caste, disability, other forms of social exclusion, and geographical barriers. It would imply greater investments and financial protection for the poor who suffer the largest burden of disease.

19. *Affordability:* As cost of care increases, affordability, as distinct from equity, requires emphasis. Catastrophic household health care expenditures, defined as health expenditure exceeding 10 percent of its total monthly consumption expenditure or 40 percent of its monthly non-food consumption expenditure, are unacceptable.

20. *Universality*: Exclusions on social or economic status, or on grounds of current health status need to be prevented. Against this backdrop, systems and services are envisaged to be designed to cater to the entire population, including special groups.

*Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (PM-ABHIM)*

21. As mentioned earlier, the World Bank's PforR Program supports the Government of India's (GoI) PM-ABHIM scheme. The implementation framework for PM-ABHIM includes a negative list, reproduced below, for financing of civil works for health facilities.<sup>2</sup> The ESSA found the list to be in complete adherence with World Bank's PforR guidelines.

- Land should be available for the selected facilities and land purchase cost should not be covered with this component.
- Repair and renovation work already undertaken under the NHM Funds.
- Facilities or any of its components should not overlap with the funds provided under Fifteenth Finance Commission (XV-FC) grants.
- This amount should not be used for the construction of a single room/wellness area or any other single project such as boundary wall, toilets, and water tanks.
- Construction of boundary walls, entrance, pavements, footpaths, and so on.

22. As mentioned earlier, the World Bank's PforR Program supports the Government of Gujarat's (GoG) effort towards improving quality of comprehensiveness of primary health care in an equitable manner. The program has various mechanisms for undertaking community engagement and consultations including developing communication strategy, support the implementation of activities through ASHAs (a community level voluntary health worker), strengthen Community based surveillance, and increased transparency and accountability through citizen engagement.

23. For complete list of environmental and social policies, refer to annex 5 and Table 13.

- *Subtask 2.2: Review of compliance levels of ongoing programs*

24. **The ESSA also reviewed compliance levels of HFWD for the GoI's National Health Mission—** . The National Health Mission (NHM) encompasses its two sub-missions: The National Rural Health Mission (NRHM) and The National Urban Health Mission (NUHM). The main programmatic components include health system strengthening, RMNCAH, and communicable and noncommunicable diseases. NHM envisages achievements of universal access to equitable, affordable, and quality health care services that are accountable and responsive to people's needs.

25. Overall, the findings of the ESSA conclude that HFWD states have requisite systems, checks, and balances to ensure compliance of environmental and social aspects under NHM. The ESSA reviewed Aide Memoires and Implementation Support and Results Reports of three ongoing World Bank operations in the States to gauge compliance on environmental and social aspects in Andhra Pradesh, Tamil Nadu, and Meghalaya, which were found to be 'Satisfactory' indicating adequate compliance in ongoing programs at the federal and state level.

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<sup>2</sup> Operational Guidelines for Pradhan Mantri Ayushman Bharat Health Infrastructure Mission; MoHFW, GoI, October 2021 [https://nhsrcindia.org/sites/default/files/FINAL%20PM-ABHIM\\_\\_15-12-21.pdf](https://nhsrcindia.org/sites/default/files/FINAL%20PM-ABHIM__15-12-21.pdf).

- *Subtask 2.3: Assessing the gaps in regulations and mechanisms*

26. The environmental and social management under the Program will be largely based on the existing legal, regulatory, and institutional system in India. The applicable environmental and social management systems are generally adequate to address underlying environmental and social risks, and noteworthy strengths are (a) existing national guidelines on BMWM, IC and (b) equity, universality, and accountability. The ESSA has identified gaps in the existing system to manage environmental and social effects, which could be addressed through certain opportunities for improvement.

27. Overall, the ESSA found that HFWD and state health society have the necessary regulations for managing environmental and social effects as per PforR guidelines.

### **Task 3: Assessment of the environmental and social benefits and risks of the proposed Program**

- *Subtask 3.1: Assessment of environmental and social risks and benefits*

28. Consistent with the requirements of the World Bank PforR Policy, the proposed PforR operation does not support activities that pose high social or environmental risks. There will be no large-scale infrastructure, only minor refurbishment and upgrade-related works within health facilities. Additionally, existing grievance redressal systems under PM-ABHIM at the federal, state, and community levels are functional.

29. An assessment of the key environmental risks and benefits was conducted for the Program, and the Program-specific results areas are listed in tables Table and Table . An assessment of social risks and benefits for the program and the program specific result areas listed in table 12.

- *Subtask 3.2: Arriving at possible risk avoidance, mitigation, management, and benefit enhancement measures*

30. The environmental and social management under the Program will be largely based on the existing legal, regulatory, and institutional assessment of health systems in the state. The applicable environmental and social management systems are generally adequate to address underlying environmental and social risks, and noteworthy strengths are (a) existing national/state guidelines on access and equity under NHM and (b) policy emphasis on inclusion and quality health service delivery in underserved areas. The ESSA has identified gaps in the existing system to manage environmental and social effects, which could be addressed through certain opportunities for improvement.

### **Task 4: Assessment of institutional capacities and constraints**

- *Subtask 4.1: Gap assessment in capacities, tools, and interagency links coordination*

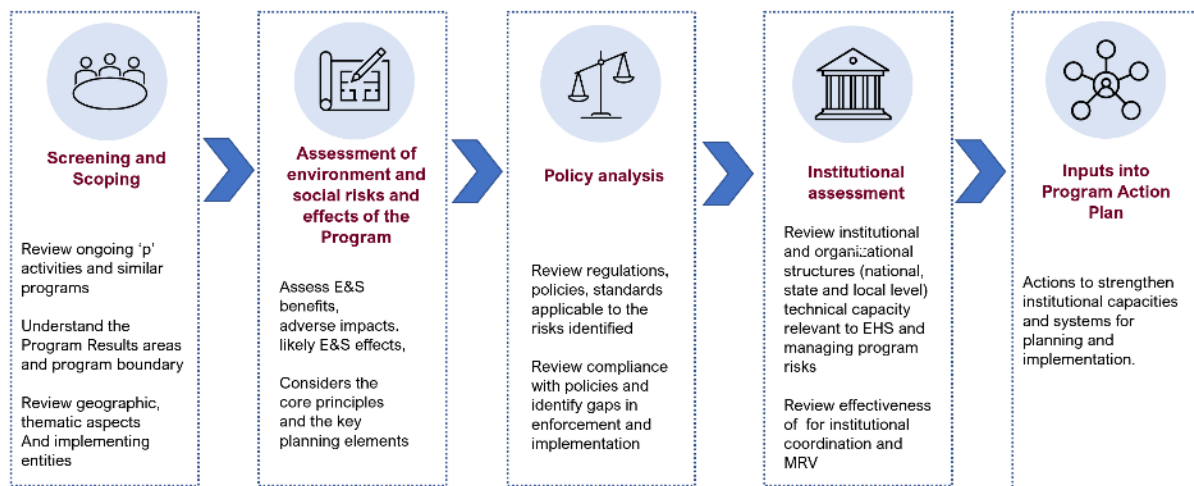
31. Following the previous subtask, a gap assessment was undertaken on the need and provision of mechanisms to manage environmental risks and enhance benefits. This included gaps in staff and resource supply, availability of guidance/frameworks and appropriate tools (hard/soft), and coordination mechanisms between agencies to manage the environmental and social aspects well during all stages.

- *Subtask 4.2: Assessing the needs to strengthen the existing mechanism to manage the environmental aspects of the proposed Program*

32. Based on the gap assessment conducted during the subtask above, recommendations were made to strengthen existing mechanisms to manage environmental and social aspects. This includes suggestions on required staff capacities frameworks to be followed for better environmental effects, tools, and mechanisms to ensure long-term management.

33. The draft ESSA report was shared with HFWD for their feedback and comments. In addition, a multi-stakeholder consultation was also undertaken to gather feedback and suggestions. The report was further revised based on the feedback and suggestions. The draft ESSA report will be further disclosed at HFWD website and World Bank external website for further feedback and suggestions and will be updated accordingly for final disclosure. The methodology for ESSA preparation is presented in figure 1.

**Figure 1. Methodology adopted for ESSA**



### C. ORGANIZATION OF ESSA REPORT

34. **Chapter I: Introduction** presented the overall Program context and the details of the Government's program. This Program would support scope and results areas of the World Bank-financed PforR, the Program implementation arrangements, and identification of environmental and social effects of Program activities.

35. **Chapter II: Program Description and Potential Environmental and Social Effects** introduces the ESSA and its methodology. Potential environmental and social effects discuss results area-wise environmental effects (benefits, risks, and opportunities to manage these).

36. **Chapter III: Assessment of Environmental and Social Management Systems and Implementation Capacity** discusses the guidance on environmental and social management in the PforR Policy of the World Bank. It also discusses the systems, regulatory aspects, gaps, and proposed actions to bridge the gaps through a systematic description of environmental and social effects to be considered for each of the ESSA's six Core Principles It presents an assessment of the adequacy and consistency of the Program's environmental and social management systems and related implementation capacity against the Core Principles and Key Planning Elements.

37. **Chapter IV: Consultation and Disclosure** describes the key formal and informal consultations undertaken as part of the ESSA process, important input and recommendations received, and how and when the ESSA was disclosed.

38. **Chapter V: Conclusions and Recommendations** lists environmental and social inputs for mitigating impacts risks and enhancing environmental and social benefits and management. This section also discusses the actions that the ESSA team recommend addressing the system and capacity gaps and shortcomings identified, which are grouped into two categories: (a) those that have been mainstreamed into Program design and (b) those that are to be included in the PAP.

## II. PROGRAM DESCRIPTION AND POTENTIAL ENVIRONMENTAL AND SOCIAL EFFECTS

### A. PROGRAM CONTEXT

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39. Gujarat has seen a steady improvement in many key reproductive, maternal, newborn, child, and adolescent health and nutrition (RMNCAH+N) indicators over time. However, it lags its comparators (in terms of economic growth) and faces persisting within-state geographic inequities. For example, the maternal mortality ratio for Gujarat has declined from 122 maternal deaths per 100,000 live births in 2010/12 to 75 in 2016/18; however, the rate is high compared to Kerala (43) and Tamil Nadu (60). Utilization of some essential health services has also improved: institutional deliveries have increased from 53 to 94 percent, and children fully immunized from 45 to 76 percent between 2005/06 and 2019/20. However, the state has some stark differences across districts in key health indicators which require immediate attention (e.g., for children under 2 years fully immunized, Banaskantha reported 44 percent while Tapi reported 98 percent).

40. Moreover, some key RMNCAH+N indicators – such as stunting, wasting and anemia – have worsened over time, and overall, the state has an unfinished, and to some extent stagnating, RMNCAH+N agenda. The state ranks around 30-34 (out of 36 states and UTs) on indicators related to child stunting (39 percent), wasting (25 percent) and underweight (39 percent). Anemia among women 15-49 years is 65 percent and 80 percent in children under-five. The health and nutrition indicators of adolescent girls (AGs) have worsened or stagnated. One in five women are still married before age of 18, anemia among girls aged 15-19 is 69 percent; and 24 percent of married AGs have unmet need for contraception. 34 percent of women aged 15-24 continue to use unhygienic methods of protection during their menstrual period and modern contraceptive prevalence has declined during the same period from 57 to 54 percent. Moreover, progress against these indicators remains poor for urban areas (e.g. child stunting at 32 percent, child wasting at 22 percent), and large variations across districts reflect equity issues.

41. The ongoing COVID-19 pandemic has reversed some of the hard-won gains of the past. Data for 2020-21 vs. 2019-20 confirmed steep declines in the utilization of routine services. For example, inpatient stays, outpatient visits and major operations decreased by 33 percent during the pandemic as compared to the pre-covid level.

42. Gujarat allocates a high share of its budget to health relative to other comparator states; however, this share is lower than the 8 percent target set in the 2017 National Health Policy (NHP). Moreover, although Gujarat's average state health expenditure has remained at 6 percent between 2015-20, other large states have shown a higher share of the state budget allocated for health in 2021-22 compared to the previous five years. While the decline is marginal for Gujarat, this share should ideally have increased given COVID-19 which requires more resources for the health sector.

43. While the utilization of health services has improved over time, some critical health indicators are still lagging, and this can be attributed to four key systemic issues. First, the service delivery model is mostly facility-based, and does not take a Comprehensive Primary Health Care (CPHC) approach, although there is renewed push for a CPHC approach through Health and Wellness Centers (HWCs). Implementation to date in most states including Gujarat has focused on infrastructure and equipment, and not on ensuring an appropriate CPHC service delivery model which is people-oriented, with population-based screening and services for NCDs. A recent meta-analysis by the World Health Organization (WHO) observed that a CPHC approach had significant positive impacts on various MCH, communicable disease and NCD measures, and on mortality due to various causes such as cancer, heart disease and stroke.

44. Second, there are key governance issues hampering performance. While the state's health system has shown good progress in a few areas (e.g., RMNCAH), progress in institutional capacity and governance has been poor. Gujarat ranked 6th (among 19 larger states) in the latest NITI Aayog's Health Index 2020; this ranking has improved marginally from the previous round's rank of 7th. While the state is amongst the best performers on inputs and processes, its health system performance did not show improvement between 2018-19 and 2019-20, mostly due to poor performance in health monitoring and data integrity; governance; and health systems and service delivery.

45. Third, despite remarkable progress in setting up health facility infrastructure, shortfalls in human resources (HR) continue to be a challenge. Twenty percent of auxiliary nurse midwives (ANM) and doctors' positions at the Primary Health Center (PHC) level were vacant in 2020, and 17 percent of nursing staff positions at PHCs and community health centers (CHCs) were vacant. At CHCs, only 13 out of 268 specialist positions were filled in 2020. There are also critical shortages of radiographers, pharmacists, lab technicians and mental healthcare professionals, and inadequate training among PHC/CHC personnel for early detection of mental illnesses. This persisting gap in HR is a major challenge, and service delivery redesign would have to factor in the available capacity in the private sector as well.

46. Finally, even though Gujarat has been one of the first states in India to focus on quality of care (QoC) initiatives in the health sector, the state's focus has mostly been on accreditation and certification, and not on other critical QoC aspects. Gujarat became the first state in India to have its government healthcare facilities and laboratories accredited by the national accreditation agency and has its own State Quality Improvement Program. The state is also implementing National Quality Assurance Standards (NQAS) and other health quality national-level certification programs. The state has also implemented technology-enabled job aid (TECHO+) for frontline workers and administrators to improve patient follow-up and supportive supervision. But there is scope to further strengthen technology- and data-driven decision making to improve program management as well as quality of services. The state also does not have an overarching QoC strategy. A QoC strategy is needed that focuses on patient outcomes and other critical dimensions of QoC.

47. Despite the state's renewed multisectoral focus on adolescent health, fragmented service delivery models and disjointed implementation of the adolescent health strategy has meant persistently poor AGs' health and nutrition outcomes. Major educational investments, legislative actions, and programming efforts over the last few decades to increase girls' schooling and curb child marriage have yielded some positive results. Furthermore, the Government of Gujarat (GOG), through implementation of the national program *Rastriya Kishor Swasthya Karyakram (RKSK)*, continues to emphasize adolescent health and welfare, with a strong focus on AGs. However, persistent gaps, particularly in AG health and nutrition outcomes, remain due to a fragmented approach to service delivery, lack of effective multisectoral coordination, and poor monitoring of program performance. Cross-sectoral interventions for AGs can be efficiently delivered through a multi-component delivery mechanism, benchmarking against global programming models. The present institutional structure and outreach of the Health and Family Welfare Department (HFWD) in Gujarat provides a unique entry point to resolve first-generation gaps in health and nutrition for AGs while simultaneously investing in inter-departmental platforms that drive improved outcomes across different pillars of human capital.

48. Gujarat has done relatively well in disease surveillance. However, the COVID-19 pandemic has shown that the surveillance system needs improvements. Key issues are: (i) many vertical programs with siloed surveillance systems; (ii) low private sector reporting; (iii) mortality and morbidity data not linked to the Integrated Health Information Portal (IHIP); and (iv) NCD surveillance yet to take off.



Furthermore, on the laboratory side, the state capacity is predominantly based on rapid diagnostic kits (RDK), and advanced capacity beyond RDKs (diagnostics, RT-PCR, and genome sequencing) for outbreak response remains a challenge. While the state has established a genome sequencing lab for the COVID-19 response, its role in broader surveillance is yet to be seen. Furthermore, with laboratory network divided in different groups, data reporting is also fragmented. The COVID-19 pandemic has re-emphasized the critical importance of “One Health” surveillance (OHS) and the principles of multisectoral and multi-institutional coordination for responding to outbreaks involving humans, animals, and their environment, and this needs to be adopted by Gujarat as well.

## **B. THE GOVERNMENT PROGRAM**

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49. The SRESTHA-G will support the Government of Gujarat’s aim to advance human capital gains. The proposed PforR operation will help address gaps in primary health care, disease surveillance, quality of care, digital health, and lagging health and welfare outcomes for AGs. The operation’s design will explicitly build on the ongoing efforts around primary health care to boost their impact. The proposed operation will focus on strengthening institutional capacity for improving quality, access and affordability of health services including for vulnerable populations.

50. *Key programs under Gujarat’s HFWD linked to the above goals are largely centered around:* The National Health Mission (NHM), Medical and Public Health, Family Welfare, Medical Services and Medical Education. The NHM is a key platform for resources and technical inputs to deliver on HWCs, quality of care, NCDs, community engagement, disease surveillance and digital health, while the other HWFD units ensure a platform to deliver these services. The recently launched Prime Minister’s Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) will further strengthen healthcare infrastructure and will be complemented by the 15<sup>th</sup> Finance Commission (FC-XV) grants to local bodies - both would be routed through the NHM.

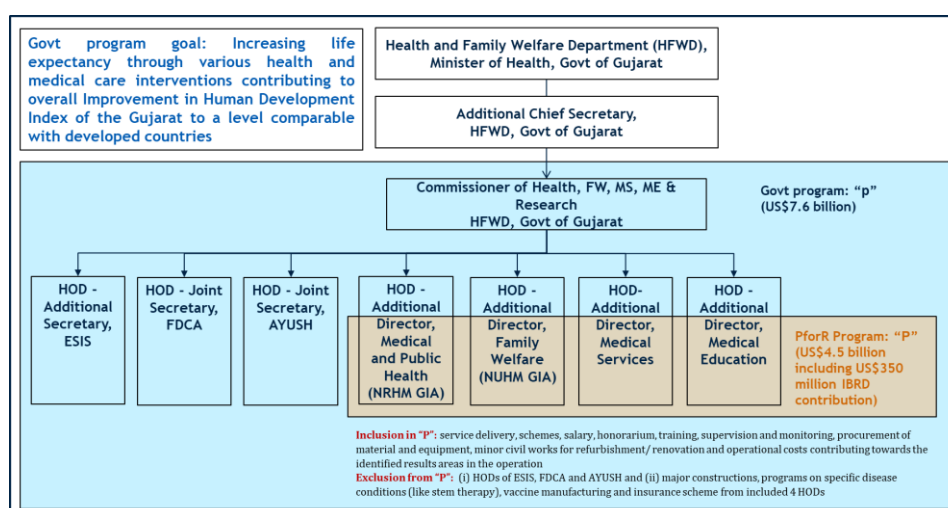
## **C. BANK FINANCED PROGRAM SCOPE, OBJECTIVES, AND KEY RESULTS AREAS**

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51. The proposed PforR Program (“P”) is a well-defined subset of the government program (“p”) that includes parts of the NHM and other sub-directorates of HFWD. GOG has an estimated budget of US\$8.1 billion for 5 years; however, the total government program budget (“p”) to deliver on goals defined earlier is US\$7.9 billion. The government program (“p”) is managed by the Commissionerate, Medical Services, Medical Education and Research (“the Commissionerate”), HFWD, GOG and its associated sub-directorates. The PforR Program (“P”) with an estimated value of US\$6.3 billion for 5 years includes CPHC reforms, strengthened disease surveillance, focus on AGs, quality of care, digital health and citizen engagement (excluding major constructions and insurance scheme). The Bank’s contribution to the Program expenditure framework for five years will be US\$350 million (equivalent to 5.6 percent of total Program financing).



**Figure 2. PforR Program boundary**



**PROGRAM DEVELOPMENT OBJECTIVE(S)**

52. The PDO is to improve quality, equity, and governance of comprehensive primary health care, adolescent girl services and disease surveillance.

**PDO LEVEL RESULTS INDICATORS**

53. **Achievement of the PDO will be assessed with progress on a select set of strategic indicators.**

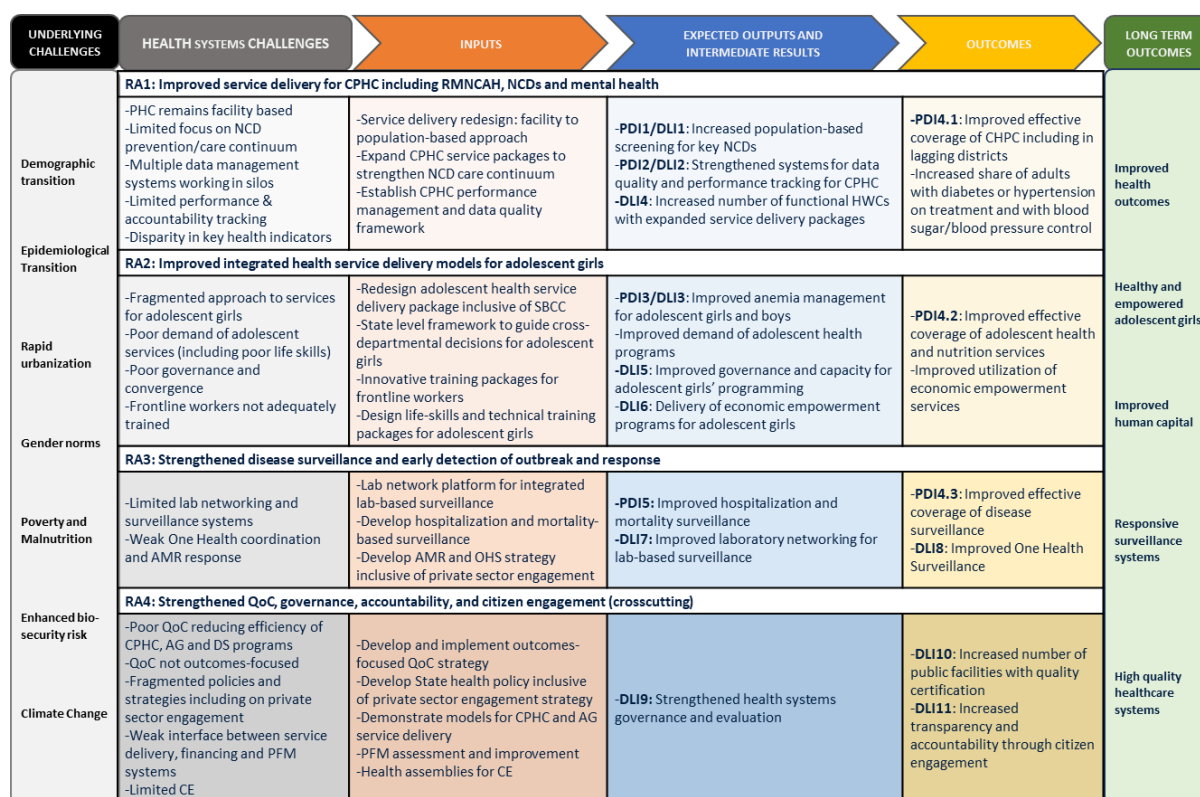
**Table 2 PDO-Level Indicators**

PDO-Level Indicator	Aspects of PDO Covered					Disease surveillance
	Quality	Equity	Governance	CPHC	AG services	
1. Increased population-based screening for key NCDs (tracked for the state, and for urban areas)	X	X	X	X		
2. Strengthened systems for data quality, and performance tracking and recognition for CPHC	X	X	X	X	X	X
3. Improved anemia management for adolescent girls and boys	X	X	X	X	X	
4. Increased effective coverage of CPHC, adolescent healthcare services, and disease surveillance (tracked for the state and for 5 lagging districts)—See RA4		X		X	X	X
5. Improved hospitalization and mortality surveillance	X	X	X			X

54. The proposed Program aims to support the Government of Gujarat in implementing its health sector reforms, by providing support to the immediate and medium-term agenda of improving CPHC service delivery, providing integrated health service delivery for adolescent girls and helping create platforms for longer-term sustainable interventions to improve disease surveillance, quality of care,

health sector governance and accountability. The Program theory of change summarizes the key health system bottlenecks as well as required inputs to achieve the expected outputs and outcomes.

**Figure 3. Program theory of change**



### PROGRAM GEOGRAPHIC SCOPE

55. The Program will be implemented across the State of Gujarat. Gujarat is the fifth-largest state in India by area and with a population of 60.44 million it is the ninth-largest state by population. About 42.6 percent of population in Gujarat live in urban areas.

56. The state is among the country's more economically prosperous and urbanized states. The state accounts for 7.7 percent of India's GDP, with an annual GDP growth rate of 12.9 percent between 2015-21 which is higher than the national growth rate. Gujarat's per capita income has grown at a rate of 8.4 percent during 2011-18 against India's growth rate of 5.5 percent and its ranking among Indian States has risen from 9th in 2011 to 3rd in 2018. Poverty levels in the state have declined from 33 percent in 2005 to 17 percent in 2012. However, despite being one of India's fastest growing states, poverty reduction in Gujarat has been slower than in other advanced states. With a total population of 60 million among which 43 percent live in urban areas, the state is the ninth most populous state and is highly urbanized. The state, like most others, has a youthful population, with 66 percent of working-age (15-64 years) and 29 percent

57. The population density of Gujarat is 308 sq.km which is lower than other Indian states and the sex ratio of 918 females for every 1000 males (Census 2011), one of the lowest (ranked 24) among the 29 states in India. Literacy rate in Gujarat is 78.03 percent as per 2011 population census. Of that, male literacy stands at 85.75 percent while female literacy is at 69.68 percent. Gujarat has a poor child sex ratio of 890 and a literacy rate of about 80 percent highlight the need for the state to improve

areas related to education and gender equality. Gujarati is the official language of the state and is spoken by 86 percent of the state's population.

#### **RA#1: IMPROVED SERVICE DELIVERY FOR CPHC INCLUDING RMNCAH, NCDS AND MENTAL HEALTH**

58. This RA will support the state's renewed focus on people centered CPHC. It will strengthen the service delivery model oriented around the HWCs – including the continuum of care and linkages with higher-level health facilities, and governance aspects – which has the potential to be transformational. Once implemented well, this HWC-based model will ensure that all individuals will have a PHC provider assigned to them, which will offer an expanded package of high-quality services.<sup>3</sup> All will undergo population-based screening at the household level and will be encouraged to go to their assigned PHC provider if they are at high risk for NCDs or other diseases. If needed, they will then be referred by their PHC provider to higher-level health facilities with regular follow-up occurring at the PHC level. This model would also have mechanisms for counter-referrals for continued follow-up and support post treatment. This potential to be transformational will only be realized if implementation is strong on all fronts and supported by a robust framework for performance tracking and recognition. Specifically, RA1 will support the following:

- (a) **Increased population-based screening for key NCDs (PDI1/ DLI1).** RA1 will support efforts by the ASHAs and Auxiliary Nurses and Midwives (ANMs) to enumerate the entire population in the area covered by each HWC, and to implement population-based NCD.
- (b) Screening for these households annually through a Community-Based Assessment Checklist (CBAC). The data from the population-based screening would be maintained at the relevant HWC, as part of family records for each household—with additional facility-level screening for those found to be of high risk during the CBAC assessment. The Program will also support this intervention by strengthening information services, capacity building and provision of relevant drugs and other necessary resources.
- (c) **Increased number of functional HWCs with expanded service delivery packages (IRI1/DLI4).** The HWCs are currently mandated to provide 7 service delivery packages, on RMNCAH, communicable diseases and NCDs – with the NCDs package being a new addition to the RMNCAH services that have traditionally been provided by lower-level facilities in India – and to eventually expand service provision to 12 service packages. RA1 will focus on ensuring that all HWCs are established and functional with adherence to established quality standards, and following the national norms in terms of population coverage with separate tracking for lagging districts as well. Furthermore, this RA will support activities to ensure that these HWCs are functional (and adhering to agreed quality standards) in terms of 9 service delivery packages – the 7 currently mandated, as well as mental health and palliative/geriatric care; with addition of additional 2 package of services, the state would become the frontrunner in expanding the scope of HWCs. To support the delivery of the latter, this RA will support the development of a Mental Health Implementation Plan (MHIP)

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<sup>3</sup> Package of services under HWCs – **existing:** (i) Care in pregnancy and child-birth.; (ii) neonatal and infant health care services; (iii) childhood and adolescent health care services; (iv) family planning and other reproductive health services; (v) management of communicable diseases; (vi) management of common communicable diseases and outpatient care for acute simple illnesses and minor ailments; **new:** (vii) screening, prevention, control and management of NCDs; (viii) care for common ophthalmic and ENT problems; (ix) basic oral health care; (x) elderly and palliative health care services; (xi) emergency medical services; and (xii) screening and basic management of mental health ailments

and a Palliative Care Implementation Plan (PCIP). The criteria for HWC functionality will be based on the Gol guidelines focused on staffing, training, drugs and branding.

- (d) **Strengthened systems for data quality and performance tracking for CPHC (PDI2/ DLI2):** RA1 will support three streams of activities to strengthen data systems for CPHC and performance monitoring. Under stream one, a CPHC performance monitoring framework (PMF) will be established, with a core set of CPHC indicators – based on what is initially measurable – tracked at the level of health facilities, blocks, districts, and the state. Additional indicators important for monitoring CPHC performance and not currently available – especially on quality, continuity of care and vulnerable population groups – will be added over time to this PMF, helped by modifications in existing information and IT systems. Based on the CPHC PMF indicators, a composite Health Index will be developed. Under stream two, a data quality assessment (examining timeliness, completeness, and accuracy aspects) will be conducted for existing CPHC-related health information systems. Based on this assessment, a road map for improving CPHC data quality – including data verification systems which could either be independent or implemented by the peers – will be developed and adopted, focusing on key indicators that are in the CPHC PMF. Under stream three, the Program will support (i) quarterly public reporting of the composite health index score for blocks, districts and the state; and (ii) development of a performance incentives and/ or recognition mechanism for health facilities, blocks and districts.
- (e) **Improvements in RMNCAH and NCDs indicators, including on safe deliveries, neonatal care and immunizations, diabetes, and hypertension:** All these areas are reflected in the Program’s results framework. Safe deliveries are included as a corporate indicator (IRI11), and the Program also supports increased functionality of the FRUs or CeMONCs under RA4 (IRI9, DLI10). Indicators related to improvement in neonatal care and immunization are included in the composite indicator (PDI4). For select NCDs – diabetes and hypertension – the Program will strengthen and track the care continuum: (i) population-based screening (described above – PDI1/DLI1); (ii) screening at HWCs of those found to be of high risk during the population-based screening; (iii) treatment (PDI4) as well as continued monitoring and control of the disease(s) (IRI2) for those found to have it during the HWC-level screening.

## **RA#2: IMPROVED INTEGRATED HEALTH SERVICE DELIVERY MODELS FOR ADOLESCENT GIRLS**

59. The Program will support the state’s efforts to improve health, nutrition and livelihood service provision and utilization for adolescent girls and boys. The activities proposed under the RA contextualize the 3E framework of enhance, empower, and employ for Gujarat to comprehensively address both supply side and demand side challenges in improving health, nutrition, and livelihood outcomes for adolescent girls (and boys) with the intent to maximize outcomes from the HFWD. The RA will intensify integrated implementation of key packages of health services geared towards adolescent girls and boys focused on anemia management (enhance); improve both supply and demand side information barriers and practices for a comprehensive approach to service delivery, supervision and monitoring of services for adolescent girls and boys (empower and enhance); use the HFWD delivery platform to deliver technical trainings on health sector jobs that are currently in demand in the state (employ); and improve state-level prioritization of and cross-sectoral decision making on the adolescent girls agenda to maximize impact. The RA will support the following:

- (a) **Improved anemia management for adolescent girls and boys [PDI3/ DLI3]:** This DLI under RA2 focuses on comprehensive anemia management with focus on prevention, screening, testing, treatment, follow-up, counseling and control. The state will develop and implement

a population-based adolescent anemia management system building on the existing programs and will prioritize the implementation of this system in 14 districts and 2 corporations with anemia in adolescent girls higher than 70 percent. The DLI will also measure and incentivize improvements in anemia screening and treatment in these high priority districts/corporations.

- (b) Improved governance and capacity for adolescent girls programming [IRI3/ DLI5]: This DLI will support design and implementation of a joint (HFWD, Department of Women and Child Development-DWCD and Education Department-ED) state-level framework to guide cross-departmental policy decisions and investment priorities on human capital outcomes for adolescent girls. This framework will be guided by a state of adolescent girls' diagnostic conducted and adopted by the state. Building on the diagnostic and existing data sources from HFWD, DWCD and ED, the Government will further develop and adopt a common health, nutrition, education and livelihood (HNEL) monitoring system for adolescent girls and boys in the state, set annual targets for progress on these indicators and report and disseminate an annual state of the adolescent girls' report. Secondly, the DLI will also support design and implementation of an innovative incremental learning approach (ILA) training package to improve knowledge, attitudes, and practices (KAP) of frontline service providers on all RKSK pillars. Third, development and adoption of supportive supervision and peer learning system aided with IT tools will be rolled-out which will serve as "job-aids" for frontline managers at the block, district, and state level to improve their supervision and enable them to provide timely mentoring to frontline providers. Finally, the DLI will capitalize on the existing annual population enumeration system (TECHO) to develop and implement HNEL tracking system of each adolescent in the state that will further support frontline management and service provision.
- (c) **Delivery of economic empowerment programs for adolescent girls [IRI3/ DLI6]:** The RA will support use of the existing RKSK platform and the national and state level skills commission to link peer educators and adolescent girls with economic and social empowerment opportunities and benefit the health department in the long run. The state will develop and adopt a plan for life skills training and technical training of peer educators and adolescent girls with a focus on health sector related courses which would also include a needs assessment at select zone/district level to identify priority job roles in health and job preference assessment for peer educators and adolescent girls. The DLI will also support first a foundational life skills training to PEs and adolescent girls in the selected catchment area followed by an in-depth technical training on select health sector jobs as guided by the national Health sector Skills Standards.
- (D) Implementation of adolescent health social and behavior change communication (SBCC) strategy [IRI4]: Alongside the supply side intervention of improving capacity of frontline workers to deliver adolescent health programs, the RA will track implementation of the comprehensive SBCC strategy developed under DLI 9 to further improve demand-side KAP issues for improved uptake of adolescent health and nutrition services, focusing not just on adolescent girls and boys, but also their families and key community-level stakeholders<sup>4</sup>.

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<sup>4</sup> Note that the SBCC implementation and ILA modules (under DLI5) would address adolescent health demand side issues more comprehensively for all the RKSK pillars including for the low modern contraceptive use/high unmet need for contraception among married adolescent girls.

### RA#3: STRENGTHENED DISEASE SURVEILLANCE AND EARLY DETECTION OF OUTBREAK AND RESPONSE

60. This RA will strengthen the state's efforts to improve the existing surveillance system and moving towards Vision 2035 of Public Health Surveillance system for the state. This will be done by targeting a selected number of key areas where substantial gains can be made. In particular, the RA will help address: (i) the lack of hospitalization and mortality surveillance in the current public health care system; (ii) fragmented laboratory management information system (LMIS); and (iii) the growing need for an effective, coordinated One Health approach to manage risks from animal-human-ecosystems interactions, especially given the COVID-19 pandemic. The RA will support the following:

- (a) **Improved laboratory networking for lab-based surveillance [IRI6/ DLI7].** Under this DLI, a structured assessment of the existing lab information system at different levels of laboratories in public health system will be conducted. Based on this assessment, an integrated LMIS would be developed using existing information systems available in the state. This LMIS will be rolled out in a phased manner in the state. The data gathered through this LMIS will be analyzed using advance digital tools and utilized for outbreak identification and informing disease surveillance. This DLI will also complement the efforts of the federal government on rolling out Integrated Public Health Lab initiative for surveillance at district and block levels.
- (b) **(b) Improved One Health Surveillance [IRI7/ DLI8].** Under this DLI, the Program will direct efforts towards a coordinated, collaborative, multidisciplinary and cross-sectoral approach to address existing or potential risks that originate at the animal-human-ecosystems interface. The state has district and state level zoonotic committees, which are currently limited in operations. The program will work towards a functional state level and district level OHS committees and set up systems for inter departmental data sharing to discuss and prioritize pathogens of importance. The Program will develop a state level OHS strategy and pilot it. The DLI will also have a coordinated approach to Anti-Microbial Resistance (AMR) under the one health strategy. The Program will develop State Action Plan for Containment of Anti-Microbial Resistance (SAPCAR)<sup>5</sup>, with implementation plan including AMR surveillance and stewardship. The Program will focus on pilot of the SAPCAR in both public and private hospitals and scale up based on the experience in a phased manner.
- (c) **Improved hospitalization and mortality surveillance [PD15]** This indicator will support the state to conduct a detailed assessment of the existing systems (Gujarat Hospital Management Information System (GHMIS), Pradhan Mantri Jan Arogya Yojana (PMJAY), etc.), strengthening and adoption of the mechanism for systematically collecting hospitalization (cause or diagnosis based on ICD10/11) and cause of death in a management information system (MIS). Based on this assessment a standardized hospitalization and mortality surveillance system will be developed and adopted. This system will systematically capture the cause of hospitalization and cause of death in the hospitals and will help develop a hospitalization and mortality surveillance system. This

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<sup>5</sup> <https://ncdc.gov.in/WriteReadData/linkimages/AMR/SAPCAR.pdf>



system will be piloted in a medical college and a district hospital and based on the pilot experience the system will be scaled up in a phased manner during the Program period in other health facilities of the state.

#### **RA#4: STRENGTHENED QUALITY OF CARE (QOC), GOVERNANCE, ACCOUNTABILITY, AND CITIZEN ENGAGEMENT (CROSSCUTTING)**

61. **Recognizing that poor quality of care is now a bigger barrier to reducing mortality than insufficient access<sup>6</sup>, RA4 will support a comprehensive approach for quality improvements to build people-centered health systems.** It will support QoC interventions aligned with global best practices such as WHO's National Quality Policy and Strategy (NQPS) and Lancet's "High Quality Health Systems" framework focusing on: (i) improved governance, (ii) improved health system capacity and skills, and (iii) improved demand for quality in population and improve accountability. The Program will support implementation of interventions based on these frameworks and focus on processes and culture of quality rather than structural interventions.<sup>7,8</sup> This RA will support: (i) strengthening governance of the health system by developing and implementing key strategies, policy documents and reforms, including a state QoC strategy, and by supporting evidence-based interventions through health systems research and pilot activities; (ii) improving the QoC by supporting accreditation and certification of health facilities at various levels and strengthening FRUs/CEmONCs; and (iii) conducting *Swasthya Parishad* meetings (health assemblies) in the state.

62. **RA4 is a cross-cutting RA, and its activities and indicators are designed to improve the outcomes in the first three RAs.** The activities to enhance the enabling environment for QoC along various dimensions, and to ignite demand for improved health services through health assemblies, will have a particular focus on CPHC, AG-related outcomes and disease surveillance. The same is true of the HF quality certification activities under the RA. The RA will support the following:

- (a) **Strengthened health systems governance and evaluation [IR18/ DL19].** The Program will improve health systems governance by extending support in devising: (i) a state-specific QoC strategy (QoCS) that will lay the much-needed roadmap for improving state efforts towards comprehensive quality improvement, including interventions pertaining to in-service training strategy and patient experience; (ii) a state health policy in shaping health systems in all key building blocks—service delivery, health financing, governance, human resources, private sector engagement, health information and research and medical products and technologies with the intent to improve health utilization and equity, responsiveness and efficiency;<sup>9</sup> (iii) SBCC strategy using formative research for adolescent girls programming and to boost HWC utilization; (iv) development and execution of a health systems research strategy and

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<sup>6</sup> Kruk, M. E., et al. (2018). High-quality health systems in the *Sustainable Development Goals era: time for a revolution*. *The Lancet Global Health*.

<sup>7</sup> *Quality of care encompasses three dimensions: structure (that is, inputs), clinical processes (that is, interaction between health workers and patients), and patient outcomes (that is, clinical outcomes, morbidity, and mortality).*

<sup>8</sup> Smith, O., & Nguyen, S. N. (2013). *Getting better: improving health system outcomes in Europe and Central Asia*. The World Bank.

<sup>9</sup> World Health Organization (WHO). *Everybody's business - strengthening health systems to improve health outcomes: WHO's framework for action*. WHO; Geneva: 2007.

associated implementation plan; and (v) development and adoption of reforms pertaining to public financial management (PFM) to improve service delivery. Additionally, this DLI will support pilots on: (i) CPHC, AG activities and QoC;<sup>10</sup> and (ii) testing out different approaches that would help address the goals of the Program (especially for RMNCAH and NCDs-related indicators). The pilots will be supported with a robust associated evaluation structure (which would be partially co-financed by separate Trust Fund financing).

- (b) **Increased number of public facilities with quality certification [IRI9/ DLI10].** NQAS certification is a critical initial step towards improving structural quality and the Program will support the progress of NQAS certification of the HWCs, CHC, SDH and DH. This DLI will also support Medical College Hospitals with NABH pre-accreditation entry level certification. The state is expected to increase the scope of structural quality improvement beyond the minimum requirement of each type of certification and provide inputs for improved quality of health service delivery in identified health facilities. The Program will also support the state to increase the FRUs/CeMONC in the state and this will be certified and measured through a routine standardized reporting for functionality of the FRU/CeMONC.
- (c) **Increased transparency and accountability through citizen engagement [IRI10/ DLI11]:** This DLI will support one of the core principles of “High Quality Health Systems” framework – igniting people’s demand for high-quality health services to improve accountability. Health assemblies (or *Swasthya Parishad* meetings as being named under this Program) would be organized at district and state levels to improve the linkage between community and policy makers.<sup>11</sup> Experiences from Thailand and Tamil Nadu in India would be utilized to design innovative platforms for delivering this intervention and resolutions passed during health assemblies would be tracked for their implementation during the Program period.

**63. Cross-cutting composite “effective coverage” indicator to be tracked under Program [PDI4]:** Finally, the Program will also track progress for a cross-cutting composite effective coverage indicator, comprised of 10 sub-indicators spanning all the Results Areas. These sub-indicators will measure Program performance on various aspects of CPHC (both RMNCAH and NCDs), adolescent girls and disease surveillance being supported. This indicator will be tracked for the entire state as well as for 5 lagging districts, defined using the 2021 NITI Ayog multidimensional poverty index – *Dang, Dahod, Panchmahal, Narmada, and Banaskantha* districts.

#### DISBURSEMENT-LINKED INDICATORS

**64. The DLIs for the Program listed in Table 5.** Each DLI reflects a critical area that the GoG must address to meet the Program’s development objectives and improve health sector outcomes. Select DLIs indicate the combined effect of specific technical interventions and institutional strengthening interventions. Annex 2 of PAD details each DLI and corresponding verification protocol, and identifies

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<sup>10</sup> Likely to include pilot on private sector engagement

<sup>11</sup> As per World Development Report, 2014, accountability relationship between people (community), providers and policy makers has been explored. In the earlier period there have been efforts made to improve the interaction between policy makers and providers (systems of reviews and supportive monitoring) and between people and providers (village committees, hospital societies etc.). But the direct linkage between community and policy makers seems to have received less attention.



which ones are timebound and scalable. An independent verification agency (IVA) will verify achievement of the DLIs based on the agreed protocol.

**Table 3 DLIs with prior results and annual allocations**

Disbursement Linked Indicators	PDO	IR	Prior Result	Allocations (US\$, million)				
				Y1	Y2	Y3	Y4	Y5
<b>DLI1:</b> Increased population-based screening for key NCDs (US\$31.50 million)	X		0.00	6.30	6.30	6.30	6.30	6.30
<b>DLI2:</b> Strengthened systems for data quality and performance tracking CPHC (US\$21.60 million)	X		0.00	5.00	4.00	4.00	4.00	4.60
<b>DLI3:</b> Improved anemia management for adolescent girls and boys (US\$21.60 million)	X		0.00	2.00	0.00	4.90	7.35	7.35
<b>DLI4:</b> Increased number of functional HWCs with expanded service delivery packages (US\$52.79 million)		X	3.32	5.06	18.87	9.78	8.24	7.52
<b>DLI5:</b> Improved governance and capacity for adolescent girls programming (US\$57.48 million)		X	3.50	5.38	0.00	11.80	18.40	18.40
<b>DLI6:</b> Delivery of economic empowerment programs for adolescent girls (US\$8.40 million)		X	0.00	0.00	1.00	0.90	2.90	3.60
<b>DLI7:</b> Improved laboratory networking for lab-based surveillance (US\$31.00 million)		X	0.00	4.00	3.60	5.40	9.00	9.00
<b>DLI8:</b> Improved One Health Surveillance (US\$15.26 million)		X	3.06	0.00	1.13	2.40	5.15	3.53
<b>DLI9:</b> Strengthened health systems governance and evaluation (US\$53.50 million)		X	9.50	5.00	14.00	5.50	5.50	14.00
<b>DLI10:</b> Increased number of public facilities with quality certification (HWCs, secondary, and tertiary) (US\$35.89 million)		X	1.29	3.68	5.15	8.11	8.59	9.07
<b>DLI11:</b> Increased transparency and accountability through citizen engagement (US\$20.11 million)		X	0.00	3.11	4.25	4.25	4.25	4.25
<b>TOTAL</b>			<b>20.67</b>	<b>39.53</b>	<b>58.29</b>	<b>63.34</b>	<b>79.68</b>	<b>87.61</b>

**ALIGNMENT BETWEEN THE GOVERNMENT PROGRAM AND THE PFORR PROGRAM**

**Table 4. Alignment of Government program with the PforR Program**

	Government program	Program supported by the PforR (PforR Program)	Reasons for non-alignment
Objective	To increase life expectancy through various health and medical care interventions contributing to overall Improvement in Human Development Index of the Gujarat to a level comparable with developed countries	To improve quality, equity, and governance of comprehensive primary health care, adolescent girl services and disease surveillance	The Program will support a subset of the government' objectives.

	Government program	Program supported by the PforR (PforR Program)	Reasons for non-alignment
Duration	Ongoing	2022-2028	The Program will support a subset of the government program
Geographic coverage	Whole state	Whole state	
Results areas	Family welfare, public health, medical education, NHM, HWCs, PM-ABHIM etc.	CPHC, disease surveillance, AGs, QOC and citizen engagement	The Program will support a subset of the government program
Overall Financing	US\$7.6 billion	US\$4.5 billion	The PforR Program “P” is approximately 59 percent of the “p”

#### D. PROGRAM EXPENDITURE FRAMEWORK

65. **The GoG has a well-defined budgetary process with clear allocation along the standard budget lines through a government program (“p”) that has been defined for the period 2022-2027.** While the overall expenditure framework of the government program (“p”) for FY2022–27 is estimated at US\$7.6 billion, expenditure framework of the PforR Program (“P”) for FY2022–27 is estimated at US\$4.5 billion. The World Bank financing at US\$350 million is 8 percent of the total PforR-supported Program financing.

66. **The proposed PforR Program (‘P’) is a well-defined subset of the government program (‘p’) that includes parts of the sub-directorates of HFWD and NHM.** The World Bank contribution to the Program expenditure framework for five years will be US\$350 million (equivalent to 8 percent of total Program). The Program expenditure includes costs for service delivery, schemes, salary, honorarium, training, supervision and monitoring, procurement of material and equipment, minor civil works for refurbishment/ renovation and operational costs contributing towards the identified results areas in the operation. The Program is largely financed by the GoG with the World Bank playing a supportive role. Table 6 shows the overall Program expenditure composition by entity/department involved and Table 8 shows economical classification of expenditures (detailed budget heads).

**Table 5: Summary of PEF**

<i>In INR millions</i>	Y1	Y2	Y3	Y4	Y5	TOTAL
Total govt program (“p”)	107,530	112,910	118,550	124,480	130,700	594,170
PforR Program boundary (“P”)	63,890	67,080	70,440	73,960	77,660	353,030
<i>In US\$, million</i>	Y1	Y2	Y3	Y4	Y5	TOTAL
Total govt program (“p”)	1,379	1,448	1,520	1,596	1,676	7,618
PforR Program boundary (“P”)	819	860	903	948	996	4,526
<i>P as a percentage of p</i>						59
<b>Bank financing</b>						<b>350</b>
<i>as a percentage of P</i>						8

67. **The nature of expenditures under the proposed Program includes revenue expenditures only for HFWD, NHM, GMSCL and PIU.** The following economic classification analysis is based on expenditure past trends.

**Table 6 Program Budget Composition by economic classification**

Economic classification	Y1	Y2	Y3	Y4	Y5	Total in US\$, million	Percent
Salaries and incentives	432.71	454.34	477.06	500.91	525.96	<b>2,391</b>	53

Economic classification	Y1	Y2	Y3	Y4	Y5	Total in US\$, million	Percent
Machinery and equipment	2.53	2.66	2.79	2.93	3.08	14	0
Minor civil works	0.18	0.19	0.20	0.21	0.22	1	0
Operating expenditure	30.58	32.11	33.72	35.41	37.18	169	4
Supplies and Materials	17.74	18.62	19.55	20.53	21.56	98	2
Grant-in-Aid NHM	54.27	266.98	280.33	294.35	309.06	1,405	31
Other Subsidy and Grants-in-Aid	81.08	85.13	89.39	93.86	98.55	448	10
<b>TOTAL PforR Program boundary</b>	<b>819</b>	<b>860</b>	<b>903</b>	<b>948</b>	<b>996</b>	<b>4,526</b>	<b>100</b>

68. **The expenditures will be incurred across the 4 sub-directorates within HFWD which include the NHM, GMSCL and PIU.** The following table reflects the quantum of funds expected to be utilized at each HoD during the Program (projections are based on previous expenditure trends):

**Table 7 Program Budget Composition by spending unit**

HoD	Total Amount in US\$, million	Percent
Secretariat	7	0.2
Family Welfare	767	16.9
Medical Education & Research	1,068	23.6
Medical Services	536	11.8
Public Health	2,149	47.5
<b>TOTAL PforR Program boundary</b>	<b>4,526</b>	

## E. PROGRAM IMPLEMENTATION ARRANGEMENTS

69. **The Health and Family Welfare Department (HFWD) is headed by a cabinet minister, under whom are Additional Chief Secretary/Principal Secretary (ACS/PS).**<sup>12</sup> ACS/PS is the administrative head of four key departments/units managing the following functions: (i) AYUSH; (ii) ESIS; (iii) FDCA; and (iv) a Commissionerate. The Commissionerate system is responsible for managing the core health sector functions, wherein, Commissioner of Health (CoH) leads the health service delivery in the state in consultation with the Mission Director (MD), National Health Mission (NHM). The critical actors in assisting the CoH and MD (NHM) are: (i) Additional Directors/Directors, who head different wings of the Health Commissionerate, viz., Family Welfare, Public Health, Medical Services, Medical Education and training; and (ii) Executive Director, State Health Systems Resource Centre (SHSRC) - provides support to the state government in strengthening health systems through health system research, reforms and documentation of program needs. The SRESTHA-G Program is to be delivered by the CoH and its team described here. Procurement and repair/renovation/maintenance of health infrastructure is to be delivered by the Mission Director, Gujarat Medical Services Corporation Limited (GMSCL) and Chief Engineer, Project Implementation Unit (PIU) respectively.

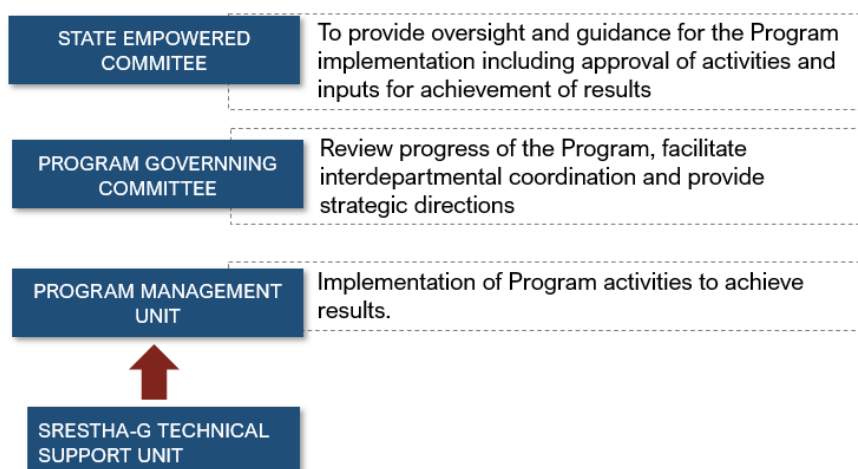
<sup>12</sup> The ACS/PS has a dual reporting and in addition to the Health Minister it reports to the Chief Secretary of the state, who is bureaucratic head of the government and also heads the various committees of HFWD.

70. **The HFWD is responsible for core health service delivery through public health facilities and community level interventions.** The curative, facility-based services of the HFWD, focuses on RMNCAH+N, nutrition, communicable diseases, and non-communicable diseases. The community-based interventions are delivered by ASHAs, which are responsible for a population of 100; the ASHAs deliver services under the guidance of Female Health Worker (an auxiliary nurse midwife). The WCD department, through its frontline workforce (Anganwadi Workers – AWWs) and an outreach center (Anganwadi Centers – AWCs), focuses on addressing awareness and behavioral related aspects through provision of information services, counseling, awareness generation etc. and also include health related referral services for women, children and adolescents. The WCD department also delivers supplementary nutrition and early childhood education. Thus, the WCD department remains an important stakeholder in delivering health and nutrition services in the state. Under this PforR-supported Program, the key implementor would be HFWD which remains responsible for delivering the agreed results; however, institutional structures would include the WCD department as a key stakeholder to ensure better convergence.

71. The Health and Family Welfare Department (HFWD) is headed by a cabinet minister, under whom are Additional Chief Secretary/Principal Secretary (ACS/PS) . ACS is the administrative head of four key departments/units managing the following functions: (i) AYUSH (India system of medicine); (ii) employee insurance scheme (ESIS); (iii) food and drugs control (FDCA); and (iv) a Commissionerate. The Commissionerate system is responsible for managing the core health sector functions, wherein, Commissioner of Health (CoH) leads the health service delivery in the state in consultation with the Mission Director (MD), National Health Mission (NHM). The critical actors in assisting the CoH and MD (NHM) are: (i) Additional Directors -- who head different wings of the Health Commissionerate, viz., Family Welfare, Public Health, Medical Services and Medical Education; (ii) Director, State Institute of Health and Family Welfare (SIHFW) – responsible for health capacity building; (iii) Executive Director, State Health Systems Resource Centre (SHSRC) - provides support to the state government in strengthening health systems through health system research, reforms and documentation of program needs. The SRESTHA-G Program is to be delivered by the CoH and its team described here. Procurement and repair/renovation/maintenance of health infrastructure is to be delivered by the Mission Director, Gujarat Medical Services Corporation Limited (GMSCL) and Chief Engineer, Project Implementation Unit (PIU) respectively.

72. **The SRESTHA-G program will be governed and implemented by a three-layer institutional structure.** First, the State Empowered Committee (SEC) at the level of Chief Secretary, GoG will provide oversight and guidance for the Program implementation including approval of activities and inputs for achievement of results. Second, a Program Governing Committee (PGC) at the level of Principal Secretary/Additional Chief Secretary, HFWD, GoG will review progress of the Program, facilitate interdepartmental coordination, and provide strategic directions. Third, a Program Management Unit (PMU) will be responsible for Program implementation, with Commissioner of Health as Program Director; Mission Director, NHM as Additional Program Director and a small team of experts working closely with SHSRC as nodal office, with Executive Director, SHSRC as member secretary. The HFWD, GoG would hire an IVA for verification of the DLIs and results under the Program.

**Figure 4. Institutional Structure SRESHTA-G**



**Table 8. Classification of health care centers in Gujarat**

Level	Rural	Urban	No of Beds	Population Norms	Services	Human Resources
<b>Tertiary Care</b>	Medical Colleges (14)		750 Beds & above	-	Tertiary level health services	Superspecialists, specialist, MO, paramedical staff
<b>Secondary Care</b>	District Hospitals (20)		50 Beds to 500 Beds	<ul style="list-style-type: none"> <li>DH/ Ranging from 2 lakhs to 30 lakhs</li> </ul>	Comprehensive secondary care health services	Specialist, MO Paramedical Staff
	Sub Districts Hospitals <sup>#</sup> (53)					
	CHCs (345)	Urban CHCs (40)	CHC -30 Beds, UCHC- 50 Beds	<ul style="list-style-type: none"> <li>CHC/120000 population (per 80000 for remote, hilly &amp; tribal areas)</li> <li>UCHC/500000 &amp; above in metro cities</li> <li>UCHC/250000 in non-metro cities.</li> </ul>	OPD, IPD, Surgeries and all Secondary level Referral Services	Specialists - Surgeon, physician, Gynecologist/obstetrician & Pediatrician, MO-MBBS, Paramedical & other staff.

Level	Rural	Urban	No of Beds	Population Norms	Services	Human Resources
Primary Care	PHCs (1477)	Urban PHCs (321)	2 to 4 Beds	<ul style="list-style-type: none"> <li>• PHC/30000 (per 20000 for remote, hilly &amp; tribal areas)</li> <li>• UPHC/5000</li> </ul>	first point of referral for HWCs. 12 Expanded primary care packages	MO-MBBS, MO-AYUSH, Staff Nurse, Pharmacists, Lab Tech, FHS, MPHS
	HWCs/SCs * (9163)	Pandit Dindayal Clinics (246)	2 Beds	<ul style="list-style-type: none"> <li>• HWC/5000 (per 3000 for remote, hilly &amp; tribal areas)</li> <li>• UHWC/15,000 to 20,000 for poor &amp; vulnerable populations, residing in slums or other pockets</li> </ul>	12 Primary health Care packages	CHOs, ANM, MPHWS
Outreach services	ASHAs (38770)	Urban ASHAs (4472)	-	<ul style="list-style-type: none"> <li>• ASHA/ 1000</li> <li>• Urban ASHA/2500</li> </ul>	Outreach services	

73. **The state has been hiring personnel and training them to meet the norms for the HWC operationalization.** The norms for the SC-level HWCs are: (i) one Community Health Officer (CHO) or Mid-Level Health Provider; (ii) 2 female Multi-Purpose Health Workers (MPWs) or Auxiliary Nurse Midwives (ANMs); (iii) one male MPW; (iv) one ASHA per 1000 people (per 500 people in tribal or hilly areas). The norms for the PHC-level and Urban HWCs are: (i) two Medical Officers; (ii) staff nurses; (iii) lab technician; (iv) pharmacist; (v) MPWs; (vi) ASHAs (1 per 1,000 people for HWCs) and USHAs (1 per 2500 people for urban areas). Various trainings related to CPHC and personnel tasks under the new HWCs model are being undertaken at all HWCs levels, especially for the CHOs, MPWs, ASHA and USHAs.

74. **Each of the entities under CoH, will have a role in implementation of interventions and achievement of results under the Program.** The Table 9 below summarizes DLI wise role of each entity:

**Table 9: Responsibility of HoDs and Other Divisions in Implementation of DLIs**

DLI		Responsibilities of the Division					
		PMU	AD FW	AD PH	AD MS	AD ME	NHM
DLI1	Increased population-based screening for key NCDs	✓		✓			✓
DLI2	Strengthened systems for data quality and performance tracking for CPHC	✓	✓	✓	✓	✓	✓
DLI3	Improved anemia management of adolescent girls and boys	✓	✓	✓	✓	✓	✓
DLI4	Increased number of functional HWCs with expanded service delivery packages	✓	✓	✓	✓		✓
DLI5	Improved governance and capacity for adolescent girls programming	✓	✓		✓		✓
DLI6	Delivery of economic empowerment programs for adolescent girls	✓	✓				✓
DLI7	Improved laboratory networking for lab-based surveillance	✓		✓	✓		✓
DLI8	Improved One Health Surveillance	✓		✓	✓	✓	✓
DLI9	Strengthened health systems governance and evaluation	✓	✓	✓	✓	✓	✓
DLI10	Increased number of public facilities with quality certification (HWCs, secondary, and tertiary)	✓	✓	✓	✓	✓	✓
DLI11	Increased transparency and accountability through citizen engagement	✓	✓	✓	✓	✓	✓

## F. DESCRIPTION OF PROGRAM ACTIVITIES AND IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL EFFECTS

75. As required by PforR financing, an ESSA has been conducted by the World Bank during Project preparation. It was prepared in collaboration with GoG and state health societies to assess potential adverse risks and impacts associated with the Program, and adequacy of the environmental and social systems of the program implementing and operating agencies, to identify specific measures to strengthen environmental and social systems and to outline the steps to be followed by the borrower to mitigate potential adverse impacts associated with the Program. The ESSA emphasizes appropriate institutional arrangements and coordination, systems, and capacity for the overall management of environmental and social risks and social inclusion aspects under the Program. Activities that are likely to have significant adverse impacts on the environment and/or affected people will be excluded.

76. **Key environmental risks associated with the Program** centers on the BMW generated at the health care facilities. With the upgrade and increase of health care facilities and package of services offered, there will be an incremental increase in the quantity of the waste generated in the country. Apart from BMW, e-waste, hazardous waste, and plastic waste from health care facilities are also likely to increase and require attention for its proper handling and disposal. Medication blister packs and packaging, and periodic disposal of PPE—particularly face masks, gowns, and gloves also contribute to the increase in BMW. Further, there are some gaps in the system (i) waste generated at the SC level is not connected to CBMWTF service provider. (ii) Wastewater generated from the healthcare facilities needs to be connected to effluent treatment plants where municipal sewer networks are not available, currently there is a gap in ETP infrastructure in the state.

77. Community and health workers' safety and health resulting from improper BMW, (through burning or through mixing with other wastes); wastewater disposal, and lack of adequate infection control during the operation of the health care facilities pose the greatest risk to the environment and



public health through the Program. Other risks include maintaining building structural integrity/safety; fire and electric safety in the health care facilities that will be refurbished. Healthcare facility refurbishment will be carried out on the current footprint of existing facilities, and no additional facilities will be created. Thus, any direct and indirect impacts on physical cultural resources or natural habitats can be ruled out. A range of minor civil works for repair and rehabilitation will be required in the HWCs and BPHU, but the risks and impacts associated with these activities (such as noise and dust pollution, waste management) will be localized and short term.

78. Worker health and safety (healthcare staff, surveillance, and outsourcing services) through appropriate precautions, use of PPE, and occupational health and safety training needs to be ensured to prevent accidents, ensure good hygiene and cleanliness, and reduce the risk of biological and chemical hazards and spread of infections.

79. The preparation of various action plans and implementation strategies under the Bank supported program is also an opportunity to include indicators/ elements of assessing and addressing environment health and safety risks and designed monitoring indicators to strengthen mainstreaming of EHS in future projects.

80. **Key social risks associated with the Program** are directly associated with the risks of exclusion particularly for STs and vulnerable groups in tribal and backward districts and blocks. **Therefore social risks can be broadly divided into two pillars: I. Risks of exclusion in tribal and backward blocks** due to (a) poor uptake and utilization of health facilities by traditionally vulnerable groups in underserved areas, including tribal blocks in the state; (b) poor utilization of health facilities by women-led households and adolescent girls for reproductive health care, NCD screening, and preventive care; and (c) lack of access to quality health care for the urban poor and marginalized, including migrants and informal workers. **II. Sub-optimal Functionality of community-level platforms (JAS, MAS) in tribal districts and blocks** due to low institutional capacities of JAS and MAS in tribal/unserved areas to manage health facilities, coordinate with VHSNCs, and act as grievance redressal platforms as per JAS Guidelines.

81. Given that the health facility improvements work will be limited to minor repair and refurbishments and will be carried out on the current footprint of existing facilities, and hence no land acquisition and/or involuntary resettlement is expected. However, a screening mechanism will be required to identify any potential adverse social impacts. HFWD at the state level through the state health society provide the institutional mechanism for equitable health program implementation along with detailed roles and responsibilities for district health officials and sub-district level officials (PHCs and HWCs). Through India's flagship program, NHM, communities are regularly involved in the planning, management, and monitoring of civil works at the health facility level along with frontline workers. HFWD also has a clear focus on social inclusion and the differentiated needs of SC, ST, and women-headed households. To enable outreach, state health society has undertaken several activities such as observing health days, specifically to generate awareness in tribal communities. The HWCs and CHCs attempt to provide all-round health care in an inclusive environment, free from discrimination. From a policy perspective, The NHM further addresses gender and social equity within a framework that is holistic and systemic.

## **ASSESSMENT OF ENVIRONMENTAL AND SOCIAL EFFECTS**

82. This section describes the activities to be implemented under each of the results areas followed by a discussion of the potential environmental and social effects that could arise from each activity. The sections below summarize the environment and social risks of the Program, followed by the environmental and social effects grouped under each results area.



## LIST OF EXCLUDED ACTIVITIES

83. The following activities are excluded from support under the proposed PforR Program:
- Establishment and operation of common BMW treatment facility
  - Construction of new buildings or any construction beyond the existing footprint of buildings
  - Activities involving asbestos containing materials (AC roofing sheets, AC pipes, and so on) such as construction, demolition, and dismantling
  - Any activity that may involve land acquisition or have potential involuntary resettlement will be excluded (screened out) from the Program boundary.
  - Use of child or bonded or forced labor or labor involved in any hazardous activities.
  - Destruction or damage to any physical and cultural resources

## ENVIRONMENTAL BENEFITS AND OPPORTUNITIES

84. The Program will seek to improve coverage and package of services provided at the PHC level. This will in turn lead to some environmental health and safety benefits and opportunities through (a) provision of quality of services through Kayakalp and NQAS certification has several criteria to improve the infection control, sanitation and hygiene management (b) strengthening of environment-based surveillance (air, water, wastewater, fomites) for detecting the circulation pathogens to monitor their abundance in environment to prevent, and assess the potential risk of disease is also an opportunity to strengthen multisector coordination mechanisms between the environment and health departments, and enhance institutional capacity towards detection of any disease outbreaks and response mechanism.

85. The Program, through support of CPHC will support capacity building of health workforce on BMW management, occupational health and safety (OHS), infection control, and occupational and public safety. This will lead to an improvement in worker health and safety (healthcare staff, surveillance, and outsourcing services) through capacity building and training on, use of PPE, accident prevention, worksite safety, good hygiene and cleanliness, and prevention of biological and chemical hazards. The preparation of various action plans, guidelines and implementation strategies is also an opportunity to include indicators/ elements of assessing and addressing environment health and safety risks and design monitoring indicators to strengthen mainstreaming in future projects.

## LIKELY ENVIRONMENTAL EFFECTS

86. Most of the activities to be supported under the proposed Program will not have any significant negative effects. The Program supports expansion of CPHC service packages, which will encompass service level improvements and upgrade/refurbishments in the health care facilities. These improvements will be undertaken within existing HCF premises—hence, they are not expected to encroach/degrade natural habitats or affect cultural heritage sites. The proposed small-scale interior construction works for the refurbishing of existing HCF facilities, and the associated environmental impacts would be limited and typically include dust, noise, on-site safety, and waste management. At this stage, the expected number of generated wastes cannot be estimated. Considering the small scale of such interventions, the expected quantities of refurbishing-related waste can be properly managed in accordance with the current practices and norms. All the above impacts are to be successfully mitigated through the application of good engineering and construction practices. The Program will not support construction of new buildings, but only interventions to the existing ones under the same footprint.

87. However, the key environmental effect of the Program is the increase in BMW generation, wastewater, and liquid waste generation due to the potential increase in the number of HWC facilities delivering improved CPHC services. The inappropriate management of infectious wastes and improper disposal (through burning or through mixing with other wastes) pose the greatest risk to the environment and public health through the Program. The increased waste would (a) require better multi-sector planning to ensure connections with Central Biomedical Waste Treatment Facility (CBMWTF) and decentralized disposal (especially for the SC level which is not currently connected) (b) ensure that no waste is disposed incorrectly through open dumping or burning, and (c) ensure that liquid wastes and wastewater are appropriately treated and disposed to an ETP or centralized STP so that they do not pose risk to human health and the environment. Other induced environmental impacts include the increased generation of e-waste, plastic waste, non-recyclable waste ( medication blister packaging) from health care facilities as they are modernized and upgraded, which will require attention for its proper handling and disposal and to be appropriately recycled.

88. The HCFs will also depend on several contracted staff and outsourced agencies for cleanliness, housekeeping, and BMW handling, so there will be increased risk of occupational exposure to chemicals, biological pathogens, infectious wastes, sharps, disinfectants, and insecticides if workers are not trained adequately in handling and safety procedures. Safety of health care workers and patient needs to be ensured so that infections are abated, and sanitation and hygiene is maintained in the health care centers. To ensure the safety, these workers would need structured training in OHS practices, accident prevention, safe handling of infectious wastes, safe operating of medical equipment such as autoclaves, safe use of reagents and disinfectants, and appropriate use of different types of PPE.

**Table 10. Environmental effects from Program activities**

Key areas relevant to EHS and OHS	Potential environmental affects	Level of concern	Government policies and systems to address these risks	Institutional responsibilities	Key gaps
<b>Implications for environmental quality</b>	Fugitive emissions (dust, noise) and waste generation (construction and demolition waste) from minor civil works	Moderate Scale of renovation is small and within existing HCF premises. Effects are site specific and can be mitigated with measures such as dust screens, water spray, use of settling tanks, disposal of waste at permitted sites, use of low-noise equipment, and prohibition of construction during night time. However, there is a need to strengthen the construction stage management system including contractual provisions and contractor compliance monitoring and reporting.	<ul style="list-style-type: none"> <li>• Air (Prevention and Control of Pollution) Act, 1981</li> <li>• Municipal Solid Waste (Management and Handling) Rules, 2000</li> <li>• Noise Pollution (Regulation and Control) Rules, 2000</li> <li>• Construction and Demolition Waste Management Rules, 2016</li> <li>• IMEP section 4.12 Construction of Management Guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Public works department (PWD)/accredited agencies implementation</li> <li>• SPCBs supervision</li> </ul>	<p>Training and provisions for contractors’ teams to manage solid waste/debris from refurbishment works</p> <p>Training on provisions of the National Hospital Safety Guidelines (National Disaster Management Authority)</p>
	BMW generation	Moderate - Substantial The existing BMW management system is not robust: 79% of rural HWC-PHCs and 65% of urban HWC-PHCs have provision for BMW management; 46% of HWC-subcenters have a deep burial pit for BMW management. The quantity of BMW generated is likely to increase with increase in the services being offered under the Program. Most health care	<ul style="list-style-type: none"> <li>• All facilities require license to operate under BMW rules.</li> <li>• BMW Rules, 2016 (amended 2018, and 2020) apply to all persons who generate, collect, receive, store, transport, treat, dispose, or handle BMW in any form including hospitals, nursing homes, clinics, dispensaries, and research labs, and so on.</li> <li>• Guidelines for Handling, Treatment, and Disposal of Waste Generated during Treatment/Diagnosis/</li> </ul>	<ul style="list-style-type: none"> <li>• HCF staff implementation</li> <li>• NHM health society funding</li> <li>• SPCBs supervision</li> </ul>	<p>Waste from SC level is being transported to PHC, and not being sent directly to the CBMWTF</p> <p>Strengthening of the BMW system including facility provision, capacity building of staff (BMW/infection control supervisor), monitoring and reporting for compliance with the regulatory requirements.</p>

Key areas relevant to EHS and OHS	Potential environmental affects	Level of concern	Government policies and systems to address these risks	Institutional responsibilities	Key gaps
		facilities do not treat liquid wastes before release. <sup>13</sup>	Quarantine of COVID-19 Patients <ul style="list-style-type: none"> <li>Guidelines for Bar Code System for Effective Management of Bio-Medical Waste</li> <li>Guidelines for Common Biomedical Waste Treatment and Disposal Facilities</li> <li>Guidelines for Environmentally Sound Management of Mercury Waste Generated from Health Care Facilities.</li> </ul>		Trainings for housekeeping and sanitation staff on BMW should be conducted with health care staff.
	Liquid waste (wastewater, chemical reagents, and disinfectants)	Moderate Effluent quality standard applicable.	<ul style="list-style-type: none"> <li>BMWM Rules, 2016 ensure segregation of liquid chemical waste at source and ensure pretreatment or neutralization before mixing with other effluent generated from health care facilities.</li> <li>BMW rules also set effluent discharge standards.</li> <li>ETPs are necessary if discharge from HCF relates to city's/town's public sewerage network not having any terminal sewage treatment plant or if the HCF is not connected to public sewerage network. Treated wastewater</li> </ul>	<ul style="list-style-type: none"> <li>HCF staff implementation</li> <li>SPCBs supervision</li> </ul>	Penetration of ETP and STP is low in the state, currently HCFs are disinfecting waste and disposing into soak pit system.  The periodical regular check, operational improvement, and upgrading (as necessary) of the hospital ETP/wastewater treatment facility should be carried out to ensure the treated effluent will meet applicable standards and

<sup>13</sup> ADB. 2020. *Program Safeguard Systems Assessment. India: Strengthening Comprehensive Primary Health Care in Urban Areas Program under PM-ASBY.*

Key areas relevant to EHS and OHS	Potential environmental affects	Level of concern	Government policies and systems to address these risks	Institutional responsibilities	Key gaps
			<p>from health care facility should conform to the standards of liquid waste as listed in Schedule II of BMW Rules, 2016.</p> <ul style="list-style-type: none"> <li>HCFs with more than 10 beds need to establish suitable effluent treatment facility should have installed ETPs by December 2019.</li> </ul>		<p>that sludge is handed over to the common BMWM service provider.</p> <p>The flow and composition of the medical wastewater should be monitored regularly based on the reformed capacity and service scope of the hospitals to ensure that the medical wastewater be collected and treated on site.</p>
	e-Waste and other general waste	Moderate With the upgrading of HCWs, and quality of service provided, the quality of e-waste generated will increase incrementally (tablets, laptops, autoclave machines, monitors, and medical diagnostic equipment).	<ul style="list-style-type: none"> <li>e-Waste (Management and Handling) Rules, 2016</li> <li>e-Waste is not covered under BMWM Rules, 2016</li> <li>As per the rules, the producer of the electrical and electronic equipment shall be responsible for collection and channelization of e-wastes generated from the 'end-of-life' of their products under extended producer responsibility (EPR). Central Pollution Control Board (CPCB) issues EPR authorization to the producers for environmentally sound management of e-waste.</li> <li>If there is no EPR, the e-waste is sent to an authorized e-waste dismantling or recycling</li> </ul>	<ul style="list-style-type: none"> <li>HCF staff implementation</li> <li>SPCBs supervision</li> </ul>	SPCB should ensure better disclosure of e-waste transfer/sale records and should maintain records for verification of the e-waste management. SPCB should provide these inputs to State BMW Advisory Committee.

Key areas relevant to EHS and OHS	Potential environmental affects	Level of concern	Government policies and systems to address these risks	Institutional responsibilities	Key gaps
			facility or an authorized collection center of the producer of the equipment.		
	Battery waste generation	Minimal Improperly discarded lead acid batteries can contaminate soil and water.	<ul style="list-style-type: none"> <li>The lead acid batteries covered under the Batteries (Management and Handling) Rules, 2001 made under the Act.</li> </ul>	<ul style="list-style-type: none"> <li>HCF staff implementation</li> <li>SPCBs supervision</li> </ul>	Strengthening of awareness on the battery waste management system—capacity building of staff, monitoring and reporting for compliance with the regulatory requirements
<b>OHS</b>	OHS during renovation refurbishment works and management of COVID-19 among workers	Minimal Scale of civil works is small. Safety risks can be mitigated with measures such as provision and use of PPE and protective fencing.	<ul style="list-style-type: none"> <li>The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996</li> <li>Guidelines for Environmentally Sound Management of Mercury Waste Generated from Health Care Facilities</li> </ul>	<ul style="list-style-type: none"> <li>Contract workers/PWD</li> </ul>	Structured trainings for contract workers on OHS to ensure use of PPE and on-site cleanliness and sanitation
	Infection control	<ul style="list-style-type: none"> <li>Moderate Inadequate adherence to safety protocols can lead to spread of infections.</li> </ul>	<ul style="list-style-type: none"> <li>Safety risks can be mitigated with measures such as provision and use of PPE, capacity building of staff, monitoring for compliance with the safety protocols.</li> </ul>	<ul style="list-style-type: none"> <li>IMEP</li> <li>NQAS</li> </ul>	No gaps
	Accidents and spills	<ul style="list-style-type: none"> <li>Moderate</li> </ul>	<ul style="list-style-type: none"> <li>BMWM Rules, 2016 ensure reporting of all accidents and spills and action taken. The HCF in charge submits the report to the SPCB annually according to agreed format.</li> </ul>	<ul style="list-style-type: none"> <li>BMWM Rules, 2016</li> </ul>	No gaps

Key areas relevant to EHS and OHS	Potential environmental affects	Level of concern	Government policies and systems to address these risks	Institutional responsibilities	Key gaps
<b>Universal access</b>	Disabled persons access to HCWs and BPHUs	<ul style="list-style-type: none"> <li>Minimal</li> </ul>	<ul style="list-style-type: none"> <li>All building design codes include provisions of universal access for disabled persons in their frameworks and guidance.</li> </ul>	<ul style="list-style-type: none"> <li>National Building Code of India 2016.</li> <li>The Central Public Works Department Harmonised Guidelines and Standards for Universal Accessibility in India 2021</li> </ul>	No gaps
<b>Building safety</b>	Life and fire safety	<ul style="list-style-type: none"> <li>Moderate</li> </ul> <p>The risk of fire in health care facilities is a concern due to the storage, handling, and presence of chemicals, pressurized gases, boards, plastics, and other flammable substrates. The building code mainly contains administrative regulations, development control rules, and general building requirements; fire safety requirements; and stipulations regarding materials, structural design, and construction (including safety). It also mandates an emergency plan for orderly and systematic evacuation and that fire drills are conducted at least once in six months. The code says that no alterations should be made in a</p>	<ul style="list-style-type: none"> <li>National Building Code of India 2016 Part - IV 'Fire &amp; Life Safety' in the building bylaws</li> <li>National Building Code of India covers the detailed guidelines for construction, maintenance, and fire safety of the structures. Guidelines were issued to the states to incorporate the recommendations of the National Building Code into their local building bylaws, making the recommendations of National Building Code of India mandatory.</li> </ul>	<ul style="list-style-type: none"> <li>PWD and HCF</li> </ul>	<p>No gaps, further, adoption of NQAS standards also cover life and fire safety in buildings.</p> <p>Structured trainings on life and fire safety, and emergency response and preparedness.</p>

Key areas relevant to EHS and OHS	Potential environmental affects	Level of concern	Government policies and systems to address these risks	Institutional responsibilities	Key gaps
		building to reduce the number, width, or protection of exits.			
	Structural safety and disaster resilience		<ul style="list-style-type: none"> <li>All PHCs should have Disaster Management Plan in line with the District Disaster Management Authority according to the Indian Standards for PHCs (annex 3).</li> </ul>	<ul style="list-style-type: none"> <li>PWD</li> <li>State Disaster Management Authority (SDMA) and HCF</li> </ul>	No gaps



**Table 11. Environmental effects by results areas**

Results area	Program activities/inputs	Risks	Mitigation/risk management	Benefits/opportunities
<p><b>RESULT AREA #1: IMPROVING SERVICE DELIVERY FOR (CPHC) INCLUDING RMNCAH+N, NCDs AND MENTAL HEALTH</b></p>	<ul style="list-style-type: none"> <li>Increased proportion of population screened based on Community Based Assessment Checklist (CBAC) tool (to be tracked separately for urban vs. rural areas)</li> <li>Strengthened systems for data quality, and performance tracking and recognition for the CPHC</li> <li>Increased number of operational / functional HWCs providing expanded healthcare service delivery packages of CPHC.</li> <li>Increased share of adults with diabetes or hypertension on treatment and with blood sugar/blood pressure control</li> </ul>	<ul style="list-style-type: none"> <li>The resultant increase footfall at HWCs and provision of increased service delivery packages will result in incremental increases in BMW, other wastes (plastics, organics, solids), and liquid wastes (wastewater, blood, reagents, and disinfectants).</li> <li>Renovation works within HCF will cause dust, noise, wastewater, and general solid waste. Visitors/patients, particularly the inpatients, may be exposed to noise and dust.</li> <li>Health care providers and personnel may be exposed to general infections, potential infectious materials during care and treatment, as well as during collection, handling, treatment, and disposal of health care waste.</li> <li>Communities and public maybe exposed to untreated wastewater streams, disposed reagents, if wastewater is not appropriately disinfected and disposed to an ETP</li> <li>Risk of fire due to the presence of chemicals and flammable containers being stored.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that no waste is disposed/ transported without consent of GPCB with appropriate monitoring mechanisms in place</li> <li>Install ETPs at all HCFs</li> <li>Trainings on OHS, use of PPE for all health care workers and contract staff</li> <li>Contract workers to be trained on OHS and environmental mitigations such as use of watering technique and screens to prevent dust, use of low noise equipment, collection of debris and packaging wastes, prevention of accidents and falls</li> <li>Workers to use PPE and trained on OHS and ERP procedures</li> <li>Prevent any open burning or dumping of biomedical waste</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Increase of trainings and ToT on BMWM and Kalakalp scheme certification</li> <li>Opportunities to enhance systems for health care worker safety - airborne infection control, life and fire safety</li> <li>Attainment of the NQAS/certification will involve monitoring of facilities.</li> <li>Infection control practices, ensuring compliance to hand hygiene practices and usage of PPE, maintenance of hygiene, sterilization and disinfectant practices as well as management of BMW.</li> <li>Strengthening of stakeholder feedback mechanisms for BMWM, sanitation and cleanliness and infection control practices in HWCs.</li> </ul>

<p><b>RESULT AREA #2: IMPROVING SERVICE DELIVERY MODELS FOR ADOLESCENT GIRLS (AGs)</b></p>	<ul style="list-style-type: none"> <li>strengthen health and nutrition service delivery for AGs</li> <li>improve AG empowerment through skilling and career counselling</li> <li>strengthen governance and convergence for AG programming.</li> </ul>	<p>Improper disposal of menstrual hygiene waste in domestic waste, public toilets, burying, burning, and disposing in pit latrines.</p> <ul style="list-style-type: none"> <li>Increase in use of electronic items (mobile phones, tablets etc) for program surveillance and feedback mechanism without appropriate extended producer responsibility for disposal.</li> <li>Increase in distribution of pharmaceutical products (iron, folic acid and deworming tablets) would lead to an incremental increase in medication blister packets being disposed. If these are non-recyclable and non-biodegradable, add increased burden to the waste.</li> </ul>	<ul style="list-style-type: none"> <li>Gender-sensitive school environment/policies for safety/privacy for girls at school</li> <li>Schools should have an incinerator for safe disposal of menstrual products.</li> <li>Ensure that medication distributed has recyclable packaging</li> <li>Improving training content in RKSK, including increasing engagement with teachers and parents will improve knowledge, attitudes and practices for menstrual hygiene product disposal.</li> <li>Facilitate favorable environments/opportunities for physical activity (e.g., School-based physical education programs; recreation space/facilities)</li> </ul>	<ul style="list-style-type: none"> <li>Introduce green skills / forward looking sectors such as environment management, renewable energy, urban design etc. as part of the AG career counselling.</li> <li>Improve hygiene and sanitation in schools – bins, water points, handwashing points, sanitation facilities; soap)</li> </ul>
<p><b>RESULT AREA #3: STRENGTHENING DISEASE SURVEILLANCE AND EARLY DETECTION OF OUTBREAK AND RESPONSE</b></p>	<ul style="list-style-type: none"> <li>Lab network platform for integrated lab based surveillance</li> <li>Develop hospitalization and mortality based surveillance</li> <li>Develop AMR and one health strategy inclusive of private sector</li> </ul>	<ul style="list-style-type: none"> <li>No environment health and safety risks as program interventions will involve development of integrated laboratory information systems and plans for Containment Anti-Microbial Resistance (SAPCAR), one health and environmental surveillance.</li> </ul>	<ul style="list-style-type: none"> <li>Establishment and implementation of an effective occupational health and safety management system and trainings for all staff involved in surveillance would protect the workforce from biological and chemical hazard exposure and other workplace hazards</li> </ul>	<p>The preparation of various action plans and implementation strategies also an opportunity to include indicators/ elements of assessing and addressing environment health and safety risks and designed monitoring indicators to strengthen mainstreaming of EHS in future projects.</p> <p>State and local health and environmental agencies should move rapidly to establish effective systems of environmental public health surveillance by identify health conditions associated with exposure to environmental hazards</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>RESULTS AREA #4: STRENGTHENING QUALITY OF CARE (QOC)</b></p>	<ul style="list-style-type: none"> <li>Strengthened governance of the health systems</li> <li>Improved evaluation structure established for key activities and innovations</li> <li>Increased number of public facilities with certification (HWCs, secondary, and tertiary)</li> <li>Increased transparency and accountability through citizen engagement</li> </ul>	<ul style="list-style-type: none"> <li>The resultant increase footfall at HWCs and provision of increased service delivery packages will result in incremental increases in BMW, other wastes (plastics, organics, solids), and liquid wastes (wastewater, blood, reagents, and disinfectants).</li> <li>Renovation works within HCF will cause dust, noise, wastewater, and general solid waste. Visitors/patients, particularly the inpatients, may be exposed to noise and dust.</li> <li>Health care providers and personnel may be exposed to general infections, potential infectious materials during care and treatment, as well as during collection, handling, treatment, and disposal of health care waste.</li> <li>Communities and public maybe exposed to untreated wastewater streams, disposed reagents, if wastewater is not appropriately disinfected and disposed to an ETP.</li> <li>The risk of fire in health care facilities is a concern due to the storage, handling, and presence of chemicals, pressurized gases, boards, plastics, and other flammable substrates.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure all HCFs ( including SC level) are connected to CBMWTF</li> <li>Ensure that no waste is disposed/ transported without consent of GPCB with appropriate monitoring mechanisms in place</li> <li>Install ETPs at all HCFs</li> <li>Trainings on OHS, use of PPE for all health care workers and contract staff</li> <li>Strengthened planning and monitoring of waste disposal (BMW, plastic, e-waste, and liquid waste) to prevent any improper disposal (burning, open dumping)</li> <li>Workers to use PPE and trained on OHS and ERP procedures</li> <li>Contract workers undertaking rehabilitation works to be trained on OHS and environmental mitigations such as use of watering technique and screens to prevent dust, use of low noise equipment, collection of debris and packaging wastes, prevention of accidents and falls</li> </ul>	<ul style="list-style-type: none"> <li>Increase of trainings and training of trainers on BMWM and Kalakalp scheme certification</li> <li>Opportunities to enhance systems for health care worker safety - airborne infection control, life and fire safety</li> <li>Attainment of the NQAS/certification will involve monitoring of facilities.</li> <li>Infection control practices, ensuring compliance to hand hygiene practices and usage of PPE, maintenance of hygiene, sterilization and disinfectant practices as well as management of BMW.</li> <li>It also includes standards for cleanliness, infrastructure maintenance, removal of junk and condemned material, and maintenance of equipment and instruments.</li> <li>Strengthening of stakeholder feedback mechanisms for BMWM, sanitation and cleanliness and infection control practices in HWCs.</li> </ul>
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## ASSESSMENT OF SOCIAL RISKS, BENEFITS AND OPPORTUNITIES

89. Overall, the program has positive social benefits and has low likelihood of any negative social impacts, and the impacts of proposed investments. There is no land acquisition and/or involuntary resettlements anticipated under the Program given no major civil work/ construction planned under the program. The Program does not support any major construction and is limited to minor renovation and repairs of existing HCF premises. Hence, it is unlikely that any additional land is required beyond the existing footprint of the health facility. The Program further aims to enhance positive social outcome by addressing the issues related to inequalities in health services and quality of health care provision in poorer and backward districts.

90. In Gujarat, the process of transforming PHCs and Health sub-centers into functional HWCs and introducing accountability enhancing mechanisms that will improve capacities of JAS to manage HWCs is already at an advance stage with 7217 HWCs functional (transformed from 1462 PHCs, 317 UPHCs, and 5438 Sub-centers) out of 8538 proposed HWCs (i.e., 1471 PHCs, 320 UPHCs, and 6747 SCs). This generally includes (a) small-scale rehabilitation through minor civil works (for example, minor repairs to damaged buildings), (b) provision of quality facilities (for example, provision of water supply and sanitation facility in case of non-existent or inadequate facilities), and (c) improved community ownership and management of HWCs through JAS. The Program will support capacity building of JAS across states to build community ownership and people-centric service delivery structures.

91. The program has positive social benefit by addressing access, inclusion and equity related issues especially in tribal and backward districts; enhancing outreach and communication to beneficiary groups through strengthening HWC and building capacities of front line workers; improving voice and engagement of citizens through collective action through state and district health assemblies; and addressing the health care related needs of the population including adolescent girls, women and other population groups.

92. As mentioned earlier, there is satisfactory institutional capacity in HFWD on addressing the social concerns including the tribal health components of the ongoing Program. The guidelines and procedures are defined and being followed. However, the proposed Program intends to build overall capacity of the health care functionaries towards addressing quality health care services.

93. Multi-sectoral convergence platforms envisaged under the Program provide opportunity for coordination between the HFWD, Women and Child Development Department (WCD) and Tribal welfare departments to improve service delivery in underserved areas and tribal blocks.

94. With increased community awareness, enhanced institutional and surveillance capacity including towards zoonotic diseases, it further contributes in early diagnosis of diseases and enhance quality of services towards addressing them. The table below presents the key social risks and benefits with respect to the main activity clusters of the Program.

**Table 12. Assessment of social risks, benefits and opportunities of Program Activities**

Component and Sub-Components	Potential Activities	Potential Social Risks/Benefits
<b>Results Area 1: Improving service delivery for comprehensive primary health care (CPHC) including RMNCAH+N, NCDs and mental health</b>		
Increased coverage and effectiveness of population-based activities	<ul style="list-style-type: none"> <li>• Support the implementation of activities by the ASHAs – which would be linked to a HWC (the primary care provider) – to enumerate the entire population in the area covered by each HWC, and to implement population-based screening for these households annually, through a Community-Based Assessment Checklist (CBAC)</li> <li>• Development of Community Based Assessment Checklist (CBAC) tool and at the HWC level for screening</li> <li>• Training and capacity building of ASHA workers on CBAC</li> <li>• Data from the screening would be maintained at the relevant HWC, as part of family records for each household—with additional facility-level screening encouraged for those found to be of high risk during the initial population-based screening</li> </ul>	<ul style="list-style-type: none"> <li>• This will enhance social benefit in identifying non-communicable diseases (NCDs) early enough for treatment.</li> <li>• Also, it will enhance access and inclusion by the overall effort to assign a primary care provider (ASHA) to every household – including women-headed households, ST households and monitoring adolescent girls via adolescent friendly health clinics – and to promote activities to increase visits by household members to primary care facilities.</li> </ul>
Operationalization of the HWCs, and expansion of service delivery packages, backed by detailed implementation strategies	<ul style="list-style-type: none"> <li>• All HWCs are established and operational following the national norms in terms of population coverage, so that the appropriate numbers are in place in each district – with separate tracking for urban and rural areas, and for 5 lagging districts[1] i.e., Dang, Dahod, Panchmahal, Narmada, and Banas Kantha districts.</li> <li>• Support activities to ensure that these HWCs are functional in terms of 9 service delivery packages (out of total 12 packages) – the 7 currently mandated, as well as mental health and palliative/geriatric care.</li> <li>• Support the development of a Mental Health Implementation Plan (MHIP) and a Palliative Care Implementation Plan (PCIP)</li> <li>• Functionality of HWCs here will be based on the GoI guidelines</li> <li>• Scaling of 9 package of services in HWCs including the roll-out of two additional package requires state to invest in HRH, skill building, drugs, equipment and also availability of tele-consultation services – the program will support on developing specific strategies to strengthen these areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on 5 lagging districts will also help focus on tribal areas as out these 5 districts, 3 are completely tribal, and other two having substantial tribal population.</li> <li>• Overall, the activity will have positive benefit on target beneficiary including in tribal pockets.</li> </ul>

Component and Sub-Components	Potential Activities	Potential Social Risks/Benefits
Strengthened systems for data quality, performance tracking and performance incentives for the CPHC	<ul style="list-style-type: none"> <li>The program support three streams of activities to strengthen data systems for CPHC and performance monitoring.</li> <li>Stream One, a CPHC Performance Monitoring Framework (PMF) will be established, with a core set of key CPHC indicators – based on what is initially measurable, tracked at the level of HWCs, blocks, districts and the state. Additional indicators that are important for monitoring CPHC performance – especially on quality, continuity of care and vulnerable population groups – will be added over time to this PMF.</li> <li>Stream Two, a data quality assessment (examining timeliness, completeness and accuracy aspects) will be conducted for existing CPHC-related health information systems and further strengthened.</li> <li>Stream Three, there will be public reporting every quarter of the HWC, block and district Health Index scores, as well as the values of key indicators at every level including selected quality measures. Based on the index mechanism, the Program will also support development of a performance incentives and/ or recognition mechanism for HWCs, blocks and districts.</li> </ul>	<ul style="list-style-type: none"> <li>Improvement in data quality and performance monitoring will have positive social effect in identifying diseases as well as timely flagging for any specific interventions towards improvement.</li> </ul>
Improvements in RMNCAH and NCDs indicators, including on safe deliveries, neonatal care and immunizations, diabetes and hypertension	<ul style="list-style-type: none"> <li>Program will strengthen and track all parts of the referral chain, including: (i) population-based screening (described above); (ii) screening at HWCs of those found to be of high risk during the population-based screening; (iii) treatment as well as continued monitoring and control of the disease(s) for those found to have it during the HWC-level screening – with ASHAs playing a key role here, during household visits.</li> </ul>	<ul style="list-style-type: none"> <li>The activity will have enhanced social benefit including women beneficiaries through early screening for NCDs to initiate treatment and monitoring.</li> </ul>
<b>Results Area 2: Improving service delivery models for Adolescent Girls (AGs)</b>		
Improved governance, including supervision and improved reporting and tracking for adolescent	<ul style="list-style-type: none"> <li>This framework will be guided by a state of adolescent girls’ diagnostic conducted and adopted by the state.</li> <li>A joint team of the three departments will further develop and adopt a common health, nutrition and welfare monitoring system for the State, set annual targets for progress on adolescent girls’ health, nutrition and</li> </ul>	<ul style="list-style-type: none"> <li>The activity will have enhanced social benefit especially among AGs.</li> </ul>

Component and Sub-Components	Potential Activities	Potential Social Risks/Benefits
girl programming in the State	<p>welfare, and report and disseminate an annual state of the adolescent girls' report.</p> <ul style="list-style-type: none"> <li>• Support development and adoption of IT-enabled supportive supervision and peer learning system</li> <li>• This will capitalize on the existing annual population enumeration system (TECHO) to develop and implement health, nutrition and welfare tracking system of each adolescent in the state that will further support frontline management and service provision.</li> </ul>	
Improved knowledge, attitudes and practices of beneficiaries and providers	<ul style="list-style-type: none"> <li>• Support design and implementation of an innovative incremental learning approach (ILA) training package to improve knowledge, attitudes and practices of frontline service providers on all RKSK pillars.</li> <li>• Support implementation of the comprehensive SBCC strategy to improve demand-side KAP issues for improved uptake of adolescent services, focusing not just on adolescent girls and boys, but also their families and key community-level stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>• The activity will have enhanced social benefit especially among AGs on awareness generation and demand creation.</li> </ul>
Improved utilization of key health and nutrition services for adolescent girls and boys with a focus on comprehensive anaemia management	<ul style="list-style-type: none"> <li>• The activity focuses on comprehensive anaemia management because of the high adolescent anaemia in the state coupled with the finding that the current state of anaemia prevention, screening, testing, treatment, follow-up, counselling and control.</li> <li>• The state will develop and implement a population-based adolescent anaemia management system building on the existing programs and will prioritize the implementation of this system in 17 districts with anaemia in adolescent girls higher than 70 percent.</li> </ul>	<ul style="list-style-type: none"> <li>• The activity will have enhanced social benefit especially among AGs addressing the anaemia problems.</li> </ul>
Delivering economic empowerment for adolescent girls	<ul style="list-style-type: none"> <li>• The activity will support use of the existing RKSK platform and the national and state level skills commission to link peer educators and adolescent girls with economic and social empowerment opportunities and benefit the health department in the long run.</li> <li>• The state will develop and adopt a plan for life skills training and technical training of peer educators and adolescent girls with a focus on health sector related courses which would also include a needs assessment at</li> </ul>	<ul style="list-style-type: none"> <li>• The activity will have enhanced social benefit especially among AGs through economic empowerment.</li> </ul>



Component and Sub-Components	Potential Activities	Potential Social Risks/Benefits
	<p>select zone/district level to identify priority job roles in health and job preference assessment on the PE/AG side.</p> <ul style="list-style-type: none"> <li>Support first a foundational life skills training to PEs and AGs in the selected catchment area followed by an in-depth technical training on select health sector jobs as guided by the national Health sector Skills Standards.</li> </ul>	
<b>Result Area 3: Strengthening disease surveillance and early detection of outbreak and response</b>		
<p>Implement a standardized hospitalization and mortality surveillance in the public healthcare system is sparse.</p>	<ul style="list-style-type: none"> <li>Support state to conduct a detailed assessment of the existing systems (GHMIS, PMJAY. etc.), strengthening and adoption of the mechanism for systematically collecting hospitalization (cause or diagnosis based on ICD10/11) and cause of death (mortality) in a MIS.</li> <li>Based on this assessment a standardized hospitalization and mortality surveillance system will be developed and adopted.</li> </ul>	<ul style="list-style-type: none"> <li>No social risks. Standardized hospitalization system will help uniformity in treatment protocols and improve overall hospitalization services.</li> </ul>
<p>Improved lab-based surveillance system through a networking platform of different laboratories at various levels of the state.</p>	<ul style="list-style-type: none"> <li>A structured assessment of the existing lab information system at different levels of laboratories in public health system will be conducted.</li> <li>Based on this assessment, an integrated lab management information system (LMIS) will be developed using existing information systems available in the state and will be rolled out in a phased manner.</li> </ul>	<ul style="list-style-type: none"> <li>No specific social risks.</li> </ul>
<p>Improved One Health Surveillance in the state</p>	<ul style="list-style-type: none"> <li>The Program will direct efforts towards a coordinated, collaborative, multidisciplinary and cross-sectoral approach to address existing or potential risks that originate at the animal-human-ecosystems interface.</li> <li>The program will work towards a functional state level and district level One Health Surveillance (OHS) committees and set up systems for inter departmental data sharing to discuss and prioritize pathogens of importance.</li> <li>The Program will develop a state level OHS strategy and pilot it.</li> <li>The Program will develop State Action Plan for Containment of Anti-Microbial Resistance (SAPCAR), with a detailed implementation plan including AMR surveillance and stewardship.</li> </ul>	<ul style="list-style-type: none"> <li>Making One health surveillance committee and mechanism will help address early detection and response to any zoonotic diseases and will positively benefit local population.</li> </ul>

Component and Sub-Components	Potential Activities	Potential Social Risks/Benefits
	<ul style="list-style-type: none"> <li>The Program will focus on pilot of the SAPCAR in both public and private hospitals and scale up based on the experience in a phased manner.</li> </ul>	
<p>Implementing novel surveillance systems like Community (event) Based Surveillance and Environmental Surveillance to strengthen state outbreak response</p>	<ul style="list-style-type: none"> <li>To complement health system-based surveillance, another approach is to involve community members in identifying, detecting and reporting health events occurring in their communities and this can add value to the existing surveillance systems.</li> <li>Support development and adoption of a community (event) based surveillance and environmental surveillance strategy and develop an operational plan.</li> <li>A wider stakeholder consultation and engagement will be undertaken in the process of the above.</li> <li>These new surveillance systems will be piloted in few blocks and districts of the state and scaled up in a phased manner.</li> </ul>	<ul style="list-style-type: none"> <li>This will help in addressing early detection and response to any diseases and will positively benefit local population.</li> </ul>
<b>Result Area 4: Strengthening quality of care (QoC) with a focus on governance, accountability, institutional and management capacity and citizen engagement</b>		
<p>Multi-faceted approach to quality improvement to build people-centered health systems</p>	<p>Support interventions aligned with best global practices such as Lancet’s “High Quality Health Systems” framework focusing on: (i) govern for quality, (ii) transform the health workforce, and (iii) ignite the demand for quality in population and improve accountability. This will support</p> <ul style="list-style-type: none"> <li>Strengthening governance of the health systems by developing and implementing state QoC strategy, state health policy and other SBCC and operations research strategies;</li> <li>Evolving definite and tangible tools for measuring quality of care, including patient experience and drawing critical learnings from Tamil Nadu’s PforR supported Program;</li> <li>Conducting health assemblies in the state – this would on based on Thailand and Tamil Nadu experience;</li> <li>Improving quality of CPHC service delivery by supporting NQAS certification of HWCs as well as other public health facilities including CHC, SDH and DH; and</li> <li>Boosting HWC utilization by people centered SBCC strategy</li> </ul>	<ul style="list-style-type: none"> <li>While it has huge benefit with improved quality of care of health services, the key social risks are related to labour management issues and occupational health and safety issues emerging from minor civil works during any physical upgradation of health facilities to improve quality of services and/or NQAS/ NABH certifications, and which may involve repair and refurbishment within the existing footprint of the health facility. These are expected to be small, localized and can easily be managed within the existing institutional mechanism. However, need mechanism for E&amp;S screening, which is a gap at present.</li> </ul>

Component and Sub-Components	Potential Activities	Potential Social Risks/Benefits
Enabling environment for comprehensive QOC improvement at state level	<ul style="list-style-type: none"> <li>• The Program will improve governance of health systems by extending support in devising:               <ol style="list-style-type: none"> <li>a. A state-specific Quality of Care Strategy (QOCS) that will lay the much-needed roadmap for augmenting its efforts towards comprehensive quality improvement, including interventions pertaining to in-service training strategy, patient experience etc.;</li> <li>b. State health policy, which will inform, clarify, strengthen and prioritize the role of the state government in shaping health systems in all its dimensions- investments in health, organization of healthcare services, prevention of diseases and promotion of good health;</li> <li>c. SBCC strategy using formative research for adolescent girls programming and to boost HWC utilization;</li> <li>d. Additionally, the Program will support execution of operations research strategy by assisting GoG in preparing a cohesive implementation plan; and</li> <li>e. Development and adoption of reforms pertaining to public financial management to improve service delivery in the state</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>• This will have enhanced social benefits with development of strategy towards quality of care and which will not only address the physical and clinical quality but also include the aspects of service delivery mechanism and look at the patient experience, communication, behaviour change towards enhanced utilization etc.</li> </ul>
Increased number of public facilities with quality certification	<ul style="list-style-type: none"> <li>• The Program will support the progress of NQAS certification of the HWCs, CHC, SDH and DH</li> <li>• This will also support Medical College Hospitals with NABH Pre Accreditation Entry Level certification</li> <li>• The state is expected to increase the scope of structural quality improvement beyond the minimum requirement of each type of certification and provide inputs for improved quality of health service delivery in identified health facilities.</li> </ul>	<ul style="list-style-type: none"> <li>• The key social risks are related to labor management issues and occupational health and safety issues emerging from minor civil works during any physical upgradation of health facilities to improve quality of services and/or NQAS/ NABH certifications, and which may involve repair and refurbishment within the existing footprint of the health facility. These are expected to be small, localized and can easily be managed within the existing institutional mechanism. However, need mechanism for E&amp;S screening, which is a gap at present.</li> </ul>
Developing definite and tangible tools for enhancing transparency	<ul style="list-style-type: none"> <li>• The Program will extend technical support to the state in developing and executing patient experience questionnaires and conducting district and state health assemblies.</li> </ul>	<ul style="list-style-type: none"> <li>• While the patient experience survey will ignite the demand for quality in the population and improve accountability by strengthening the feedback loops</li> </ul>

Component and Sub-Components	Potential Activities	Potential Social Risks/Benefits
and accountability through citizen engagement	<ul style="list-style-type: none"> <li>This will support igniting people demand, promoting accountability and consolidation of citizen engagement through annual district and state health assemblies.</li> </ul>	<p>between citizens and facilities as well as between facilities and the state; the health assemblies will improve voice and engagement of citizens through collective action while also raising the visibility of the health concerns and needs of communities.</p> <ul style="list-style-type: none"> <li>Overall, this will enhance accountability and transparency and will have enhanced social benefits.</li> <li>However, it will be important to ensure that health assemblies also have representation from marginalized community groups, CSOs/ NGOs, and women community members to ensure their voices are also heard.</li> </ul>
Improved evaluation structure established for key activities and innovations	<ul style="list-style-type: none"> <li>The program will support pilots on: (i) CPHC, AG activities and Quality of Care (QoC) that will be robustly evaluated; and (ii) testing out different approaches that would help address the goals of the Program (especially for RMNCAH and NCDs-related indicators)</li> <li>Some of these pilots will be undertaken through separate Trust fund financing and will take place in four selected districts: Banaskantha, Dahod, Rajkot and Vadodara Municipal Corporation</li> </ul>	<ul style="list-style-type: none"> <li>No specific social issues</li> </ul>
Cross-Cutting Composite Service Utilization to be tracked under Program	<ul style="list-style-type: none"> <li>The Program will also track progress for a cross-cutting composite service coverage/utilization Indicator, mainly the sub-indicators on measuring the performance on various aspects of CPHC (both RMNCAH and NCDs), AGs and disease surveillance.</li> </ul>	<ul style="list-style-type: none"> <li>No specific social issues</li> </ul>

[1]5 lagging districts defined using the 2021 Niti Ayoog multidimensional poverty index – Dang, Dahod, Panchmahal, Narmada, and Banas Kantha districts).

### III. ASSESSMENT OF ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEMS AND IMPLEMENTATION CAPACITY

#### A. INTRODUCTION

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95. This section provides a summary assessment of whether the Program’s environmental and social management systems are adequate for and consistent with the Core Principles and Key Planning Elements contained in the PforR Policy, as relevant to the Program. It also assesses whether the involved institutions have the requisite capacity to implement these systems’ requirements. An in-depth description and analysis of the Program’s systems and implementation capacity and gaps are in annex 2, a list of applicable policies and guidelines are in annex 5, and a complete list of the standards for primary health care facilities is in annex 3.

96. As noted earlier, the PforR Policy requires the proposed Program to operate within an adequate environmental and social management system that can manage environmental and social effects (particularly adverse impacts and risks) identified during the ESSA process. This includes (a) an adequate legal and regulatory framework and institutional setting to guide environmental and social impact assessment and the management of environmental and social effects and (b) adequate institutional capacity to effectively implement the requirements of the system.

97. **This section assesses whether the Program’s environmental and social management systems are consistent with the Core Principles and Key Planning Elements contained in the PforR Policy and whether the involved institutions have the requisite capacity to implement these systems’ requirements.** Both elements (for example, Program systems and capacity) are necessary toward ensuring that the environmental and social effects identified in Chapter II are effectively managed. Through both analyses, the ESSA team has identified gaps in both areas, which are addressed in Inputs to the PAP and Supplemental actions.

98. Program systems constituted by the rules and “arrangements within a Program for managing environmental and social effects,” including “institutional, organizational, and procedural considerations that are relevant to environmental and social management” and that provide “authority” to those institutions involved in the Program “to achieve environmental and social objectives against the range of environmental and social impacts that may be associated with the Program.” This includes existing laws, policies, rules, regulations, procedures, and implementing guidelines, and so on that are applicable to the Program or the management of its environmental and social effects. It also includes interagency coordination arrangements if there are shared implementation responsibilities in practice.

99. Program capacity is the ‘organizational capacity’ of the institutions authorized to undertake environmental and social management actions to achieve effectively ‘environmental and social objectives against the range of environmental and social impacts that may be associated with the Program’. This ESSA has examined the adequacy of such capacity by considering, among other things, the following factors:

- Adequacy of human resources (including in training and experience), budget, and other implementation resources allocated to the institutions
- Adequacy of institutional organization and the division of labor among institutions
- Effectiveness of interagency coordination arrangements where multiple agencies or jurisdictions are involved

- The degree to which the institutions can demonstrate experience in effectively managing environmental and social effects in the context in projects or programs of similar type and magnitude.

100. This ESSA examines and discusses only those aspects of the proposed Program’s environmental and social management systems and related capacity that the ESSA team found to be relevant considering its identified environmental and social effects. This section provides a summary assessment of the Program’s systems and capacity as they relate to each of the Core Principles and Key Planning Elements. The text and tables below clarify the instances in which one or more of the Core Principles or Key Planning Elements are not relevant to the Program and are thus inapplicable. More in-depth discussion and analysis of the Program’s systems and capacity are found in annex 2.

101. Overall, the applicable environmental management systems are generally adequate to address underlying environmental and social risks, and noteworthy strengths are strong regulations and guidelines on BMWM, general waste management, and infection control. The provisions of the existing environmental legal and regulatory framework are adequate but require enabling institutional and technical capacity for compliance. While the provisions of the Biomedical Waste Management and Handling Rules, (as amended on March 2018) and IMEP are being implemented, provisions of other relevant environmental acts such as hazardous, solid, plastic, and e-waste rules applicable to the Program require additional capacity-building efforts.

102. The applicable environmental and social management systems are generally adequate to address underlying environmental risks, and noteworthy strengths are having national regulations and guidelines in place for biomedical and other waste management, general infection control, national building codes for life, and fire safety and building and construction worker safety, though efforts are required to strengthen implementation and institutional coordination to achieve sustainable outcomes. Similarly, the management capacity are generally adequate to address the underlying social risks such as access, equity and inclusion related issues including for tribal and marginalized population, and issues related to social accountability and transparency through instituting mechanisms under the program. Gaps identified through the assessment are proposed to be addressed through a set of actions which are compiled as environmental and social inputs to the PAP.

## **B. PROGRAM SYSTEMS: LEGAL, REGULATORY SYSTEMS AND FRAMEWORKS**

103. The GoI and the state government have enacted a range of laws, regulations, and procedures relevant to managing the environmental and social effects of the proposed Program. Table 15 lists legal instruments that manage the biomedical and other wastes, pollution prevention, labor, OHS, community/public health and safety, and building safety (life and fire safety) related aspects relevant to the Program results areas.

**Table 13. Applicable GoI policies and regulations**

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
1	Infection control	IMEP is a policy framework which lays out detailed guidelines for infection control in subcenters, PHC, CHC.	Highly relevant and applicable in all health care facilities.
2	Bio-medical Waste Management Rules, 2016	Schedule 1: Categorization and Management Schedule 2: Standards for treatment and disposal of BMW	Highly relevant. <ul style="list-style-type: none"> <li>• As per accreditation requirements, health care facilities need to develop Standard Operating Procedures (SOPs) in the handling of</li> </ul>

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
		<p>Schedule 3: Prescribed Authority and duties</p> <p>Schedule 4: Label of containers and bags and transportation of BMW</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 waste-water treatment plants should install compact on-site sewage treatments (that is primary and secondary treatment, disinfection) to ensure that wastewater discharges meet applicable thresholds.</p>	<p>medical solid, liquid, and radioactive wastes.</p> <ul style="list-style-type: none"> <li>On solid BMW, there is a good overall capacity and compliance. On liquid BMW, there are significant gaps in treatment and disposal of wastewater from hospitals.</li> <li>The requirements in Ministry of Environment and Climate Change (MoEFCC) Notification - G.S.R.234 (E), dated March 28, 2016, are found to be equivalent to the World Bank Group EHS Guidelines for Healthcare Facilities as they cover good international industry practice such as labelling and symbols for hazardous materials and waste, waste reduction, segregation, storage, transportation (manifest), treatment and handling (with autoclave, incineration), health workers' OHS, and public health and safety. The effluent standards are also equivalent or better than the World Bank Group EHS Guidelines for Health Care Facilities (performance monitoring); for example, 100 mg/L (India) and 250 mg/L (World Bank Group Guidelines) for COD.</li> </ul>
3	Construction and Demolition Waste Management Rules, 2016	Waste comprising building materials, debris, and rubble resulting from construction, remodelling, repair, and demolition of any civil structure	<ul style="list-style-type: none"> <li>Relevant as there will be construction waste generated. CPCB guidelines on Environmental Management of Construction and Demolition Waste Management in India (2017) will be applicable.</li> </ul>
4	E-waste (Management and Handling) Rules 2011 as amendment up to 2018	<p>To address leakage of e-waste to informal sector at all the stages of channelization.</p> <p>The 2016 Amendment brought health care facilities (with turnover over INR 20 crores or more than 20 employees).</p>	<ul style="list-style-type: none"> <li>Relevant as it is applicable for consumers or bulk consumers. The disposal of e-wastes to be done at the specified collection centers and reported annually.</li> </ul>
5	Plastic Waste Management Rules 2016	All institutional generators of plastic waste shall segregate and store the waste generated by them in accordance with the Solid Waste Management Rules and hand over segregated wastes to authorized waste processing or disposal facilities or deposition centers, either on its own or through the authorized waste collection agency.	<ul style="list-style-type: none"> <li>Relevant as hospitals are generators of large quantity of plastics, including non-reusable types.</li> </ul>



Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
6	E-waste (Management) Rules, 2016	Shall apply to every manufacturer producer, consumer, bulk consumer, collection centers, dealers, e-retailer, refurbisher, dismantler, and recycler involved in manufacture, sale, transfer, purchase, collection, storage, and processing of e-waste or electrical and electronic equipment listed in Schedule I, including their components, consumables, parts, and spares which make the product operational but shall not apply to (a) used lead acid batteries as covered under the Batteries (Management and Handling) Rules, 2001 made under the Act; (b) micro enterprises as defined in the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006); and (c) radioactive wastes as covered under the provisions of the Atomic Energy Act, 1962 (33 of 1962) and rules made thereunder.	<ul style="list-style-type: none"> <li>• Relevant as it is applicable for consumers or bulk consumer. The disposal of E-wastes to be done at the specified collection centers and reported annually.</li> <li>• All programs, where e-waste is generated including electrical/electronic equipment</li> <li>• As per rules, the manufacturer has to collect back e-waste and channelize for collection/disposal; producer (seller of the assembled product under own brand) shall arrange end-of-life disposal under extended producers responsibility and create awareness on this; collection centers established by producer/dealer (lighting agencies/dealers) can also collect e-waste on behalf of dismantler, refurbisher, and recycler including those arising from orphaned products.</li> </ul>
7	Water (Prevention and Control of Pollution) Act 1974 Air (Prevention and Control of Pollution) Act 1981 Environment Protection Act (and Rules), 1986 and 1996	Provisions are largely to prevent air and water pollution by not releasing untreated effluents and harmful emissions. Most provisions are already discussed under the Bio-Medical Waste Rules.	<ul style="list-style-type: none"> <li>• Relevant and largely complied with; gaps exist in disposal of liquid wastes from health care facilities.</li> </ul>
8	Air Pollution No.14 of 1981, (29/3/1981) The Air (Prevention and Control of Pollution) Act 1981, Amended 1987 and Rules thereof	To provide for the prevention, control, and abatement of air pollution in India	<ul style="list-style-type: none"> <li>• Relevant to transport of materials for upgrade, repairs, and other materials, through unpaved roads</li> <li>• Transport of wastes from construction, demolition, and other wastes</li> <li>• Use of fuels in diesel generator set</li> <li>• Use of paint/other material with hazardous contents</li> </ul>
9	Solid Waste Management Rules, 2016	Apply to every municipal authority responsible for the collection, segregation, storage, transportation, processing, and disposal of municipal solid wastes.	<ul style="list-style-type: none"> <li>• Relevant. Majority of wastes generated from health care facilities, laboratories, and PoE health organizations is general solid waste, for example, paper, packaging, dry leaves, food wastes and needs to be collected, stored, handled, and treated separately from hazardous wastes.</li> </ul>

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
			<ul style="list-style-type: none"> <li>Storage, transport, handling, recycling/reuse, disposal of solid wastes including packaging materials under all Program activities.</li> </ul>
10	Building and Construction Workers Act, 1996	An act to regulate 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 incidents.	<ul style="list-style-type: none"> <li>Relevant to public health workers, contracted workers employed by PWD for refurbishment of HCFs and frontline workers</li> </ul>
11	Insecticides Act 1968	This act governs the use of registered insecticides and non-use of banned insecticides. It is relevant to all health facilities and hostels that undertake pest control operations	<ul style="list-style-type: none"> <li>Applicable to maintenance and cleaning of new toilet/water, sanitation, and hygiene (WASH) structures and also for vector control</li> <li>Exclusion of banned insecticides</li> <li>Safe storage of insecticides, spill management, and safe usage</li> </ul>
12	National Building Code 2016 and Relevant Standards of the Bureau of Indian Standards (BIS)	The code provides regulations for building construction by departments and public bodies. It lays down a set of minimum provisions to protect the safety of the public about structural sufficiency, fire hazards, and health aspects. The code mainly contains administrative regulations, development control rules, and general building requirements; fire safety requirements; stipulations regarding materials, structural design, and construction (including safety); building and plumbing services; signs and outdoor display structures; guidelines for sustainability, asset and facility management, and so on.	<ul style="list-style-type: none"> <li>Relevant for any building being constructed or upgraded, maintaining safe work, construction typology standards, and guidance, mitigation/management measures, training, monitoring</li> <li>Life and fire safety</li> <li>Structural safety</li> </ul>
13	The Constitution of India (especially, Articles 15,16 and 46)	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.	Applicable to the overall Program
14	Minimum wages Act, 1948	This act ensures minimum wages that must be paid to skilled and unskilled	Applicable to the overall Program

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
		labors. The employer shall pay to every employee engaged in scheduled employment under him, wages at the rate not less than the minimum wages fixed by such notification for that class of employee without any deductions except authorized.	
15	The Child and Adolescent Labour (Prohibition & Regulation) Act, 1986; and Notification of the Child Labour (Prohibition and Regulation) Amendment Act, 2016 and Rules 2017	This act prohibits the engagement of children below 14 and 15 years in certain types of occupations and regulates the condition of work of children in other occupations. No child shall be employed or permitted to work in any of the occupations set forth in Part A of the schedule, processes set forth in Part B of the schedule which includes building and construction industry. The 2016 amendment also prohibits the employment of adolescents in the age group of 14 to 18 years in hazardous occupations and processes and regulates their working conditions where they are not prohibited.	Applicable to hiring contract labour for construction activities
16	Prevention of Sexual Harassment at the Workplace Act, 2013	The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act was passed in 2013. It defined sexual harassment, laid down the procedures for a complaint and inquiry and the action to be taken. It broadened the Vishaka guidelines, which were already in place.	Relevant to public health workers and contract workers in participating states under the EHSD Program
17	Right to Information Act, 2005	Provides a practical regime of right to information for citizens to secure access to information under the control of public authorities. The act (a) sets out obligations of public authorities with respect to provision of information; (b) requires designating a Public Information Officer; (c) sets out process for any citizen to obtain information/disposal of request, and so on; (d) provides for institutions such as Central Information Commission/State Information Commission.	Provides framework for disclosing information to the public
18	Construction Standards and Disaster Related	<ul style="list-style-type: none"> <li>Disaster Management Act, 2005</li> <li>National Policy on Disaster Management 2009</li> <li>National Disaster Management Guidelines - Hospital Safety 2016</li> </ul>	<ul style="list-style-type: none"> <li>Codes for construction in disaster-prone areas</li> <li>National policy (2009) focuses on prevention, mitigation, preparedness, and response</li> <li>Universal access</li> <li>Electrical safety</li> </ul>

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
			<ul style="list-style-type: none"> <li>• Structural safety</li> <li>• Fire safety</li> <li>• Emergency response plans</li> <li>• It describes the institutional and financial arrangements, capacity development, knowledge management and so on</li> </ul>
19	The Hazardous and Other Waste Management Rules, 2016	The Hazardous and Other Waste Management Rules, 2016 provide for generation, collection, treatment, transport, import, storage, and disposal of hazardous wastes. Improper storage, handling, transportation, treatment, and disposal of hazardous waste result in adverse impact on ecosystems including the human environment.	Relevant to all health programs
20	The Occupational Safety, Health and Working Conditions Code, 2020	This code on occupational safety, health, and working conditions applies to all establishments with 10 or more workers and includes building and construction workers. It is applicable to all infrastructure works supported under the Program. The Occupational Safety, Health, and Working Conditions Code ('Code') is enacted to consolidate and amend the laws regulating the occupational safety, health, and working conditions of the persons employed in an establishment and for the connected and incidental matters. The code also lists benefits to the interstate migrant workman such as the benefits of the insurance and provident fund benefits either in the native state or the state of employment, portability of benefits of the interstate migrant worker for building or other construction work out of the building and other construction cess fund in the destination state where such interstate migrant worker is employed. It also mandates free health checkups for workers age 45 for prescribed industries such as factories, mines, plantations, and those employed in hazardous process.	Relevant for all workers and construction activities
21	The Epidemic Diseases Act 1897  The Epidemic Diseases	The Epidemic Diseases Act 1897 provides for better prevention of the spread of dangerous diseases. The Epidemic Diseases (Amendment) Ordinance, 2020 was promulgated on	To ensure safety of communities, workers, and project staff especially during this period of COVID-19 pandemic.

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
	(Amendment) Ordinance, 2020	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 health care personnel combating epidemic diseases and expands the powers of the Central Government to prevent the spread of such diseases.	The ordinance includes provisions for protection of health and safety of health workers from the acts of violence and aggression during management of COVID-19 response in the health facilities and communities.
22	Workmen's Compensation Act, 1923 and Rules 1924	The act provides for compensation in case of injury by accident arising out of and during employment.	Relevant to the Program and applicable for subprojects involving construction
<b>Important Guidelines relevant to the Program</b>			
1	PM-ABHIM Operational Guidelines	PM-ABHIM operational guidelines cover the guiding principles, implementation mechanisms, planning, appraisal, and approval process of HCWs and BPHUs under the Program.	Relevant. The guidelines provide information on eligible expenditure, guiding policies (such as BMWM Rules, 2016). and factors to be considered while planning.
2	XV-FC Technical and Operational Guidelines	The technical and operational guidelines are intended for state and district Program managers, and the representatives of state and district rural and urban local bodies to plan new infrastructure under PM-ABHIM.	PM-ABHIM health centers follow the guidelines of the XV-FC. This provides the layout of the health care centers and the needed infrastructure for maintaining environment health, safety, and cleanliness.
3	NQAS Operational Guidelines For Improving Quality In Public Health Facilities	To strengthen and improve quality of care and provide recognized/accepted standards, measurement system, and quality improvement interventions in congruence with universal quality and safety goals	Relevant - sets standards for infection control
4	Swachhata Guidelines	These guidelines have been developed for states to use in maintaining cleanliness in their health facilities. Quality in public health facilities encompasses much more than hygiene and cleanliness.	Relevant to all health care facilities under PM-ABHIM
5	Kayakalp Award Scheme	Aim of the initiative is to improve and promote the cleanliness, hygiene, waste management and infection control practices in public health care facilities and incentivize the exemplary performing facilities. The scheme is intended to encourage and incentivize public health facilities in the country to demonstrate their commitment for cleanliness, hygiene, and infection control practices. Initiated from district hospitals in 2015, the scheme expanded to the	<ul style="list-style-type: none"> <li>• To inculcate a culture of ongoing assessment and peer review of performance related to hygiene, sanitation, and infection control.</li> <li>• To incentivize and recognize public health care facilities that show exemplary performance in adhering to standard protocols of cleanliness, infection control, and sanitation.</li> <li>• To create and share sustainable practices related to improving cleanliness in public health facilities which lead to positive health outcomes.</li> </ul>

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
		PHC level (2016) and then covered all urban health facilities by 2017.	
6	Swachh Bharat Mission	Swachh Bharat Mission, Swachh Bharat Abhiyan, or Clean India Mission is a country-wide campaign initiated by the GoI in 2014 to eliminate open defecation and improve solid waste management	Relevant to the Program - preventing inappropriate SWM disposal and encouraging good sanitation and hygiene practices.
7	National Disaster Management Authority Hospital Safety Guidelines	The guidelines on hospital safety have been developed to ensure health care centers are structurally and functionally safer from disasters, such that the risks to human life and infrastructure are minimized.	Relevant <ul style="list-style-type: none"> <li>To ensure structural safety of hospitals (especially of critical facilities)</li> <li>To ensure that all professionals involved in the day-to-day operation of hospitals are prepared to respond to disasters</li> <li>To ensure that every hospital in the country has a fully functional and regularly tested Hospital Disaster Management Plan</li> </ul>
8	Indian Public Health Standards for Primary Health Care Facilities	Indian Public Health Standards for subcenters, PHCs, CHCs have been used as the reference point for public health care infrastructure planning and upgrade in the states and union territories.	Relevant - provides the standards and guidelines for critical EHS parameters such as firefighting, storage of insecticides, BMWM, and infection control at the primary health care facility level (refer annex 3)

104. **Findings.** The GoI and GoG has a robust set of policies and standards to manage (a) all wastes generated from health care facilities; (b) pollution control from construction and operation of health care facilities; (c) OHS and infection control practices; and (d) health care building safety aspects (life and fire safety), disaster preparedness, emergency response, and universal access. This effectively addressed all key environmental effects identified under the Program. The existing legislative framework is adequate to ensure social sustainability and inclusion of marginalized and vulnerable population including the SC and ST population, labour welfare, and gender and inclusion but requires strengthening of institutional capacity for better compliance. Overall, it was found that the legal and regulatory landscape and guidance provided by the center was adequate in covering the environmental effects of the Program. This was further elaborated in table 14. All states follow the national policies and guidelines but differ in implementation capacity of the regulations.

105. The provisions of the existing environmental legal and regulatory framework are adequate but require enabling institutional and technical capacity to comply with. While the provisions of the Biomedical Waste (Management and Handling) Rules, 2016, as amended up to March 2018, are being implemented, provisions of other relevant environmental acts, such as hazardous, solid, plastic, and e-waste rules, require additional capacity-building efforts. Efforts are required to improve the monitoring of the management of different kinds of wastes, including liquid wastes.

## C. PROGRAM CAPACITIES: INSTITUTIONAL AND ORGANIZATIONAL ASSESSMENT

### ENVIRONMENT

106. Considering the scale and the nature of the activities under the Program (as detailed in chapter II), none of the activities require a standalone environmental impact assessment. The Program systems operate within a legal and regulatory framework that is adequate to guide environmental impact mitigation, management, and monitoring of the limited, site-specific impacts and issues associated with the refurbishment works, generation of biomedical and other wastes, infection control, OHS, and building safety. A detailed assessment of the institutional roles, responsibilities, and capacities was undertaken in annex 2, and key gaps identified. A deep dive was undertaken into the BMWM institutional responsibilities, implementation capacity, and performance of states in annex 8.

107. The Program environment systems are robust, with clear regulatory framework, implementation arrangements, budget, and Program activities to mitigate negative environment effects on human health and communities especially from BMW and infection risks. The stakeholders have adequate capacity to deal with likely issues from implementation.

**Table 14. Institutional capacity gaps on EHS**

Institution	Capacity gap analysis
Health and Family Welfare Department	HFWD is well equipped to handle its current programs and has well laid-out guidelines and processes for implementation within the applicable legal and regulatory framework. All programs adopt the Indian Public Health Standards and implementation of the BMWM Rules and the IMEP. This is usually managed by BMWM officer, or quality control officer, but needs dedicated capacity on EHS issues to look at EHS and OHS, holistically. There is no dedicated capacity in the health department that can look at EHS risks in a consolidated manner across an array of institutions and sectors (health, environment, disaster remediation, water and sanitation, urban and rural departments).
Construction wing of Health Department	The wing has not any designated environmental safeguards personnel. The chief engineer is responsible within the institution to oversee environmental management related to construction. There is a need to enhance capacity in managing issues related to contracted labour, improve health and safety of workers at construction sites and follow good construction management practices.
State Institute of Health and Family Welfare (SIHFW)	State Institute of Health and Family Welfare (SIHFW) is the nodal government department at the state level which is responsible for undertaking all the health department trainings at their headquarters in Vadodara. SIHFW in coordination with State Quality Assurance Cell (SQAC) conducts the training related to Biomedical waste management and Infection Control practices. Training on both the mentioned areas are undertaken in the umbrella of Kayakalp majorly along with SSS (Swachh Swasth Sarvatra) and NQAS. SIHFW has their established system of conducting cascade training to reach the front-line workers through District Training Teams (DTT). There are 33 District Training Teams in all the districts and 4 District Training Centers (DTC) which



Institution	Capacity gap analysis
	undertake the trainings at the district level and further till health facility level. The trainings on BMW and IPC under the umbrella of Kayakalp training are conducted every year at the state level, district level and facility level as well.
Gujarat Pollution Control Board	<p>There is no dedicated 'Biomedical Waste Management Cell' in Central or State Pollution Control Boards with exclusive manpower. Most staff are part of environment resource cell, which deploys staff for various issues on pollution management.</p> <p>The GPCB monitors the issues related to BMW including its Inventorisation, Compilation of data, Renewal of Annual License, Compliance with the rules, collection secondary storage and transportation of BMW as well as Training and capacity Building Process. Gujarat High Court had ordered an Audit of all 'Red Category' units across the State, including CBMWTFs. These audits are to be carried out every year by the independent Environmental Auditors 27 regional offices of GPCB are monitoring the BMW.</p>
State Public Works Department (PWD)	The PWD will not have designated environmental safeguards personnel. The chief engineer is responsible within the institution to oversee environmental management related to construction. There is a need to enhance capacity in managing issues related to contracted labor, improve health and safety of workers at construction sites, and follow good construction management practices.
State Disaster Management Authority	Institutional coordination mechanisms with MoHFW (national and state), BIS, and NHSRC need to be strengthened to make safety provisions mandatory in the design, construction. and functioning of hospitals.
State Biomedical Waste Committee	Establishment of BMW committees was not fully completed. Coordination and participation among different stakeholders—in particular, state environmental and health agencies, local authorities, health care facility representatives, academia, and NGOs are also needed. The state level committee constituted should look at all wastes generated as part of HCF operations—e-waste, plastics, hazardous wastes, and liquid wastes—and submit recommendations based on the site conditions.
Committee on BMWM and Infection Control under the District Health Society	Infection control Committees are established from MCH to PHC level, as per NQAS guidelines and are functional in all HCFs. No Separate institutional arrangements for Biosafety and Biosecurity requirements have been made, at the Laboratory level. All components are covered in Infectional Control Committee formed at the HCF Level. BMW Management Committee is formed upto the HWC level. The committee meets regularly, and minutes are recorded and maintained at facility level.

Institution	Capacity gap analysis
	<p>The committees meet regularly to discuss sanitation, BMW Management, training etc. and minutes of these meetings are shared with the District Level and State Level Committees.</p> <p>The committees constituted should look at all wastes generated as part of HCF operations—e-waste, plastics, hazardous wastes, and liquid wastes—and submit recommendations based on the site conditions (of the disposal facilities, CTFs, pits, and so on) and prevailing issues (flooding, fires, COVID-19 peaks, natural disasters etc.) within the districts in the half-yearly report to the State Advisory Committee.</p>
Urban and Rural Local Bodies	Urban and rural local bodies need to establish stronger coordination mechanisms with SPCBs, health and sanitation departments, and water resource departments to identify sites for disposal pits (decentralized management).

## SOCIAL

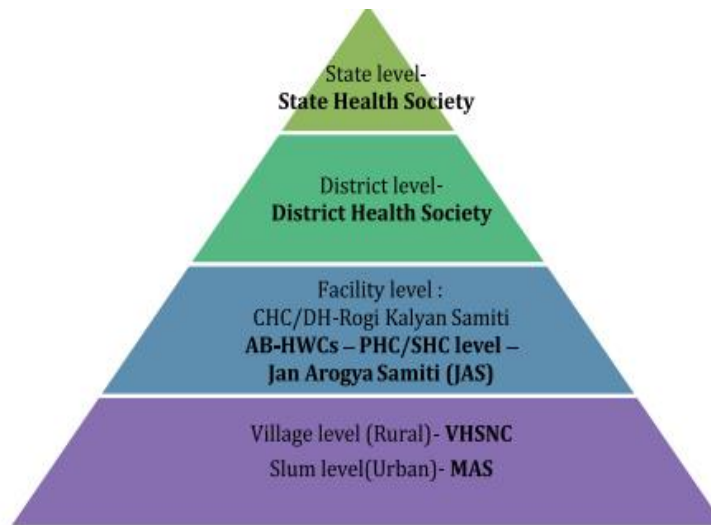
108. *Community engagement towards CPHC*: The HFWD is responsible for core health service delivery through public health facilities and community level interventions in Gujarat. The community-based interventions are delivered by ASHAs, which are responsible for a population of 100; the ASHAs deliver services under the guidance of Female Health Worker (an auxiliary nurse midwife - ANM) at the HWC/ Health Sub-Center and the primary care provider. The *Jan Arogya Samiti* (JAS) HWCs are also expected to play a critical public health role and focus on collective community action for social and environmental determinants of health and support social accountability and community feedback processes. The JAS have an oversight role over the functioning of HWC and will hold the HWC team accountable for ensuring universal access to equitable, quality healthcare services, as per the provision of services available at the HWC level. ASHA and the Village Health Sanitation and Nutrition Committees (VHSNC), (similarly ASHA and *Mahila Arogya Samities* (MAS) in urban areas) are expected to undertake community action for health, in the form of monitoring health and related public services through undertaking semi-annual *Jan Sunwais* or community hearings, at which staff from HWC would also be present. The JAS also has representatives from among Peer Educators under Rashtriya Kishore Swasthya Karyakram (RKSK) of WCD department as their members.

### **Community Engagement at HWC level**

With sub health centers (SHCs) and PHCs are being transformed to HWCs to provide CPHC services. Such a transformation is expected to enable these Health and Wellness Centre (HWCs) to serve as the first port of call for a range of primary health care services, spanning preventive, promotive, curative, rehabilitative, and palliative care to the population, in their coverage area. HWCs are also expected to play a critical public health role and focus on collective community action for social and environmental determinants of health and support social accountability and community feedback processes.

*Institutions supported by community-led platforms*

**Figure 6. Institutions for effective health planning**



#### *Role and functions of JAS*

JAS work as the platform for planning and supporting multi-sectoral action on social and environmental determinants of health, especially to address (a) NCDs; (b) WASH; and (c) malnutrition, stunting, and anaemia. These platforms coordinate the celebration of annual health calendar days at HWC-SHC and facilitate and support VHSNCs to undertake the celebration. These JAS support the HWC team in effective community-level implementation of programs such as Population-Based Screening for NCDs, Eat Right Campaign of FSSAI (using Eat Right Tool Kit developed by FSSAI), and SABLA (Rajiv Gandhi Scheme for Empowerment of Adolescent Girls).

Additionally, JAS ensure community-level collective action on WASH, using the handbook of VISHWAS (Village-based Initiative to synergize health, water, and sanitation) campaign, through the structure of 11 monthly campaign days which are part of the VISHWAS campaign. JAS also engage with women groups/self-help groups (SHGs)/farmers groups/cultural groups/MAS/milk unions, and other unions to

- Ensure greater participation of women, enabling gender equity and promotion of women's health issues;
- Promote regular exercise and sports for adoption of healthy lifestyles and initiate preventive and health promotive actions against the use of alcohol, tobacco, and other forms of substance abuse; and
- Promote awareness about services and entitlements under various government schemes for health and financial risk protection making optimal use of community radios, social media, and so on.

#### *Role of JAS in catalysing grievance redressal*

JAS is responsible for setting up a system to register complaints (patient feedback can be recorded through patient satisfaction surveys). The process and method of making complaints is widely advertised at the HWC premises and in the villages under the HWC. The grievance redressal process adopted by JAS across states is outlined below:

- JAS will periodically review the functionality of the system of complaints and ensure HWC team's response to them.

- In every meeting, JAS shall hear patient or user concerns in accessing quality health care services at HWC. The members shall facilitate timely and appropriate action on feedback.
- JAS shall encourage respective VHSNCs to take feedback from community regarding the services at the HWC level and outreach services in the community and share them with JAS on a regular basis.
- JAS shall also act as grievance redressal platform for families who access health care, under different health care schemes provided at the facility.
- JAS shall, as appropriate, escalate relevant issues and complaints by sending its representation (oral or written as per the requirement) to the PHC/CHC level (JAS/RKS) and the district health society.

*Role of JAS in social accountability exercise*

JAS enables and facilitate smooth conduct of social accountability exercise of its AB-HWCs (in both SHC and PHC). It also ensures that all necessary information/data and logistics support to the team are provided. JAS also facilitates the public hearing as part of the social accountability process. JAS also follows up on issues highlighted in the social accountability exercises.

*Untied fund of JAS as per MoHFW guidelines*

- The purpose of the un-tied fund is to make available a flexible fund, to cater to unanticipated minor requirements, based on decisions taken at the AB-HWC level, in consultation with JAS.
- Under Ayushman Bharat, an annual untied fund is provided at INR 50,000 for SHC level HWCs and INR 1,75,000 for PHC level HWCs.
- Ensuring basic amenities and services to the patients and citizens and supporting community-level health promotion are two cornerstones for prioritizing expenditures from untied funds. The fundamental principle that should be adhered to is that the expenditure must be made based on the local needs and priorities.

Untied funds should be used only to meet common and not individual needs, except in the case of referral and transport in emergency situations. In exceptional circumstances to meet urgent health care needs of a destitute woman, an impoverished single elderly, or disabled persons, small amounts (up to INR 500) can be utilized. Any such expenditure shall be duly ratified in the next meeting of JAS. JAS can also mobilize resources/contributions from the local community for supporting such needs. JAS shall record such contributions in its meeting proceedings and may even consider honouring such contributors at health promotion days or the annual public dialogue or social accountability events.

109. Adolescent Health and Wellness Days (AHWDs) are organized at each of the HWCs on quarterly basis and series of activities being undertaken including on Mental Health, GBV, NCD, Substance Abuse, Nutrition, Sexual and Reproductive health along with one hour group counselling. To conduct the AHWDs, the team includes frontline workers of both HFWD as well as WCD and includes Community Health Officer (CHO), MPW-Female and Male, ASHAs, and Anganwadi Workers (AWWs). Also, community level representatives from departments of Rural Development, Youth Affairs and Panchayati Raj and Self-Help Groups (SHGs) encouraged to participate in these events.

110. *Sexual exploitation and abuse at the workplace (for public health workers, formal, and contractual workers)*

- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act was passed in 2013 (POSH Act) mandates employers to take steps to protect female

employees from sexual harassment in the workplace and to provide procedures for resolution, settlement, or prosecution. It widened the definition of the workplace and covered the informal sector, including domestic workers. It protects all workers in any place visited by the employee during her employment, including transportation. The law builds upon the 1997 'Vishaka guidelines' set out by the Supreme Court, mandating that employers take steps to protect female employees from sexual harassment at work.

- The POSH Act requires employers to create an internal committee at each office with 10 or more employees. For other establishments with less than 10 employees and for women working in the informal sector, the state government's district officer or collector is required to form a local committee in each district.
- These committees handle complaints and recommend actions ranging from a written apology to termination of employment, providing an alternative to filing a criminal complaint with police. Under the POSH Act, the Government is also responsible for developing training and educational materials, organizing awareness programs, monitoring implementation of the law, and maintaining data on the number of sexual harassment cases filed and resolved in the workplace. But studies show that many of these local committees simply do not exist, and when they do, there is no publicly available information on how to access them.
- SRESTHA-G Program will set up Internal Complaints Committee as applicable. For contractual workers, including ASHAs, outreach and sensitization activities will be undertaken to deliver safe workplace environments for frontline workers.
- Under the SRESTHA-G Program, Internal Complaints Committee as applicable will be set up in case not already functional. For contractual workers, including ASHAs, outreach and sensitization activities will be undertaken to deliver safe workplace environments for frontline workers.

111. *Land acquisition and management.* The Program is limited to the repair and refurbishment of existing HCFs within their existing footprint. These are expected to be small, localized and can easily be managed within the existing institutional mechanism. Land acquisition and/or involuntary resettlement is outside the HCF premises will be excluded, and no legacy or unresolved issues are known. No social conflicts or social fragility is present in the Program areas. The Program will not support activities with significant environmental and social impacts that may expose the World Bank to reputational risks. There have been no known safeguards complaints from the previous state-level financed operations and/or ongoing operations.

112. *Equity and inclusion.* The assessment reviewed the social policies and procedures for the Government program and found them to be adequate. The assessment finds an enabling policy and regulatory and legal framework that will promote decentralized planning, implementation and monitoring, active redressal of grievances through JAS and effective participation and safeguarding the interests of vulnerable sections (ST communities, SC communities, women-headed households, and adolescent girls).

113. *Social risks.* However, residual social risks related to exclusion of vulnerable groups particularly tribal blocks. **The anticipated social risks are manageable and can be mitigated through localized implementation strategies, better local oversight and enhanced accountability of JAS and MAS.**

114. The Program environment systems are robust, with clear regulatory framework, implementation arrangements, budget, and Program activities to mitigate negative social effects of the program activities. The stakeholders have adequate capacity to deal with likely issues from

implementation. The HFWD along with its Directorates including State Health Society is well equipped to handle its current programs and has well laid-out guidelines and processes for implementation within the applicable legal and regulatory framework. However, to further strengthen the institutional capacity of HFWD, key frontline staffs will be further trained to enhance social benefits.

#### D. ASSESSMENT OF CORE PRINCIPLES

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##### CORE PRINCIPLE 1 - ENVIRONMENTAL AND SOCIAL MANAGEMENT

Program environmental and social management systems are designed to (a) avoid, minimize, or mitigate adverse impacts; (b) promote environmental and social sustainability in the program design; and (c) promote informed decision-making relating to a program's environmental and social effects.

**Summary findings:** Applicable

115. India (and its states) have an adequate legal framework for environment health and safety, backed by a set of comprehensive laws, regulations, technical guidelines, and standards, which apply nationwide and to all the environmental effects identified in the Program. Over the decades, it has gradually evolved into a comprehensive system that is generally consistent with the PforR principles. In Gujarat, the HFWD has well-established institutional arrangements with qualified staff (quality Control officer) and technical expertise for managing the EHS aspects but not OHS aspects of health care facility operations. The NHM has been providing manpower and funds which also cover BMW and infection control prevents and measures for providing satisfactory oversight. There is also growing evidence, national guidelines and schemes, and standards for health facilities to maintain clean water supply, hygiene and sanitation, infection control and safe disposal of wastes (*under Swacch Bharat; Kalakalp and NQAS standards*). There is regular monitoring of BMW and infection control measures in the HCWs and the CBMWTF (site inspections, annual reports, and so on) conducted by the health and environmental regulators GPCB (details provided in annex 8). A complete set of regulatory and legal framework related to health care facilities is presented in table 8, and annex accreditation systems and standards such as NAQS (annex 3) also set out standards for adequate BMW and infection control practices in the health care facilities. The Indian Public Health Standards for Primary Healthcare facilities also outline critical EHS and OHS measures that must be adopted in the health care facilities (annex 3).

116. The quantity of civil works associated with the HCW recurring expenses entails minor renovation and refurbishment works; the impacts and risks associated with this are small and temporary (increase in dust, noise, and debris). There is existing legislation that mandated management of these impacts with appropriate mitigation and monitoring. For health facility renovations and improvements, there are guidelines listed under the IMEP section 4.12.

117. While there is no exclusive process to screen and assess environment impacts before undertaking any Program-supported activities (as this is not infrastructure intense program), the World Bank Program has built in a clear exclusion criteria/negative list that the expenditure framework will not support, and this includes any kind of major construction.

118. The key risk associated with the implementation of the Program is the incremental increase in BMW and other wastes (solid, plastic, e-waste, and liquid wastes). Further, with increase in package of services, and incentives through Kayakalp scheme, more HCWs will adopt better protocols and performance on sanitation, cleanliness, and infection control. Hence, the quantity of liquid and solid waste associated with use of cleaning reagents, disinfectants, and PPE will also increase. With the upgrading of HCWs, and quality of service provided, the quality of e-waste generated will increase



incrementally (tablets, laptops, autoclave machines, monitors, and medical diagnostic equipment). The Government has the necessary coordination mechanisms (BMWM committees) in place to monitor compliance with BMW Roles, but their capacity to predict/project waste quantities and plan for waste treatment options and site selection of disposal facilities can be strengthened.

119. The public health ecosystem in Gujarat has three-tiered, robust consultation, grievance redressal and feedback mechanism. Rogi Kalyan Samiti - RKS (Patient Welfare Committee) are established under NHM in health care facilities at the level of the PHC and above (i.e, PHC, CHC, SDH, and DH) to acts as a group of trustees for the health facility to manage its affairs and consists of members from local Panchayati Raj Institutions (PRIs), NGOs, local elected representatives and officials from Government sector. RKS are active local-level institutional platforms that enable feedback provision and action for improvement in the availability and quality of hospital infrastructure and services and promote a culture of accountability among service providers in the public health system. JAS serve as an institutional platform of SHC/PHC level HWCs (similar to RKS at PHC/CHC/DH) for community participation in its management and governance, ensuring periodic stakeholder consultations and accountability with respect to provision of health care services and amenities. JAS also act as a grievance redressal platform for families who access health care services at HWCs, ensuring availability and accountability for quality services. Additionally, JAS are primary vehicles of stakeholder consultations; these platforms leverage existing organized volunteers (National Service Scheme, National Cadet Corps, Red Cross, Scouts and Guide, Youth groups) for patient follow-up, counselling, community mobilization, conducting surveys, and other related actions. MAS actively participate in consultations with women-headed households, widows, adolescent girls, and other excluded groups for drawing attention to women's health and reproductive health.

120. HFWD has setup Performance Monitoring and Control Centre (PMCC) at the Commissionerate of Health at the state level and District PMCC (DPMCC) to monitor the performance and the progress of the various health programs on the basis of high prioritized performance indicators. This is also being used to encourage the feedback and responses from ground level for betterment of the services and randomly takes suggestion/observation on basis of the field visits made by health staffs in those areas. It also seeks feedback from beneficiaries on their satisfaction and experience on infrastructure and equipment, materials and services at all levels of health care delivery system to ensure the availability, accessibility, quality and optimum utilization of the human resources.

121. The program thorough Result Areas #4 is aiming to enhance community engagement by developing definite and tangible tools for enhancing transparency and accountability through citizen engagement – by instituting annual Health assemblies at state and district level based on learning from the experiences of Thailand and Tamil Nadu (India) to improve voice and agency of citizens through collective action while also raising the visibility of the health concerns and needs of communities. Through these state and district health assemblies, the Program also aims to achieve vertical integration of accountability by providing a platform for citizens to engage in health policy. This will be further strengthened with a more comprehensive SBCC strategy that will include multiple layers of engagement with patients, health providers and communities through various channels of communication.

122. Data protection in India is currently governed by the Information Technology (Reasonable security practices and procedures and sensitive personal data or information) Rules, 2011 (“Data Protection Rules”) notified under the Information Technology Act, 2000 (“IT Act”). The Data Protection Rules impose certain obligations and compliance requirements on organizations that collect, process, store and transfer sensitive personal data or information of individuals such as obtaining consent, publishing a privacy policy, responding to requests from individuals, disclosure, and transfer

restrictions, and provides for the implementation of reasonable security practices and procedures. Government of India (GoI) and the State Governments including HFWD, and its Directorate have experience in protection of personal data through established operating procedures for data protection and complying with the existing data protection rules applicable to various surveillance program and through National AIDS Control program (NACP) over a long time. This will be further strengthened by the Government of India (GoI) and State Governments through upcoming Data Protection Bill 2021.

### **Key gaps identified**

- The capacity to manage EHS risks under the program is spread across an array of institutions and sectors (health, environment, disaster remediation, water and sanitation, urban and rural departments). All sectors have also provided their own set of guidelines and good practices; capacity in HFWD needs to look at EHS and OHS in a consolidated manner.
- There is no dedicated capacity in HFWD that can look at OHS of healthcare workers in a consolidated manner.
- As per the BMW Rules,2016, every HCF is supposed to get an authorization (along with Consents to operate) under the BMW rules from the concerned SPCB. As per information gathered from PMU, most of the sub-centres are sending their BMW to the PHCs under different arrangements at their own level. It needs to be ensured that the transportation of the waste to the PHC level is done in compliance with BMW rules and ensuring occupational health and safety of the workforce involved.
- All HCFs (with >30 beds) should be treating their liquid wastes by installing ETP in their premises itself. The Chemical / liquid waste from Laboratory etc should be pre- treated / disinfected and then treated before disposal. Only those HCFs, which are connected to a public sewer leading to an STP are exempted from ETP, after pre-treatment of chemical /lab waste. Many HCFs at the level of sub-centres and PHCs are yet to be provided the infrastructure to be connected to a public sewer/terminal STP and should be provided an interim solution of sanitary septic tank and soak pit system till they are able to connect to a central STP or establish ETPs.
- There will be an increase in BMW, and other wastes aggregated; while many states have unutilized capacity remaining in the central treatment facilities, there is a need for future planning especially for decentralized waste disposal facilities and areas that do not have access to CBMWTF due to terrain and weather conditions. This would require appropriate siting of deep burial pits, soak pits, septic tanks so that they do not pose risk to the environment or nearby communities. This would also require strengthened data collection and planning mechanism that includes environment, health, urban and rural local bodies.
- At present, there is no formal mechanism adopted for screening and identifying any potential environmental and social issues before undertaking any civil works. However, given the nature of the works the impacts are predictable (dust, noise, debris) and temporary, and measures can be worked into the contract bill of quantities (such as fencing, screens, watering, low-noise equipment) and consultation with RKS/ JAS and a plan to mitigate accordingly.
- BMW committees look only at BMW generated; they need to look at both solid and liquid wastes and their management and future planning to handle and dispose wastes. Accordingly, recommendations should be made to the state government.
- The organizational arrangements and provisions, such as nomination of designated BMW supervisor in the HCWs and BPHUs and infection control committees and information disclosed publicly to set accountability and expectations for EHS.
- While the effort to enhance enhancing transparency and accountability through citizen engagement by instituting health assemblies, it is important that these assemblies have



representation from all community groups including marginalized groups, SC and ST population groups, and women to ensure their voices are also heard to ensure inclusion.

## CORE PRINCIPLE 2 - NATURAL HABITATS AND PHYSICAL CULTURAL RESOURCES

Program environmental and social management systems are designed to avoid, minimize, and mitigate adverse impacts on natural habitats and physical cultural resources resulting from the program. Program activities that involve the significant conversion or degradation of critical natural habitats or critical physical cultural heritage are not eligible for PforR financing.

**Summary findings:** Applicable.

123. The World Bank Program will not support any capital expenditure. Further, the recurring expenditure includes minor refurbishment works which will be carried out within the existing HCFs and footprint of the existing HCFs; hence, Program-supported expenditures do not pose any risk to natural habitats and physical and cultural resources from the perspective of renovation works. However, there will be an increase in liquid waste, both infectious and non-infectious (disinfectants, reagents, wastewater) many HCFs still do not have ETPs installed, and effluents that are being disposed without any formal connection to STP or ETP system. These pose an indirect risk of contaminating natural drainage systems and groundwater if not disinfected adequately and disposed in a sanitary manner.

Key gaps

- a. The liquid waste is being pre- treated / disinfected before disposal, but many HCFs are not connected to sewerage network/ STP or have standalone ETPS.
- b. Many HCFs at the level of sub-centres and PHCs are yet to be provided the infrastructure to be connected to a public sewer/terminal STP and should be provided an interim solution of sanitary septic tank and soak pit system till they are able to connect to a central STP or establish ETPs.
- c. In the present scenario, none of the sub-centres and most of PHCs seem to be connected to a public sewer leading to terminal STP.
- d. Some HCFs are disposing off liquid wastes after pre-treatment / disinfection directly into soak wells, instead of treatment in a septic tank first.

## CORE PRINCIPLE 3 - PUBLIC AND WORKER SAFETY

Program procedures ensure adequate measures to protect public and worker safety against the potential risks associated with (a) the construction and/or operation of facilities or other operational practices under the program; (b) exposure to toxic chemicals, hazardous wastes, and otherwise dangerous materials under the program; and (c) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards.

**Summary findings:** Applicable.

124. The renovation and rehabilitation work for HCWs under recurring expenditure involve some improvements within the facility. The government approved institutions undertake such works and have a long track record in this area. However, given that there will be several packages of such works in the states, there is an opportunity to strengthen the OHS practices, uses of PPE, and environmental mitigation controls (dust, noise, and waste management) through trainings which can be standardized at the state level.

125. At an individual health care facility and laboratory level, the generation of additional biomedical wastes might not be significant, but on an aggregate basis, this could overwhelm the existing capacity, particularly for collection and transport to final disposal site if not adequately planned. Health care workers and the public would be exposed to risks associated with exposure to BMW and associated infections. In addition, wastewater, liquid wastes (blood and so on), and uncollected BMW pose threats to communities in exposing them to pathogens and vector-borne diseases.

126. Occupation practices for maintaining infection control, sanitation, cleanliness in the HCFs and addressing accidental spills and reporting accidents are well documented through the IMEP, Swachhata guidelines, and BMW rules and integrated into SOPs and operational procedures of PM-AMBHIM. The Program will involve increase in human resources of several types of workers, core health care staff, contract labor, contracted housekeeping, and sanitation and BMW collectors. It is critical that all human resources are trained adequately in infection control practices, use of PPE, fire safety procedures, OHS, and BMW. Existing guidance and national building codes for life and fire safety and emergency response planning are in place. HCWs have been mandated to follow such guidance. All primary care facilities, according to national guidelines/standards, have to have Disaster Management Plan in line with the District Disaster Management Plan.

#### **Key gaps**

- Occupation safety to update knowledge on occupational risk management and good environmental mitigation practices for dust and noise control.
- A majority of HCFs are still to start using the bar codes for BMW collection.
- Contracted workers (sanitation, housekeeping, and cleanliness) need trainings on safe handling of BMW, operation of equipment, use of PPE (depending on the type of cleaning reagents used and type of room), ERP and L&FS.
- There is scope to broaden public-private partnerships (PPPs) in the state for CPHC service delivery (sanitation, security, housekeeping, IEC and targeted intervention) which may not fall under the ambit of the formal training programs under NHM/ HFWD. Trainings need to be provided to all outsourced agency teams on infection control practices, L&FS, ERP and BMW handling to ensure health and safety of workers and patients. ( under NQAS certification)
- BMW supervisors to keep daily record of wastes generated according to format maintained in the Annex 2 of the Guidelines for Management of Healthcare Waste Management Rules, 2016 by health care facilities to keep track of the incremental increase of wastes. Data from these sheets will be collected to inform the state on future planning on central treatment facilities.
- Multi-sector coordination with BIS, NABH, and SDMA on hospital safety standards.

#### **CORE PRINCIPLE 4 - LAND ACQUISITION**

Avoid or minimize land acquisition and related adverse impacts: Avoid or minimize displacement, and assist the affected people in improving, or at the minimum restoring, their livelihoods and living standards.

**Summary findings:** Not applicable.

127. The planned investments under the Program will be restricted to existing land available for health facilities. The ESSA does not foresee risks related to land acquisition, loss of livelihoods, and/or involuntary resettlement at the preparatory stage. The environmental and social screening checklist will include a screening criterion on land availability and ownership to rule out any isolated instances of forced acquisition and involuntary resettlement.

## Key gaps

(a) Consistent with the requirements of the World Bank PforR Policy, the proposed PforR operation does not support activities that pose high social or environmental risks. There will be no major construction, only minor repair and refurbishments and upgrade-related works within the health facilities. Therefore, risks of land acquisition and involuntary resettlement are not applicable under the Program.

### CORE PRINCIPLE 5 – INDIGENOUS PEOPLES AND VULNERABLE GROUPS

Give due consideration to the cultural appropriateness of, and equitable access to, program benefits, giving special attention to the rights and interests of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and to the needs or concerns of vulnerable groups.

**Summary findings:** Applicable.

128. Scheduled tribes (ST) represent 14.8 percent of Gujarat's population, and Scheduled Castes (SC) constitute 6.7 percent<sup>14</sup>. About 55 Talukas have ST population spread over 14 districts with 5 districts having more than 70 percent population being ST. Most of the tribal population in Gujarat is concentrated in the eastern districts. There are 11 major tribes including 5 Particularly Vulnerable Tribal Groups (PVTGs) in Gujarat. The Tribal Sub-Plan (TSP) area constitutes about 18 percent of the state's geographical area.

129. As per Multi-dimensional Poverty Index (MPI), which encompasses a broader set of indicators spanning over health, education and standard of living, Gujarat ranks 11th among larger Indian states. There is, however, significant variation in development across districts. The State is comprised of 33 districts and 8 corporations. Based on the state's MPI, the five worst-performing districts are: Dang (0.278), Dohad (0.258), Panch Mahals (0.190), Narmada (0.161), and Banas Kantha (0.144)<sup>15</sup>. In addition to Dohad and Narmada, Morbi district has been included in the National Institution for Transforming India (NITI) Aayog's list of 124 'aspirational districts' in India, requiring substantial improvements<sup>16</sup>.

130. While the provision of health services at present are same in all the districts including the tribal districts, there are specific norms for locating the Sub-Centre, PHC, and CHC based on geographic condition and population, and which are lower for tribal areas. In tribal areas, Sub Health Centre (SHC) are at 3000 population compared to 5000 in other areas; PHC is at 20,000 population compared to 30,000 in other areas; and CHC is at 80,000 population compared to 120,000 in other areas. Special budgetary packages like Chiranjeevi Yojana towards addressing the shortage of obstetricians in rural areas especially the tribal and backwards areas of Gujarat through public-private partnership mode,

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<sup>14</sup> MoFHW. May 2017. Viewed at <https://www.google.com/search?q=Indicative+Costing+for+HWCs&ie=utf-8&oe=utf-8&client=firefox-b> on 16 April 2021.

<sup>15</sup> Garg S, Basu S, Rustagi R, Borle A. Primary Health Care Facility Preparedness for Outpatient Service Provision During the COVID-19 Pandemic in India: Cross-Sectional Study. *JMIR Public Health Surveill.* 2020;6(2):e19927. Published 2020 Jun 1. doi:10.2196/19927. V

<sup>16</sup> MoFHW. May 2017. Viewed at <https://www.google.com/search?q=Indicative+Costing+for+HWCs&ie=utf-8&oe=utf-8&client=firefox-b> on 16 April 2021.

as well as special budget provision for tribal districts under various heads are proposed and sanctioned as part of Tribal Sub-plan (TSP).

131. However, most of the health indicators particularly the RMNCAH and nutrition related indicators are low for ST population. The low literacy rate, poor awareness on hygiene and sanitation, poor socio-economic condition, resistance towards acceptance of health services due to traditional beliefs/ taboos, lack of awareness of health services available, and limited logistics and human resources available for health service provision also contributes to it.

132. The *Vanbandhu Kalyan Yojan (VKY)* of the Government of Gujarat (GoG) also has 'health for all' as one of the key elements. Through this scheme, HFWD further tries to strengthen the service delivery and includes (a) Strengthening of health services for maternal and child health in tribal areas by ensuring that in each of the tribal talukas - at least one CHC or Sub-District hospital is of a higher standard; and (b) Promotion of private hospitals to increase health services including providing 50 percent of the amount of medical equipment to start private hospitals in tribal areas.

133. The other efforts for enhance quality services in tribal areas include (a) Providing financial and other incentives for doctors and other medical staffs to provide services in tribal areas; (b) Analyse gaps and organize training classes of medical and para-medical staffs; and (c) Waiver of income limit for accessing insurance services under '*Mukhyamantri Amrutam (MA)*' scheme and Ayushman Bharat scheme in tribal areas.

134. *Jan Aarogya Samiti (JAS)* is the community level platform to formalize people's participation in planning, decision making and monitoring the quality of health services in their area and supporting multi-sectoral action on social and environmental determinants of health, especially to address: (i) Non-Communicable Diseases (NCDs), (ii) Water Sanitation and Hygiene (WASH), and (iii) Malnutrition, Stunting and Anemia. These platforms coordinate the celebration of annual health calendar days at HWC-SHC and facilitate and support VHSNCs to undertake the celebration. JAS support the HWC team in effective community-level implementation of programs such as Population-Based Screening for NCDs, Eat Right Campaign of FSSAI (using Eat Right Tool Kit developed by FSSAI), and SABLA (Rajiv Gandhi Scheme for Empowerment of Adolescent Girls). JAS is also responsible for setting up a system to register complaints (patient feedback can be recorded through patient satisfaction surveys). However, given the level of awareness and current capacities of members of JAS about its roles and responsibilities especially in tribal and backward areas, it is expected that JAS in these areas may take much longer to be fully functional as desired.

135. Gujarat attracts a huge number of migrant workers especially the laborer and informal workers from various parts of the country who are largely concentrated around the large industrial hubs. Majority of these workers work in unorganized sector with complexity as some of them even migrate for smaller duration, and many of them may not be registered with state labor department, and hence there may not be an exact estimate of them at each of the industrial hubs and large urban centers within the state. However, they pose additional challenge for health care services given majority of them is dependent on public health system and remain underserved or partially served.

136. However, the key challenges include (a) availability of specialist doctors in all areas and especially in tribal areas especially gynaecologists among others; and (b) low awareness towards health services.

## Key gaps

- **Risks of exclusion in tribal and backward districts/ blocks** (a) uptake and utilization of health facilities by traditionally vulnerable groups in underserved areas including tribal blocks; (b) utilization of health facilities by women-led households and adolescent girls for reproductive health care, NCD screening, and preventive care; and (c) access to quality health care for the urban poor, including migrants and informal workers.
- **Risks of exclusion in of urban migrant worker.** With large urban industrial pockets attracting migrant informal workers, it is unclear to what extent these workers are able to access public health services and need to be further explored and identify appropriate measures.
- **Functionality of community-level platforms (JAS, MAS) in tribal and backward districts/ blocks:** low institutional capacities of JAS and MAS in tribal/underserved areas to manage health facilities, coordinate with VHSNCs, and act as grievance redressal platforms as per JAS Guidelines.

## CORE PRINCIPLE 6 - SOCIAL CONFLICT

**System and capacity assessment:** Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

**Summary findings:** Not applicable.

137. There are no social conflict-affected areas in the Program areas. And, in any case, the Program interventions do not exacerbate any social conflicts as it supports the strengthening of health services in seven states leading to overall improved health outcomes. Also, exclusion of any groups in terms of caste, religion, and/ or geography by the Program activities is not expected.

## GRIEVANCE REDRESS MECHANISM (GRM)

138. The SRESTHA-G program will leverage the existing system to receive, resolve and manage grievances, and includes:

(a) Chief Minister's (CMs) Dashboard/ grievances portals: One can raise grievances by writing to Chief Minister using the CM Dashboard (<https://cmogujarat.gov.in/en/>); or through State-Wide Attention on public Grievance by Application of Technology (SWAGAT) portal (<https://swagat.gujarat.gov.in/>). The SWAGAT system comprises of an online public portal and video-conferencing setup that connects the Chief Minister to all the district and sub-district level officers, as well as the complainant in real time. The system has an integrated grievance tracking module that tracks the progress of each complaint. Applications for 'SWAGAT' are accepted in collector office registry.

(b) At the at health facilities level, community members and other stakeholders can write a complaint put it in the complaint/feedback box available at every health facility, which is opened on 6<sup>th</sup> of every month in a meeting and addressed by the head of the institution.

(c) Complaints can also be handed over to Mamlatdar, Collector, and Commissioner for the health service delivery in their Taluka/ Districts, who then directs it to respective Health officials for redressal and reporting.

(d) At Local Level and also online complaint on 104 tollfree number. Anyone can complaint on 104 from where about 90-95% are grievances solved on the same day and feedback also taken from

complainant. Rest grievances are sent to corresponding departments and constantly followed up for redressal, and if needed necessary actions in the policy matter changes can also be done.

(e) Complaints can also be made to HFWD district and State offices, and the respective in-charges further directs it to respective authorities/ officials for redressal.

(f) In addition, one can also lodge complaints through *Mera Asptal* portal (<https://meraaspataal.nhp.gov.in/>) and/or App. The portal of Hospital Management Information System (HMIS) is integrated with *Mera Asptal* portal for any feedback.

139. At the national level, the Centralized Public Grievance Redress and Monitoring System (CPGRMS) is an online web-enabled system (<https://pgportal.gov.in/>) in association with Directorate of Public Grievances (DPG) and Department of Administrative Reforms and Public Grievances (DARPG) to register and track grievance. And is being used in all Central Ministries and Departments, it is also used for state specific grievances which can also be lodged using the portal and is further directed to respective state and department for resolution and reported back through CPGRMS system.

140. Most of the beneficiary groups and community in general largely use the manual system of written complaint at the HCF or at Taluka, district and State level; 104 call centre; and the CM Dashboard/ grievances portals.

141. One of the challenges of grievance redressal at HWC level is the low institutional capacities of JAS in many of the areas who are supposed to maintain complaint register at HWC and also redress local level grievances. While this is expected to improve with effort towards building capacities of HWC staffs and JAS under the program, it will benefit from periodic monitoring and consolidated monthly reporting of grievances received, resolved and pending for early intervention by district level officials.

142. While there is various offtake mechanism for registering grievances, each of the sub-system works independently in their own domain, but overall it lacks in having a consolidated monitoring and reporting of all the grievances raised and resolved using various offtake mechanism at the district and at the state level and requires strengthening.

## IV. CONSULTATION AND DISCLOSURE

### A. SUMMARY OF DISCUSSIONS AND CONSULTATIONS

143. Consultations have been conducted with GoG officials as part of the ESSA preparation process over March 2022 to May 2022 period. Given COVID-19 restrictions, virtual consultations were organized with HFWD and GPCB through project preparation. This involved going over with each of the ESSA core principles and their relevance and applicability for the SRESTHA-G program, as well as current status of service delivery and environmental and social practices including addressing environmental and social risks and impacts. In addition, a detailed checklist was prepared and shared with HFWD for their written feedback along with state specific information and documentations.

144. State officials responsible for BMWM, tribal health programming, and community strengthening initiatives were consulted to receive information regarding the existing due diligence mechanisms for management of environmental and social aspects at the state level. Virtual consultations with state nodal officials for environmental and social systems found that the Program safeguard systems are robust, with a clear regulatory framework, implementation arrangements, budget, and Program activities to mitigate negative impacts on environment and people, especially from BMW and infection risks.

145. It was mentioned during the first consultation with state nodal counterparts that states do not have any track record of non-compliance regarding environmental or social laws and regulations that are applicable to the Program boundary. The state nodal officials also outlined various initiatives that are likely to mitigate the identified social risk of exclusion experienced by tribal communities.

146. Details of various consultations undertaken by the ESSA team in preparation of the ESSA report is as below.

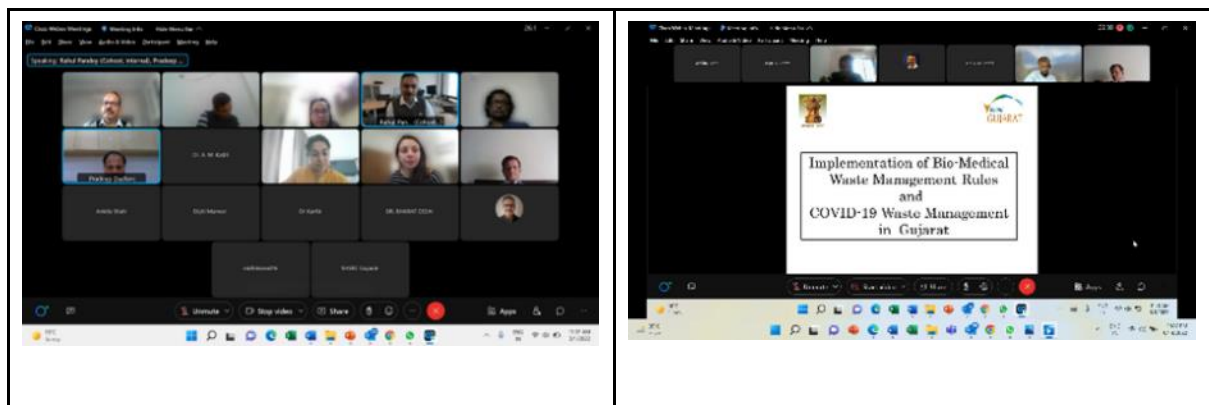
**Table 15 List of Consultations Undertaken**

Date of Consultation	Type of Consultation	Thematic Area	Key Participants
March 01, 2022	Virtual Consultation	ESSA Processes; Environmental sustainability aspects including Bio-Medical and other Hazardous Waste Management	<ul style="list-style-type: none"> <li>Key officials from HFWD,</li> <li>Key officials from SHSRC, NHM, MCH, HFW, and GMSCCL</li> <li>Nodal officers responsible for BMWM</li> <li>Key officials from Gujarat Pollution Control Board (GPCB)</li> <li>World Bank Task Team</li> </ul>
March 01, 2022	Virtual Consultation	Social Sustainability aspects including Access and inclusion issues - rural and urban health provision; service provision in tribal areas; gender;	<ul style="list-style-type: none"> <li>Key officials from HFWD,</li> <li>Key officials from SHSRC, NHM, MCH, and HFW</li> <li>Key officials from Women and Child Development Department</li> <li>World Bank Task Team</li> </ul>

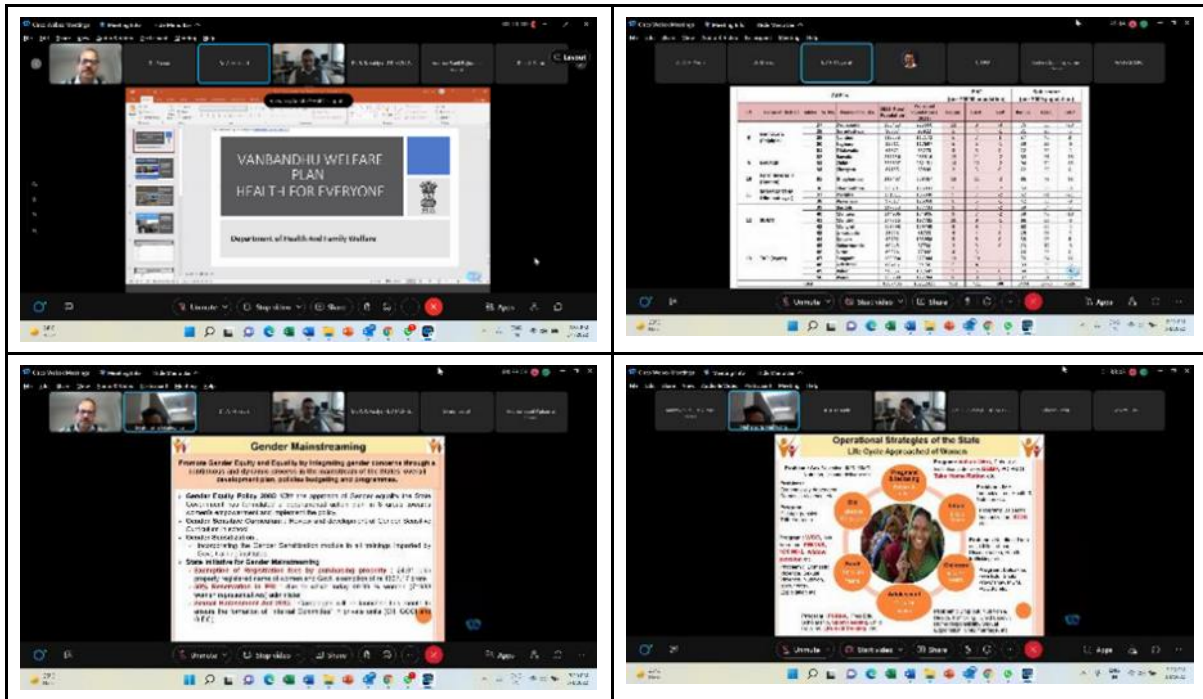


		community engagement etc.	
<b>March 02, 2022</b>	Virtual Consultation	Adolescent Girls results area & Nutrition	<ul style="list-style-type: none"> <li>• Key officials from HFWD,</li> <li>• Key officials from SHSRC, NHM, MCH, and HFW</li> <li>• Nodal officers for adolescent girls' programs</li> <li>• Key officials from Women and Child Development (WCD) Department</li> <li>• World Bank Task Team</li> </ul>
<b>March 07, 2022</b>	Virtual Consultation	Comprehensive Primary Health Care (CPHC)	<ul style="list-style-type: none"> <li>• Key officials from HFWD, NHM and SHSRC nodal officers for CPHC, HWC, NCDs, mental health, HMIS, TECHO+, PPP etc</li> <li>• World Bank Task Team</li> </ul>
<b>May 11, 2022</b>	Virtual – On ESSA	ESSA - Environmental and social Aspects	<ul style="list-style-type: none"> <li>• Key officials from HFWD, NHM and SHSRC;</li> <li>• Nodal officers for BMWM, labs;</li> <li>• Key officials from GPCB</li> <li>• SHSRC Nodal officers for citizen/community engagement</li> <li>• World Bank Task Team members</li> </ul>

147. Below are some of the photographs of the virtual consultations.







148. The consultation with HFWD and the seeking of information through checklist was largely concentrated in the areas of (a) Disease surveillance; (b) Details about laboratories; (c) Bio-medical waste management and infection control measures; (d) Land Requirement for upgradation of facilities; (e) Equity and Access to Health Services; (f) Health care workers; (g) Training and capacity building; (h) Labor management; (i) Workers health and safety measures; (j) Community health and safety measures; (k) Gender; (l) Stakeholder consultation; and (m) Grievance redress mechanisms, among other details.

149. The draft ESSA incorporates the summary of desk review, discussions and consultations with each of implementing agencies, and written information received from implementing agencies as per the ESSA checklist.

## B. SUMMARY OF MULTI-STAKEHOLDER CONSULTATION

150. A multi sector stakeholder consultation workshop is planned to be undertaken on June 23, 2022, in hybrid format at state level. The participants expected included representative from various government departments including from HFWD and its Directorate including NHM, HFWD, NHM and SHSRC; key officials involved in Bio-medical waste management committees, Infection control committees, PWD officials involved in construction/ refurbishment of HCFs; Key officials from WCD, Tribal Development, Pollution Control Board. and other stakeholder departments; District level health officials including from backward and tribal districts; Civil Society Organizations/ NGOs working in health sector, tribal welfare in the state among others. Comments and suggestions will be invited on the assessment scope and practices currently being undertaken at the state level. The ESSA was updated based on the suggestions and feedback during the multi-stakeholder workshop. The list of stakeholders present at the consultation workshop are attached in Annex-9.

151. Key feedback and suggestions emerging from the multi-stakeholder consultation includes: (a) at present there is no mechanism of decentralized management of BMW at sub-centers level given the spread-out locations, and hence most of them are not connected with CBMWTF. They transport their BMW waste to PHCs for further collections by the CBMWTF – which is not authorized. Hence,

there is need for developing a strategy/ mechanism/ guideline for safe transportation of BMW from sub-center to PHC and also coordinate with GPCB in taking authorization for doing so; (b) many of the HCFs currently lack in having authorization for BMW – towards this HFWD has already made efforts by filing the applications, however need budgetary allocations to get the authorization, which they expect that it can be done in the next budget year; (c) It was suggested and clarified that there is need for two separate officials as environment specialist and social specialist for technical support to oversee the E&S aspect of the program; (d) It was suggested that as mentioned for tribal health strategy, there is need for similar strategy to be developed for migrant/ informal workers as they remain unserved/ under-served; (e) It was suggested to keep in mind existing interventions/strategies from the National health programs while developing the tribal health strategy; (f) it was suggested to revitalise the existing structures which addressing citizen engagement along with development of Health assembly structure; (g) It was suggested that there should be LMS system for occupational Health through self-paced training through online platform; and (h) the strategy towards adolescent girls should also include boys even though the main target could be the AGs for a more wholistic approach.

152. Below are some of the photographs of the multi-stakeholder face to face consultation.



**Table 16. List of officials met during preparation'**

<b>Sl. No.</b>	<b>Names of officials</b>
1	Dr A. M. Kadri Executive Director, SHSRC-G
2	Dr Birendra Singh, Quality Nodal Officer, HFW
3	Dr R. R. Vaidya, Deputy Director, MCH, HFW
4	Dr Priyanka Thanki, Deputy Director, MCH, HFW
5	Dr Bina Vadalia Asst Dir - MCH, HFW
6	Dr Prakash Suthar SPO, HWC, HFW
7	Dr Ankita Shah, Consultant, SHRC-G
8	Ms Dipti Manvar, PO (Quality), HFW
9	Dr Bharat Desai, Consultant, SHRC-G
10	Dr Shalu Chaudhary, Consultant, SHRC-G
11	Mr Vijay Rakholia, Deputy Environment Engineer, GPCB
12	Mr Mahendra Makwana, PO, Gender Resource Centre, WCD
13	Mr Priyank Parmar PO Planning, NHM
14	Dr Vaibhavi PO, Health and Wellness Centre, HFW
15	Ms Darshna Shelat PO, Urban Health, HFW
16	Ms Halak Mehta State Consultant-Maternal and adolescent nutrition; WCD
17	Dr Anita Mahajan State Consultant (Quality), HFW
18	Dr Dinesh Barot SPO, Urban Health, HFW
19	Dr Nidhi Sood, DGM, GMSCL

### **C. DISCLOSURE**

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153. A multi-stakeholder workshop was undertaken on June 23, 2022 inviting participants from HFWD and its Directorate and other key officials; representatives from other departments such as PWD, WCD, Tribal Development, and Pollution Control Board; District level health officials including from backward and tribal districts; and Civil Society Organizations/ NGOs working in health sector, among others. The draft ESSA was further revised based on feedback and comments received during the multi-stakeholder workshop. The draft ESSA report was disclosed at the World Bank external website and at the HFWD (GoG) website on June 30, 2022 (<https://gujhealth.gujarat.gov.in/srestha-gujarat.htm>) for receiving further feedback and comments. The Final ESSA report will be redisclosed on the World Bank's external website and HFWD website prior to negotiation.

## V. CONCLUSIONS AND RECOMMENDATIONS

### A. INTRODUCTION

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154. The ESSA concludes that the Program has a moderate environmental risk and moderate social risk. The Program risks on dealing with BMW and other wastes are well covered but will require efforts to address other environmental challenges emerging from disposal of BMW in remote areas from smaller HCFs (SC/ HWCs) and liquid/wastewater effluents. Though the policies cover all aspects of safe disposal of wastes, there are certain gaps in the infrastructure and systems.

155. The risks pertaining to building safety, life and fire safety, and universal access are also adequately covered in national policy and guidelines, institutional capacity to implement these guidelines is in place, but there are some gaps in institutional coordination (with disaster management authorities, environment, urban and rural departments) which need to be addressed to strengthen implementation capacity.

156. GoI regulatory guidelines adequately cover BMWM, infection control, sanitation, worker health, and safety and building safety norms, and designate implementation arrangements and funding around these various functions. The ESSA has shown that the proposed Program interventions are not likely to cause social safeguard impacts. However, to avoid any adverse impact, E&S screening needs to be conducted at each of the HCF where civil works are planned for integrating mitigation measures with the overall upgradation effort of the facility.

157. The systems are in line with the Core Principles and Key Planning Elements as defined in the World Bank Policy for PforR. The Program will require increased coordination among various departments and agencies on environmental and social aspects to further support implementation, such as environment, water and sanitation, disaster management authorities, urban and rural local bodies. The process and criteria for monitoring, enforcement, and reporting on environmental and social measures will be part of overall Program reporting. The above requirements, processes, and systems will be included in the Program Operations Manual. Monitoring and supervision of the ESSA implementation will be a part of World Bank supervision.

158. The applicable social management systems are generally adequate to address underlying social risks. The approach of HFWD towards ensuring equitable and inclusive health services is well grounded with local situation, however, it requires further strengthening especially in tribal and backwards areas for desired outcomes and moving towards social sustainability. While legal and regulatory framework is adequate, it requires strengthening institutional capacity for better compliance.

159. Overall, the applicable environmental management systems are generally adequate to address underlying environmental and social risks, and noteworthy strengths are strong regulations and guidelines on BMWM, general waste management, infection control, building and worksite safety. The Program environment systems have a relatively clear regulatory framework, implementation arrangements, budget, to mitigate negative impacts on environment and people, especially from BMW and infection risks. HFWD will need capacity strengthening and expert inputs to design tailored strategies to deal with likely issues from implementation (management of wastewater/ liquid wastes).

160. While the provisions of the Biomedical Waste (Management and Handling) Rules and IMEP are being implemented, provisions of other relevant environmental acts such as solid waste, plastic, wastewater treatment standards and e-waste rules applicable to the Program require strengthened oversight for compliance. Additionally, as there will be more outsourced agencies and contract



workers (through PPP schemes) it is critical that they undergo structured trainings on OHS, waste management, and infection control practices. Gaps identified through the assessment are proposed to be addressed through a set of actions which are compiled as environmental and social inputs to the PAP.

1. Gap 1: The capacity to manage BMW and IC rests with the Quality control officer in HFWD. Quality officer also looks at fire safety, radiological safety, and compliance with national programs such as NQAS, Kayakalp and Swachh Bharat Abhiyan. The quality control officer does not look at occupational health and safety aspects for workers.
2. Gap 2: All HCFs (with > 30 beds) should be treating their liquid wastes by installing ETP in their premises itself. Only those HCFs, which are connected to a public sewer leading to an STP are exempted from ETP, after pre-treatment of chemical /lab waste. One of the key gaps is that not all facilities (>30 beds) have independent ETPs or are connected to centralized STPs. The state needs to take a long-term planning view of this and design strategy (over short-medium term) over all HCFs would have access to sanitary wastewater disposal facilities (either through independent ETPs, or sewerage connections) and apply appropriate practices of disinfection. The strategy/ plan will allow for adequate budget to be set aside to account for this additional infrastructure to be built.
3. Gap 3: The health department is still to fully implement the bar codes for BMW collection. The bar coding enables tracking of the BMW and ensures that it is collected and disposed at the right locations.
4. Gap 4: Through strengthening and expansion of CPHC services, and attainment of quality standards such as NQAS and NABH, HCFs would need to manage all BMW appropriately. While the state has unutilized capacity in the central treatment facilities, and most facilities are connected to CBMWTF, there is a need for future planning especially for decentralized waste disposal facilities and areas that do not have access to CBMWTF due to accessibility, disaster zones, and weather conditions. This would require appropriate siting of deep burial pits, and septic tank and soak pit system so that they do not pose risk to the environment or nearby communities.
5. Gap 5: There is no mechanism for early screening for identifying any potential environmental and social issues before undertaking works. However, given the nature of the works proposed under the program (maintenance, repairs and minor refurbishments) the impacts are predictable (dust, noise, debris) and temporary, and measures can be worked into the contract bill of quantities (such as fencing, screens, watering, low-noise equipment) to mitigate accordingly.
6. Gap 6: There is scope to broaden public-private partnerships (PPPs) in the state for CPHC service delivery (sanitation, security, housekeeping, IEC and targeted intervention) which may not fall under the ambit of the formal training programs under NHM/ HFWD. Trainings need to be provided to all outsourced agency teams on infection control practices and BMW handling to ensure health and safety of workers and patients.
7. Gap 7: As per the BMW Rules, 2016, every HCF is supposed to get an authorization (along with Consents to operate) under the BMW rules from the concerned SPCB. As per information gathered from PMU, most of the sub-centres (SCs) are sending their BMW to the PHCs under different arrangements at their own level. It needs to be ensured that the transportation of the waste to the PHC level is done in compliance with BMW rules and ensuring occupational health and safety of the workforce involved. There is an existing number of HCFs at the SC level (smallest and lowest level) that are not currently connected to CBMWTFs. The waste is

being transported to the PHC level for disposal. As these SCs are being upgraded to HCWs, they have applied for authorization for BMW disposal, they need to be supported with good operational and technical guidelines (specific to the state) to segregate the waste tie up with BMW operators that will collect the waste.

8. Gap 8: All bedded healthcare facilities need to develop a separate page/web link on their websites for displaying the information pertaining to EHS (BMW generated and monthly records; CBWTF through which waste is disposed of; immunisation of workers; and training conducted on BMWM)
9. Gap 9: While the effort to enhance transparency and accountability through citizen engagement by instituting health assemblies, it is important that these assemblies have representation from all community groups including marginalized groups, SC and ST population groups, and women to ensure their voices are also heard to ensure inclusion.
10. Gap 10: No focused strategy to address equitable health care service provision and utilisation in tribal pockets, and for migrant/ informal workers.
11. Gap 11: Low institutional capacities of JAS and MAS in tribal/unserved areas to manage health facilities, coordinate with VHSNCs, and act as grievance redressal platforms as per JAS Guidelines.

## **B. RECOMMENDATIONS FOR PROGRAM EXCLUSIONS**

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### **LIST OF EXCLUDED ACTIVITIES (BASED ON ENVIRONMENTAL AND SOCIAL RISK)**

161. The following high-risk activities will be excluded from support under the proposed PforR Program expenditure.

- Establishment and operation of CBMWTF
- Construction of new buildings or any construction beyond the existing footprint of buildings
- Activities involving asbestos containing materials (AC roofing sheets, AC pipes, and so on) such as construction, demolition, dismantling
- Any activity that may involve land acquisition or have potential involuntary resettlement will be excluded (screened out) from the Program boundary.
- Use of child or bonded or forced labor or labor involved in any hazardous activities.
- Destruction or damage to any physical and cultural resources

## **C. KEY RECOMMENDATIONS**

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162. The ESSA recommendations focus on strengthening the implementation arrangements, program procedures, risk mitigation practices/protocols and monitoring and reporting systems on E&S aspects, as well as core training programs to build the technical and operational capacity, and includes:

- a. Designation of environmental expert, and social expert as a part of the SRESTHA-G Program to institutionalize best practices (BMWM, infection control, HCW safety, cleanliness, access and inclusion, and accountability and transparency)
- b. Development of guidance for updating terms of references for state-level BMWM advisory committee to look holistically at management of all wastes

- c. States to ensure continuous OHS training to all outsourced agencies engaged in the cleanliness activities for HWCs ( this includes Life and Fire Safety and Emergency Response and Preparedness)
- d. Deploy qualified biomedical experts to support development of strategies and on-site infrastructure for BMW and liquid waste effluent management for the HCFs based on local conditions.
- e. Ensure continuous coordination with urban, rural, water and sanitation departments for site selection of BMW disposal.
- f. Ensure continuous training of all outsourced agencies on PPP, and surveillance officers on occupational health and safety, biomedical waste management and infection control practices.
- g. Include trainings on menstrual waste management as part of adolescent girls programs
- h. Strengthen the supervision and enforcement capacity of responsible agencies (monitoring committees for BMW and infection control) to ensure adequate action on noncompliance.
- i. Disclose details of BMWM oversight committees at the state level and district level on GPCB and HFWD websites
- j. Disclose details regarding BMWM supervisor in HCWs and BPHUs in the health care facilities to fix responsibility and accountability
- k. Development and adoption of strategy addressing health provision challenges in (a) tribal areas and backward areas; and (b) urban poor including migrant and informal workers. The strategy to address:
  - i. Community engagement includes consultations with tribal and migrant workers, awareness creation and behavior change communication - customized to local situation in light of local beliefs, taboos, and traditions, and involving traditional community leaders/ influencers.
  - ii. Capacity building of ASHAs, ANMs and AWWs towards inter-personal communication (IPC) and community engagement methods especially in tribal and backwards districts/ blocks, and the frontline workers in urban areas.
  - iii. Capacity building of JAS and MAS at HWCs for consultation with local community including tribal communities and informal migrant workers in creating awareness and demand for services along with identifying key barriers in accessing public health services.
  - iv. Mechanism towards addressing logistical and human resource gaps and provision.
  - v. Mechanism for incentivizing HWCs and frontline workers towards achievements; and
  - vi. Mechanism for close monitoring of functionality of JAS/ MAS and HWCs in tribal and backward blocks, and in urban areas.
- l. Health Assembly strategy to clearly spell out constitution of assemblies to include representation from marginalized community groups including SC and ST groups, CSOs/ NGOs, and women community members
- m. Existing Grievance Redress Mechanisms (GRM) system to be further strengthened and streamlined for consolidated monitoring and reporting at district and state level

- n. Sensitization and outreach to strengthen the implementation of the POSH Act and Internal Complaints Committee
- o. Periodic training and information, education, and communication (IEC) material disseminated for strengthening functionality of community-level GRM platforms

163. While most of the recommendations to be incorporated in the program operations manual (POM) and some are mainstreamed as part of result framework, a higher-level action is recommended as part of the program action plan (PAP).

#### **D. RECOMMENDATIONS TO BE INCLUDED IN THE PAP**

164. The assessment identified certain areas for improvement of the implementation of the environmental and social systems, which can be addressed through the following recommendations:

**Table 17. Recommended environmental and social actions for PAP**

<b>Action description</b>	<b>Responsibility</b>	<b>Timing</b>	<b>Completion measurement</b>
Designation of environmental expert, and social expert as a part of the SRESTHA-G Program to institutionalize best practices (BMWM, infection control, HCW safety, cleanliness, access and inclusion, and accountability and transparency)	HFWD	After 6 months of effectiveness	Designating qualified staff, scope of work including preparation of environmental and social guidance and monitoring the implementation of environmental and social actions and reporting protocols, and relevant templates
Development and adoption of a short- medium term state level strategy for liquid waste management from HCFs. <sup>17</sup>	HFWD	After 12 months of effectiveness	Strategy prepared and disclosed on HFWD website.
Issue state specific guidelines to SC level HCWs for collection and transport of waste, following authorisation from GPCB for waste to be collected by CBMWTF.	HFWD	After 12 months of effectiveness	Guidelines issued and disclosed on HFWD website.
Development and adoption of strategy addressing equitable health service provision in tribal and backward areas customized to local situation and challenges - including addressing local beliefs	HFWD	Within 12 months of effectiveness	Tribal Health Strategy prepared and adopted addressing (a) equitable health provision; (b) Detailing community engagement processes towards behaviour change and

<sup>17</sup> The strategy will apply to all bedded HCFs >30 beds. The strategy will provide the HFWD and associated departments ( water and sanitation, environment, and rural development) a common framework in which the state can plan to establish the needed infrastructure to treat wastewater from these facilities to the applicable standards before discharge. The strategy will allow the state to prioritise which HCFs need to be targeted first, identify opportunities to prevent or reduce wastewater pollution through such measures as recycle/reuse within their facility. The suggested method for design and treatment standards are part of the National Guidelines for implementation of the Biomedical waste management rules 2016.



Action description	Responsibility	Timing	Completion measurement
and traditions along with institutional capacity and coordination mechanism			addressing local belief and traditions; (c) indicators for monitoring progress
Health Assembly strategy to clearly spell out constitution of assemblies to include representation from marginalized community groups including SC and ST groups, CSOs/ NGOs, and women community members	HFWD	Within 12 months of effectiveness	Health assembly strategy includes representation from marginalized community groups including SC and ST groups, CSOs/ NGOs, and women community members
Existing Grievance Redress Mechanisms (GRM) system to be further strengthened and streamlined for consolidated monitoring and reporting at district and state level	HFWD	Within 12 months of effectiveness	Consolidated report generated on grievances received and resolved at district and state level.

## ANNEXURES

### ANNEX 1: LIST OF DOCUMENTS REVIEWED

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1. Ministry of Environment, Forest & Climate Change (MoEFCC) notified amendment to the EIA Notification 2006 published vide MoEFCC Notification of S.O. 1142 (E) dated April 17.
2. Bank Guidance on 'Program for Results Financing Environmental and Social Systems Assessment', September 18, 2020.
3. ADB, 2020. Program Safeguard Systems Assessment. India: Strengthening Comprehensive Primary Health Care in Urban Areas Program under PM-ASBY.
4. National Health Mission, Government of Uttar Pradesh. Viewed at <http://upnrhm.gov.in/Home/MonitoringAndEvaluation> on 15 April 2021.
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6. Overview of Comprehensive Primary Health Care and HWCs. (Presentation); Induction Training Module for Community Health Officers. NHM. Viewed at <http://nhsrcindia.org/sites/default/files/Induction%20Training%20Module%20for%20CHOs.pdf>.
7. Indian Public Health Standards (IPHS). Guidelines for Primary Health Centers. 2012.
8. Guidelines for Village Health and Sanitation Committees, Sub-centers, PHCs and CHCs. Viewed at [https://nhm.gov.in/images/pdf/guidelines/nrhm/guidelines/guidelines\\_of\\_untied\\_funds\\_nrhm.pdf](https://nhm.gov.in/images/pdf/guidelines/nrhm/guidelines/guidelines_of_untied_funds_nrhm.pdf) on 16 April 2021.
9. Environmental and Social Management Framework. Andhra Pradesh Health System Strengthening Project (P167581). Viewed at <http://documents1.worldbank.org/curated/en/882191549366417695/pdf/SFG5048-V1-REVISED-EA-P167581-PUBLIC-Disclosed-2-26-2019.pdf>
10. Garg S, Basu S, Rustagi R, Borle A. Primary Health Care Facility Preparedness for Outpatient Service Provision During the COVID-19 Pandemic in India: Cross-Sectional Study. *JMIR Public Health Surveill.* 2020;6(2):e19927. Published 2020 Jun 1. doi:10.2196/19927. Viewed at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7265797/> on 14 April 2021.
11. Ayushman Bharat – Operational Guidelines. NHSRC. Viewed at <https://abhwc.nhp.gov.in/download/document/45a4ab64b74ab124cfd853ec9a0127e4.pdf> on 16 April 2021.
12. CPCB. Environmental Training Unit. Viewed at <https://cpcb.nic.in/openpdf.php?id=TGF0ZXN0RmlsZS9fMTYxMDk3MjY3OV9tZWVpYXB0b3RvMTk4NTcucGRm> on 12 April 2021. .
13. Annual Report on Biomedical Waste Management 2019. State Pollution Control Board, Government of Odisha. Viewed at <http://ospboard.org/wp-content/uploads/2020/10/Annual-Report-of-BMW-2019.pdf>.
14. Annual Report on Biomedical Waste Management 2019. State Pollution Control Board, Government of Tamil Nadu. Viewed at [https://tnpcb.gov.in/Waste\\_MGT/AnnualRptBMW2019.pdf](https://tnpcb.gov.in/Waste_MGT/AnnualRptBMW2019.pdf).
15. Implementation Completion and Results Report. Uttar Pradesh Health Systems Strengthening Project (P100304). Viewed at <http://documents1.worldbank.org/curated/en/305891586198590786/pdf/India-Uttar-Pradesh-Health-Systems-Strengthening-Project.pdf> on 12 April 2021. .

16. Annual Report on BWM as per SMWM Rules 2016 for the year 2019. CPCB.
17. Annual Report on Biomedical Waste Management as per Biomedical Waste Management Rules 2016 for the year 2019. CPCB. Viewed at <https://cpcb.nic.in/openpdffile.php?id=UmVwb3J0RmlsZXMvNDYwXzE1MDIxNzAwNzJfbWVkaWFwaG90bzEwMDg0LnBkZg==> on 11 April 2021.
18. Strategy for Promoting Processing of C&D Waste and Utilization of Recycled Products. Draft. 5 November 2018. Niti Ayog, Government of India. Viewed at [https://niti.gov.in/writereaddata/files/CDW\\_Strategy\\_Draft%20Final\\_011118.pdf](https://niti.gov.in/writereaddata/files/CDW_Strategy_Draft%20Final_011118.pdf) on 11 April 2021.
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21. IPHS Guidelines for PHCs. Revised 2012. <http://clinicaestablishments.gov.in/WriteReadData/360.pdf>
22. Biomedical waste management rules, 2016 [https://dhr.gov.in/sites/default/files/Bio-medical\\_Waste\\_Management\\_Rules\\_2016.pdf](https://dhr.gov.in/sites/default/files/Bio-medical_Waste_Management_Rules_2016.pdf)
23. Biomedical waste management guidelines 2016 [https://cpcb.nic.in/uploads/Projects/Bio-Medical-Waste/Guidelines\\_healthcare\\_June\\_2018.pdf](https://cpcb.nic.in/uploads/Projects/Bio-Medical-Waste/Guidelines_healthcare_June_2018.pdf)
24. Training manual on BMWWM [https://www.biomedicalwastemanagementinindia.in/Resurces/5\\_Waste\\_handlers\\_manual\\_FLIP\\_CHART.pdf](https://www.biomedicalwastemanagementinindia.in/Resurces/5_Waste_handlers_manual_FLIP_CHART.pdf)
25. SOP for Covid Waste Disposal <https://mpcb.gov.in/sites/default/files/biomedical-waste/CPCBSOPforCOVIDWastemanagementatHWCTFsFeb29092021.pdf>
26. CPCB Guidelines for Imposition of Environmental Compensation Charges against Healthcare Facilities and Common Biomedical Waste Treatment Facilities <https://mpcb.gov.in/sites/default/files/biomedical-waste/CPCBBMWECCGuidelines29092021.pdf>
27. BMWWM Toolkit [https://mpcb.gov.in/sites/default/files/biomedical-waste/Toolkit\\_BMWM\\_Rules\\_201613032020.pdf](https://mpcb.gov.in/sites/default/files/biomedical-waste/Toolkit_BMWM_Rules_201613032020.pdf)
28. Biomedical waste annual report format <https://www.wbpcb.gov.in/writereaddata/files/BMW-Annual%20Report-2016-website.pdf>
29. National Building Code of India 2016 Part – IV “Fire & Life Safety”
30. Pages No.51-55 of Operational and Technical Guidelines of Implementation of FC-XV Health Grants through Local Governments (<https://nhsrcindia.org/sites/default/files/2021-09/FCXV%20Technical%20and%20Operational%20GLs%20to%20States%20dated%2031082021.pdf>)  
detailed Guidance on Infrastructure planning and design requirements

31. Swachhata Guidelines for Public Health Facilities  
<http://qi.nhsrindia.org/sites/default/files/Swachhta%20Guidelines%20for%20Public%20Health%20Facilities.pdf>
32. Healthy States Progressive India - Report on the Ranks of States and Union Territories (Health Index Round IV 2019-20). Niti Aayog, Ministry of Health and Family Welfare, and World Bank Available at [https://www.niti.gov.in/sites/default/files/2021-12/NITI-WB\\_Health\\_Index\\_Report\\_24-12-21.pdf](https://www.niti.gov.in/sites/default/files/2021-12/NITI-WB_Health_Index_Report_24-12-21.pdf)
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36. Disease Surveillance in India: Data Protection and Privacy Concerns - JURIST - Commentary - Legal News & Commentary. <https://www.jurist.org/commentary/2020/06/nikhil-pratap-disease-surveillance/>
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38. Vanbandhu Kalyan Yojana. Government of Gujarat. <https://vky.gujarat.gov.in/>
39. Community Ownership of Health and Wellness Centre – Guideline for Jan Arogya Samiti. [https://ab-hwc.nhp.gov.in/download/document/Jan\\_Aarogya\\_Samiti\\_Web\\_Compressed.pdf](https://ab-hwc.nhp.gov.in/download/document/Jan_Aarogya_Samiti_Web_Compressed.pdf)
40. Tribal Health in India. National Health System Resource Centre. Government of India. <https://nhsrindia.org/practice-areas/kmd/tribal-health>
41. Ayushman Bharat - Comprehensive Primary Health Care through Health and Wellness Centers. <https://nhsrindia.org/practice-areas/cpc-phc/comprehensive-primary-health-care>
42. Healthy States Progressive India - Report on the Ranks of States and Union Territories (Health Index Round IV 2019-20). Niti Aayog, Ministry of Health and Family Welfare, and World Bank Available at [https://www.niti.gov.in/sites/default/files/2021-12/NITI-WB\\_Health\\_Index\\_Report\\_24-12-21.pdf](https://www.niti.gov.in/sites/default/files/2021-12/NITI-WB_Health_Index_Report_24-12-21.pdf)

**ANNEX 2: DESCRIPTION OF ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM AND CAPACITY AND PERFORMANCE ASSESSMENT**

Institution	Roles and Responsibilities	Capacity Gap Analysis
<b>State Level Institutions</b>		
<b>State Health Society National Health Mission (NHM)</b>	<ul style="list-style-type: none"> <li>• Works to pool all resources available in implementation of the programmes</li> <li>• All National Health Programmes at the State and District level are brought under one umbrella of NHM</li> <li>• Provides funding allocation for support for BMWM and IC activities</li> <li>• According to the directions of the MoHFW, the states have to implement PM-ABHIM through existing structures of the NHM and its administrative and FM structures would be utilized. The Mission Director, NHM of the state along with State Program Management Unit (SPMU) would monitor and track implementation of the interventions under the Program. The SPMU would be supported by the District Program Management Units (DPMUs) at the district level and Block Program Management Units (BPMUs) at the block level for implementation and monitoring of interventions at districts, blocks, and facility levels. It is understood that the PM-ABHIM would be implemented through the existing structures of the NHM in each of the priority states that is, the SPMU, DPMU, and BPMU.</li> <li>• Additional Chief Secretary/Secretary/Principal Secretary/Secretary (Health) in the States/UTs as the chairperson of EC of the State Health Society, will be responsible for monitoring the progress and implementation status of various components of PM Ayushman Bharat Health Infrastructure Mission under the scheme</li> <li>• Similarly, at the district level, the District Health Society, headed by the District Collector, will play a crucial role in not only planning as per the guidelines and also, for effective implementation and</li> </ul>	<ul style="list-style-type: none"> <li>• No significant gaps identified on the social side except a better coordination will help bring synergy between BMWM and IC committees, and better public awareness and feedback on these issues</li> <li>• While adequate funding is provided, need to improve monitoring of BMWM.</li> <li>• NHM health society have experience in managing health centres in urban and rural areas. There are no significant capacity gaps in allocation of funds for NHM. PM- ABHIM HCWs are clear guidelines on HWC facility design which accounts for BMWM, Infection Control, worker safety, cleanliness and good sanitation. Use of energy efficient equipment, and renewable energy resources is also encouraged.</li> </ul>

Institution	Roles and Responsibilities	Capacity Gap Analysis
	<p>robust monitoring of the units of various components under PM Ayushman Bharat Health Infrastructure Mission, under the overall supervision of the District Collector.</p> <ul style="list-style-type: none"> <li>States have the responsibility to do quality check of the new AB-HWCs as per the norms set by the State in accordance with the other construction works undertaken. The State should ensure third party monitoring and quality checks (as pertinent to the GLs under FC-XV Health Grants) to ensure that the works undertaken meet the required quality parameters and are constructed as per the terms and conditions decided by the State.</li> </ul>	
State Public Works Department (PWD)	<ul style="list-style-type: none"> <li>Constructs and maintains buildings of various Government Departments, in line with Bureau of Indian Standards (BIS) and National Building Code of India which covers the detailed guidelines for construction, maintenance and fire safety of the structures.</li> <li>Will construct or rehabilitate and repair healthcare facilities and laboratories including for TB unit</li> </ul>	<ul style="list-style-type: none"> <li>The Department of Public Works will not have designated Environmental Safeguards personnel. The Chief Engineer is responsible within the institution to oversee environmental management related to construction.</li> <li>Need to enhance capacity in managing issues related to contracted labour</li> <li>Need to improve health and safety of workers at construction sites and follow good construction management practices</li> </ul>
State Disaster Management Authority	<ul style="list-style-type: none"> <li>Both Health and Disaster Management</li> <li>along with the state public works department, will play a crucial role in implementing these building safety guidelines on the ground.</li> <li>of hospitals</li> </ul>	<ul style="list-style-type: none"> <li>Institutional coordination mechanisms with MoH&amp;FW (national and state), BIS, and NHSRC need to be strengthened to making safety provisions mandatory in the design, construction and functioning of hospitals</li> <li>Wherever necessary, the National Disaster Management Authority, the Bureau of Indian Standards, technical institutions like IITs and other relevant agencies extend their support to further the agenda of Hospital Safety in our country.</li> </ul>
State Pollution Control Board	<ul style="list-style-type: none"> <li>The 'prescribed authority' for enforcement of the provisions of BMW rules in respect of all the health care facilities is the respective State Pollution Control Board (SPCB)/ Pollution Control Committee (PCC).</li> <li>State pollution Control Board is entrusted with monitoring and ensuring compliance to environmental regulations including Biomedical Waste Management Rules, 2016</li> </ul>	<ul style="list-style-type: none"> <li>SPCBs are generally understaffed for adequate monitoring, and enforcement capacity (violations on waste burning etc.) but have adequate technical capacity and role clarity.</li> <li></li> <li></li> </ul>

Institution	Roles and Responsibilities	Capacity Gap Analysis
	<ul style="list-style-type: none"> <li>● Grant of authorization to Common Biomedical Waste Treatment Facilities.</li> <li>● Action against health care facilities or common bio-medical waste treatment facilities for violation of these rules.</li> <li>● Monitoring CBWTFs and Healthcare Facilities to ensure compliance to BMW Rules, 2016, and issue of notices, orders and penalties etc. for non-conformance as per Environment Protection Act, 1986.</li> <li>● Organize training programmes for staff of health care facilities and common bio-medical treatment facilities and State Pollution Control Boards or Pollution Control Committees Staff on segregation, collection, storage, transportation, treatment and disposal of bio-medical wastes.</li> <li>● Inventorisation of Occupiers and data on bio-medical waste generation, treatment &amp; disposal.</li> <li>● Grant consent to and publish the list of registered or authorised Recyclers. (E -Waste)</li> <li>● Undertake and support third party audits of the common bio-medical waste treatment facilities in their State</li> </ul>	
State Bio Medical Waste Committee	<ul style="list-style-type: none"> <li>● Each state needs to constitute a committee to advise the state government and the SPCBs about implementation of the BMW rules. under the chairmanship of the respective health secretary include representatives from the Departments of Health, Environment, Urban Development, State Pollution Control Board or Pollution Control Committee, urban local bodies or local bodies or Municipal Corporation, representatives from Indian Medical Association, common bio-medical waste treatment facility and non-governmental organisation.</li> <li>● The Advisory meets at least once in six months and review all matters related to implementation of the provisions of these rules in the State.</li> </ul>	<ul style="list-style-type: none"> <li>● Establishment of BMW committees was not fully completed. Coordination and participation among different stakeholders—in particular, state environmental and health agencies, local authorities, health care facility representatives, academia, and NGOs is also needed.</li> <li>● The State level committee constituted should look at all wastes generated as part of HCF operations – e-waste, plastics, hazardous wastes and liquid wastes and submit recommendations based on the site conditions</li> </ul>

Institution	Roles and Responsibilities	Capacity Gap Analysis
<b><i>District and Sub-District Level Institutions</i></b>		
Committee on Biomedical Waste Management and Infection Control (SC-BMW/IC) under the District Health Society	<ul style="list-style-type: none"> <li>• A District Level Monitoring Committee is set up in each district under the chairmanship of District Collector or District Magistrate or Deputy Commissioner or Additional District Magistrate to monitor the compliance of the provisions of these rules in the health care facilities generating bio-medical waste and in the common bio-medical waste treatment and disposal facilities. The committee submits its report once in six months to the State Advisory Committee and State Pollution Control Board or Pollution Control Committee concerned for taking further necessary action.</li> <li>• The District Level Monitoring Committee comprises of District Medical Officer or District Health Officer, representatives from State Pollution Control Board or Pollution Control Committee, Public Health Engineering Department, local bodies or municipal corporation, Indian Medical Association, common bio-medical waste treatment facility and registered nongovernmental organisations working in the field of bio-medical waste management and if necessary and the District Medical Officer shall be the Member Secretary of this Committee.</li> </ul>	<ul style="list-style-type: none"> <li>• The District Level Monitoring Committee constituted should look at all wastes generated as part of HCF operations – e-waste, plastics, hazardous wastes and liquid wastes and submit recommendations based on the site conditions (of the disposal facilities, CTFs, pits etc.) and prevailing issues (flooding, fires, COVID-19 peaks, natural disasters etc.) within the districts in the half- yearly report to the State Advisory Committee.</li> </ul>
Urban and Rural Local Bodies	<ul style="list-style-type: none"> <li>• Provide or allocate suitable land for development of common bio-medical waste treatment facilities in their respective jurisdictions as per the guidelines of CPCB</li> <li>• Collect other solid waste (other than the biomedical waste) from the health care facilities as per the Municipal Solid Waste (Management and handling) Rules, 2000 or as amended time to time.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordination mechanisms with RLBs to identify sites for disposal pits (decentralised management), better monitoring of waste burning and disposal of liquid wastes such as reagents and disinfectants need to be strengthened.</li> <li>• ULBs capacity to manage environment health and safety aspects has been given sufficient emphasis through the pandemic, in the maintenance of hygiene cleanliness, worker safety and immunisation. There are gaps in some hilly states with difficult terrain where solid waste is not collected on daily basis by ULBs.</li> <li>• Efficient monitoring in the SWM dumpsites for BMW needs to be reported (through citizen monitoring committees and ULB officials)</li> </ul>



Institution	Roles and Responsibilities	Capacity Gap Analysis
District and Village Health and Sanitation Committee (under NHM)	<ul style="list-style-type: none"> <li>One of the key elements of the National Rural Health Mission is the Village Health , Sanitation and Nutrition committee (VHSNC). The committee has been formed to take collective actions on issues related to health and its social determinants at the village level. They are particularly envisaged as being central to ‘local level community action’ under NRHM, which would develop to support the process of Decentralised Health Planning. Thus, the committee is envisaged to take leadership in providing a platform for improving health awareness and access of community for health services, address specific local needs and serve as a mechanism for community based planning and monitoring</li> </ul>	<ul style="list-style-type: none"> <li>DHSC and VHSC can also work with RLBs to institute community Monitoring and Supervision of biomedical waste disposal, burial pits, and general waste management from HCWs</li> </ul>
<p>There are a few other ministries important for elements of the health programs, e.g., Water and Sanitation with respect to water supply and sanitation and water borne disease management, Power for supply of electricity to run boilers; Industries with respect to supply and recycling of electrical and electronic equipments; and Bureau of Indian Standards ( BIS) which is the National Standard Body of India for the development of standardization, marking and quality certification of goods ( relevant for certifying energy efficiency and safety of equipments)</p>		

### ANNEX 3: GOI PUBLIC HEALTH AND ENVIRONMENTAL STANDARDS FOR PHC

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(Points relevant to Environment, Health and Safety)

- The PHC should have a building of its own.
- The surroundings should be clean.
- It should be centrally located in an easily accessible area.
- The area chosen should have facilities for electricity, all weather road communication, adequate water supply and telephone.
- PHC should be away from garbage collection, cattle shed, water logging area, etc.
- PHC shall have proper boundary wall and gate.
- It should be well planned with the entire necessary infrastructure. It should be well lit and ventilated with as much use of natural light and ventilation as possible.
- For all new upcoming facilities in seismic 5 zone or other disaster prone areas: Building and the internal structure should be made disaster proof especially earthquake proof, flood proof and equipped with fire protection measures.
- Earthquake proof measures - structural and non-structural should be built in to withstand quake as per geographical/state govt. guidelines. Non-structural features like fastening the shelves, almirahs, equipment, etc. are even more essential than structural changes in the buildings.
- PHC should not be located in low lying area to prevent flooding as far as possible.
- Firefighting equipment – fire extinguishers, sand buckets etc. should be available and maintained to be readily available when needed. Staff should be trained in using fire fighting equipment.
- All PHCs should have Disaster Management Plan in line with the District Disaster management Plan. All health staff should be trained and well conversant with disaster prevention and management aspects. Surprise mock drills should be conducted at regular intervals.
- Waiting area: Should have adequate space; Toilets with adequate water supply separate for males and females should be available; Safe drinking water should be available; Surroundings should be kept clean with no waterlogging and vector breeding places in and around the centre.
- Outpatient Department: Rooms shall have provision for ample natural light and air; Windows shall open directly to the external air or into an open verandah; Adequate measures should be taken for crowd management.
- Wards: There should be facilities for drinking water and separate clean toilets for men and women; There should be utility room for dirty linen and used items; Cooking should not be allowed inside the wards for admitted patients; Cleaning should be carried out at regular intervals.
- Labor room: Provision of hand washing and containment of infection control; Room should be well-lit and ventilated with an attached toilet and drinking water facilities; Separate areas for dirty linen, baby wash, toilet, sterilization; Regular washing and mopping with disinfectants to maintain cleanliness; Fumigation at regular intervals.
- General store: Area should be well-lit and ventilated and rodent/pest free; Inflammable and hazardous material shall be secured and stored separately.
- Waste management: 'Guidelines for HCWs for Waste Management and Infection Control in PHCs' are to be followed.

- Waste disposal pit: As per CPCB guidelines.
- Environment-friendly features: The PHC should, as far as possible, be environment-friendly and energy efficient; Rain water harvesting and solar energy use and use of energy efficient equipment should be encouraged.
- Adequate water supply and water storage facility (over head tank) with pipe water should be made available.
- Statutory and Regulatory Compliance: PHC should fulfill all the statutory and regulatory requirements and comply with all the regulations issued by the local bodies, state and union of India. PHC shall have a copy of these regulations/Acts. The statutory and regulatory compliances include, inter alia:
  - No objection certificate from the competent Fire Authority.
  - Authorization under Bio-medical Waste Management Rules 2016.
  - Hazardous Waste Management Rules 2016.
  - Authorization from Atomic Energy Regulation Board (if x-ray facility is available).
  - Excise permit to store spirit.
  - Insecticides Act 1968.

#### NAQS INFECTION CONTROL STANDARDS FOR HWCS

Area of Concern - F: Infection Control	
<b>Standard F1</b>	<b>The facility has established program for infection prevention and control</b>
ME F1.1	Facility ensures that staff is working as team and monitor the infection control practices
<b>Standard F2</b>	<b>The facility has defined and implemented procedures for ensuring hand hygiene practices</b>
ME F2.1	Hand Hygiene facilities are provided at point of use & ensures adherence to standard practices
<b>Standard F3</b>	<b>The facility ensures standard practices and equipment for Personal protection</b>
ME F3.1	The facility ensures availability of personal protection equipment and ensures adherence to standard practices
<b>Standard F4</b>	<b>The facility has standard procedures for disinfection and sterilization of equipment and instruments</b>
ME F4.1	The facility ensures availability of material and adherence to Standard Practices for decontamination and cleaning of instruments and followed by procedure/patient care areas
ME F4.2	The facility ensures standard practices and materials for disinfection and sterilization of instruments and equipment
<b>Standard F5</b>	<b>The facility has defined and established procedures for segregation, collection, treatment and disposal of Bio-Medical and Hazardous Waste</b>
ME F5.1	The facility ensures segregation and storage of Bio-Medical Waste as per guidelines
ME F5.2	The facility ensures management of sharps as per guidelines
ME F5.3	The facility ensures management of hazardous & general waste
ME F5.4	The facility ensures transportation & disposal of waste as per guidelines

#### GUIDING PRINCIPLES FOR BUILDING NEW HEALTH INFRASTRUCTURE

Per the FC XV to be followed for PM-ABHIM HCWs and BPHUs

The infrastructure for SC-HWCs, PHC-HWCs and CHCs should follow the rules and regulations as laid down in the state by-laws and the associated National Building Code and are friendly for differently abled, patient friendly with appropriate culture and gender sensitive amenities.

There should be availability of drinking water, hand-washing area, separate female and male toilets, parking area, waiting area, laundry facilities and waste disposal as per BMWM Rules, 2018.

- All new infrastructure should be environment friendly with scope for enough natural light, water harvesting, solar energy, etc.
- Availability of an open area for management of any disasters or emergency cases.
- The facilities should be in line with the national and state disaster management plan / National Disaster Management Plan for hospital safety, 2016 issued by NDMA, Gol.
- Regular piped water supply and reliable electricity for service delivery should be made available at the site of new construction. This should be ensured in collaboration with the concerned departments and if required, facilitation should be done at the district level. The water storage along with the required equipment also needs to be provided.
- New electrical appliances should have a minimum 3-star rating from Bureau of Energy Efficiency or equivalent recognized organization to minimize the energy input. When choosing the technology, guidelines and standards issued by the Ministry of New and Renewable Energy must be adhered to (Gazette of India April 16, 2018, No 1456).
- To ensure compliance with safety norms, all new hospital buildings should comply with provisions prescribed for seismic zone IV and V and mitigation measures to be undertaken as per National Building Code if such buildings are situated in these zones.

**3.3. Layout Plan: The flow of services should be in alignment with the IPHS 2012 guidelines or the most recent ones released by Gol and as given in the Appendix 3).**

The essential areas to be planned for all health care facilities:

- i. Waiting area - For patient registered at registration counter, there should be seating arrangement for them while they wait for their consultation. Adequate seating arrangement/ chair should be available.
- ii. Consultation room – Room of Community Health Officer / Medical Officer and Specialists, should have enough space to accommodate desks and chairs, where interaction with patients can be undertaken with confidentiality and dignity. It should be well lit and ventilated.
- iii. Examination room (This can be combined with the Consultation room if there is a space constraint). It should be co-located with consultation room or Can be clubbed with the consultation room with due privacy features for the patient. It should have adequate space for accommodating an examination table (wheeled, wall mounted, single piece), space for free movement around examination table, curtains for privacy and wall mounted cupboard where essential equipment, etc. can be kept.
- iv. Record keeping: Every HWC must plan to ensure safe upkeep of the necessary records preferably utilizing IT systems.
- v. Day care beds: The facility may sometimes require the patient to be under medical supervision for a period of a few hours at Sub-Centre and PHC-HWCs.
- vi. Store: Adequate and spacious stores located away from patient traffic with facility for storing drugs, consumables, records, linen, furniture, equipment and sundry articles. Gol Guidelines for safe disposal of expired drugs and vaccines should be adhered to.
- vii. Support services – Drinking water / Handwashing facilities: Washroom facility, laundry facilities and waste disposal as per BMW Rules, 2018 should be part of planning.

**Table 8: Suggestive area for facility:**

S.No.	Type	Suggestive Area in sq. ft
1.	Primary Health Centre	
	PHCs / PHC level HWCs	<b>8,369.8</b>
2.	SHC – HWC with residential facilities	<b>3,766.0</b>
	SHC - HWC building without Residence	<b>2,098.0</b>
3.	Community Health Centre (30 bedded)	<b>22,596.0</b>

## ANNEX 4: ENVIRONMENTAL AND SOCIAL BASELINE DATA CHECKLIST

1.	Disease Surveillance																								
1.1	Briefly describe how the disease surveillance system operates currently in the state?																								
1.2	Who is responsible for collection of field level data (village/town)?																								
1.3	How is the data compiled at the block, district and state level – manual system, IT enabled system etc.? Real time or with time lag?																								
1.4	Is there joint surveillance involving Animal Husbandry and Wildlife Departments? If yes, please indicate how many joint surveillances were undertaken in last 1-3 years.																								
1.5	Is there a zoonotic risk and/or hotspot mapping done at the state/district level?																								
1.6	Please provide details of allocated budget and expenditure on disease surveillance in the last 1-3 years.																								
1.7	Please list the key gas observed/learned in surveillance due to COVID-19 pandemic?																								
1.8	Which are the cities (names) where surveillance units are planned																								
1.9	What are the infrastructure requirements for setting up the surveillance units?																								
1.10	Does this also require establishing new laboratories? If so, how many?																								
1.11	Does this also require expansion of existing laboratories? If so, how many?																								
1.12	Please provide a list of all committees/working groups etc. established focusing on disease surveillance?																								
1.13	Please provide details of any emergency plans/ protocols the state follows in outbreak of infectious diseases?																								
2.	Laboratories																								
2.1	<p>What is the status of existing laboratories at HCFs, PHC, CHC, District and State level for disease surveillance and testing?</p> <table border="1"> <thead> <tr> <th>HCF Level</th> <th>Public Laboratories</th> <th>Private Laboratories</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>PHC Level</td> <td></td> <td></td> <td></td> </tr> <tr> <td>CHC Level</td> <td></td> <td></td> <td></td> </tr> <tr> <td>District Level</td> <td></td> <td></td> <td></td> </tr> <tr> <td>State Level</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Totals</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	HCF Level	Public Laboratories	Private Laboratories	Total	PHC Level				CHC Level				District Level				State Level				Totals			
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2.2	How many BSL3 and BSL4 laboratories exist in the state?																								
2.3	Is there a practice of laboratory safety and performance audits in the state/district? If so whether these audit reports are publicly available?																								
2.4	<p>Requirement of expanding existing laboratories at HCFs, PHC, CHC, District and State level to meet the requirement for disease surveillance and testing?</p> <table border="1"> <thead> <tr> <th>HCF Level</th> <th>Public Laboratories</th> <th>Private Laboratories</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>PHC Level</td> <td></td> <td>N.A.</td> <td></td> </tr> <tr> <td>CHC Level</td> <td></td> <td>N.A.</td> <td></td> </tr> <tr> <td>District Level</td> <td></td> <td>N.A.</td> <td></td> </tr> <tr> <td>State Level</td> <td></td> <td>N.A.</td> <td></td> </tr> <tr> <td>Totals</td> <td></td> <td>N.A.</td> <td></td> </tr> </tbody> </table>	HCF Level	Public Laboratories	Private Laboratories	Total	PHC Level		N.A.		CHC Level		N.A.		District Level		N.A.		State Level		N.A.		Totals		N.A.	
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2.4.1	Please provide your best estimates for physical expansion of existing laboratories (could include biomedical waste management requirements, liquid waste treatment, new rooms for establishing test-benches etc.)																								
2.4.2	Please provide your best estimates for new equipment for existing laboratories																								
2.5	Has a gap analysis undertaken on the requirement of establishing new laboratories at HCWs, PHC, CHC, District and State level? If so, please provide estimates below.																								

2.6	Please provide the number of accredited laboratories at different levels?
2.7	Please list what are the checklists/ criteria for accreditation of laboratories and does this include environment, health and safety criteria
<b>3.</b>	<b>Land Requirement for Laboratories</b>
3.1	Is there a requirement of additional land beyond existing premises of the health facility for establishing new laboratories at HCWs, PHC, CHC, District and State level (Mention numbers at each level). If so, is there any estimate on the quantum of land required at each level?
3.2	Will there be a requirement of additional land for expansion of existing laboratories?
3.3	In case of additional land requirement, what process is followed for taking additional land for the health facility?
3.4	Do you see a need for displacement or removal of squatters/ vendors/ hawkers etc. in the course of establishing new laboratories or expansion of laboratories at HCWs, PHC, CHC, District and State level (Mention numbers at each level)
3.5	What is the process followed to ensure that any HCF expansion or design does not impact any religious/ cultural property or environmentally sensitive area or natural habitat?
<b>4.</b>	<b>Medical Waste Disposal (including biomedical, E-waste and Hazardous)</b>
4.1	How many Common Bio-medical Waste Treatment Facility (CBWTF) established in the state?
4.2	What is the total volume of biomedical waste generated and treated? Is there a gap in installed capacity and biomedical waste generated, especially after COVID-19 pandemic?
4.3	Are district level and tertiary healthcare facilities treating liquid waste (including laboratory and sewerage) before final disposal? How many healthcare facilities at the state/district levels have functional ETPs/STPs or connected with one?
4.4	Are CPCBs guidelines for COVID-19 waste disposal followed?
4.5	Please describe briefly describe method of disposal of <ul style="list-style-type: none"> <li>a. hazardous waste</li> <li>b. e-waste</li> <li>c. plastic waste</li> <li>d. chemical waste (expired medications, radioactive, cytotoxics, cytostatics)</li> </ul>
4.6	Are there any budgetary gaps in terms of required budget and actual budget made available? Please provide details for last 1-3 years of allocation and expenditure.
4.7	Infection control committees established, and at what level? State/ District/ etc. and are they functional? Please share TORs
<b>5.</b>	<b>Biosafety and Biosecurity</b>
5.1	Please briefly describe the institutional arrangements operating at the state/district level for establishing, reviewing the biosafety and biosecurity requirements at the laboratories and/or other healthcare facilities?
5.2	Please indicate if the healthcare level biosafety committees are effectively working? Do these meet regularly and are minutes of these meetings recorded and maintained?
5.3	Has any biosafety and biosecurity audits conducted so far? If so, can the audit reports be accessed?
5.4	Is there a standard protocol for process for servicing and decommissioning Lab safety equipment?
<b>6.</b>	<b>Healthcare workers</b>
6.1	What measures exist in enforcing that no child labor or forced labor is engaged in any civil/ construction work in the health sector?
6.2	What is the mechanism to ensure that labor laws are being adhered to in any of the civil works/ road construction? Are they being monitored?

6.3	Providing is the means of surveillance and active screening of workers · Preventing illness among workers in local communities
6.4	What is the approved strategy/ guideline for immunization programs for workers
6.5	What is the strategy/ arrangement for monitoring occupational health and safety Facilities
6.6	Is there a record of occupational accidents (especially accidents that could result in lost work time, disability, fatalities), diseases and dangerous occurrences maintained for the HCF?
<b>7.</b>	<b>Community Health &amp; Safety</b>
7.1	What measures are used in avoiding, minimizing, and/or mitigating community, individual, and worker risks while the construction work is in progress?
7.2	Do HCF buildings incorporation siting and safety engineering criteria/ international, national building codes to prevent failures due to natural risks posed by earthquakes, flooding, landslides and fire? (please state which are the guidelines followed)
7.3	Do buildings meet life and safety objectives? And are Life and fire safety systems and equipment installed in HCFs?
7.4	Transportation of high-risk materials (infectious waste, laboratory samples etc.) <ul style="list-style-type: none"> <li>a. Are containers properly labeled with the quantity of the contents, and its associated hazards in addition</li> <li>b. Are workers involved in the transportation of high risk trained regarding emergency procedures</li> </ul>
7.5	Are wastewater outflows from hospitals adequately connected to city sewerage system? are there any gaps?
7.6	What control strategies are adopted for vector borne diseases
7.7	Are there occurrences where BMW service providers have not picked up waste within 48 hours?
<b>8.</b>	<b>Training and Capacity Building</b>
8.1	Is there a training and capacity building plan available for the health sector staff/workers at different levels?
8.2	Please provide an indicative list of trainings provided in the last 1-3 years and number of people trained.
8.3	What are the institutional arrangements for providing training/capacity building?
8.4	Please provide the details regarding allocated and utilized budget for training and capacity building.
<b>9.</b>	<b>Social Issues including Gender</b>
9.1	Is there a gender focus on recruitment of health workers in the state, district or panchayat level? What percent of health workers is women?
9.2	What measures exist in addressing any gender-based violence issues including among women laborers during construction?
9.3	How does the state ensures access to healthcare by vulnerable, SC and ST populations within the state?
<b>10.</b>	<b>Grievance Redress System</b>
10.1	Does the department have a functional grievance redress mechanism (GRM) for the patients, community, staffs, and other stakeholders? If exists - please describe in detail including provide links (if any) to any online GRM system(s).
<b>11.</b>	<b>Stakeholder Consultations</b>
11.1	Is there a regular practice of engaging with different stakeholders? These may include, but not limited to patients, health insurance agents, equipment manufacturers, healthcare workers and staff etc.



11.2	Please describe the process of collecting feedback from healthcare facility users. Who reviews this feedback and how is it acted up on?
<b>12.</b>	<b>Other Issues</b>
12.1	Are there any IEC/ SBCC/ communication strategy for the health department in the state? How are they linked to NHM activities?
12.2	Are there any community level actions by the state for awareness generation about diseases surveillance and reporting?

## **ANNEX 5: LIST OF APPLICABLE REGULATIONS AND GUIDELINES TO THE PROGRAM**

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### **Waste Management**

1. Bio Medical Waste Management Rules, 2016,
2. Guidelines for Handling, Treatment and Disposal of Waste Generated during Treatment/Diagnosis/ Quarantine of COVID-19 Patients
3. Guidelines for Bar Code System for Effective Management of Bio-Medical Waste
4. Guidelines for Common Bio-medical Waste Treatment and Disposal Facilities
5. Guidelines for Environmentally Sound Management of Mercury Waste Generated from Health Care Facilities.
6. Plastic Waste Management Rules, 2016
7. Water (Prevention and Control of Pollution) Act, 1974
8. e-Waste (Management and Handling) Rules, 2016
9. NQAS standards
10. Construction and Demolition Waste Management Rules, 2016
11. Solid Waste Management Rules, 2016
12. The Hazardous and Other Waste Management Rules, 2016
13. Management of Solid Health Care Waste at Primary Health Center: A Decision-Making Guide: WHO
14. World Health Organization (WHO) in “PQS Performance Specifications: Safety Box for disposal of waste sharps” Document number: WHO/PQS/E10/SB01.

### **Worker Safety**

1. The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996
2. National Disaster Management guidelines, 2016
3. IMEP section 4.12 Construction of Management Guidelines
4. Noise Pollution (Regulation and Control) Rules, 2000
5. National Building Code of India 2016 Part – IV “Fire & Life Safety”
6. Workmen’s Compensation Act, 1923 & Rules 1924
7. The Occupational Safety, Health and Working Conditions Code, 2020
8. The Epidemic Diseases Act 1897
9. The Epidemic Diseases (Amendment) Ordinance, 2020
10. Insecticides Act 1968

### **Infection Control**

1. MoH&FW Swachhata Guidelines
2. IMEP Policy Framework: MoHFW India
3. NQAS standards for infection Control

Table 18. Implementation experience of Program states

State	Project	Remarks on E&S management
Andhra Pradesh	World Bank supported Andhra Pradesh Health System Strengthening Project (P167581, 2019-2024). Implementing agency: Department of Health, Medical and Family Welfare, Government of Andhra Pradesh.	Current (January 2021) rating for Environment & Social Risk: Moderate.
Tamil Nadu	World Bank supported Tamil Nadu Health System Reform Program (P166373, 2019-2024). Implementing agency: Department of Health and Family Welfare (DoHFW) Government of Tamil Nadu.	Current (January 2021) rating for Environment & Social Risk: Moderate. The SPCB conducted and publicly disclosed the Annual Performance Audit of CBWTFs. The DoHFW has provided trainings to health workers on COVID-19 waste management, infection control and occupational safety. However, training on biomedical waste management, especially related to liquid wastes, needs strengthening.
Uttar Pradesh	World Bank supported Uttar Pradesh Health System Strengthening Project (P100304, 2011-2019). Implementing agency: Department of Medical Health and Family Welfare, Government of Uttar Pradesh.	An Environment and Social Action Plan was implemented – albeit with some delay due to slow decision making owing to leadership changes. The project made significant progress in improving the biomedical waste management. A performance-based contract with innovative use of information technology for monitoring of bio-medical waste collection and treatment by CBWTF was implemented covering 129 District Hospitals and 140 Community Health Centers.

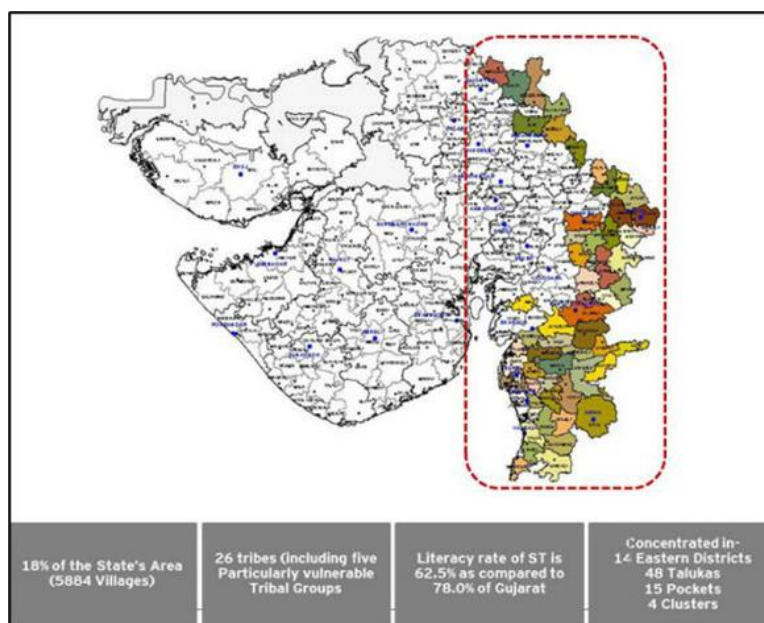
STATE OVERVIEW

**Gujarat, with a population of 60.4 million, is the tenth most populous state in India.** It is among the most urbanized states with 43 percent of the population residing in urban areas.<sup>[1]</sup> According to the 2011 Census of India, Scheduled tribes (ST) represent 14.8 percent of Gujarat’s population, and Scheduled Castes (SC) constitute 6.7 percent. Gujarat’s population is relatively younger compared to the national average, and a larger share of the population is of working age but the proportion of the elderly in the state is projected to double by 2036 and exceed the proportion at the national level. The state’s dependency ratio is 59 percent compared to the national average of 65 percent. Between 2000 and 2010, the population grew by 19.8 percent, but the total fertility rate has declined from 2.7 in 1998-99 to 1.9 in 2019-21.

**Gujarat is among the medium-performing states in India with respect to human development, attaining eighth rank on the Human Development Index (HDI) among larger states in India (2019).** While Gujarat is one of the richer states in the country, about 17 percent of the state population continues to live below the poverty line. Of the three core dimensions of well-being in HDI, viz., education, health, and income, Gujarat’s performance in case of Health and Education Index is particularly lower than the comparator states like Kerala, Tamil Nadu, Maharashtra and Punjab. As per Multi-dimensional Poverty Index (MPI), which encompasses a broader set of indicators spanning over health, education and standard of living, Gujarat ranks 11<sup>th</sup> among larger Indian states. There is, however, significant variation in development across districts. The State is comprised of 33 districts and 8 corporations. Based on the state’s MPI, the five worst-performing districts are: Dang (0.278), Dohad (0.258), Panch Mahals (0.190), Narmada (0.161), and Banas Kantha (0.144).<sup>[2]</sup> In addition to Dohad and Narmada, Morbi district has been included in the National Institution for Transforming India (NITI) Aayog’s list of 124 ‘aspirational districts’ in India, requiring substantial improvements.<sup>[3]</sup>

The state is home to a population with diverse socio-cultural backgrounds. Scheduled Caste and Scheduled Tribes share in the state population is 6.7 percent and 14.8 percent respectively (account for 8.55 percent of the total ST population of the country). About 55 Talukas have ST population spread over 14 districts with 5 districts having more than 70 percent population being ST. Most of the tribal population in Gujarat is concentrated in the eastern districts.

About 12 out of 33 districts have ST population more than the state average and among them 5 districts have more than 70 percent population being ST. As per census 2011, the literacy rate for Scheduled Castes (SC) and Scheduled Tribes (ST) is reported to be 79.2 percent and 62.5 percent respectively. Gujarat accounts for 8.1% of the Scheduled Tribe population of the country. Most of the tribal population in Gujarat are concentrated in the eastern districts. The Tribal Sub-Plan (TSP) area constitutes about 18 percent of the state’s geographical area. There are 11 major tribes in Gujarat



of them the largest are Bhil tribe about constituting 48 percent of the state’s tribal population. There are 5 Particularly Vulnerable Tribal Groups (PVTGs) in Gujarat and account for about 1.6 percent of the tribal population in the state.

## HEALTH STATUS

**Maternal, infant and under-5 mortality in Gujarat state have been steadily declining and are all below the Indian average.** However, they are high compared to some comparator states, notably Kerala, Tamil Nadu and even Maharashtra. For under-5 mortality, for example, Gujarat state registered 38 deaths per 1,000 live births, compared to 42 for India as a whole, 5.2 for Kerala, and 22 for Tamil Nadu. The table also shows that Gujarat state does, however, perform at a similar level or better than the other comparator states, Punjab and Assam – especially for maternal mortality.

**The Sex Ratio at birth has been improving in the state, but remains low compared to the national average, and improvements have been slow compared to national trends.** (See Table 1.) In addition, the Sex Ratio at birth in the state is worse than in most comparator states. This indicator has improved from 950 to 965 between 2015/16 and 2019/2020 in Gujarat state, but the latter is significantly lower than for India as a whole (1020).

**Table 1: Key Mortality and Behavioral Indicators in Gujarat State and Comparator States (NFHS-5)**

Indicator	India	Gujarat	Kerala	Tamil Nadu	Maharashtra	Punjab	Assam
IMR	35	31	4.4	19	23	28	32
U5MR	42	38	5.2	22	28	33	39
MMR (SRS 2019)	103	70	30	58	38	114	205
Sex Ratio at Birth	1020	965	1121	1088	966	938	1012
Early Marriage	23.3	21.8	6.3	12.8	21.9	8.7	31.8
Early Motherhood	6.8	5.2	2.4	6.3	7.6	3.1	11.7

**Gujarat state as a whole performs well for indicators related to antenatal care, deliveries, and postnatal care, compared to the Indian average and several comparator states.** As Table 3 shows, the state has been showing strong improvements over time, reaching 94% and 90% respectively for institutional births and postnatal care respectively – compared to 89% and 62% for India as a whole. Antenatal care coverage (at least 4 visits) in the state is somewhat lower at 77%, compared to 58% for India as a whole. The percentage of pregnant women having anti-tetanus vaccinations is quite high at 89%, though slightly lower than in India as a whole (92%). These coverage figures overall compare well to all comparator states except Tamil Nadu and Kerala states.

**Table 3: Key MCH Indicators in Gujarat State and Comparator States (NFHS-5)**

Indicator	India	Gujarat	Kerala	TN	Maharashtra	Punjab	Assam
IFA consumption (>=180 days)	26	43	67	63	31	41	19
IFA consumption (>=100 days)	44	60	80	83	48	55	48
ANC visits (4 or more)	58	77	79	90	70	59	51
Institutional Birth (%)	89	94	100	100	95	94	84
PNC (within 2 days)	62	90	93	93	85	86	65
Full Immunization	76	76	78	89	74	76	66

**Overall, the quality of the ANC care provided in Gujarat is high.** Almost all women who received antenatal care for their last birth received each of the services needed to monitor their pregnancy: having their weight taken (99%), their blood pressure measured (99%), having a blood sample taken (99%) having a urine sample taken (98%), and having their abdomen examined (98%). An ultrasound test was performed during 88 percent of pregnancies. Women with at least 10 or more years of schooling were much more likely to have an ultrasound test (93%) than women with no schooling (80%).

**Child malnutrition indicators – stunting, wasting and malnutrition – are all high in Gujarat state, compared to the country as a whole and compared to all comparator states except Maharashtra state.** The state's child malnutrition rates are, indeed, higher than in many low-income countries. As Table 4 shows, 39% of young children in the state suffer from stunting and 25% suffer from wasting – compared to 36% and 19% respectively for the country as a whole.

**Table 4: Nutrition and Anemia Indicators in Gujarat State and Comparator States (NFHS-5)**

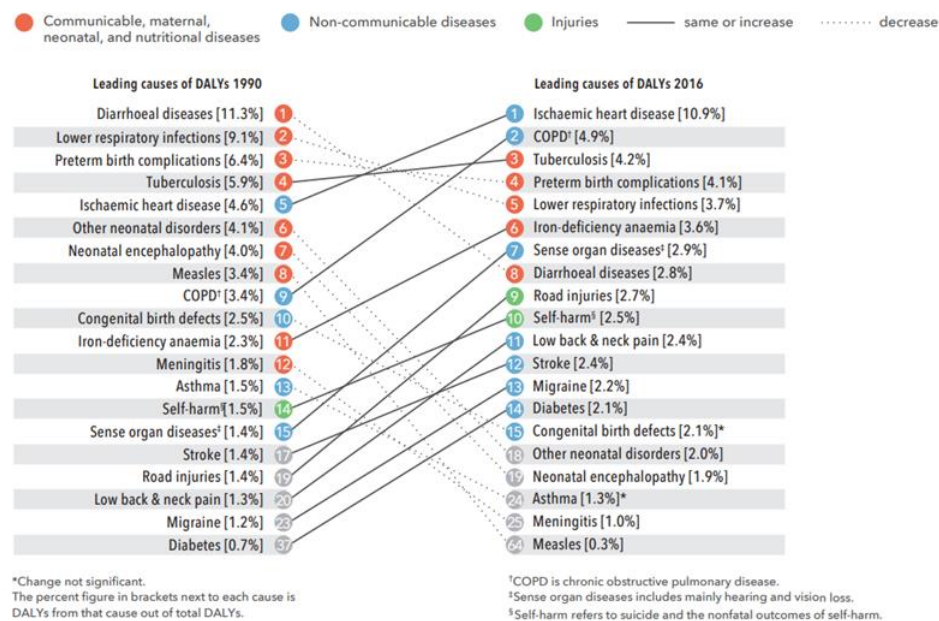
Nutritional status	India	Gujarat	Kerala	Tamil Nadu	Maharashtra	Punjab	Assam
Underweight Children (<5 years)	32.1	39.7	19.7	22.0	36.1	16.9	32.8
Stunted Children (<5 years)	35.5	39.0	23.4	25.0	35.2	24.5	35.3
Wasted Children (<5 years)	19.3	25.1	15.8	14.6	25.6	10.6	21.7
Severely wasted Children (<5 years)	7.7	10.6	5.8	5.5	10.9	3.7	9.1
Anemic Children (<5 years)	67.1	79.7	39.4	57.4	68.9	71.1	68.4
Anemic Adolescent women (15-19 yrs)	59.1	69.0	32.5	52.9	57.2	60.3	67.0
Anemic Adolescent men	31.1	36.0	27.4	24.6	27.9	32.7	39.6
Anemic Pregnant women	52.2	62.6	31.4	48.3	45.7	51.7	54.2

**Anemia is also a major problem in Gujarat state, especially among women and children.** The prevalence of anemia is 80% for young children, 69% for adolescent girls and 62% for pregnant women – as compared to 67%, 59% and 52% respectively in India as a whole.

**Gujarat, like several other states, is undergoing an epidemiological transition, and faces a double burden of communicable and non-communicable diseases (NCDs).** The burden of NCDs puts enormous pressure on the health system and society and risks congesting the PHC and referral level facilities while causing high and ongoing costs to NCD cases. Three of the top five causes of poor health were maternal and neonatal disorders and communicable diseases in 2001 in the state, which was replaced by NCDs in 2019.

**Proportion of total disease burden from:**  
 CMNNDs: 31.6% | NCDs: 56.7% | Injuries: 11.7%

**How have the leading causes of death and disability combined changed from 1990 to 2016?**  
 Change in top 15 causes of DALYs, both sexes, ranked by number of DALYs, 1990–2016



## HEALTH SERVICE DELIVERY

**As in every state in India, health and nutrition related services are being delivered by two different departments viz. Health and Family Welfare Department (HFWD) and Women and Child Development (WCD) Department.** The HFWD is responsible for core health service delivery through public health facilities and include community interventions. The curative, facility-based services of the HFWD, focuses on RMNCAH, nutrition, communicable diseases and non-communicable diseases; and community-based interventions are around preventive aspects. The WCD department, through its frontline workforce (Anganwadi Workers – AWWs) and an outreach center (Anganwadi Centers – AWCs), focuses on addressing behavioral aspects through provision of information services, counseling, awareness generation etc. and also include health related referral services for women, children and adolescents. The WCD department also delivers supplementary nutrition and early childhood education. Thus, the WCD department remains an important stakeholder in delivering health and nutrition services in the state. Under this PforR-supported Program, the HFWD would be responsible for delivering the results; however, institutional structures would include the WCD department as a key stakeholder.

The HFWD is delivering facility based healthcare services through a set of healthcare facilities placed in a hierarchical manner; these include: (i) a sub-health center (SHC) for around 3,000-5,000



population – preventive and outreach functions; (ii) primary health center for around 25,000-30,000 population – primary care facility; (iii) community health centers for around 100,000-120,000 population – secondary care facility; (iv) sub-district hospitals (no fixed population norm) – secondary care facility; (v) district hospitals at every district – secondary/tertiary care facility; and (vi) medical colleges – tertiary and higher level healthcare facilities with teaching functions. The HFWD also has a frontline worker cadre known as Accredited Social Health Activist (ASHA) at every 100 population and they work in close coordination with SHC and AWC at the community level.

**The state’s hierarchy of public health facilities is shown in Table 5 below.** In addition, the state has 750+ private hospitals empaneled under Pradhan Mantri Jan Aarogya Yojana (PMJAY) in Gujarat and Govt is providing grant in Aid 115 private/NGO run hospitals in state. The table does not include teaching colleges, the District Public Health Laboratories and program-specific units such as the First Referral Units (130), Child Malnutrition Treatment Centres (223), New-born Stabilization Units (151), District Early Intervention Centres, Nutrition Rehabilitation Centres (29), Special New-born care Units (49), and facilities under the Employees' State Insurance Corporation (State) (11 hospitals and 103 dispensaries).

**Table 5. Hierarchy of Public Health Facilities in Gujarat State**

Level	Rural	Urban	Human Resources
Tertiary Care	Super speciality Hospitals (5)		Superspecialist, Specialists
	Medical Colleges (14) + (AIIMS, Rajkot)		Superspecialist, Specialists, MO-MBBS, Paramedical Staff
Secondary Care	District Hospitals (20)		Specialists, MO-MBBS, Paramedical Staff
	Sub Districts Hospitals (53)		Specialists, MO-MBBS, Paramedical Staff
	CHCs (345)	Urban CHCs (40)	CHCs (345)
Primary Care	PHCs/HWCs (1477)	Urban PHCs/HWCs (321)	MO-MBBS, MO-AYUSH, Staff Nurse, Pharmacists, Lab Tech, FHS, MPHS
	SCs/HWCs (9163)	Pandit Dindayal Clinics (246)	CHOs, ANM, MPHWS
Community Level	ASHAs (38770) (linked to HWCs)	Urban ASHAs (4472)	

**Notes:** ASHA- Accredited Social Health Activist, HWC: Health & Wellness Centre, SC: Sub centre, PHC: Primary Health Centre, CHC: Community Health Centre, MO: Medical officer, CHO: Community Health Officer, ANM: Auxiliary Nurse Midwifery, FHS: Female Health Supervisor, MPHWS: Multipurpose Health Worker, MPHS: Multipurpose Health Supervisor.

**The state has a range of different health programs – national (mostly) as well as state ones.** These are shown in Table 6 below:



**Table 6: Key Government Programs**

Name of Program	Key activities under Program
<b>Ayushman Bharat (AB) – Health and Wellness Centers (HWCs)</b>	HWCs throughout state, population empanelment and population-based screening, expanded package of services including for NCDs, entry by ASHAs of key household data via mobiles (TeCHO and CPHC-NCD), telemedicine linkages; School Health and Wellness Program
<b>Niramay Gujarat</b>	Various activities at different levels to combat Non-Communicable Diseases (NCDs)
<b>PM-JAY MA Yojana</b>	Insurance scheme for poorer families’ hospitalization services
<b>Maternal Health</b>	<b>Pradhan Mantri Surakshit Matritva Abhiyaan</b> (antenatal services), <b>Janani Shishu Suraksha Karyakram</b> (diagnostics and treatment), <b>Obstetric ICUs</b> (emergency obstetric care), <b>Janani Suraksha Yojana</b> (financial aid for poorer mothers), <b>Chiranjeevi Yojana</b> (involving private gynaecologists), <b>blood storage units</b>
<b>Child Health and Nutrition</b>	<b>Rashtriya Baal Swasthya Karyakram</b> (screening children for birth Defects, Deficiencies, Diseases, Development delays), <b>Kuposhan Mukh Gujarat</b> (screening and treatment for malnutrition), <b>Special Newborn Care Units</b> for sick infants, <b>Bal Sakha 3 Yojana</b> (involving private paediatricians), <b>Intensified Diarrhoea Control Fortnight</b> , <b>Social Awareness and Actions to Neutralize Pneumonia Successfully</b> , <b>Khilkhilat</b> (special ambulances for mothers and infants).
<b>Community-Based Newborn + Young Child Care</b>	Home-based care for newborns & young children (including on nutrition, care for preterm/low-birthweight babies, building mothers’ skills), through visits by ASHAs.
<b>Community-Based Newborn + Young Child Care</b>	Home-based care for newborns & young children (including on nutrition, care for preterm/low-birthweight babies, building mothers’ skills), through visits by ASHAs.
<b>Adolescent Health and Nutrition</b>	Rastriya Kishor Swasthya Karyakram (RKSK) Adolescent friendly clinics, adolescent interventions on health and nutrition at community, facility and school level; Anemia Mukh Bharat (AMB)
<b>Mental Health</b>	Various mental health activities, especially at community level
<b>Telemedicine – e-Sanjeevani</b>	Telemedicine with physicians and specialists
<b>Mukhyamantri Nidaan Yojana</b>	Essential diagnostic services and medical testing
<b>Quality Assurance Schemes at</b>	National Quality Assurance Standards accreditation, Kayakalp Swachh Bharat (certification for hygiene and infection control practices), LaQshya (quality of care during delivery and post-partum), MusQan (ensuring child-friendly

<b>Health Facility Level</b>	services), state-level certification for SUMAN (free care for maternal and newborn services).
<b>Mera-Aspataal</b>	Platform for capturing voice of patients on quality of services
<b>PPP models</b>	PM-JAY, diagnostic services, dialysis services, Information/Education/Communication (malaria), medical colleges, ambulance services, others

<sup>[1]</sup> Dohad is the least urbanized district (only 9 percent of the population resides in urban settings), while Ahmedabad has the highest proportion of urban population (84 percent of the population lives in urban areas).

<sup>[2]</sup> [https://www.niti.gov.in/sites/default/files/2021-11/National\\_MPI\\_India-11242021.pdf](https://www.niti.gov.in/sites/default/files/2021-11/National_MPI_India-11242021.pdf)

<sup>[3]</sup> The aspirational districts were identified based on performance across 49 key indicators on health and nutrition, education, agriculture and water resources, financial inclusion and skill development, and basic infrastructure. Two districts were selected from each state in India. 115 districts were identified in Phase I while 9 additional districts have been identified in phase II.

## ANNEX 8: ASSESSMENT OF BIO-MEDICAL WASTE MANAGEMENT IN GUJARAT

### COVERAGE AND MANPOWER RELATED TO HEALTHCARE FACILITIES IN THE STATE.

Level	Rural	Urban	Types of Human Resources
Tertiary Care	Super speciality Hospitals (5)		Superspecialist, Specialists
	Medical Colleges (14) + (AIIMS, Rajkot)		Superspecialist, Specialists, MO-MBBS, Paramedical Staff
Secondary Care	District Hospitals (20)		Specialists, MO-MBBS, Paramedical Staff
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	SCs/HWCs (9163)	Pandit Dindayal Clinics (246)	CHOs, ANM, MPH
Community Level	ASHAs (38770) (linked to HWCs)	Urban ASHAs (4472)	

### QUANTUM OF BMW GENERATED

The total Quantum of Bio Medical Waste per day generated in the state is about 49.5 tons/ day with 80% of incinerable waste (about 39.8 tons) and with 20% Recyclable waste (9.7 tons ). Entire BMW is disposed of through CBMWTFs only, Gujarat does not use deep burial puts There is presently no gap in the installed capacity (capacity utilised is 35% and authorised capacity is 103.9 tons/ day) . No projections are available for BMW; however, some geographical regions have been identified where new CBMWTFs are proposed to be implemented all CBMWTFs are Linked to the TSDF Sites where the Incinerator ash from the common facilities is disposed in compliance with the BMWM rules.

The State has 20 CBMWTFs currently working in the State. There is sufficient capacity to cater to current and short to medium term needs. However, some regions of the State, specially Amreli, Dwarka and Morvi are not adequately covered by the CBMWTFs. These regions need to be reinforced with new Common Facilities to have adequate and uniform coverage for BMW treatment and disposal across the State in the long run. All CBMWTFs are duly certified and monitored by Gujarat Pollution Control Board.

The location of the present CBMWTFs in Gujarat are highlighted in the map attached at the next page. Some of the districts in the Northern Gujarat (e.g., Banaskantha, Sabarkantha, Patan) and other districts such as Amreli, Gir Somnath Chota Udaipur, Dwarka etc. do not have a CBMWTF presently.

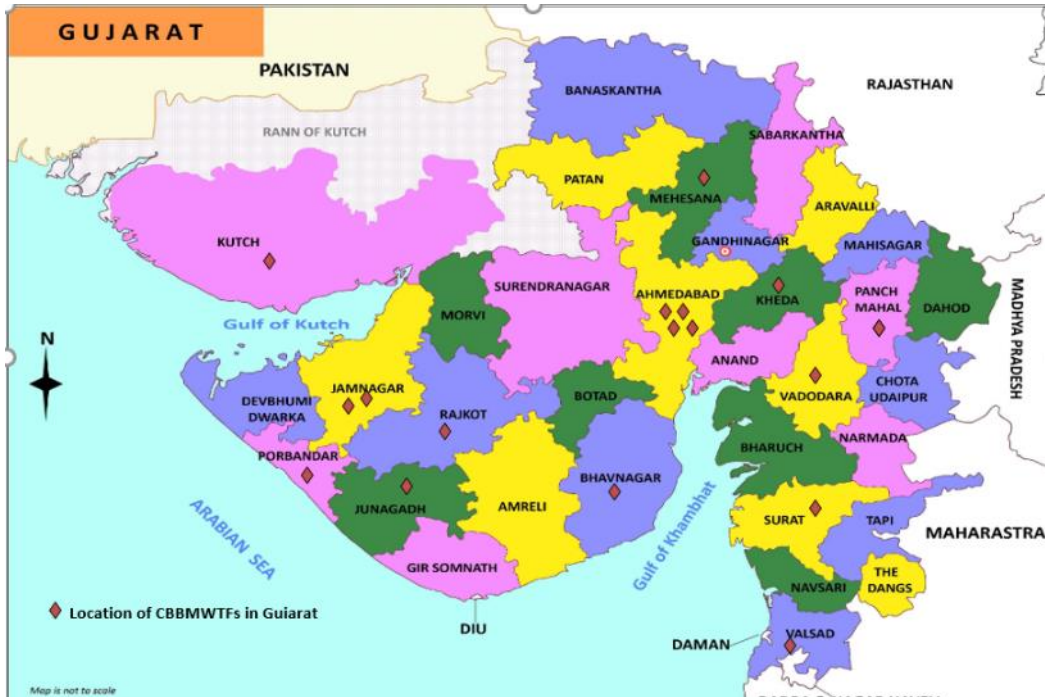


Figure 5 Location of CBMWTF in the State

### BMW MANAGEMENT SYSTEM

Biomedical Waste collected from source generation point (HCFs) using coloured poly bags and gathered at Storage Point available at hospitals. From the storage point it is transported through designated vehicles to CBWTFs located nearby. The incoming waste then is treated and sent for disposal to landfill and while recyclables materials are sent to recyclers. All BMW is treated & disposed through the CBMWTFs across the State.

Name of the CBMWTF	Medical College Hospital		District Hospital		Sub District Hospital	
	2020-21	April-21 to Sep-21	2020-21	April-21 to Sep-21	2020-21	April-21 to Sep-21
	Quantity of BMW Collected CBMWTFs in kgs					
Distromed Bio Clean Pvt. Ltd, Rajkot	145020	77657	57364	31843	66504	36428
Distromed Kutchh Services Pvt Ltd. Bhuj	NA	NA	NA	NA	12620	6411
Girnar Bio Medical Waste Services- Junagadh	39045	20258	2989	1266	NA	NA
Quantum Environment Engineers - Vadodara	33916	26055	14223	6902	652	224
Medicare Environmental Management Pvt Ltd,	121592	63918	4752	2654	NA	NA
Porbandar Manav Seva Charitable Trust	NA	NA	31206	19059	867	649
Ecoli waste Management Pvt Ltd-UNIT- I	NA	NA	7057	4507	3260	1561
Ecoli waste Management Pvt Ltd-UNIT-II	21986	12210	NA	NA	20753	8954
Dev Bio Medical Waste Management Services- Jamnagar	175483	75926	NA	NA	NA	NA

BMWMC-IMA - Bhavnagar	NA	NA	15303 1	91483	3944	1968
Pollucare Biomedical Management Pvt.Ltd.	11885	9779	30070 8	175707	18613	12444
Samvedna BMW Incinerator- Unit-I Halol	86889	33172	30677	18316	10164	4169
Samvedna BMW Incinerator- Unit-II Nadiyad	NA	NA	16542	10410	10600	4483
Care BMW Incinerator - Ahmedabad	NA	NA	NA	NA	NA	NA
Care BMW Incinerator - Mehsana	144271	96913	38924	18020	15628	10569
En-Cler Biomedical Waste Pvt.Ltd.- Surat	NA	NA	21964 6	74434	NA	NA
En-Cler Biomedical Waste Pvt.Ltd.- Vapi	NA	NA	82555	34025	35018	16915

All the healthcare facilities have defined and established procedures for segregation, collection and treatment and disposal of Bio Medical and hazardous waste. The healthcare facilities ensure transportation and disposal of waste as per the guidelines. They have arrangement for disposal of infectious waste. There is a designated Demarcated area for secure storage of BMW before disposal and a Logbook/Record of waste generated is maintained in all the healthcare facilities.

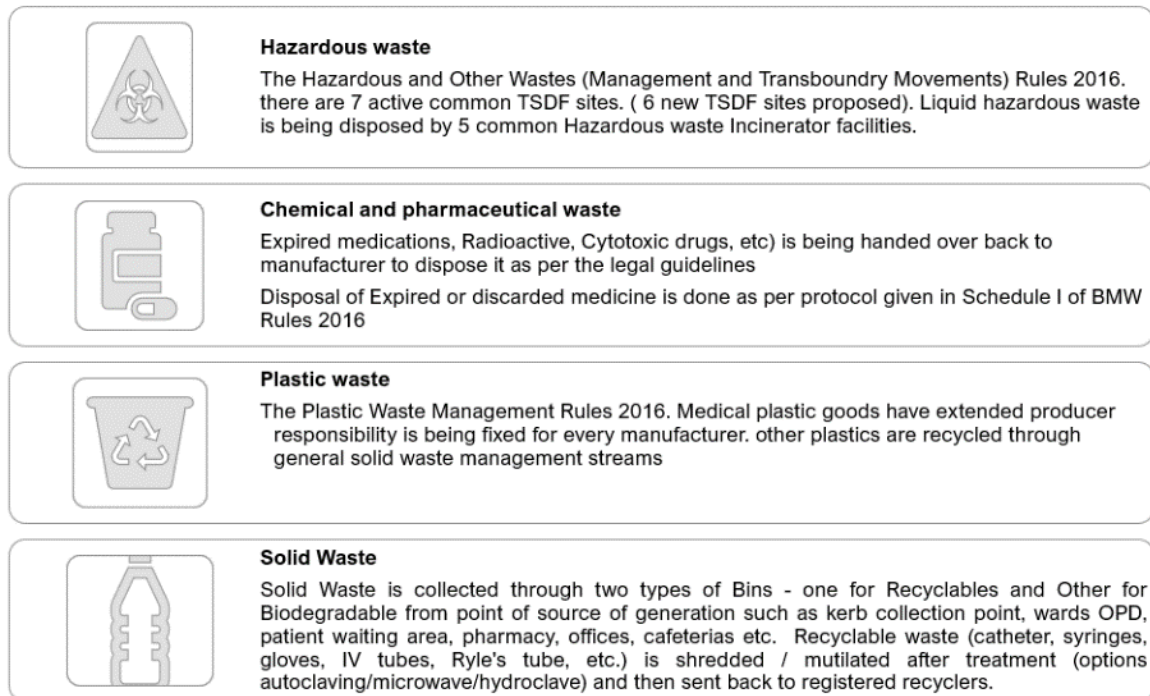
There is a display of Bio-Hazard sign at the point of storage and generation in all the HCF. There is good awareness among the staff on BMW, and the work Instructions for Segregation of different types of BMW are properly displayed. The HCFs manage the sharps waste in compliance with the rules, the functional needle cutters and PP boxes are available at all HCFs. Disinfection of Sharps before their disposal is carried out and the action to be undertaken in condition of needle stick injuries, if any is well understood.

A copy of the BMW Rules 2016 and its amendments is available at all the HCFs. Actions are underway for procurement of Bar-Coded bags and containers in order to have better compliance. The BMW is properly segregated in color coded bins and bags & transported from clinical areas to storage areas in dedicated covered trolleys/bins. The Location and Operation of the BMW Storage facility at the HCF Level is in compliance with the BMW rules, PPEs Have been provided to all BMW handlers. BMW collection service providers are connected down to the PHC Level for collection; However, SC level HWCs do not have independent arrangements and bring their waste to the PHC level for collection. The waste generated is being transported to parent PHC which holds the BMW authorization with CBMWTF. This is a major gap in the overall BMW System in the state. The risks associated with this set-up include improper handling of BMW while it is being transported from a HWC to the nearest PHC, irregular frequency, non-compliance etc, and needs to be rectified at the planning stage of the SRESTHA-G project. The waste generated at the HWC is being transported to PHC by HWC staff themselves as and when they are required to visit the parent PHC.

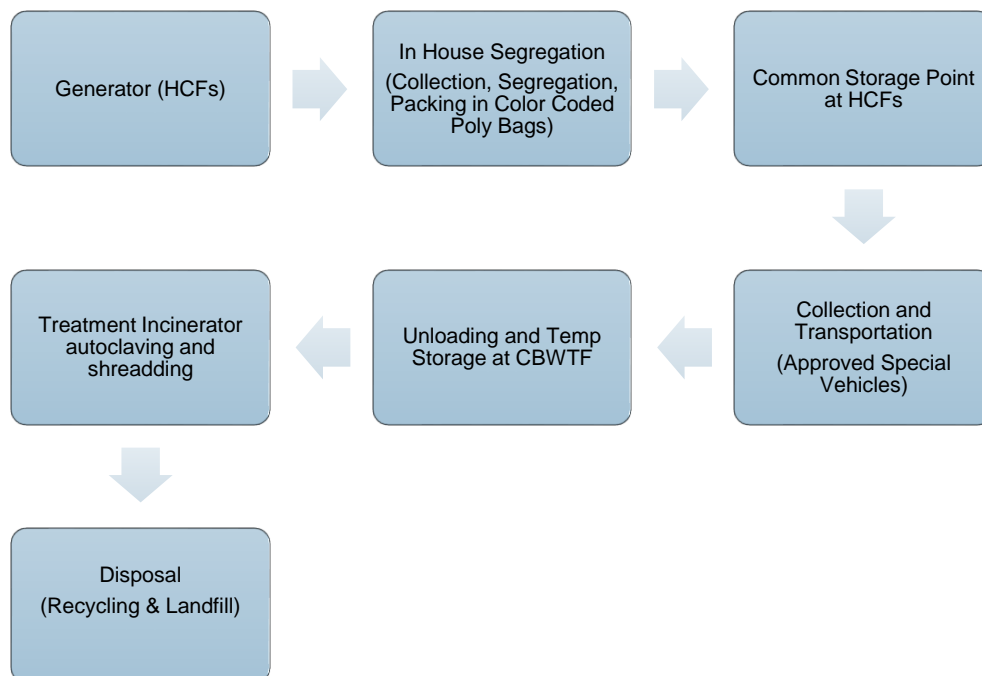
A register is maintained at the HWC for recording BMW transportation both for the normal operations as well as for the special outreach sessions. The Liquid waste generated at the Laboratory level in the smaller facilities (e.g. PHCs, CHCs) is pre-treated with Hypo solutions and stored in the Soak Pits, which are disposed off periodically. In the larger facilities such as the District Hospitals, the liquid Waste from Path lab, Central laboratory etc. after disinfections is released into the Sewer systems. Pre-treatment of microbes and pathology waste including blood bags is carried out through hypochlorite solution and autoclaving respectively before its disposal into the sewerage system.

The State Government has plans to take up implementation of the STPs/ETPs for this purpose. The State Quality Assurance Committee and its district level institutions monitor the BMW at the HCF level, under the guidance of the GPCB. The other wastes are managed as per the following procedures:

**Figure 6 Collection and disposal of other wastes**



Bio-Medical waste Management flow chart for the State could be broadly presented as follows.



## COVID-19

The CPCB guidelines for Covid -19 Waste disposal are being followed across the State. The facility is managing infectious waste like COVID-19 as per the procedures laid down by CPCB like double layer bags, labelling of "COVID-19", disinfection with 1% sodium hypo-chlorite solution etc. are done.

GPCB had advised Health Department, Regional offices, IMA and CBMWTFs on in March 2020 along with First Guidelines for Management of COVID Waste. Covid Waste is being monitored through the Regional Offices, and GPCB has also deputed 2 teams to monitor the same. All precautions have been undertaken to ensure proper management of COVID waste

## TRAINING & CAPACITY BUILDING

State Institute of Health & Family Welfare Gujarat is an apex institute to roll out State ToTs based on approved trainings by GoI and create Master Trainers for each district that will provide training at District level. District level Trainers will further train health care workers at Taluka level and PHC Level.

The training and Capacity Building Plan is available at State, Regional and District Level. The various training programme under RCH, FP, MH, HWC, non-communicable diseases and communicable diseases, etc were conducted. In Year 2019, about 1409 no. of batches conducted and about 42090 participants were there, while in Year 2021-22, total 4034 no. of batches were conducted where 79256 were the participants and beneficiaries of this training programme. In year 2020-21, about 1812 no. of batches underwent the training programme with 37, 634 participants.

Gujarat Pollution Control Board (GPCB) conducts training Program through 27 Regional Offices located in various part of the state. There is State Training Institute at Vadodara and 5 Centers Situated in as Regional training centers namely HFWTC Rajkot, DTC Bavla, DTC Aliyabada, DTC Sachin, DTC Padra. District level training is executed by District Training team, functional in every district. The Training Programme are undertaken through the Quality Assurance Program of the Government. Gujarat Energy Development Agency (GEDA) had provided training to staff of the Private Health Facilities as well, about 2 years back., apart from the staff of the Government HCFs. The status of BMW and IPC inclusive trainings for 2021-22 is provided below.

**Table 19 Status of BMW and IPC inclusive trainings 2021-22**

Type of training	Level of training	Number of participants trained	Participants
State level ToT for Kayakalp and SSS	State level- Physical	206 (3 trainings for districts and one for corporation)	MO, Ayush MO, SN, LT, Pharmacist, newly appointed DQAMOs
WASH-IPC		<b>3455 (Total)</b> <ul style="list-style-type: none"> <li>● State level- Physical: <b>33</b></li> <li>● State Level- Virtual: <b>293</b></li> <li>● ASCI-UNICEF (2 districts): <b>39</b></li> <li>● District level- DTT: <b>3090</b></li> </ul>	<ul style="list-style-type: none"> <li>● DQAMOs</li> <li>● DQAMOs/THO/MO</li> <li>● Health facility staff</li> <li>● Class IV Employees</li> </ul>



BMW training for private hospitals (SIHFW-GEDA Collaboration)	Corporation level (8 corporations are targeted)- Physical	771 (total 20 batches conducted)	Staff nurse, ICN, Class IV Employees
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## PROCUREMENT SYSTEM

In Gujarat, equipment's and consumables related to BMWM, i.e., coloured bins, bags, PPE Kits, trolleys; syringe cutter etc is procured both at the centralized and the decentralized levels.

The GMSCL (Gujarat Medical Service and Corporation Limited), an apex body (agency), which procures the equipment and consumables centrally as per the need and demand from the facility level. Additionally, according to the GAP Assessment report of Facility, under NHM PIP, they have a separate budget head for procurement of consumables and PPE, Bio Medical Waste Management and Liquid Waste Management. Also, they have other budget heads under Quality Assurance and Kayakalp Budget line, in which they can procure the remaining equipments and consumables in case of gaps in funding.

## BUDGET

Sufficient budget has been allocated to the different HCFs across the state, down to the HWC level, for procurement of coloured plastic bags, needle cutter bins, syringes as well as the IEC material such as the posters, for ensuring segregation of different BMW streams, their collection and Secondary storage. The budgetary allocation for BMW and expenditure for 2020-21 are as follows:

Year 2020-2021	Approved Budget	Expenditure
<b>BMW Management</b>	132.65 Lac	101.58 (76.57%)
<b>Consumable &amp; PPE</b>	132.65 Lac	107.77 (81.25%)
<b>Liquid waste mgmt.</b>	94.75 Lac	70.60 (74.51%)
<b>Year 2019-2020</b>	Any Other (for traversing gaps) 379 Lac	349.38 (92.19%)

## RESPONSIBILITY AND ACCOUNTABILITY

HCFs having 30 beds or more shall have **Quality Team/ Infection Control Committee/ Bio Medical Waste Management Committee** and HCFs having less than 30 beds should designate **Bio Medical Waste Supervisor**. It is the overall responsibility of the in charge of the HCF to take all necessary steps to ensure that bio-medical waste is handled without any adverse effect to human health and the environment and in accordance with the rules.

### Responsibilities of Healthcare facilities under BMWM Rules

- The five steps (Segregation, Collection, pre-treatment, Intramural Transportation and Storage) is the exclusive responsibility of Health Care Facility. While Treatment and Disposal is primarily responsibility of CBWTF operator except for highly infectious waste, which is required to be pre-treated by the HCF.
- Each Healthcare facility should ensure that there is a designated central waste collection room situated within its premises for storage of bio-medical waste, under lock & key.



- All the bags/ containers/ bins used for collection and storage of bio-medical waste, must be labelled with the Symbol of Biohazard or Cytotoxic Hazard and provided with bar code labels in accordance with CPCB guidelines for “Guidelines for barcode System for Effective Management of Biomedical Waste”.
- Every healthcare facility needs to maintain the records w.r.to category wise bio-medical waste generation and its treatment disposal (either by captive facility or through CBWTF) on daily basis.
- Records on bio-medical waste management and accidents submitted to SPC annually
- Records shall be maintained on training on BMW Management, and immunization of healthcare workers including both Induction and in service training records.

The infection management and environment plan (IMEP) policy framework, 2007 provides guidance on the screening and categorization of the potential environmental impacts of a proposed activity under the program. Section 2.2.3 of the framework requires that all activities should be in full compliance with the Environmental Impact Assessment Notification, 2006. The environmental impacts caused by the refurbishment will be avoided by adopting the management plan detailed in section 4.12 (construction of management guidelines) of the IMEP policy framework.

#### **MONITORING AND REPORTING BY HEALTH DEPARTMENT ON EHS (UNDER NHM)**

Systems for monitoring of HCFs are well-defined with clear institutional responsibilities outlined at every level – PHCs, CHCs, District, Divisional and State. Monitoring is through field visits, Health Management Information Systems (HMIS) and review meetings. The aspects to be monitored at every level are specified (in the form of model checklists) and include infrastructure, bio-medical waste management and infection control under National Health Mission.

**Table 20. Monitoring of EHS aspects in HCFs under NHM**

	<b>SC</b>	<b>PHC/CHC (non First Referral Unit)</b>	<b>PHC/CHC (First Referral Unit)</b>
<b>Infrastructure</b>	Building in good condition Electricity with functional power backup Running 24*7 water supply Functional and clean toilet attached to labor room General cleanliness in the facility Availability of deep burial pit for waste management or any other mechanism	Building in good condition Electricity with functional power backup Running 24*7 water supply Clean toilets separate for Male & Female Functional and clean toilet attached to labor room Clean wards Availability of mechanisms for bio-medical waste management (BMW)	Building in good condition Electricity with power backup Running 24*7 water supply Clean toilets separate for Male & Female Functional and clean toilet attached to labor room Clean wards Availability of mechanisms for bio-medical waste management (BMW) BMW outsourced

<b>Training</b>	-	-	Infection Management and Environment Plan (IMEP)
<b>Equipment</b>	Needle and Hub cutter Color coded bins	Functional Needle Cutter	Functional Needle Cutter
<b>Quality parameters</b>	Adherence to IMEP protocols Segregation of waste in color coded bins	Adherence to IMEP protocols Segregation of waste in color coded bins	Adherence to IMEP protocols Segregation of waste in color coded bins Manage bio-medical waste

### MONITORING AND REPORTING BY POLLUTION CONTROL AGENCIES ON EHS (UNDER NHM)

The system for monitoring management of bio-medical waste is well defined and the implementation is streamlined. The Biomedical Waste Management Rules, 2016 stipulate that every HCF and operator of Common Bio-medical Waste Treatment Facility (CBWTF) must submit the annual report to concerned State Pollution Control Board (SPCB). This format is provided in the Guidelines for Management of Healthcare Waste as per Biomedical Waste Management Rules, 2016.

Further, SPCBs compile and submit the annual report information to the Central Pollution Control Board (CPCB) for the preceding year before 31 July of every year. The CPCB compiles, reviews and analyzes the annual data submitted by SPCBs and submits the same to the MoEF&CC<sup>18</sup>. The reports are publicly available on the website of the CPCB. The CPCB has identified 12 Key Performance Indicators to assess states with respect to effectiveness in monitoring, ensuring compliance and implementation of Biomedical Waste Management Rules, 2016. The indicators are listed below.

1. Inventory of all HCFs and bio-medical waste generation.
2. Authorization to all HCFs including non-bedded HCFs.
3. Facilitate setting-up adequate number of CBWTFs to cover entire state or all HCFs.
4. Constitution of State Advisory Monitoring Committee and District Level Monitoring Committee.
5. Implementation status of barcode system.
6. Monitoring of HCFs other than hospitals/clinics such as Veterinary Hospitals, Animal Houses, AYUSH Hospitals, etc.
7. Monitoring infrastructure of SPCBs.
8. Training and Capacity Building of officials of SPCBs and HCFs.
9. Installation of Online Continuous Emission Monitoring Systems (OCEMS) by CBWTFs as a self-monitoring tool and transmission of data to servers of SPCBs/CPCB.
10. Preparation of Annual Compliance Status Reports.
11. Compliance by CBWTFs (emission/discharge standards, barcoding, proper operation, etc.).
12. Compliance by HCFs (segregation, pre-treatment, on-site storage, barcoding and other provisions etc.).

**CBMWTF:** CBWTFs as per the BWM Rules 2016 are supposed to provide training for all its workers involved in handling of bio medical waste at the time of induction and thereafter at least once every year, and also assist the HCFs in training conducted by them for bio-medical waste management. HCFs are required to provide training to all their health care workers and others involved in handling of bio

<sup>18</sup> Annual Report on Bio-medical Waste as per Bio-medical Waste Management Rules 2016 for the year 2019. CPCB.

medical waste at the time of induction and thereafter at least once every year. The HCFs are required to provide details of training programs conducted, number of personnel trained, and number of personnel not trained in their Annual Reports.

As per BMWB rules, every CBWTF with incinerator facility is required install online continuous emission monitoring system (OCEMS) and report the real time emission data. As per the CPCB annual report 2019-2020, Gujarat is yet to ensure that all CBWTFs in their State install OCEMS systems and connected to CPCB and SPCB servers.

**ANNEX 9: LIST OF PARTICIPANTS AT ESSA CONSULTATION WORKSHOP JUNE 23, 2022**

<b>Sr.No</b>	<b>Name</b>	<b>Designation</b>
1.	Dr. N P Jani	Additional Director, FW
2.	Dr. Devesh Kumar	AD- Medical Services.
3.	Dr. R Dixit	AD- Medical Education
4.	Dr. Bipin Nayak	CEO GMERS
5.	Dr. A V Mavlankar	Director IIPH Gandhinagar.
6.	Dr. A M Kadri	ED SHSRC
7.	Dr. Harsh Bakshi	Team Leader SHSRC
8.	Dr Kartik R Shah	DTO, Ahmedabad
9.	Dr. Keval Pandya	DC & O
10.	Dr. Sima Bhatt	B J Medical Collage
11.	M S Solanki	CDHO Gandhinagar
12.	Dr. Hitesh Bramhbhatt	Asst.Dir. MS
13.	Dr Somen Saha	Asst, Prof IIPH-G
14.	Dr. Ashutosh Parhi	Consultant (Quality)
15.	Dr. Apurva Ratnu	Nirmay NGO
16.	Dr. Jaydeep Gadhvi	
17.	Dr. A. I. Malek	DQAMO Sabarkantha
18.	Dr. Sheetal Kikani	
19.	N D Patel	
20.	Dr. Gaurav Thakkar	Consultant
21.	Dr. Ajay B Parekh	Telemedicine
22.	Dr,P R Sathwara	SNO HWC
23.	Dr. Abid Qureshi	IIPH-G
24.	Dr. Himanchal Bhutak	President Mode India
25.	Dr. Viral Dave	Prof & Head Gcms Ahmedabad
26.	Dr. Birendra Singh	SQAMO
27.	Ms Mohini Ranjan	PO Quality
28.	Dr. Princy Verma	Consultant WASH, UNICEF
29.	Dr. Kalpesh Goswami	MOH Gandhinagar
30.	Dr. Chinmay Shah	OSD, MS

31.	Mahendra Makawana	GRC
32.	Ameet Rupela	GRC
33.	Dr. Nitesh Shah	SPO, NCD
34.	Dr. Vaidehi Gohil	
35.	Dr. A Bhagyalaxmi	B J Medical College
36.	Dr. Shikha Jain	B J Medical College
37.	Dr. Bharat Desai	SHSRC-G Consultant
38.	Dr. Ankita Shah	SHSRC -G Consultant
39.	Dr. Shalu Chaudhary	SHSRC -G Consultant
40.	Mr. Santosh Powar	SHSRC -G Consultant
41.	Dr. Pradeep Kumar	Professors, GMERS, Gandhinagar.
42.	Dr. Gauri Shankar	Professor, Microbiology Dept, GMERS, Gandhinagar.
43.	Dr. Harsh Shah	IIPH-G
44.	Dr. Anish Sinha	Assistant Professor, IIPH Gandhinagar.
45.	Brijesh Seth	
46.	Mr. Rahul Pandey	TTL, World bank
47.	Andrew Sunil Rajkumar	Co-TTL World bank
48.	Dr Guru Rajesh Jammy	Health specialist, World Bank
49.	Dr Elina Pradhan	Senior Health specialist World Bank
50.	Sharlene J Chichgar	Environmental Specialist, World Bank
51.	Dr Kiran Narkhede	Technical Consultant World Bank
52.	Ranjan Verma	Social Development Consultant, World Bank
53.	Shivangi Dube	Intern SHSRC-G
54.	Bhargavi	Intern SHSRC-G

## ANNEX 10: ENVIRONMENTAL AND SOCIAL SCREENING

As per the World Bank Guidance on ‘Program for Results Financing Environmental and Social Systems Assessment’, the proposed PforR operation was screened to determine whether, from an environmental and social perspective, the proposed Program is suitable and eligible for PforR financing. The first step in the screening exercise was to identify any activities within the Proposed program of expenditures that, under the exclusionary principle of the policy, should be excluded because of their inherently high risk. The second step was to review the proposed Program activities to determine whether the potential environmental and social effects (which may not meet the policy’s criteria for exclusion) include unacceptable adverse risks.

### RISK SCREENING CHECKLIST

The objective of the initial risk screening was to identify potential risks and opportunities that may be associated with the Program which warrant further analysis through the ESSA. The risk screening was undertaken using the four criteria recommended in the World Bank Guidance:<sup>19</sup> (a) the likely environmental and social effects; (b) the environmental and social context, including any risks to sustainability; (c) institutional complexity and borrower implementation capacity and track record; and (d) reputational and political risk.

**Table 10. Risk screening checklist**

Criteria for risk screening	Description	Risk rating - Environment	Risk rating - Social
Likely environmental and social effects	<p>Environmental risks of the Program potentially include (a) risks related to rehabilitation of existing health care facilities; (b) risks related to increased BMWW and wastewater disposal; (c) risk attributed to building and engineering safety of buildings and equipment; and (d) public and worker health and safety. This PforR will not cause potential loss or conversion of natural habitats or adversely affect physical and cultural properties. Most potential works are within existing HCFs.</p> <p>The key social risks of the Program can be broadly divided into two pillars: I. Risks of exclusion in tribal and backward districts and blocks: Risks of exclusion in tribal and backward districts and blocks due to (a) poor uptake and utilization of health facilities by traditionally vulnerable groups in underserved areas mainly the tribal blocks of the state; (b) poor utilization of health facilities by women-led households and adolescent girls for reproductive health care, NCD screening, and preventive care; and (c) lack of access to quality health care for the poor and marginalized including migrants and informal workers especially in urban areas. II. Sub-optimal Functionality of community-level platforms (JAS, MAS) in tribal districts and blocks due to low institutional capacities of JAS and MAS in tribal/unserved areas to manage health facilities,</p>	Moderate	Moderate

<sup>19</sup> Bank Guidance on ‘Program for Results Financing Environmental and Social Systems Assessment’, September 18, 2020.

Criteria for risk screening	Description	Risk rating - Environment	Risk rating - Social
	coordinate with VHSNCs, and act as grievance redressal platforms as per JAS Guidelines.		
Environmental and social context	<p>The Program is not expected to have impacts on physical and cultural resources or natural habitats as the focus will be on improving existing health care facilities, and refurbishment and operational expenditure will take place on the existing footprint of HCWs. The Program will support minor rehabilitation works and equipping health centers with better quality facilities and medical waste disposal arrangements. The activities contributing to the Program results areas are not expected to have any interactions with other planned activities that may trigger adverse impacts.</p> <p>Gol and GoG has well-grounded policies for the management of BMW and Infection Control. Most urban PHCs are also under assessment through the Kayakalp Award Scheme.</p> <p>The relevant institutions regarding the environmental and social management have been established and their accountabilities and duties are clearly designated. The institutional capacities will be adequate to manage the environmental and social risk associated with the PforR</p> <p>The Program is not expected to have any impacts related to involuntary settlement of land acquisition. Based on secondary analysis and due diligence, the Program is limited to the refurbishment of health facilities and setting up of new HWCs in rented accommodations.</p> <p>As such, no identified sensitive social settings could impede the successful performance of the Program. Land acquisition or vertical and horizontal expansion of structures will be excluded, and no legacy or unresolved issues on the activity sites are known. No social conflicts or social fragility is present in the Program areas.</p>	Moderate	Moderate
Institutional complexity and borrower implementation capacity and track record	<p>Three States in India have ongoing health projects supported by the World Bank and have good experience of working with World Bank Environmental and Social Framework standards and safeguards policies. Gujarat like several other states has similar implementing structures and capacities.</p> <p>For environmental issues during operations that are of concern under this Program, such as BMWM and infection control, the State Pollution Control Board (SPCB) and state health departments are responsible for ensuring compliance with relevant national and state regulations. The medical officers of the health care facility discharge their responsibilities adequately in implementing the BMWM practices congruent with national requirements.</p> <p>From a social perspective, the operationalization of HWCs does not necessitate the acquisition of new land for upgrading, or refurbishing, or any such activity that may</p>	Moderate	Moderate



Criteria for risk screening	Description	Risk rating - Environment	Risk rating - Social
	<p>result in physical or economic displacement of any individual, household, or organization. Thus, the social diagnostic assessment confirmed Program's involuntary resettlement impact as minimal. Any activity that may have potential involuntary resettlement will be excluded (screened out) from the SRESTHA-G Program, consistent with the Program's design to avoid involuntary resettlement impacts.</p> <p>No financing will be provided for land acquisition, construction of new premises, and/or physical expansion of the existing government structures or rented premises. The refurbishment of health facilities in hard-to-reach unserved areas will avoid land and other property acquisition and facilitate effective health service delivery by reaching the vulnerable and poorer sections across seven states including tribal development blocks. Virtual state consultations across seven states confirmed that current health facilities and premises are well secured, with boundary walls. Hence, the proposed Program will not have any negative social impacts, either permanent or temporary, on any individual or the community.</p>		
Reputational and political risk	<p>The PforR does not appear to have high political risk, and the sector is not known to be controversial, the Bank program is closely aligned with the India CPF Focus Area 3: Investing in Human Capital. The proposed results areas are directly linked to the CPF's key objective 3.4, which is 'to improve the quality of health service delivery and financing and access to quality health care'</p> <p>The project will leverage and help deliver on Gol guidelines and schemes NHM, Swachhata guidelines for health facilities, Kayakalp Scheme guidelines, NAQS standards, and IMEP.</p>	Low	Low
Overall assessment	<p>The proposed activities under this PforR are suitable to be supported according to the World Bank PforR Policy, and Directive. The environmental risk is moderate and can be effectively managed under the current environment, health, and safety (EHS) and environment system. The social risk is moderate and can be effectively managed under the current social system.</p>	Moderate	Moderate
Aggregate risk rating		Moderate	