



INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

ENVIRONMENT AND SOCIAL SYSTEMS ASSESSMENT

ON A

PROPOSED LOAN IN THE AMOUNT OF US\$500 MILLION EQUIVALENT TO INDIA

FOR THE

INDIA'S ENHANCED HEALTH SERVICE DELIVERY PROGRAM

P178146

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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
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)
Goi	Government of India
HIV	Human Immunodeficiency Virus
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
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
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
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

INDIA'S ENHANCED HEALTH SERVICE DELIVERY

P178146

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 India's Enhanced Health Service Delivery (P178146) Program supported by a Program-for-Results (PforR) financing instrument of the World Bank. Following the requirements of the World Bank PforR Policy, the Program relies on country-level systems for the management of environmental and social effects.

2. The ESSA has been prepared to (a) identify the Program's environmental and social effects; (b) assess the legal and policy framework for environmental and social management, including a review of relevant legislation, rules, procedures, and institutional responsibilities that are being used by the Program; (c) assess the capacity to implement requirements under the system; and (d) recommend specific actions to address gaps in the Program's system and implementation capacity. Through this process, the ESSA team assessed the extent to which the Program's environmental and social management systems are consistent with six core environmental and social principles (hereafter, Core Principles) contained in the PforR Policy and corresponding Key Planning Elements.

Program Development Objective and Description

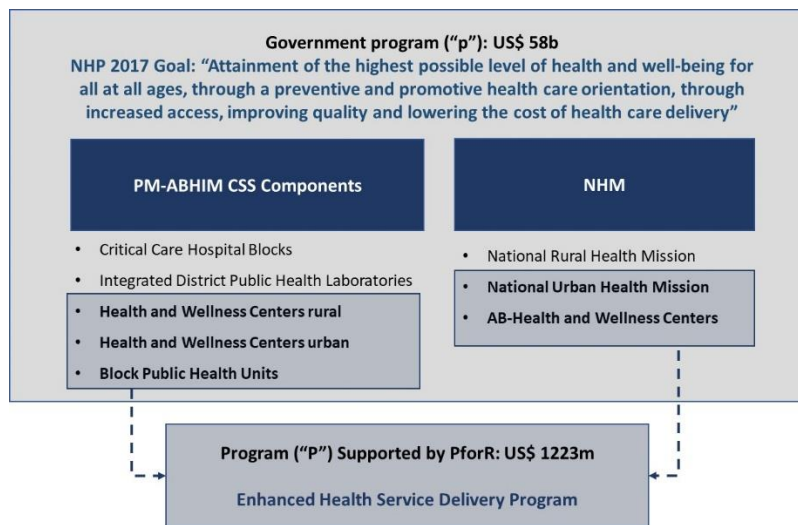
3. The Program Development Objective (PDO) is to increase utilization of comprehensive primary health care services, improve quality of care, and strengthen governance of the health sector in India.

4. The proposed PforR Program will support the Government of India's (GoI) ongoing implementation of an ambitious reform agenda to transform the delivery and quality of essential health services as well as underlying accountability mechanisms needed to enable such reforms. The proposed Program will tackle reforms related to ensuring universal, effective coverage; spending more and better; and moving toward a system of accountability for results. The Program has three key results areas with a combination of technical interventions related to comprehensive primary health care (CPHC), quality of care, and health financing as well as transversal interventions to strengthen institutions and state capacity to focus on results, enabling achievement of the expected outputs and outcomes in the Program's theory of change. Briefly described below are the Pradhan Mantri-Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) components and underlying relevant government programs that are included in this proposed PforR Program boundary. The selected seven priority states will be the focus for state-level interventions and results.

5. The seven priority states for the Program have been identified based on a combination of factors including: (a) leveraging ongoing WB state health systems operations to deepen impact, (b) providing a mix of high-performing and not-so-well-performing states based on an NITI Aayog-MOHFW-World Bank Annual State Health Index, (c) ensuring geographical representation from all four regions of India, and (d) providing opportunities of knowledge sharing and cross-learning among states based on state-specific CPHC initiatives.

6. The proposed PforR Program (the Program) is a well-defined subset of the Government program ('p') that is anchored on PM-ABHIM and is supported by Ayushman Bharat-Health and Wellness Centre (AB-HWC) under the National Health Mission (NHM) to facilitate health sector transformation. Technical topics within the Government program that will be part of the PforR Program include CPHC reforms; quality of care; training and career development; and data, monitoring, and accountability. The Program Expenditure Framework (PEF) will exclude capital expenditures and include recurring expenditures to align with the Program scope and results and to minimize risks during implementation. The Government program is US\$58 billion, the Program is US\$1,223 million, and the WB contribution to the PEF for five years will be US\$500 million (equivalent to 54 percent of the total Program financing). Specifically, the following will be included for the seven priority states that is, Andhra Pradesh, Kerala, Odisha, Meghalaya, Punjab, Tamil Nadu, and Uttar Pradesh.

Figure 1. Program boundary



ESSA Methodology

7. The World Bank team prepared this ESSA report that provides an overview and analysis of the Ministry of Health and Family Welfare (MoHFW) and the seven state governments' policies, regulatory frameworks, and ongoing programs for the environmental and social aspects of the participating state health societies. The ESSA discusses relevant environmental and social national legislations for the health sector in India. Apart from the national legislations, there are several state-level environment regulations and social inclusion guidelines (for example, tribal health programming, community-level initiatives) which are also considered before implementing activities in any state.

8. 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 in Meghalaya, Tamil Nadu, Odisha, and Andhra Pradesh. The ESSA also focuses on land management aspects and labor and safety standards as well as inclusionary strategies adopted by states.

9. The methodology focused on the understanding of 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.

10. 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 biomedical waste management (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.

Potential Environmental and Social Effects of the Program

11. 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, natural habitats, 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 PM-ABHIM 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.

12. **Environmental effects.** The environmental effects of the Program are associated with the operationalization and increased footfall in the health facilities under PM-ABHIM to offer more comprehensive services and attain high quality of service delivery. While there will be an incremental increase in biomedical waste (BMW) and other wastes (solid and liquid) associated with the Program-supported activities, the Program, through DLI 3, further improves critical parameters around environment, health, and safety management (BMW, infection control, worker safety, and building design safety) through the new PM-ABHIM program guidelines and National Quality Assurance Standards (NQAS). The measures are linked closely with the disbursement-linked indicators (DLIs) for the PforR operation, specifically DLI 3: Increased NQAS certification of HWCs/UHWCs.

13. The key environmental effects of the Program include the following:

- (a) Increase in BMW throughout the country is a key risk arising from the Program. As health care centers are upgraded and offer more comprehensive services, increase in footfall will lead to increase in BMWs and other associated wastes—plastics, e-wastes, and solid wastes. Some HCWs, particularly in the rural areas which do not have access to centralized waste treatment facilities, would need to plan for final disposal facilities and sealed pits.
- (b) Increase in quantity of liquid wastes (wastewater, blood, disinfectants, and reagents), which need to be appropriately treated and disposed.
- (c) Risks to worker health and safety during the operations of the HCWs need to be abated through appropriate immunization and training programs for all workers (contracted and health care staff), ensuring good hygiene, infection control practices, and BMW handling.
- (d) While the standards of HCWs encompass critical elements such as life and fire safety, building safety, and maintenance, there is a need to ensure all staff are trained on these aspects and systems and that there is also good collaboration with other disaster planning initiatives.

- (e) Generation of dust, noise, and debris while HCWs are being refurbished. Though these impacts are temporary and manageable, the health care facilities need to ensure that appropriate mitigation is followed so that solid wastes are disposed appropriately, and dust and noise do not cause adverse impacts to inpatients and visitors.

14. At the same time, 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. Overall, there are also opportunities to build capacity across the board of all stakeholders on aspects of EHS and improve the performance of sectors that contribute to the efficient performance of the HCWs (such as water and sanitation, disaster management, and energy).

15. **Social effects.** The activities to be 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 Mahila Arogya Samitis (MAS); (b) development of performance measurement and rewards at the district level including for aspirational districts; (c) increased number of operational/functional HWCs providing expanded health care service delivery packages of CPHC, including for tribal blocks in Schedule V areas of the state; and (d) increased utilization of public health facilities by women-headed households and SC/ST households.

16. The key social risks of the Program are directly associated with the risks of exclusion particularly for STs and vulnerable groups in unserved areas, that is, aspirational districts and Integrated Tribal Development Agency (ITDA) blocks. Four of the seven participating states have designated Schedule V and Schedule VI areas.¹ The social systems assessment filtered Odisha and Tamil Nadu as focus states to decipher key social risks and institutional capacities in improving health service delivery in tribal blocks. Additionally, across seven states, the Program covers 15 aspirational districts. **Therefore, social risks can be broadly divided into two pillars. I. Risks of exclusion in aspirational districts and ITDA blocks:** (a) uptake and utilization of health facilities by traditionally excluded vulnerable groups in unserved and underserved areas, including aspirational districts, tribal blocks, and Schedule V areas of Odisha, Andhra Pradesh, Meghalaya, and Tamil Nadu; (b) utilization of health facilities by women-led households and adolescent girls for reproductive health care, noncommunicable disease (NCD) screening, and preventive care; and (c) access to quality health care for the urban poor, including migrants and informal workers. **II. Functionality of community-level platforms (JAS, MAS) in aspirational districts and ITDA blocks:** 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.²

¹ In Scheduled Areas declared so under the Fifth Schedule, the governor of the state has special responsibilities with respect to tribal populations in the area including issuing directives to the state government and limiting the effect of acts of the central or state legislature on the Schedule Area. On the other hand, in Scheduled Areas declared so under the Sixth Schedule, the emphasis is on self-rule; tribal communities are granted considerable autonomy, including powers to tribal communities to make laws and receive central government funds for social and infrastructure development. To enable local control, the role of the governor and the state are subject to significant limitations in Sixth Schedule areas.

² <https://nhsrcindia.org/sites/default/files/2021-06/Guidelines%20for%20Jan%20Arogya%20Samiti.pdf>

Applicability of the ESSA Core Principles

Table 1. Identified environmental and social gaps and recommendations

List of identified gaps	Recommendations
<p><i>Core Principle 1: Environmental and social management procedures and processes are designed to (a) avoid, minimize, or mitigate adverse impacts; (b) promote environmental and social sustainability in Program design; and (c) promote informed decision-making relating to a program’s environmental and social effects.</i></p>	
<ul style="list-style-type: none"> • The capacity to manage EHS risks in PM-ABHIM 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; there is no dedicated capacity in MoHFW that can look at EHS in a consolidated manner. • Through PM-ABHIM implementation, 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 Central Biomedical Waste Treatment Facility (CBMWTF) due to terrain and weather conditions. This would require appropriate siting of deep burial pits, soak pits, and 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. • 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. 	<ul style="list-style-type: none"> • Hire environmental and social specialists as a part of the Program Management Unit (PMU) for the India’s Enhanced Health Service Delivery (EHSD) Program to have dedicated capacity and institutionalize EHS best practices (BMWM, infection control, HCW safety and cleanliness). • Update terms of references for state-level BMWM advisory committee to look holistically at management of all wastes (solid and liquid). • Strengthen qualification/accreditation standards of BMWM/infection control supervisor linked to management of sanitation, accident and spills, fire safety, emergency response preparedness, and complaints handling on BMWM (in HCWs). • Each state to disclose details regarding BMWM supervisor in HCWs and BPHUs in the health care facilities, to fix responsibility and accountability. • Disclose BMWM oversight committees at the state level and district level on State Pollution Control Board (SPCB) and Department of Health and Family Welfare (DoHFW) website. • Deploy qualified biomedical experts to the states that can support states in developing integrated waste management strategies for the HCWs based on local conditions. • Strengthen the supervision and enforcement capacity of responsible agencies (monitoring committees for BMW, infection control, and so on) to ensure adequate action on non-compliance.
<p><i>Core Principle 2: Environmental and social management procedures and processes are designed to avoid, minimize, and mitigate adverse effects on natural habitats and physical cultural resources resulting from the program.</i></p>	
<p>This principle is not applicable as all eligible expenditure under the Program is limited to existing and current footprint of health facilities. This is including all recurring expenditure on HCWs and BPHUs. There will be no expansion or new</p>	<p>An environmental screening checklist has been included as a best practice in annex 10. MoHFW focal points on environmental and social will be trained to use the checklist for all future planning for BMW infrastructure.</p>

List of identified gaps	Recommendations
<p>construction that would affect physical and cultural resources and natural habitats.</p>	
<p><i>Core Principle 3: 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.</i></p>	
<ul style="list-style-type: none"> As part of PM-ABHIM, many contracted workers/outsourced agencies would be hired to undertake cleaning, housekeeping, and BMW collection services, which may not fall under the ambit of the formal training programs under NHM/PM-ABHIM. Trainings need to be provided to all outsourced agencies' teams on infection control practices and BMW handling to ensure health and safety of workers and patients. Public works departments (PWDs) and other accredited agencies will carry out works related to upgrade of the HCWs. While national laws and standards exist for labor work safety, due to the small nature of these works, these contracts are also often outsourced to smaller contractors. It is important that these contractors' teams undergo structured and formal trainings in OHS management, use of personal protective equipment (PPE), and maintaining of cleanliness, sanitation to ensure minimal disruption to the environment and visitors. 	<ul style="list-style-type: none"> States to ensure continuous OHS training to all outsourced agencies engaged in the cleanliness activities for HWCs. Include collection and disposal of all debris and solid waste after refurbishment works in the contractor's scope of work. Provide structured training program on OHS and use of PPE for contracted workers undertaking refurbishment works.
<p><i>Core Principle 4: Avoid or minimize the 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.</i></p>	
<p>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. Therefore, risks of land acquisition and involuntary resettlement are not applicable under the Program.</p> <p>Additionally, the ESSA negative list, reproduced below, is in complete adherence with World Bank's PforR guidelines.³</p>	<p>The key recommendations are as follows:</p> <ul style="list-style-type: none"> Environmental and social screening mechanism is to be instituted during the planning phase of any new construction (including health care facility and waste management pits) under the Program to identify any adverse social risks and impact. Though land acquisition and/or resettlement is not anticipated during preparation, in rare scenarios, if any need arises, the World Bank's ESF policy, particularly ESS5 on land acquisition and resettlement will be followed and due process to be instituted in consultation with the World Bank task team.

³ Operational Guidelines for State Health Societies; PM-ABHIM, Ministry of Health and Family Welfare, Government of India.

List of identified gaps	Recommendations
<ul style="list-style-type: none"> Land should be available for the selected facilities and land purchase cost should not be covered under PM-ABHIM. Repair and renovation works already undertaken under the NHM Funds. 	<ul style="list-style-type: none"> The ESSA includes a screening template for monitoring land requirements at the health care level, if required.
<p><i>Core Principle 5: 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</i></p>	
<ul style="list-style-type: none"> Risks of exclusion in aspirational districts and ITDA blocks: (a) uptake and utilization of health facilities by traditionally vulnerable groups in unserved and underserved areas, including tribal blocks and Schedule V areas of Odisha, Andhra Pradesh, Meghalaya, and Tamil Nadu; (b) utilization of health facilities by women-led households and adolescent girls for reproductive health care, NCD screening, and preventive care; (c) access to quality health care for the urban poor, including migrants and informal workers. 	<p>Development of an inclusion monitoring template to track rollout of PM-ABHIM in aspirational districts and ITDA blocks in select states.</p> <p>States with aspirational districts and Schedule V and VI areas will adopt the inclusion template to monitor (a) specific key performance indicators (KPIs) to track tribal health programming and outreach and (b) functionality of JAS in ITDA blocks.</p> <p><i>(Four of the seven participating states under the EHSD Program have designated Schedule V and VI areas. In addition, across seven states, 15 aspirational districts are included under the Program).</i></p>
<ul style="list-style-type: none"> Functionality of community-level platforms (JAS, MAS) in aspirational districts and ITDA blocks: 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. 	
<p><i>Core Principle 6: Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.</i></p>	
<ul style="list-style-type: none"> 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 the Program 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. 	<p>No relevant recommendations.</p>

Disclosure and Consultations

17. The team undertook consultations at the federal and state levels (during the development of the instrument) with relevant stakeholders from MoHFW, state health societies, BMWM, and infection control and quality control officers, on April 4, 2022, to seek inputs on states' performance on environment and social management. A checklist to capture key issues and gaps in government systems was circulated to the states before consultation. This is included in annex 4.

18. A multistakeholder consultation was conducted on the draft ESSA on May 2, 2022, to share the findings and recommended actions for the Program Action Plan (PAP) and the Program

Implementation Plan (PIP). The final ESSA, incorporating stakeholder comments and suggestions, will be disclosed in-country and on the World Bank's external website before the close of appraisal.

Key Findings from Environmental and Social Management Systems Assessment

Social

19. The Program is limited to the refurbishments of existing HCFs, and during preparation no identified sensitive social settings could impede successful performance of the Program. Land acquisition or horizontal expansion of structures outside the HCF premises will be excluded, and no legacy or unresolved issues on the across seven states 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 are no known safeguards complaints from the previous state-level financed operations and/or ongoing operations.

20. The assessment reviewed the social policies and procedures (both at national and state levels) for the Government program—PM-ABHIM—and found them to be adequate. The social systems assessment filtered Odisha and Tamil Nadu as focus states to decipher key social risks and institutional capacities in improving health service delivery in tribal blocks. The assessment finds an enabling policy and regulatory and legal framework at the federal and state levels that will promote decentralized planning, implementation and monitoring, active redressal of grievances through JAS, and effective participation and safeguarding of the interests of vulnerable sections (ST communities, SC communities, women-headed households, and adolescent girls). The ESSA undertook a detailed review of grievance redressal platforms at the community level and found that the Grievance Redress Mechanisms and institutional capacities of the Implementing Agencies are functional and effective manage complaints.

21. However, residual social risks related to exclusion of vulnerable groups particularly in aspirational districts and ITDA blocks in Schedule V and VI areas remain. Further implementation of the Prevention of Sexual Harassment at the Workplace Act, 2013 and access to information about the POSH Act and Internal Complaints Committee mechanisms for contracted health workers and frontline workers remains a key challenge. **The anticipated social risks are manageable and can be mitigated through localized implementation strategies, better local oversight, and enhanced capacities of JAS and MAS.**

Environment

22. 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, 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.

23. Institutional and technical capacity and multisector 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, 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.

- **Gap 1.** The capacity to manage EHS risks in PM-ABHIM 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; there is no dedicated capacity in MoHFW that can look at EHS in a consolidated manner.
- **Gap 2.** Through PM-ABHIM implementation there will be an increase in BMW, and other wastes aggregated. While many states have unutilized capacity 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, and 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.
- **Gap 3.** At present, there is no formal mechanism for screening and identifying any potential environmental and social issues before undertaking any 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 a plan to mitigate accordingly.
- **Gap 4.** 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.
- **Gap 5.** As part of PM-ABHIM, many contracted workers/outsourced agencies would be hired to undertake cleaning, housekeeping, and BMW collection services, which may not fall under the ambit of the formal training programs under NHM/PM-ABHIM. 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 6.** PWDs and other accredited agencies will carry out works related to upgrade of the HCWs. While national laws and standards exist for labor work safety, due to the small nature of these works, these contracts are also often outsourced to smaller contractors. It is important that these contractors' teams undergo structured and formal trainings in OHS management, use of PPE, and maintaining of cleanliness, and sanitation, to ensure minimal disruption to the environment and visitors.
- **Gap 7.** States do not have all CBMWTFs connected to the online continuous emission monitoring system (OCEMS) to supply data on emissions from the treatment facilities.

Way Forward

24. The Program will ensure adequate resources are provided for timely and effective implementation of environmental and social measures and the key recommendations are made a part of the PAP.

Inputs to the PAP

Description	Source	By	Timeline	Indicator for completion
Designating environmental and social (E&S) specialists for the Program	Environmental and Social Systems	MoHFW	Within 3 months of the Effective Date	Designation of qualified staff, with defined scope of work (including the preparation of E&S guidance, monitoring the implementation of E&S actions and reporting protocols).
Development and issuance of guidance to Priority States for updating terms of references for state-level bio-medical waste management advisory committee to look holistically at management of all wastes	MoHFW	MoHFW	Within 6 months after the Effective Date	Development of guidance to states for updating terms of references for state-level bio-medical waste management advisory committee to look holistically at management of all wastes
Priority States shall conduct periodic occupational health and safety training to all outsourced agencies engaged in the cleanliness activities for HWCs	MoHFW	Priority States	Yearly	Priority States to include action and costing in their annual work plans submitted to MoHFW
Development of an inclusion monitoring template to track roll-out of PM-ABHIM in aspirational districts and integrated tribal development blocks in Priority States	Environmental and Social Systems	MoHFW	Within the first year after the Effective Date	Submission of a template for Priority States to monitor: (a) fund utilization in integrated tribal development blocks; (b) specific KPIs to track tribal health programming, utilization; and (c) functionality of JAS in aspirational districts.
Produce a biannual ESSA monitoring report and submit it to the Bank immediately thereafter, based on a desk review of the quarterly progress reports, other information sources, and sample-based field monitoring visits in Priority States.	Environmental and Social Systems	MoHFW	Recurrent	Regular reporting in implementation support missions

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 Ministry of Health and Family Welfare (MoHFW) and Department of Health and Family Welfare (DoHFW) of Andhra Pradesh, Meghalaya, Tamil Nadu, Odisha, and Uttar Pradesh which are most relevant for health service delivery in National Health Mission (NHM), Ayushman Bharat-Health and Wellness Centre (AB-HWC), and Pradhan Mantri-Ayushman Bharat Health Infrastructure Mission (PM-ABHIM). The ESSA identified opportunities for strengthening the existing institutional, operational, and regulatory systems and capacities pertaining to environment and social issues in the health sector. The findings of the ESSA are based on use of checklists to assess BMWM, the institutional assessment questionnaire, and discussions with key stakeholders, including officials from MoHFW and the five states. The ESSA also benefited from the experience of ongoing World Bank-financed projects: Tamil Nadu Health Systems Reform Program, P166373; Andhra Pradesh Health Systems Strengthening Project, P167581; Uttar Pradesh Health Systems Strengthening Project, P100304; and Meghalaya Health Systems Strengthening Project, P173589.

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 **India's Enhanced Health Service Delivery Program (EHSD, P178146)**. 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 MoHFW and states and will become legally binding agreements under the conditions of the new loan.

B. ESSA METHODOLOGY

5. The ESSA was primarily a desk-based exercise with virtual interactions and consultations 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 1 and 5). Detailed consultations with state nodal officials across seven states 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 and block level (specifically for Integrated Tribal Development Agency [ITDA] 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 EHSD 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, at the federal and state level, 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 MoHFW's as well as the seven state governments' policies and regulatory frameworks for the environmental and social aspects of the participating state health societies. The ESSA discusses relevant environmental and social national 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. The ESSA filtered Odisha and Tamil Nadu as focus states to decipher key social risks and institutional capacities in improving health service delivery in tribal blocks.

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 in Meghalaya, Tamil Nadu, Odisha, and Andhra Pradesh. 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 BMWM 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 ongoing Program*

13. The PM-ABHIM scheme, the largest pan-India Health Infrastructure Program, aims to provide a much-needed fillip to India's capacity to address emergent public health issues. This will bring about a paradigm shift in India's health care infrastructure and make it more resilient.

14. PM-ABHIM has a three-pronged approach to health sector reform. First, it strengthens the public health system, with a focus on bolstering infrastructure, to deliver universal comprehensive primary health care (CPHC) to address the current epidemiological and demographic transitions, a double burden of chronic and infectious diseases, and the unfinished agenda of reproductive-maternal-neonatal-child and adolescent health (RMNCAH), which have collectively created an increasing demand for public health services. Second, it expands and builds an IT-enabled disease surveillance system. Third, it supports biomedical research and the one-health approach to respond to epidemics. While PM-ABHIM is a new initiative, it is layered on top of NHM—an extensive National Government program that aims to strengthen health systems, RMNCAH, communicable and

noncommunicable diseases—and Ayushman Bharat that aims to provide CPHC (AB-HWCs) and offer financial risk protection (Pradhan Mantri Jan Arogya Yojana [PM-JAY]). PM-ABHIM’s approach aims to enhance service delivery and quality of care, with a reinforced focus on CPHC, and sets the stage for a long-term transformational reform agenda for equipping India’s health system for the 21st century. Given this, the proposed Program aims to assist India embark on this journey for health sector reform, by providing support to the immediate and medium-term agenda for enhancing CPHC service delivery, especially in the wake of the COVID-19 pandemic and helping create a platform for longer-term sustainable interventions to improve quality of care and strengthen health sector governance and accountability.

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

15. The objectives of the PM-ABHIM program and the proposed EHSD Program include strengthening grassroot 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 including for critical care services. 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. The emphasis on community ownership of health facilities and links between ‘people providers’ and ‘policy makers’ highlight the high degree of community involvement in health service delivery and management essential for the long-term sustainability of facilities created. Involvement of communities and the civil sector (different agencies in different regions) in the delivery of quality health services supports addressing these risks, provided there is ample guidance and awareness. Additionally, PM-ABHIM and NHM have a clear emphasis on awareness and training needs of communities including tribal households, and actions to improve the monitoring capacity of agencies/communities are detailed out in the ESSA. 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.⁴ 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. For complete list of environmental policies, refer to annex 5 and Table 13.

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

23. **The ESSA also reviewed compliance levels of state health societies for the GoI's National Health Mission—an ongoing flagship program.** 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 achievement of universal access to equitable, affordable, and quality health care services that are accountable and responsive to people's needs.

24. Overall, the findings of the ESSA conclude that state health societies of the participating seven states have requisite systems, checks, and balances to ensure compliance of environmental and social aspects under NHM. Additionally, Meghalaya, Andhra Pradesh, and Tamil Nadu (three of the seven participating states) have active World Bank-financed operations with the state health societies. The ESSA reviewed Aide Memoires and Implementation Support and Results Reports of these three operations to gauge compliance on environmental and social aspects in Andhra Pradesh, Tamil Nadu, Meghalaya and Uttar Pradesh, which were found to be 'Satisfactory' indicating adequate compliance in ongoing programs at the federal and state level.

⁴ Operational Guidelines for Pradhan Mantri Ayushman Bharat Health Infrastructure Mission; MoHFW, GoI, October 2021 https://nhsrindia.org/sites/default/files/FINAL%20PM-ABHIM__15-12-21.pdf.

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

25. 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 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.

26. Overall, the ESSA found that MoHFW and state health societies 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*

27. 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.

28. An assessment of the key environment risks and benefits was conducted for the Program, and the Program-specific results areas are listed in tables Table 8 and Table 9.

29. The activities to be supported by the Program are likely to provide social benefits such as (a) increased community ownership and management of HWCs through Village Health and Sanitation Committees (VHSCs), Jan Arogya Samitis (JAS), and Mahila Arogya Samitis (MAS); (b) development of performance measurement and rewards at the district level including in unserved areas; (c) increased number of operational/functional HWCs providing expanded health care service delivery packages of CPHC including for tribal blocks in Schedule V areas of the state; and (d) increased utilization of public health facilities by women-headed households and SC/ST households.

30. The key social risks of the Program are directly associated with the risks of exclusion particularly for STs and vulnerable groups in unserved areas, that is, aspirational districts and ITDA blocks. Four of the seven participating states have designated Schedule V and Schedule VI areas.⁵ Additionally, across seven states, the Program covers 15 aspirational districts. **Therefore social risks can be broadly divided into two pillars. I. Risks of exclusion in aspirational districts and ITDA blocks:** (a) uptake and utilization of health facilities by traditionally vulnerable groups in unserved and underserved areas, including tribal blocks and Schedule V areas of Odisha, Andhra Pradesh, Meghalaya, and Tamil Nadu; (b) utilization of health facilities by women-led households and adolescent girls for reproductive health care, noncommunicable disease (NCD) screening, and preventive care; and (c) access to quality health care for the urban poor, including migrants and informal workers. **II. Functionality of community-level platforms (JAS, MAS) in aspirational districts**

⁵ In Scheduled Areas declared so under the Fifth Schedule, the governor of the state has special responsibilities with respect to tribal populations in the area including issuing directives to the state government and limiting the effect of acts of the central or state legislature on the Schedule Area. On the other hand, in Scheduled Areas declared so under the Sixth Schedule, the emphasis is on self-rule; tribal communities are granted considerable autonomy, including powers to tribal communities to make laws and receive central government funds for social and infrastructure development. To enable local control, the role of the governor and the state are subject to significant limitations in Sixth Schedule areas.

and ITDA blocks: 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.⁶

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

31. The environmental and social management under the Program will be largely based on the existing legal, regulatory, and institutional assessment of health systems in India at the federal level and state health societies of the participating seven states. 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 access and equity under NHM and (b) policy emphasis on inclusion and quality health service delivery in unserved areas. The ESSA has identified gaps in the existing system to manage environmental 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*

32. 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.

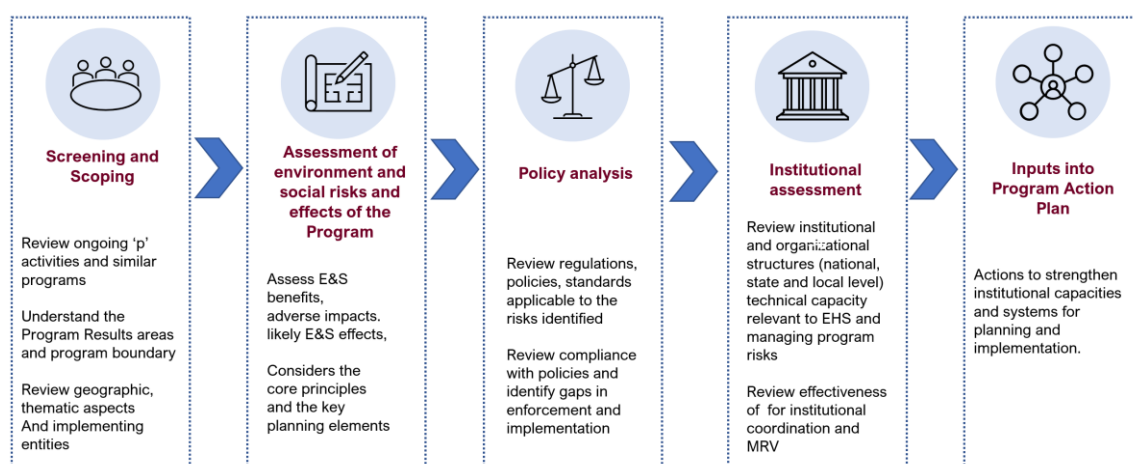
- *Subtask 4.2: Assessing the needs to strengthen the existing mechanism to manage the environmental aspects of the proposed Program*

33. 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.

34. During the appraisal mission, the draft ESSA and its findings—benefits, risks, gaps, and recommendations (environmental and social)—will be shared with MoHFW. A consultation will be undertaken to gather feedback and the report will be updated accordingly for final disclosure. Details of stakeholders consulted in the region are presented in annex 11. The methodology for ESSA preparation is presented in Figure 2.

⁶ <https://nhsrcindia.org/sites/default/files/2021-06/Guidelines%20for%20Jan%20Aarogya%20Samiti.pdf>.

Figure 2. Methodology adopted for ESSA



C. ORGANIZATION OF ESSA REPORT

35. **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.

36. **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).

37. **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.

38. **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.

39. **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 to address 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

40. **India's performance in health has improved substantially over time, yet wide variation exists across states and indicators.** India's life expectancy—at 69.8 in 2020, up from 58 in 1990—is higher than the average for its income level. Under-five mortality rate (36 per 1,000 live births), infant mortality rate (30 per 1,000 live births), and maternal mortality ratio (113 per 100,000 live births) are all close to the average for India's income level, reflecting significant achievements in access to skilled birth attendance, immunizations, and other priority services. However, India lags behind global trends on other key indicators, such as stunting (35.5 percent) and financial risk protection (out-of-pocket expenditure (OOPE) at 48.8 percent as a share of total health expenditure). The country faces a double burden of disease: (a) an unfinished agenda related to reproductive, maternal, newborn, child, and adolescent health (RMNCAH), malnutrition, and communicable diseases; and (b) a rapidly growing prevalence of chronic non-communicable diseases (NCDs) which are now the dominant share of the overall disease burden in the country. This has long-term implications for health, learning, employability, and economic performance

41. **The COVID-19 pandemic is reversing some of the hard-won gains and illustrating the collateral damage of the pandemic on the health system.** The health management information system (HMIS) data for 2020–21 confirmed steep year-over-year declines in the delivery of routine outpatient and in-patient services (over 30 percent for both) and an average decline of 13 percent across 22 priority RMNCAH services. Progress toward the zero-dose children goal has been affected due to drop in coverage, large-scale displacement, and school closures. Relatedly, there has been a major decline in hospital utilization among the poor. Pradhan Mantri Jan Arogya Yojana (PM-JAY) utilization declined by 40 percent during 2020 Q2 compared to the previous quarter, and by 33 percent during 2021 Q2 compared to Q1, with sharper declines for key services such as cancer care. Moreover, utilization by women and younger and older populations (under 20 and over 60 years) declined more than by men, young adults, or the middle-age during the lockdown period. To have a health system that can provide an increasing volume of services, manage increasingly complex conditions, and be better prepared to maintain essential service delivery even amid disease outbreaks and other emergencies, India needs to invest even more in primary health care system and address key challenges in quality of care, both of which are part of its National Health Policy (NHP) 2017.

42. **The COVID-19 outbreak has re-emphasized the need and urgency for significant reforms to improve health sector performance.** Four key health system reforms need to be prioritized.

- **Ensure universal, effective coverage.** Service delivery needs to be redesigned for providing comprehensive primary health care (CPHC) that not only further strengthens the provision of quality RMNCAH services but also includes NCDs and mental health, building a people-centered health system focused on quality, with an adequate and well-equipped health workforce and robust information systems, and addressing the unique challenges of urban health care delivery. Furthermore, PHC is the most pro-poor level of the government health system and strengthening PHC helps the most disadvantaged households. The Government has already embarked upon this with multiple initiatives and programs to redesign CPHC, especially since 2018, which can be consolidated and further scaled up for maximum impact.
- **Spend more and spend better.** Increasing Government spending on health and strengthening public sector systems and strategic engagement of the private sector will maximize the impact of health sector spending. Government's health expenditure

increased from 1.15 to 1.35 percent of the GDP between 2013–14 and 2017–18 but remains short of the NHP target.

- **Move toward a system of accountability for results.** The focus needs to be on the transition from inputs to outputs and outcomes at all levels, including strengthening data systems, enhancing accountability, performance-based management, and gradual shifts in payment methods. The National Health Mission (NHM) has made great strides on this, including performance incentives provided to states (NHM Conditionality Framework) and NHM Program Implementation Plan (PIP) simplification/redesign, similar performance incentives (whether financial or non-financial) need to be strengthened or replicated at different levels, such as the primary health care level (health and wellness center [HWCs]) and district level, to enhance accountability for results across the system.
- **Build a resilient public health system.** The COVID-19 pandemic revealed that India needs to strengthen core public health functions to build a robust public health system resilient to shocks.

43. **The recognition that the public health system needs to respond to outbreaks while continuing to deliver essential non-outbreak health services led to the launch of the Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) scheme.** The PM-ABHIM has a three-pronged approach to health sector reform. First, it strengthens the public health system, with a focus on bolstering infrastructure, to deliver universal CPHC. Second, it expands and builds an IT-enabled disease surveillance system. Third, it supports biomedical research and the one-health approach to respond to epidemics. While the PM-ABHIM is a new initiative, it is layered on top of the NHM—an extensive GOI program that aims to strengthen health systems, RMNCAH, communicable diseases, and NCDs—and Ayushman Bharat (AB) which aims to provide CPHC (Ayushman Bharat health and wellness centers [AB-HWCs]) and offer financial risk protection [PM-JAY]. PM-ABHIM’s approach aims to enhance service delivery and quality of care, with a reinforced focus on CPHC, and sets the stage for a long-term transformational reform agenda for equipping India’s health system for the twenty-first century.

44. **Given India’s federal system and the corresponding decentralized nature of health service delivery, distinguishing between center and state roles and accounting for state responsibilities is critical for health sector reforms.** Health is a state subject in India, and while some functions remain primarily at the national level, most others are either shared with states or rest primarily with states. The proposed Program implementation framework recognizes that the center holds responsibility for providing financing, defining the overall policy framework, identifying priority results, developing performance monitoring frameworks and providing incentives to achieve results, providing technical assistance (TA) to states, and creating a platform for implementation research, cross-state learning, and knowledge exchange. States hold the responsibility for providing financing, implementing and achieving results, coordinating within the state (district, block, local bodies, and private sector), and convergence across sectors and programs. About 40 percent of government financing for health flows from the national level to states largely through clearly defined centrally sponsored schemes (CSSs). The overall levels of state spending, including the funding at national level under CSSs, vary significantly by state. With respect to organization of the public health sector, there is less variation with most states delivering primary care through health sub-centers (HSCs) and primary health centers (PHCs), secondary care through community health centers (CHCs) and district hospitals (DHs), and tertiary care through DHs and medical colleges (MCs). The level of community and local government engagement in the management of public health facilities, organization in terms of the role of the public sector versus the private sector, and payment mechanisms and modalities for health sector staff varies substantially across states.

45. **As the Program will be anchored on and enhance the efficiency and effectiveness of the Government's existing well-defined health sector program, the Program-for-Results (PforR) is considered the most suitable financing instrument.** The PforR instrument will enable a much-needed shift from inputs to outcomes, through a greater alignment of financing with results. The Government has already outlined this results' focus through clearly defined results areas and a program framework with prioritized interventions for the PM-ABHIM Program. This will be integrated within the Ayushman Bharat Health and Wellness Centre Component supported under the Government's NHM, which is the primary platform for health service delivery in the country. It will thus build on and strengthen the existing institutional capacity and fiduciary systems of the Ministry of Health and Family Welfare (MoHFW), which is critical for the health system to move to the next level of performance and well-aligned with the principles of a PforR operation.

B. THE GOVERNMENT OF INDIA'S PROGRAM

46. **Several MoHFW initiatives and schemes support achievement of this goal and associated targets,** including NHM, Ayushman Bharat, quality of care initiatives, and Human Resources for Health (HRH) reforms.

47. **In the wake of the COVID-19 pandemic, the GoI announced the PM-ABHIM scheme to strengthen delivery of health care services, including strengthening HWCs,** especially in urban areas (rural HWCs will be supported in seven high focus states and three northeastern states; in other states, rural HWCs will be supported by XV-FC grants to local government bodies); enabling universal access to basic diagnostic and treatment services, including NCDs and mental health; building a trained frontline health workforce to respond to public health needs; and strengthening synergies and referral links with other programs to provide continuum of care. For pandemic preparedness, it also aims to expand and build an IT-enabled disease surveillance system by developing a network of surveillance laboratories at block, district, regional, and national levels, points of entry, and in metropolitan areas and by strengthening public health institutions at the block and district levels to provide comprehensive treatment for infectious diseases without disruption to other essential health services and support research on COVID-19 and other infectious diseases.

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

48. **The Government program ("p") is anchored on India's NHP 2017.** NHP 2017 recognized four major trends affecting the country's health system: (a) improvements in maternal and child health (MCH) alongside a growing burden from NCDs and an unfinished agenda related to infectious diseases, (b) emergence of a robust health industry, (c) high rates of new and deeper impoverishment due to dependence on out-of-pocket financing for health; and (d) availability of enhanced 'fiscal space' due to sustained economic growth. Most notably, NHP 2017 called for a paradigm shift in primary health care from limited and selective care to provision of comprehensive services at frontline public facilities along with appropriate referral links. For secondary and tertiary care, NHP emphasized the need for a move from input-based financing to output-based strategic purchasing from both public and private providers.

49. **The Government is implementing several transformational reforms in support of NHP 2017, the vision for which was operationalized with initiation of Ayushman Bharat (AB) - 'Long Live India'.** AB had two pillars, one of which introduced service delivery redesign to enable the provision of CPHC, in large part through the establishment of HWCs. This pillar, AB-HWC, focuses on strengthening frontline primary health care functions and delivering CPHC services at HSCs and PHCs. As primary care is the most pro-poor level of the government health system, AB-HWC helps the most

disadvantaged households. AB-HWC also leverages existing community-level platforms to deliver population-based services and information. It endeavors to expand primary health care from the existing limited package of RMNCH services to a comprehensive package that includes RMNCAH, NCDs, communicable diseases, mental health, oral health, ophthalmic and ENT services, emergency services and elderly/palliative care. In addition, Accredited Social Health Activists (ASHAs)—who receive activity-based incentives—undertake home visits to ensure screening, risk factor modification, counselling, and adherence to treatment. The CPHC redesign introduced through AB-HWCs by the government is a key universal step in ensuring universal, effective coverage.

50. **The AB-HWC program rests on the institutional mechanisms, governance structures and systems created under the NHM, and responds to India’s epidemiological and demographic transitions.** The AB-HWC program leverages several NHM health system reforms to deliver on the CPHC agenda. This includes decentralized decision-making to states; strengthening governance, financing, and procurement systems; provision of performance and innovation incentives; use of technology; deployment of quality of care (QOC) initiatives in public health facilities (for example, National Quality Assurance Standards [NQAS]); and community ownership and engagement initiatives. Several improvements have been made in enhancing the size, composition, competence, and management of the health workforce deployed in the public sector including introduction of a program management cadre.

51. **In 2021, the GoI announced the PM-ABHIM scheme, which is also implemented through the NHM implementation platform.** For supporting India’s efforts for transforming CPHC, PM-ABHIM includes strengthening HWCs, especially in urban areas. Much of this is complementary to the efforts of AB-HWCs supported under NHM to advance the provision of CPHC.

52. **In addition, the GoI has now launched Fifteenth Finance Commission (XV-FC) grants to local bodies for health.** These grants are intended to support primary care, including gaps in diagnostic infrastructure for PHCs, block public health units (BPHUs), and HWCs. A substantial share of XV-FC local grants is targeted to infrastructure for primary care and important social determinants of health. Given the complementarity with PM-ABHIM and AB-HWCs, the XV-FC local body grants provide a critical contribution to the realization of CPHC transformational agenda and also necessitates not only coordination between the state health departments and local bodies but also improved state capacity of local bodies to ensure effective and efficient use of the FC local grants.

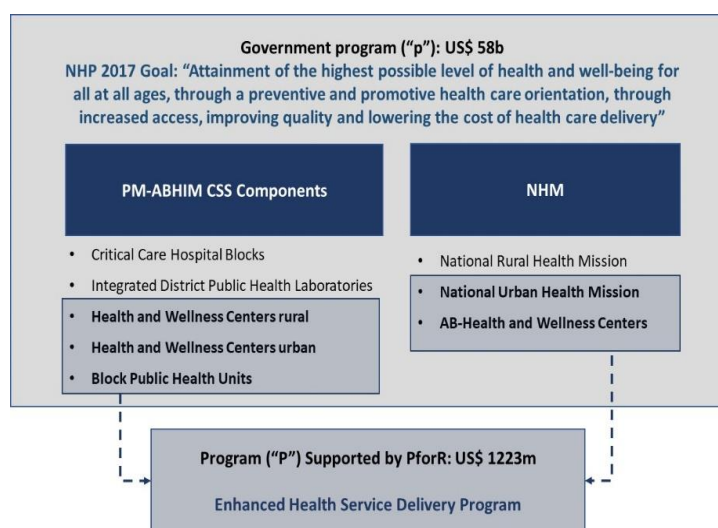
53. **The proposed PforR Program will support the GoI’s ongoing implementation of an ambitious reform agenda to transform the delivery and quality of essential health services as well as the underlying accountability mechanisms needed to enable such reforms.** The proposed Program will tackle reforms related to ensuring universal, effective coverage; spending more and better; and moving toward a system of accountability for results. The Program has three key result areas with a combination of both technical interventions related to CPHC and quality of care as well as transversal interventions to strengthen institutions and state capacity to improve accountability and enable achievement of the expected outputs and outcomes in the Program Theory of Change. Figure 2 illustrates the PM-ABHIM components and underlying relevant Government programs that are included in this proposed PforR Program boundary. Seven states will be prioritized for state-level interventions and results monitoring: Andhra Pradesh, Kerala, Odisha, Meghalaya, Punjab, Tamil Nadu, and Uttar Pradesh. TA will be provided at the national level and to these priority states to enhance institutional and state capacity to achieve the results.

54. **The seven priority states for the Program have been identified based on a combination of factors including:** (a) leveraging ongoing WB state health systems operations to deepen impact, (b) providing a mix of high-performing and not-so-well-performing states based on an NITI Aayog-

MOHFW-World Bank Annual State Health Index, (c) ensuring geographical representation from all four regions of India, and (d) providing opportunities of knowledge sharing and cross-learning among states based on state-specific CPHC initiatives.

55. **The proposed PforR Program (“P”) is a well-defined subset of the Government program (“p”) that is anchored on PM-ABHIM and is supported by HWC under NHM to facilitate health sector transformation (Figure 3).** Technical topics within the Government program that will be part of the PforR Program include CPHC reforms; quality of care; training and career development; and data, monitoring, and accountability. The Program Expenditure Framework (PEF) will exclude capital expenditures and include recurring expenditures to align with the Program scope and results and minimize risks during implementation. The Government program is US\$58 billion, the Program is US\$1,223 million, and the WB contribution to the PEF for five years will be US\$500 million (equivalent to 41 percent of the total Program financing). Specifically, the following will be included for the seven priority states that is, Andhra Pradesh, Kerala, Odisha, Meghalaya, Punjab, Tamil Nadu, and Uttar Pradesh: (a) PMABHIM HWCs, (b) PM-ABHIM BPHUs, and (c) NHM HWCs.

Figure 3. PforR Program boundary



PROGRAM DEVELOPMENT OBJECTIVE(S)

56. **The Program Development Objective (PDO)** is to increase utilization of comprehensive primary health care services, improve quality of care, and strengthen governance of the health sector in India.

PDO LEVEL RESULTS INDICATORS

57. **Achievement of the PDO will be assessed with progress on a select set of strategic indicators.** (see Figure 4).

Figure 4. mapping of PDO indicators to measure progress

PDO Indicator	Increased Utilization of CPHC Services	Improved Quality of Care	Strengthened Governance
Increased pregnant women who received 4 or more ANC visits (disaggregated by urban/ rural) (percentage)	X		

Increased infants 9-11 months old who received full immunization as per the schedule (disaggregated by urban/ rural and gender) (percentage)	X		
Increased footfalls at HWCs* (disaggregated by urban/rural and gender) (number) (DLI)	X		X
Increased HWCs with NQAS certification (disaggregated by urban/rural) (number) (DLI)		X	X
Improved community ownership and management of HWCs through Jan Arogya Samitis (JAS) (percentage) (DLI)			X
Increased state implementation of district-level performance measurement and rewards framework (number) (DLI)			X

PROGRAM GEOGRAPHIC SCOPE

58. The Program will be implemented across the country focused on a set of national-level policy and programmatic results combined with a set of state-level results in the selected priority states: Uttar Pradesh, Punjab, Odisha, Tamil Nadu, Andhra Pradesh, Kerala, and Meghalaya.

RA#1: STRENGTHENED SERVICE DELIVERY THROUGH REDESIGNED CPHC MODEL

59. Based on global best practice, RA#1 will support the implementation of an effective CPHC system in India including (a) every household will have access to a primary health care (PHC) facility as its first port of call (including for women-headed households, ST households and monitoring adolescent girls through adolescent friendly health clinics); (b) ensuring links between each household and its primary care facility through regular visits to all households by ASHAs (or equivalent) linked to the facility; (c) conducting appropriate activities at the household visits, including risk assessment of NCDs and TB, community mobilization, health promotion, and follow-up for treatment adherence; (d) promoting activities to increase visits by household members to PHC facilities, including enhancing the functionality of PHCs to ensure quality and completeness of care they provide; (e) ensuring referral and counter-referral (two-way) links to higher-level health facilities; and (f) strengthening systems to closely monitor and incentivize performance by facilities and administrative units for different aspects of PHC service delivery. This will include operational support to strengthen last-mile monitoring systems to also reach women-headed households and improve provision of CPHC services for the population including for women and girls. RA#1 will also support interventions to strengthen CPHC data systems, including gender-disaggregation in data collection and usage, and better tracking of CPHC performance at the HWCs.

60. This approach towards CPHC is transformational, effectively involving a redesigning of India's health care system. All individuals will have access to a PHC facility, which will offer an expanded range of high-quality services organized in 12 service delivery packages. All will undergo risk-assessment at the household level and will be encouraged to go to the PHC in their catchment area 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 then occurring at the level of the PHC. This is a wholistic and people-centred model that emphasizes prevention and lifestyle changes, and continuity of care from the household level and upwards. Furthermore, interventions in RA#1 will assist the most economically vulnerable populations.

61. RA #1 will provide support to achieve the following results:

(a) Increased footfalls at HWCs (DLI 1, CRI). This is a composite indicator that measures the utilization of the full range of services provided at the HWC and captures every time a service is utilized by an individual at the HWC. This is a disbursement-linked indicator (DLI). It is expected to show steady progress if the Program is implemented as designed—as the functionality of the HWCs improves to deliver services, the provision of the expanded package of services increases and there is positive patient experience with utilization of services. Additionally, service provision at HWCs will include

targeted information delivery for pregnant women for ANC care, information related to NCD screening for women-headed households and reproductive health for adolescent girls.

(b) Operationalization of the HWCs. The Program will work with the GoI on reviewing the existing HWCs operationalization indicators, reporting, and processes. It will support the GoI's efforts to increase the number of fully operational HWCs across the country, and to expand the number of service packages offered, over time. At present, the HWCs at most provide only 7 of the 12 service delivery packages and over time, other packages will be phased in. The Program will specifically track and support operationalization of HWCs in urban areas as well.

(c) Increased population screened based on established national protocol (DLI 2). Appropriate population-based activities are an essential element of an effective CPHC service delivery model. These will include population-based screening through a Community Based Assessment Checklist (CBAC), a national protocol, for eligible persons in all households, with additional facility-level screening encouraged for those found to be of high risk. The data from the screening, disaggregated by gender, would be maintained at the relevant HWC, as part of family records for each household. State-led innovations, including HRH pilots, temporary stay facilities for pregnant women (third trimester) from remote areas, mobile medical units, and transport facilities to improve institutional deliveries and post-natal check-up rates in aspirational districts will be reinforced and scaled-up under the Program. These are critical activities that will help increase utilization of CPHC services and will be supported under RA#1.

(d) Strengthened CPHC data systems for improved performance tracking and performance incentives (DLI 3). The CPHC data systems are evolving and there is need to develop a cohesive data system to monitor CPHC performance. The Program will work on developing a robust CPHC Performance Monitoring Framework, including prioritized indicators, pooling existing data from various data sources and conducting an assessment of data quality (for timeliness, completeness, and accuracy) for CPHC information systems to identify the gaps and develop a roadmap for improving the data quality, including independent verification system. A composite CPHC Index will be developed at the HWC and district levels and will be disseminated to the public to foster accountability. A performance incentive system for HWCs based on the CPHC Performance Monitoring Framework will be strengthened, as needed, to enhance HWC performance.

(e) Key service utilization indicators: The CPHC model to be supported by this RA would boost a range of health service utilization indicators. The Program will closely track two key indicators among these as proxy indicators, and these will be part of the Program's Results Framework: (i) proportion of pregnant women with at least 4 ANC visits; and (ii) proportion of infants 9–11 months old who have received full immunization as per the schedule.

RA#2: IMPROVED COMPREHENSIVE QUALITY OF CARE

62. RA#2 of the Program will emphasize the importance of quality of care in building a resilient and high-quality health system for the 21st century, to further support India's transformational CPHC reform agenda. To improve quality of care, there needs to be a paradigm shift from narrowly focusing on structural (input) quality to a more holistic approach encompassing competent care processes and patient experience. The Program will support the following core areas to build a high-quality health system: (a) improve quality of CPHC service delivery by supporting NQAS (NQAS) certification of HWCs, which is core to the GoI's quality agenda; (b) create a knowledge sharing platform and an enabling environment for comprehensive QOC improvement extending beyond certification and other micro-level interventions to introducing meso- and macro-level interventions; (c) refine and further develop contextualized measurement tools for quality of care, including patient experience; and (d)

strengthen the health workforce through adopting a comprehensive state-specific HRH strategy for public health care facilities.

63. Improved quality of CPHC service delivery. India has adopted the NQAS, as a national framework implemented by individual states, to certify public health care facilities at primary and secondary levels, including the HWCs. Recently, India has updated this framework and released the Operational Guidelines for Improving Quality of Care (QOC) in Public Health Facilities (2021). NQAS certification – a micro-level intervention – is an important initial step towards improving structural quality, as well as accountability by strengthening the feedback loops within health facilities and between facilities and the Department of Health and Family Welfare (DOHFW) in respective states. It provides a strong foundation to subsequently expand the reform agenda for QOC to focus on meso- and macro-level interventions. The Program will support the progress of NQAS certification of the HWCs, including UHWCs (DLI 4).

64. Create an enabling environment for comprehensive QOC improvement at the national and state levels. Given the current progress made towards QOC improvement in India, especially in some of the less advanced states, an expansion of the reform agenda for QOC would benefit from knowledge sharing, both between states and from global experiences, resulting in an enabling environment for introducing a more comprehensive approach to improving QOC over time – including a stronger emphasis on competent care processes and patient experience. The Program will support MoHFW to conduct a diagnostic analysis in order to develop a coherent framework for developing a state-specific Quality of Care Strategy (QOCS), enabling each state to create a roadmap for enhancing its efforts towards comprehensive quality improvement, including interventions at the micro-, meso- and macro-levels. Additionally, the Program will support the creation of a platform for documentation and learning exchange on global and national (across states) experiences on HQSS.

65. Develop contextualized measurement tools for patient experience. The current initiatives such as NQAS certification and initiatives such as Mera Aspataal have been focused on measuring patient satisfaction. While patient satisfaction is conditional upon patient expectations, patient experience is a more objective way of capturing what happened in a patient-provider interaction and to what extent it was clinically sound and patient-centered. The Program will support the MoHFW to develop, in consultation with states, a template for a patient experience measurement tool in Year 1 of the Program for states to subsequently adapt, adopt and pilot. This will ignite the demand for quality in the population and strengthen the feedback loops between the people and health facilities.

66. Strengthen the health workforce. The Program will support the Government's efforts toward strengthening the health workforce, focusing on increasing availability of qualified HRH and enhancing their performance to deliver quality services. One of the key interventions will be for MoHFW to develop, in consultation with states, a template for an HRH-strategy for public health facilities in Year 1 of the Program and provide technical assistance to the states in Year 2 for them to subsequently tailor and adopt in Years 3-5. The strategies would focus on improving production, introducing reforms in contractual arrangements and recruitment, and filling vacancies, capacity building, continuous professional development, functional human resources information system (HRIS), task sharing/shifting including creation of a public health cadre, and performance measurement, among others. The approach to handle state-specific challenges would require developing a strategy that identifies these contextual challenges and aims to create a roadmap based on each state's needs, fiscal space and institutional capacity (DLI 5).

RA#3: TRANSFORMING HEALTH SECTOR GOVERNANCE, ACCOUNTABILITY, AND INSTITUTIONAL AND MANAGEMENT CAPACITY

67. RA#3 shifts attention to the critical foundations of a high-performing health system, embracing issues related to governance, institutions, and accountability. RA#3 aims to support actions that will help strengthen accountability along four dimensions: (a) between tiers of government; (b) between the state and providers, (c) between the state and citizens, and (d) between providers and citizens.

68. Strengthening a national implementation framework and learning platform to scale up interventions fostering better utilization and quality of service provision (supported by DLI 6). The PforR-supported Program will support the strengthening of an implementation framework and learning platform that leverages the comparative advantages of the center and the states, whereby the national level will identify priority results and provide incentives while allowing states to innovate and achieve results adapted to their own context (Figure 3). Such a platform will enable operational research to capture key factors critical to realizing results, knowledge exchange, and cross-state experience sharing in the areas of service delivery, quality assurance, and accountability. While the strengthening of an implementation and learning platform is incentivized through a DLI, the component will also leverage TA to support the MoHFW to further strengthen the ongoing interventions or make course corrections to achieve the agreed results. It would also coordinate TA in the areas of service delivery, quality assurance, and accountability to ensure that service providers, local panchayats, districts, and state authorities have the adequate technical support to implement the reforms embedded in the Program.

69. Developing a system for social accountability between providers and people to improve quality of service delivery at HWCs (supported by DLI 7). The PforR Program is planning to strengthen relationships between provider-people by empowering citizens to participate in the management of HWC to improve the delivery of CPHC services through one DLI. This consists of aiming to improve community ownership and management of HWCs through JAS by institutionalizing a platform for community participation and management of HWCs through JAS according to the existing NHM guidelines. This DLI will measure the proportion of HWCs having a functional JAS. The functionality of JAS can be defined as HWCs preparing an annual report placed before the JAS and presented to the Gram Sabha (public reporting) and an annual financial audit. A disbursement-linked result (DLR) to develop a template for JAS annual report and financial audits has been included as a prior result to provide a tool to JAS to prepare these. Another DLR on utilization of JAS funds will also be introduced to assess the effective implementation of JAS and avoid similar issues related to poor budget execution of untied funds of Rogi Kalyan Samitis (RKS). Flexible funding at the facility level and community engagement are both important pillars of stronger service delivery systems, but their potential has not been fully maximized to date. Furthermore, the program will incentivize states to improve representation of women grassroot leaders in JAS and strengthen links with Mahila Arogya Samitis (MAS) (women's health groups) for improved uptake of reproductive healthcare services, preventive care, and screening for NCDs such as cervical cancer and breast cancer. Additionally, women's health groups (MAS) will be involved in social audits, planning, and monitoring of health programs in urban areas, including slums.

70. Shifting the focus to a performance-based measurement and system at district level to improve quality of PHC services (supported by DLI 8). This will be incentivized through a DLI aiming at introducing a Performance Measurement Framework at the district level, guided mainly by the CPHC Performance Measurement Framework but can also draw upon the NITI Aayog State Health Index that could be published as a yearly district index report. Parameters drawn from other GoI performance ranking initiatives may also be considered. The first two years of the PforR program will consist of developing and agreeing on a district measurement framework. Years 3, 4, and 5 will consist of publishing the annual district health index report for a proportion of districts and establishing a rewards framework (which could be monetary in the form of a budget bonus or non-monetary such as peer recognition and celebration). By elevating district performance as a critical

ingredient of scheme success, this DLI aims to empower this tier of government to sustain momentum in implementation and ultimately ensure service delivery achievements on the ground. As such, this is also a PDO indicator.

71. Strengthening social accountability between state-people through more transparent public finance management (supported by DLI 9). The PforR Program is proposing a DLI to strengthen relationships between states and people by empowering citizens and other stakeholders to have access to better information to monitor resource allocation and expenditure that affect PHC service delivery. At present, it is difficult to track resource allocation by the center, fund releases to states, and expenditures at the state level. In fact, expenditures are not in the public domain. This DLI consists of establishing a mechanism whereby the MoHFW would clearly report key financial data for which it is responsible—allocations and fund releases for PM-ABHIM—while also creating the space for states to report expenditures. In addition, this DLI will build upon a prior result in Year 1 aimed at simplifying PFM data by reducing the number of budget lines and resources pools under the NHM. This measure can both reduce the administrative burden on states and encourage better budget execution by making transfers across pools more flexibly achieved. This DLI (New guidelines on streamlining the PIP (Program Implementation Plan) process planning, appraisal, implementation and monitoring developed by MOHFW and transmitted to states)) is a prior result under DLI 9.

72. While the Program (activities and results) is anchored on PM-ABHIM and HWC of NHM, the states would continue to provide the overall implementation platform and underlying health system to deliver on results of the PforR-supported Program. The results areas are very clearly aligned to the government programs and funding sources that are included in the Program (Table 2).

Table 2. PforR-supported Program, results areas, and links with Government program

Program/ Platform	What's included in Enhanced Health Service Delivery Program (EHSDP) RAs with respect to the Program		
	RA#1: Strengthened service delivery through redesigned CPHC model	RA#2: Improved comprehensive quality of care	RA#3: Transformed health sector governance, accountability, and institutional and management capacity
PM-ABHIM	PM-ABHIM is the key government program to deliver on operationalization of increased number of HWC to improve CPHC delivery	Resources for key inputs provided under PM-ABHIM would be relevant to improve structural quality of HWCs	
AB-HWCs (leveraging the NHM platform)	Ongoing interventions under AB-HWC, community engagement, ASHA program, service delivery program related to RMNCAH, NCDs etc. – including provision of free drugs and diagnostics – would be leveraged to deliver on results related to increased footfalls, screening for NCDs etc.	Quality certification (NQAS) and other quality improvement programs under NHM would be relevant for RA#2. In addition, HRH reforms would be synergized with efforts prioritized under NHM and will accelerate implementation.	AB-HWC community engagement and ownership initiatives such as JAS, cross-cutting NHM initiatives such as strengthening FM functions (for resource pool and transparency-related results), performance management systems etc. would be relevant for the indicators under RA#3. The NHSRC, as part of nodal NHM technical resource provider, would be relevant for strengthening of the learning platform.

DISBURSEMENT-LINKED INDICATORS

73. **The DLIs for the Program, a combination of outcome and intermediate results, are as follows.** The DLI matrix and verification protocol indicate which DLIs are timebound, non-timebound, scalable, and non-scalable.

Table 3. Disbursement-Linked Indicators

DISBURSEMENT LINKED INDICATORS	PDO	IR	ALLOCATIONS (US\$) (M)					
			PRIOR RESULTS	YEAR 1*	YEAR 2	YEAR 3	YEAR 4	YEAR 5
DLI 1: Increased footfalls at HWCs (number) (CRI) US\$50M	X		NA	6.25	6.25	15.63	15.62	6.25
DLI 2: Increased population screened based on established national protocol US\$87M		X	NA	17.5	20.0	20.0	20.0	9.5
DLI 3: Strengthened CPHC data systems for improved performance tracking and performance incentives (text) US\$53M		X	NA	10.0	8.0	16.0	8.0	11.0
DLI 4: Increased HWCs with NQAS certification (number) US\$60M	X		3.76	1.54	8.14	18.7	23.59	4.26
DLI 5: Development and adoption of state-specific Human Resources for Health (HRH) strategies for public health facilities (number) US\$60M		X	NA	10.0	10.0	16.0	16.0	8.0
DLI 6: Strengthened national implementation framework and learning platform (text) US\$37.75M		X	6.0	4.25	10.0	6.5	6.0	5.0
DLI 7: Improved community ownership and management of HWCs through Jan Arogya Samitis (JAS) US\$50M	X		7.0	0.0	10.75	10.75	10.75	10.75
DLI 8: Increased state implementation of district-level performance measurement and rewards framework (number) US\$56M	X		NA	0.0	11.0	18.0	27.0	0.0
DLI 9: Simplification and enhanced transparency of health sector's public financial management (text) US\$45M		X	8.0	0.0	4.0	16.50	16.5	0.0
TOTAL			24.76	49.54	88.14	138.08	143.47	54.76

74. **The achievement of the prior results and DLIs would trigger World Bank disbursements to the Program.** The DLIs reflect the critical areas that the GoI must address to push health sector performance to the next level. They indicate the combined effect of a set of specific technical interventions and institutional strengthening interventions.

ALIGNMENT BETWEEN THE GOVERNMENT PROGRAM AND THE PFORR PROGRAM

Table 4. Alignment of Government program with the PforR Program

	Government program	PforR-supported Program	Reasons for Non-alignment
Objective	To attain the highest possible level of health and well-being for all, through a preventive and promotive health care orientation, through increased access, improving quality and lowering the cost of health care delivery	To expand health service delivery, improve quality of care and strengthen governance of the health sector in India	The Program will support a subset of the Government program's objectives.
Duration	2017–ongoing	2022–2027	Supporting the latter phase
Geographic coverage	National	National with a focus on 7 priority states	Priority engagement for the WB and maximum impact of available financing
Results areas	PM-ABHIM CSS Components, NHM and XV-FC grants	PM-ABHIM HWCs, PM-ABHIM BPHUs, NHM (HWCs)	The Program will support a subset of the Government program's focus areas and activities (recurring expenditure and operational cost).
Overall Financing	US\$58 billion	US\$922 million	The Program will support a subset of the Government program's objectives; as such, the PEF is approximately 2 percent of the Government program

PROGRAM EXPENDITURE FRAMEWORK

75. The PEF is premised on the following: (a) AB-HWCs as part of flagship NHM program of the GoI and (b) the newly launched PM-ABHIM. While the AB-HWCs is a CSS (GoI and state government funding in agreed ratio), PM-ABHIM has both central sector schemes components (100 percent financing by the GoI) and CSS components. The GoI has prepared a costed plan for the implementation of the wider PM-ABHIM during FY22/23 to FY26/27. Considering the results areas and attributable program interventions, the overall expenditure framework of the Government program, based on the four areas mentioned earlier, for FY22/23 to FY26/27 is estimated at US\$58 billion. The proposed PforR-supported Program is a subset of the Government program after taking out budgetary allocations and budget lines for activities to be excluded out of the three areas mentioned earlier. The key exclusions to arrive at the Program include (a) major civil work, (b) legal aspects around female feticides, (c) specific disease control programs (Integrated Disease Surveillance Program are not excluded and is part of the Program); and (d) AYUSH or Indian system of medicine. The total PEF for five years is estimated at US\$12.4 billion, to which the World Bank contribution will be US\$500 million (equivalent to 4 percent of the total Program financing).

76. The expenditure projection has been arrived at by analyzing trends of actual expenditures (FY18/19, FY19/20 and FY20/21) and budgetary allocation (FY21/22 and FY22/23) for the budget lines contributing to the three areas mentioned earlier and has been adjusted for inflation over the Program period. In addition, for the new initiatives, (that is, PM-ABHIM) the projections for the next five years are based on the approvals accorded by the GoI through its Cabinet. The budget outturn in the past years shows reasonably well-functioning budget allocation and execution, ranging from xx percent to xx percent. The Program budget by source of financing is provided in table 5.

Table 5. Expenditure framework and Program financing

Summary of Program Expenditure Framework

(in INR m)

Scheme	Y1	Y2	Y3	Y4	Y5	Total	Assumption
PM-ABHIM	-	59	193	644	1,473	2,369	Only Urban HWC and BPHU recurring costs for 7 states
NHM-HWCs	1,010	1,161	892	1,536	1,766	6,808	Only HWC recurring cost for 7 states + UPHCs and UCHCs HR cost for 7 states
Total	1,1010	1,220	1,538	3,239	3,239	9,177	
					US\$, millions	1,223	
					P as a percent of p	2 percent	
					Bank financing	US\$500 millions	
					As a percent of P	41 percent	

D. PROGRAM IMPLEMENTATION ARRANGEMENTS

77. The Joint Secretary (JS), NHM, Director (Policy) will be the overall lead for the Program and provide oversight of implementation and be the focal point for the WB team. The JS will work under the overall supervision and guidance of the Secretary, Health and Family Welfare, MoHFW and Additional Secretary and Mission Director, NHM (AS/MD). The JS is supported by Director (Policy), who will assist with day-to-day coordination, and a team of directors managing technical, fiduciary, and safeguards activities. The JS would coordinate with relevant JS's/ Directors in the MoHFW for smooth implementation of the Program and achievement of results. The National Health System Resource Center (NHSRC), the apex technical body under NHM, will be responsible for providing necessary technical inputs for the implementation of the Program and be responsible for developing guidelines, tools, capacity building efforts, and technical assistance to states.

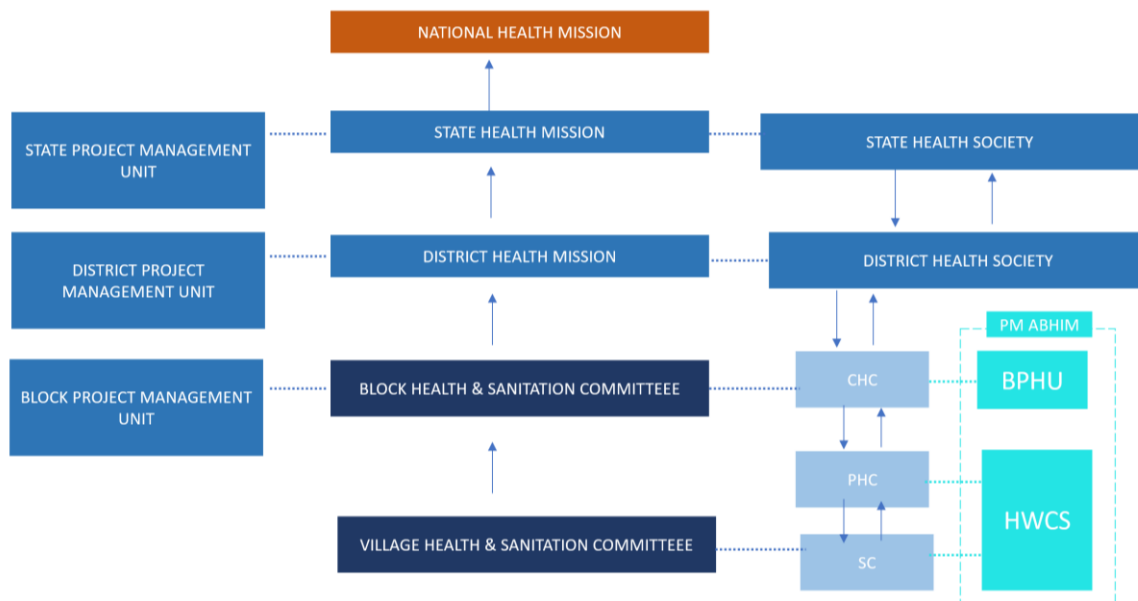
78. The Program will be guided by the National Steering Committee constituted for ABHIM, which will also have the mandate for the WB-supported Program at the national level. The National Steering Committee chaired by Secretary, Health and Family Welfare, MoHFW with the AS/MD as the member will be responsible for providing policy direction and reviewing overall Program performance. In addition to the established structures, the Program will also support strengthening of a national implementation framework and learning platform that will foster active engagement of states and help drive key priorities, support cross-learning among states, and support the operational research agenda (DLI 6). The MoHFW will issue an Office Memorandum (OM) related to the Program to concerned officials in MoHFW, NHSRC and seven priority states and cover aspects such as description of the Program objective and scope, Results Framework including DLIs, DLI allocations, roles and responsibilities (national and state level) for achievement of results, fund flows and reporting of fund utilization, monitoring and reporting (including KPI reporting), Program Actions

and compliance, anti-corruption protocol, and exclusion of high-value contracts (HVCs). This will be a DLR (6.1) and a prior result.

79. The (MoHFW) will be responsible for achieving the Program’s national-level results while the seven priority states will be responsible for achieving state-level results. Table 6 provides a summary of entities primarily responsible for achieving the DLIs. The MoHFW is the implementing agency at the national level, responsible for policy development, technical oversight and assistance, setting results, monitoring and evaluation, providing financing, ensuring a coordinated implementation platform that enables continuous learning and cross-state learning for the Program.

80. Within the MoHFW, existing implementation mechanisms and platforms of NHM will be utilized. The MoHFW will also provide oversight and necessary support and guidance to achieve the Program results. The experiences of these priority states will provide learning opportunities for remaining states in the country for assessing implementation challenges and sharing successes **The state health society managing NHM would be overall responsible for implementation** of relevant interventions at the state level in five priority states. As per the directions of MoHFW, the states must implement PM-ABHIM through existing structures of 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 Unit (DPMU) at district level and Block Program Management Units (BPMU) at the block level for implementation and monitoring of interventions at district, block, and facility levels. It is understood that PM-ABHIM would be implemented through the existing structures of NHM in each of the priority states, that is, SPMU, DPMU and BPMU.

Figure 5. Public health institutional setup



81. Each of the seven priority states have different governance structures and varied implementation capacity. Throughout implementation, the Program will assess capacities of different states and provide technical assistance to augment the implementation capacity to achieve desired results. The form of TA can include provision of independent technical consultants at the state/ sub-state level or explore procuring services of a local technical agency to provide necessary guidance and support during program implementation. The Program will also explore options for incentivizing states on achievement of pre-defined results.

82. **Central Government-State relationship.** The NHM is a centrally driven program, and structures in terms of administration, powers, financing, and so on are largely the same as the PM-ABHIM. The PM-ABHIM Program is to follow the same central-state relationship. The agreed instrument for Program planning, PIP, will continue to be the means for planning and approval of resources for the HWC component within the NHM and PM-ABHIM. The Program will develop a performance-based management mechanism to drive positive competition among HWCs and districts to improve performance and provide incentives (financial and nonfinancial) based on the composite scores related to the HWC Health Index and the district level performance management system

83. Health and hospitals being a state subject, the primary responsibility to strengthen public health infrastructure lies with the respective state government. The Central Government, however, provides technical and financial support to states under NHM for improving health care systems, based on their proposals, subject to availability of resources. The overall health care delivery services are categorized as primary, secondary, and tertiary care services and at the state level are managed by different directorates of the state health department. While the primary health care services by subcenter and PHC are largely preventive and promotive, the CHC works as the first referral unit (FRU) for curative services. The district hospitals and sub-divisional hospitals form the core of the secondary services, while the medical college hospitals and super specialty hospitals form part of the tertiary health services. Table 6 further details the key functions of district hospital, CHC, PHC, and subcenter. To ensure delivery of CPHC, all the existing subcenters and PHCs (both rural and urban) are being upgraded to HWCs.

Table 6. Classification of health care centers

Type of health facility	Typology and geographic distribution	BMWM protocol	PM-ABHIM nomenclature
District hospital	One in each district. District hospital serves as secondary referral unit and provides comprehensive secondary health care services to the people in the district at an acceptable level of quality. Based on population size, districts are graded and vary from 100 to 500 bedded hospitals and services include outpatient department (OPD), indoor, and emergency and they will have OT and ICUs.	Every district has at least one district hospital and there are more than 1,000 district hospitals in the country. All district hospitals are mandated to comply with the BMW Rules (2018); most district hospital have tie-up with common treatment facilities (CTFs) for collection and disposal of biomedical waste (BMW); while solid BMW is being managed, there are gaps in treating liquid wastes from district hospitals.	
Community health centers (CHCs) or sub-divisional hospitals	CHCs are established and maintained by the state government. They also work as FRUs. The standard norm is one CHC for every 120,000 population in plain areas and every 80,000 population in hilly areas. In urban areas, it is 250,000 population.	Compliance with BMW Rules 2016 is generally satisfactory with respect to segregation of wastes, collection in colored bins, and final disposal. Liquid wastes are generally untreated. Staff trainings on BMWM are provided	All block headquarter level facility (referred to as CHCs/sub-divisional hospitals /block PHCs) would be strengthened to become a BPHU. This will only be focused in Uttar Pradesh and Odisha (Program states)

Type of health facility	Typology and geographic distribution	BMWM protocol	PM-ABHIM nomenclature
		but often refresher trainings are missing.	
Primary health center (PHC)	PHC is the first contact point between village community and the medical officer. The PHCs were envisaged to provide an integrated curative and preventive health care to the rural population with emphasis on preventive and promotive aspects of health care. The standard norm is one PHC for every 30,000 population in plain areas and every 20,000 population in hilly areas	Volumes of BMW are generally low, and disposal is done through deep burial pits located on site. BMW segregation is practiced but better training and monitoring is required at PHCs.	PHCs will be upgraded to HWC-PHCs.
Subcenter	The subcenter is the most peripheral and first contact point between the primary health care system and the community. The standard norm is one subcenter for every 5,000 population in plain areas and every 3,000 population in hilly areas.	Generation of BMW is meager, and disposal is done on site; disinfection is carried out with available disinfectants	Subcenters will be upgraded to HWC-PHCs.

E. DESCRIPTION OF PROGRAM ACTIVITIES AND IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL EFFECTS

84. As required by PforR financing, an ESSA has been conducted by the World Bank during Project preparation. It was prepared in collaboration with MoHFW 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.

85. **Key environmental risks associated with the Program** centers on the BMW generated at the health care facilities. With the upgrade 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. Due to the COVID-19 pandemic, the use of personal protective equipment (PPE) has increased substantially. The periodic disposal of PPE—particularly face masks, gowns, and gloves also contribute to the BMW. 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.

86. Other **RISKS** and impacts include building safety; fire and electric safety in the health care facilities that will be refurbished; and noise, dust, and wastes generated through the refurbishment and renovation of the HWCs. These improvements 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. The third area is community and health workers' safety and health resulting from improper BMWM, wastewater disposal, and lack of adequate infection control during the operation of the health care facilities. 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.

87. **Key social risks associated with the Program** are directly associated with the risks of exclusion particularly for STs and vulnerable groups in unserved areas, that is, aspirational districts and ITDA blocks. The social systems assessment filtered Odisha and Tamil Nadu as focus states to decipher key social risks and institutional capacities in improving health service delivery in tribal blocks. **Four of the seven participating states have designated Schedule V and Schedule VI areas. Additionally, across seven states, the Program covers 15 aspirational districts. Therefore social risks can be broadly divided into two pillars: I. Risks of exclusion in aspirational districts and ITDA blocks:** (a) uptake and utilization of health facilities by traditionally vulnerable groups in unserved and underserved areas, including tribal blocks and Schedule V areas of Odisha, Andhra Pradesh, Meghalaya, and Tamil Nadu; (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. **II. Functionality of community-level platforms (JAS, MAS) in aspirational districts and ITDA blocks:** 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.

88. From a social perspective, the assessment revealed that to meet the Core Principles on land acquisition and involuntary resettlement, a screening mechanism will be required to identify any potential adverse social impacts. The screening requirement for land acquisition will be embedded as a parameter in the current social audit monitoring system of JAS. MoHFW at the central level and the state health societies across seven states provide the institutional mechanism for equitable health program implementation along with detailed roles and responsibilities for district health officials and sub-district level officials (BPHUs 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. JAS and tribal councils in Meghalaya regularly follow the process of social audits to create transparency, participation, and accountability of the Program implementation at the health facility level. MoHFW also has a clear focus on social inclusion and the differentiated needs of SC, ST, and Casen and women-headed households. To enable outreach, state health societies have 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, PM-ABHIM further addresses gender and social equity within a framework that is holistic and systemic. Additionally, MoHFW has a special focus to improve delivery and quality of health care services in ITDA blocks in participating states.

ASSESSMENT OF ENVIRONMENTAL EFFECTS

89. 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.

ENVIRONMENTAL AND SOCIAL SCREENING

90. 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.

LIST OF EXCLUDED ACTIVITIES

91. 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
- Construction of boundary walls, entrance, pavements, footpaths, and so on (in line with PM-ABHIM guidelines)
- Any activity that may have potential involuntary resettlement will be excluded (screened out) from the Program boundary.

RISK SCREENING CHECKLIST

92. 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:⁷ (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 7. Risk screening checklist

Criteria for risk screening	Description	Risk rating - Environment	Risk rating - Social
Likely environmental and social effects	Environmental risks of the Program potentially include (a) risks related to rehabilitation of existing health care facilities; (b) risks related to increased BMWM and 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	Moderate	Moderate

⁷ 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
	<p>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 aspirational districts and ITDA blocks: (a) uptake and utilization of health facilities by traditionally vulnerable groups in unserved and underserved areas, including tribal blocks and Schedule V areas of Odisha, Andhra Pradesh, Meghalaya, and Tamil Nadu; (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. II. Functionality of community-level platforms (JAS, MAS) in aspirational districts and ITDA blocks: 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.</p>		
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 upgrading 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 of 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>Three out of seven participating states have ongoing World Bank operations in health which have dedicated components to strengthen their capacity, in BMWM and Infection Management and Environmental Plan Framework (IMEP). 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 HCWs in rented accommodations.</p> <p>As such, no identified sensitive social settings could impede successful performance of the Program. Land acquisition or vertical and horizontal expansion of structures will be excluded, and no legacy or unresolved</p>	Moderate	Moderate

Criteria for risk screening	Description	Risk rating - Environment	Risk rating - Social
	issues on the activity sites are known. No social conflicts or social fragility is present in the Program areas.		
Institutional complexity and borrower implementation capacity and track record	<p>MoHFW has demonstrated experience and institutional capacity to manage expected environmental and social risks and impacts.</p> <p>The executing agency at the national level is MoHFW. According to the directions of MoHFW, the states must implement PM-ABHIM through existing structures of NHM and its administrative and FM structures would be utilized. The Mission Director, NHM, of the state along with SPMU would monitor and track implementation of the interventions under the Program. The SPMU would be supported by DPMUs at the district level and BPMUs at the block level for implementation and monitoring of interventions at districts, blocks, and facility levels. It is understood that PM-ABHIM would be implemented through the existing structures of NHM in each of the priority states, that is, SPMU, DPMU, and BPMU.</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 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 EHSD 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>	Moderate	Moderate

Criteria for risk screening	Description	Risk rating - Environment	Risk rating - Social
	Four participating states 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.		
Reputational and political risk	The PforR does not appear to have high political risk, and the sector is not known to be controversial. As the PforR will involve investments in human resource capacity and small-scale rehabilitation of health facilities, environmental and social issues are expected to present reputational risks to the World Bank. The project will leverage and help deliver on GoI guidelines and schemes such as Swachhata guidelines for health facilities, Kalakalp Scheme guidelines, NAQS standards, and IMEP.	Low	Low
Overall assessment	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.	Moderate	Moderate
Aggregate risk rating		Moderate	

ENVIRONMENTAL BENEFITS AND OPPORTUNITIES

93. The Program will transform PHCs and subcenters into functional HWCs. This will include support for (a) small-scale renovations (for example, minor repairs to damaged buildings), (b) provision of quality facilities (for example, provision of water supply and flooring, windows, partitions, cleanliness), (c) BMW disposal arrangements (for example, ensuring adequate facilities and management systems in the HWCs), and (d) hiring of contract workers for health care cleanliness and housekeeping. The Program will support capacity building of health workforce on BMW management, occupational health and safety (OHS), infection control, and occupational and public safety. It will also strengthen community multi-sector coordination mechanisms, between the departments of health, environment, disaster management, rural, and urban.

LIKELY ENVIRONMENTAL EFFECTS

94. Most of the activities to be supported under the proposed Program will not have any significant negative effects. The Program supports recurring expenditure within the HCWs and BPHUs; this 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 HCW and BPHU 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.

95. 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, (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 so that they do not pose risk to human health and the environment. Other induced environmental impacts include the increased generation of e-waste and plastic waste 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.

96. The HCWs and BPHUs 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, 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, 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 8. 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
Implications for environmental quality	Fugitive emissions (dust, noise) and waste generation (construction and demolition waste) from minor civil works	<ul style="list-style-type: none"> 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"> Air (Prevention and Control of Pollution) Act, 1981 Municipal Solid Waste (Management and Handling) Rules, 2000 Noise Pollution (Regulation and Control) Rules, 2000 Construction and Demolition Waste Management Rules, 2016 IMEP section 4.12 Construction of Management Guidelines 	<ul style="list-style-type: none"> Public works department (PWD)/accredited agencies implementation SPCBs supervision 	Training and provisions for contractors' teams to manage solid waste/debris from refurbishment works Training on provisions of the National Hospital Safety Guidelines (National Disaster Management Authority)
	BMW generation	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> All facilities require license to operate under BMW rules. 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. 	<ul style="list-style-type: none"> HCF staff implementation NHM health society funding SPCBs supervision 	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. Trainings for housekeeping and sanitation staff on

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
		care facilities do not treat liquid wastes before release. ⁸	<ul style="list-style-type: none"> Guidelines for Handling, Treatment, and Disposal of Waste Generated during Treatment/Diagnosis/Quarantine of COVID-19 Patients Guidelines for Bar Code System for Effective Management of Bio-Medical Waste Guidelines for Common Biomedical Waste Treatment and Disposal Facilities Guidelines for Environmentally Sound Management of Mercury Waste Generated from Health Care Facilities. 		BMW should be conducted with health care staff.
	Liquid waste (wastewater, chemical reagents, and disinfectants)	<ul style="list-style-type: none"> Moderate Effluent quality standard applicable. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> HCF staff implementation SPCBs supervision 	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

⁸ 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
			<ul style="list-style-type: none"> • BMW rules also set effluent discharge standards. • 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 from health care facility should conform to the standards of liquid waste as listed in Schedule II of BMW Rules, 2016. • HCFs with more than 10 beds need to establish suitable effluent treatment facility should have installed ETPs by December 2019. 		<p>effluent will meet applicable standards and 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	<ul style="list-style-type: none"> • Moderate <p>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).</p>	<ul style="list-style-type: none"> • e-Waste (Management and Handling) Rules, 2016 • e-Waste is not covered under BMWM Rules, 2016 • As per the rules, the producer of the electrical and electronic equipment shall be responsible for collection and channelization of e-wastes 	<ul style="list-style-type: none"> • HCF staff implementation • SPCBs supervision 	<p>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.</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
			<p>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.</p> <ul style="list-style-type: none"> • If there is no EPR, the e-waste is sent to an authorized e-waste dismantling or recycling facility or an authorized collection center of the producer of the equipment. 		
	Battery waste generation	<ul style="list-style-type: none"> • Minimal Improperly discarded lead acid batteries can contaminate soil and water. 	<ul style="list-style-type: none"> • The lead acid batteries covered under the Batteries (Management and Handling) Rules, 2001 made under the Act. 	<ul style="list-style-type: none"> • HCF staff implementation • SPCBs supervision 	Strengthening of awareness on the battery waste management system—capacity building of staff, monitoring and reporting for compliance with the regulatory requirements
OHS	OHS during renovation refurbishment works and management of COVID-19 among workers	<ul style="list-style-type: none"> • 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"> • The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 • Guidelines for Environmentally Sound 	<ul style="list-style-type: none"> • Contract workers/PWD 	Structured trainings for contract workers on OHS to ensure use of PPE and on-site cleanliness and sanitation

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
			Management of Mercury Waste Generated from Health Care Facilities		
	Infection control	<ul style="list-style-type: none"> Moderate Inadequate adherence to safety protocols can lead to spread of infections. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> IMEP NQAS 	No gaps
	Accidents and spills	<ul style="list-style-type: none"> Moderate 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> BMWM Rules, 2016 	No gaps
Universal access	Disabled persons access to HCWs and BPHUs	<ul style="list-style-type: none"> Minimal 	<ul style="list-style-type: none"> All building design codes include provisions of universal access for disabled persons in their frameworks and guidance. 	<ul style="list-style-type: none"> National Building Code of India 2016. The Central Public Works Department Harmonized Guidelines and Standards for Universal Accessibility in India 2021 	No gaps
Building safety	Life and fire safety	<ul style="list-style-type: none"> Moderate The risk of fire in health care facilities is a concern due to the 	<ul style="list-style-type: none"> National Building Code of India 2016 Part - IV 'Fire & Life Safety' in the building bylaws 	<ul style="list-style-type: none"> PWD and HCF 	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
		<p>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 building to reduce the number, width, or protection of exits.</p>	<ul style="list-style-type: none"> 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. 		
	Structural safety and disaster resilience		<ul style="list-style-type: none"> All PHCs should have Disaster Management Plan in line with the District Disaster Management Authority according to the Indian Standards for PHCs (annex 4). 	<ul style="list-style-type: none"> PWD State Disaster Management Authority (SDMA) and HCF 	No gaps

Table 9. Environmental effects by results areas

Results area	Program activities/inputs	Risks	Mitigation/risk management	Benefits/opportunities
<p>RA#1: STRENGTHENED SERVICE DELIVERY THROUGH REDESIGNED CPHC MODEL</p>	<ul style="list-style-type: none"> • Primary health care (PHC) provider/facility to every household • Links between each household and its primary care provider/facility • Household visits and population-based screening for NCDs, with basic records of all households maintained at the facility • Activities to increase visits by household members to PHC facilities • Referral and counter-referral links to higher-level health facilities • Systems to closely monitor and incentivize performance by facilities and administrative units for different aspects of PHC service delivery 	<ul style="list-style-type: none"> • 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). • Packages such as cancer screening will involve procurement of new and advanced medical imaging equipment which can lead to radiation exposure. • 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. • 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. 	<ul style="list-style-type: none"> • Trainings on OHS, use of PPE for all health care workers and contract staff • Strengthened planning and monitoring of waste disposal (BMW, plastic, e-waste, and liquid waste) to prevent any improper disposal (burning, open dumping) 	<ul style="list-style-type: none"> • Increase of trainings and training of trainers on BMWM and Kalakalp scheme certification • Opportunities to enhance systems for health care worker safety - airborne infection control, life and fire safety

Results area	Program activities/inputs	Risks	Mitigation/risk management	Benefits/opportunities
RA#2: IMPROVED COMPREHENSIVE QUALITY OF CARE	<ul style="list-style-type: none"> • Improve quality of CPHC service delivery by supporting NQAS certification of HWCs • Create a knowledge sharing platform and an enabling environment for comprehensive quality of care improvement extending beyond certification and including meso- and macro-level interventions • Develop contextualized measurement tools for patient experience • Strengthen the health workforce through adopting a comprehensive state-specific HRH strategy for public health care facilities. 	<ul style="list-style-type: none"> • Attainment of NQAS, and CPHC services will involve inputs in the facilities and processes which may include minor civil works, and increase in the dust, noise, and solid waste. • The operation of the improved facilities will result in incremental increases in BMW and other wastes as well as wastewater/liquid waste and disinfectants. • 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. 	<ul style="list-style-type: none"> • Workers to use PPE and trained on OHS and ERP procedures • 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 	<ul style="list-style-type: none"> • Attainment of the NQAS/certification will involve monitoring of facilities. • 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. • It also includes standards for cleanliness, infrastructure maintenance, removal of junk and condemned material, and maintenance of equipment and instruments. • Strengthening of stakeholder feedback mechanisms for BMWM, sanitation and cleanliness and infection control practices in HWCs.

Results area	Program activities/inputs	Risks	Mitigation/risk management	Benefits/opportunities
RA#3: TRANSFORMING HEALTH SECTOR GOVERNANCE, ACCOUNTABILITY, AND INSTITUTIONAL AND MANAGEMENT	<ul style="list-style-type: none"> • Actions that will help strengthen accountability along four dimensions: (a) between tiers of government, (b) between the state and providers, (c) between the state and citizens, and (d) between providers and citizens 	<ul style="list-style-type: none"> • Environmental quality and health and safety accountability (planning implementation, monitoring, supervision) needs to be clearly defined and not spread across an array of players. 	<ul style="list-style-type: none"> • Strengthened multi-sector coordination on BMWM, infection control, and safety in health care facilities 	<ul style="list-style-type: none"> • Community engagement and monitoring of BMW • Opportunity to support and promote awareness about Kayakalp scheme • Building of stronger coordination mechanisms between environment, rural, and health departments to tackle and find solutions for decentralized waste management • Institutionalize knowledge on BMWM and infection control best practices

ASSESSMENT OF SOCIAL MANAGEMENT SYSTEMS

97. The Program has low likelihood of any negative social impacts, and the impacts of proposed investments and cluster of activities are largely anticipated to be positive. There is no land acquisition anticipated 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, which are being addressed through quality of care and equity component of the Program. Table 10 presents the key social risks and gaps with respect to main activity clusters of the Program and potential measures to align with ESSA Core Principles.

98. As mentioned earlier, there is satisfactory institutional capacity among the functionaries of participating health directorates 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 of all participating directorates and society(ies) by promoting continued medical education and helping develop policy and strategy to strengthen the gap areas in quality health care service provision. In addition, to effectively mitigate the impacts of COVID-19, there is a need to further strengthen the interinstitutional coordination mechanism for better program outcome. The institutional capacity to address environmental issues will require strengthening on some specific areas. For example, for improved capacity for monitoring and reporting on access and quality issues across the health care facilities.

99. In addition, consultations with states documented that those states have adequate staff managing social safeguard-related impacts, as assessed, based on the record of NHM and ongoing World Bank operations in Andhra Pradesh, Meghalaya, Tamil Nadu, and a closed World Bank operation in Uttar Pradesh. However, to strengthen their capacity, state nodal officials under the current Program will be trained in tracking tribal health programming, as part of their orientation training and refresher training.

Table 10. State-level assessment of social systems: A snapshot

State	State-level initiatives for tribal areas	State-level initiatives for community strengthening
Andhra Pradesh	<ul style="list-style-type: none"> • Significant government focus to improve uptake of health schemes in ITDA blocks • Peer educators creating awareness in schools • Nutritious diet in schools • Hostels for pregnant tribal women and policy emphasis on nutritional status of tribal women • Tuberculosis camps 	<ul style="list-style-type: none"> • Strengthening of block-level systems and convergence for undernutrition in tribal blocks • Community Nutrition Hub, community nutrition counsellors, and community-led social audits • Consultations with specialists through telemedicine
Kerala	<ul style="list-style-type: none"> • >1% of population lives in areas with limited access • Mobile medical units • Mobilization camps 	<ul style="list-style-type: none"> • Community engagement: Arogya and health care volunteerism 25 per ward—a total of 500 per 30,000 population

State	State-level initiatives for tribal areas	State-level initiatives for community strengthening
		<ul style="list-style-type: none"> Family health plan: Mapping health needs of health facility area, mapping the services that are currently provided, identifying new services that need to be integrated, mapping the provider at each level Specific focus projects for tribal and marginalized population in urban and rural areas
Meghalaya	Designated Schedule VI areas; policy focus on preventative care <ul style="list-style-type: none"> Tribal health center in Shillong 	<ul style="list-style-type: none"> Strengthening of community ownership through Meghalaya Community Participation and Public Services Social Audit Act, 2017 Village-level social audit committees to improve accountability of health care provision Increase awareness and uptake of health services and public health facilities by community-level initiative
Odisha (focus state for the ESSA)	Designated Schedule V areas: 40% of the population is SC/ST <ul style="list-style-type: none"> Major investments by the state government to create awareness in tribal areas—shows for awareness, beneficiary identification, and tracking. Additional budgeting procedures at the state level and annual budget plans include special provisions for KBK districts (tribal districts in Odisha) 	<ul style="list-style-type: none"> Kalpana program for better health—Dhenkanal, Odisha: Capacity building of primary care givers in preparing homemade nutritious food from locally available ingredients and counselling of mothers on family planning are also conducted here. Gaon Kalyan Samiti (GKS): Successful in demonstrating state-level health platforms
Punjab	No notified tribes or designated schedule areas	<ul style="list-style-type: none"> Strong engagement of women-led groups in supporting maternal and newborn health, through generating awareness on health and nutritional information and providing peer-to-peer support
Uttar Pradesh	High levels of poverty; more than a crore of population experiences health shocks due to OOP payment <ul style="list-style-type: none"> Improve institutional delivery and post-delivery care for women of the Tharu tribe 	<ul style="list-style-type: none"> Strong engagement of women-led groups in supporting maternal and newborn health, through generating awareness on health and nutritional information and providing peer-to-peer support. Outreach camps in urban areas for vulnerable groups including informal workers
Tamil Nadu (focus state for the ESSA)	Designated Schedule V areas; targeted initiatives for ITDA blocks <ul style="list-style-type: none"> Tribal waiting rooms, bed grant scheme, tribal counselors Referral services Mobile medical units Specific interventions to improve institutional deliveries in tribal blocks of the state 	Community based assessment checklist <ul style="list-style-type: none"> Hospital on Wheels Program: Mobile medical units were launched to provide health care services in unserved areas of the state; public health cadre

Note: Refer to annex 8 for a detailed analysis of state level social systems.

SOCIAL BENEFITS AND OPPORTUNITIES

100. The social systems assessment filtered Odisha and Tamil Nadu as focus states to decipher key social risks and institutional capacities in improving health service delivery in tribal blocks. Findings from the social systems assessment are summarized below: The Program will transform PHCs and subcenters into functional HWCs and introduce accountability enhancing mechanisms that will improve capacities of JAS to manage HWCs. This will include support for (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. Multi-sectoral convergence platforms envisaged under the Program provide opportunity for coordination between the state health societies and tribal welfare departments to improve service delivery in unserved areas and tribal blocks.

Table 11. Social effects from Program activities

Sl. No.	Activity cluster	Key social risk and gaps	Potential measures to align with ESSA core principles
1	<p>RA#1 will support interventions under the Program to strengthen the provision of CPHC services. In particular, it will support efforts to ensure effective coverage and provision of CPHC services through HWCs, with multi-disciplinary teams operating at both the facility and household levels and referral links to higher-level health facilities.</p> <p>RA#1 will also support interventions to strengthen CPHC data systems and better track CPHC performance at the HWC and district level; a system of financial incentives based on this improved performance tracking will also be introduced.</p>	<p>The proposed activities will benefit STs and vulnerable groups in aspirational districts and ITDA blocks in Schedule V areas/Schedule VI areas with improved quality of health care infrastructure and services. However, based on consultations with states and semi-structured interviews with focal points from Odisha and Tamil Nadu, the ESSA found gaps in health programming and outreach in ITDA blocks and aspirational districts.</p>	<p>To align with Core Principle 1, an environment and social risk management checklist is proposed that will have enabling provisions to fill the identified gaps. An inclusion template will be developed under the EHSD Program to strengthen service delivery in aspirational districts and ITDA blocks.</p>
2	<p>Interventions will be supported along the following key dimensions: (a) increased footfalls at HWCs, (b) operationalizing the HWCs, (c) increasing</p>	<p>Low likelihood of any negative social risks with the proposed activities.</p>	<p>To align with Core Principles 1 and #3, training facilities will be expanded, and refresher trainings will be</p>

Sl. No.	Activity cluster	Key social risk and gaps	Potential measures to align with ESSA core principles
	coverage and effectiveness of population-based activities, and (d) strengthening existing CPHC data systems toward improved performance tracking and incentivization		introduced and operationalization of HWCs will integrate social screening requirements.
3	The Program will support the following core areas to build a high-quality health system: (a) improved quality of CPHC service delivery, (b) create a knowledge sharing platform and an enabling environment for comprehensive quality of care improvement, (c) develop contextualized measurement tools for patient experience, and (d) strengthen the health workforce through developing a comprehensive state-specific HRH strategy for public health care facilities.	Low likelihood of any negative social risks with the proposed activities. Some of the activities related to enhancing of quality services will help address the gender gap identified.	To align with Core Principles 1 and 3, training facilities will be expanded, and refresher trainings will be introduced specifically on promoting sensitivities on inclusion.
6	RA#3 aims to support actions that will help strengthen accountability along four dimensions: (a) between tiers of government, (b) between the state and providers, (c) between the state and citizens, and (d) between providers and citizens. This approach is aligned with the World Development Report 2004 framework for service delivery. ⁹	This will help bridge the inequity between the bottom and top quintile districts on access to health services across the participating seven states. However, to upgrade the grievance redressal architecture, some states may need to undertake gap assessments of existing feedback loops in tribal development blocks.	Already aligned with ESSA Core Principle 5 with culturally appropriate SBCC tailored to priority unserved areas, such as tribal blocks in Maharashtra, Odisha, and Andhra Pradesh and special focus on aspirational districts including the districts with tribal population.

⁹ World Bank. 2003. *World Development Report. 2004. Making Services Work for Poor People.*

Sl. No.	Activity cluster	Key social risk and gaps	Potential measures to align with ESSA core principles
7	Citizen engagement, gender and gender-based violence	<p>The activities related to enhancing the citizen engagement through VHSCs, JAS, women-led groups, and MAS which are civic forums built on the Panchayati Raj system to boost citizen voice and agency. Additionally, to ensure equitable benefits of the Program for women-headed households and adolescent girls, the following activities will be supported under the Program:</p> <ul style="list-style-type: none"> • Gender-disaggregation in data collection and usage, and better tracking of CPHC performance at the HWC and district level. • Early identification of teenage pregnancies, high-risk pregnancies, and anemic young mothers will be identified at the HWC level for providing continuous care at the facility level. 	Already aligned with Core Principle 5 by giving special focus to community voice and agency to monitor the Program outcome.

Table 12. Intra-state variations and shortfall in health facilities¹⁰

State	Estimated midyear tribal population (as on July 1, 2019, in tribal blocks)	Subcenters			PHCs		
		Required	Present	Shortage	Required	Present	Shortage
Andhra Pradesh	2,266,965	755	802	**	113	153	**
Uttar Pradesh	1,147,580	382	n.a	n.a	57	n.a	n.a
Odisha	9,202,138	3,067	2,701	366	460	427	33
Tamil Nadu	644,645	214	432	**	32	105	**
Meghalaya	2,314,912	771	477	294	115	118	**
Kerala	285,346	95	831	**	14	137	**
Punjab (no notified tribes)	0	0	0	0	0	0	0

¹⁰ Ministry of Tribal Affairs, Government of India, 2019.

III ASSESSMENT OF ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEMS AND IMPLEMENTATION CAPACITY

A. INTRODUCTION

101. 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.

102. 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.

103. **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.

104. 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.

105. 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.

106. 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.

107. 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, 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.

108. 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. 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

109. The Gol 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 13 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 Gol 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"> • As per accreditation requirements, health care facilities need to develop Standard Operating

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>Procedures (SOPs) in the handling of medical solid, liquid, and radioactive wastes.</p> <ul style="list-style-type: none"> 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. 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.
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"> 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.
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"> 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.
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	<ul style="list-style-type: none"> Relevant as hospitals are generators of large quantity of plastics, including non-reusable types.

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
		or through the authorized waste collection agency.	
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"> • 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. • All programs, where e-waste is generated including electrical/electronic equipment • 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.
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"> • Relevant and largely complied with; gaps exist in disposal of liquid wastes from health care facilities.
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"> • Relevant to transport of materials for upgrade, repairs, and other materials, through unpaved roads • Transport of wastes from construction, demolition, and other wastes • Use of fuels in diesel generator set • Use of paint/other material with hazardous contents
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"> • 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,

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
			<p>handled, and treated separately from hazardous wastes.</p> <ul style="list-style-type: none"> Storage, transport, handling, recycling/reuse, disposal of solid wastes including packaging materials under all Program activities.
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"> Relevant to public health workers, contracted workers employed by PWD for refurbishment of HCFs and frontline workers
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"> Applicable to maintenance and cleaning of new toilet/water, sanitation, and hygiene (WASH) structures and also for vector control Exclusion of banned insecticides Safe storage of insecticides, spill management, and safe usage
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"> Relevant for any building being constructed or upgraded, maintaining safe work, construction typology standards, and guidance, mitigation/management measures, training, monitoring Life and fire safety Structural safety
13	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
14	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.	Provides framework for disclosing information to the public

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
		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.	
15	Construction Standards and Disaster Related	<ul style="list-style-type: none"> • Disaster Management Act, 2005 • National Policy on Disaster Management 2009 • National Disaster Management Guidelines - Hospital Safety 2016 	<ul style="list-style-type: none"> • Codes for construction in disaster-prone areas • National policy (2009) focuses on prevention, mitigation, preparedness, and response • Universal access • Electrical safety • Structural safety • Fire safety • Emergency response plans • It describes the institutional and financial arrangements, capacity development, knowledge management and so on
16	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
17	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	Relevant for all workers and construction activities

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
		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 check-ups for workers age 45 for prescribed industries such as factories, mines, plantations, and those employed in hazardous process.	
18	The Epidemic Diseases Act 1897 The Epidemic Diseases (Amendment) Ordinance, 2020	The Epidemic Diseases Act 1897 provides for better prevention of the spread of dangerous diseases. The Epidemic Diseases (Amendment) Ordinance, 2020 was promulgated on April 22, 2020. The Ordinance amends the Epidemic Diseases Act, 1897. The act provides for the prevention of the spread of dangerous epidemic diseases. The ordinance amends the act to include protections for health care personnel combating epidemic diseases and expands the powers of the Central Government to prevent the spread of such diseases.	To ensure safety of communities, workers, and project staff especially during this period of COVID-19 pandemic. 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.
19	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
Important Guidelines relevant to the Program			
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	To strengthen and improve quality of care and provide recognized/accepted standards, measurement system, and quality improvement interventions in	Relevant - sets standards for infection control

Sl. No.	Applicable act/ regulation/ policy	Objective and provisions	Relevance to the Program and key findings
	In Public Health Facilities	congruence with universal quality and safety goals	
4	<i>Swachhata</i> 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	<i>Kalakalp</i> 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 PHC level (2016) and then covered all urban health facilities by 2017.	Relevant to all HCWs and BPHUs under PM-ABHIM <ul style="list-style-type: none"> To inculcate a culture of ongoing assessment and peer review of performance related to hygiene, sanitation, and infection control. To incentivize and recognize public health care facilities that show exemplary performance in adhering to standard protocols of cleanliness, infection control, and sanitation. To create and share sustainable practices related to improving cleanliness in public health facilities which lead to positive health outcomes.
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"> To ensure structural safety of hospitals (especially of critical facilities) To ensure that all professionals involved in the day-to-day operation of hospitals are prepared to respond to disasters To ensure that every hospital in the country has a fully functional and regularly tested Hospital Disaster Management Plan
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)

110. **Findings.** The GoI 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. 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.

111. 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, 1998, 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.

C. PROGRAM CAPACITIES: INSTITUTIONAL AND ORGANIZATIONAL ASSESSMENT

ENVIRONMENT

112. MoHFW has over the past 20 years implemented about 15 World Bank-financed projects/programs in the areas of COVID-19 emergency response, tuberculosis elimination, acquired immunodeficiency syndrome (AIDS), vector-borne disease control, disease surveillance, immunization, nutrition, reproductive and child health, child development services, and so on. A recent operation (approved in 2019) is a PforR, the ‘Program Towards Elimination of Tuberculosis’, having a Moderate risk rating on environmental and social aspects. As noted in the most recent Implementation Status and Results Report of the World Bank (February 2021), MoHFW is implementing the PforR satisfactorily.

113. Among the participating states, Andhra Pradesh, Tamil Nadu, Meghalaya and Uttar Pradesh have implemented World Bank-supported projects/programs: Andhra Pradesh Health Systems Strengthening Project (P167581, 2019–2024), Tamil Nadu Health Systems Reform Program (P166373, 2019–2024), Uttar Pradesh Health Systems Strengthening Project (P100304, 2011–2019). The states of Odisha and Punjab have experience of implementing a United Nations Industrial Development Organization (UNIDO) supported project—Environmentally Sound Management of Medical Wastes in India (2011–2019). See annex 6 for further details.

114. 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 BMW institutional responsibilities, implementation capacity, and performance of states in annex 8.

115. 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
Ministry of Health and Family Welfare (MoHFW) and Department of Health (state level)	MoHFW 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 BMW Rules and the IMEP. This is usually managed by BMW officer, or quality control officer, but needs dedicated capacity on EHS issues to look at EHS and OHS, holistically.
Central Pollution Control Board	There is no dedicated 'Biomedical Waste Management Cell' in Central or State Pollution Control Boards with exclusive manpower to deploy experts to the states and provide them with TA to find solutions for BMW and plastic and e-waste management.
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 Pollution Control Board	SPCBs need to strengthen enforcement capability and capacity for adequate monitoring (violations on waste burning and so on), data from online continuous emission monitoring system (OCEMS), and management of plastic waste and e-waste.
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 BMW and Infection Control (Subcenter-BMW/infection control) under the District Health Society	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, 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.
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

National stakeholder engagement framework and Grievance Redressal process flow

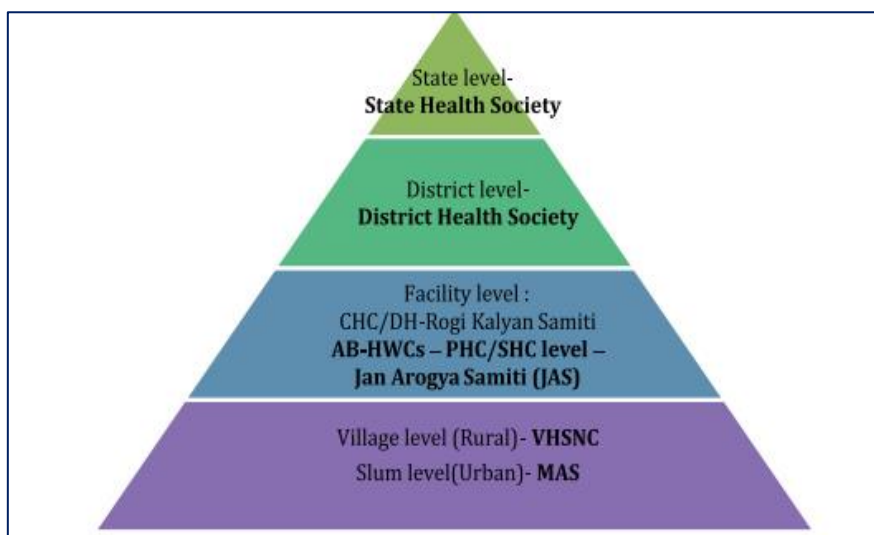
Background

116. Under AB-HWCs, sub health centers (SHCs) and PHCs are being transformed to HWCs to provide CPHC services. Such a transformation is expected to enable these AB-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. AB-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

117. 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 across states, including Uttar Pradesh, Punjab, and Tamil Nadu, 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).

118. Additionally, JAS (addressed as Gaon Kalyan Samitis in Odisha) 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 catalyzing grievance redressal

119. 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 AB-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 AB-HWC team's response to them.
- In every meeting, JAS shall hear patient or user concerns in accessing quality health care services at AB-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 AB-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

120. 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 untied 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 AB-HWCs and INR 1,75,000 for PHC level AB-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.

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

- The 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.
- Participating states under the EHSD 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.

Findings from the social systems assessment

121. *Land acquisition and management.* The Program is limited to the refurbishments of existing HCFs and during preparation, and no identified sensitive social settings could impede successful performance of the program. Land acquisition or horizontal expansion of structures outside the HCF premises will be excluded, and no legacy or unresolved issues on the across seven states 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.

122. *Equity and inclusion.* The assessment reviewed the social policies and procedures (both at national and state level) for the Government program, PM-ABHIM, 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).

123. *Social risks.* However, residual social risks related to exclusion of vulnerable groups particularly in aspirational districts and ITDA blocks in Schedule V and VI areas remain. **The anticipated social risks are manageable and can be mitigated through localized implementation strategies, better local oversight and enhanced accountability of JAS and MAS.**

D. ASSESSMENT OF CORE PRINCIPLES

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

124. India has an adequate legal framework for EHS, 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 the seven states, the NHM health directorates have well-established institutional arrangements with qualified staff and technical expertise for managing the EHS and OHS aspects of health care facility operations. 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 standards for health facilities to maintain clean water supply, hygiene and sanitation, and safe disposal of wastes. 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 (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).

125. The quantity of civil works associated with the HCW recurring expenses entails small 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 and technical and operational guidelines for implementation of PM-ABHIM which list compliances with BMW rules.

126. 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 PEF will not support (this is in chapter V)

127. 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 Kalakalp 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). With the increase in BMW this could lead to cumulative impacts at the country level, while at the facility level this would be small. The Government has the necessary coordination mechanisms (BMWM committees) in place to predict/project waste quantities and plan for waste treatment options and site selection of disposal facilities (centralized and decentralized).

128. The public health ecosystem in India has three-tiered, robust consultation, grievance redressal and feedback mechanism. RKS are established under NHM in health care facilities at the level of the PHC and above. 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 AB-HWCs (similar to RKS at PHC/CHC) 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 AB-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.

Key gaps identified

- The capacity to manage EHS risks in PM-ABHIM 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; there is no dedicated capacity in MoHFW that can look at EHS in a consolidated manner.
- Through PM-ABHIM implementation 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 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 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.

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: Not applicable.

129. The World Bank Program will support only recurring expenditure in PM-ABHIM HCWs and BPHUs and 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. HCWs in urban areas are connected to city sewerage networks to ensure safe disposal of effluents. HCWs in rural areas are established in existing villages and towns and do not pose any risk to natural habitats.

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.

130. **Rehabilitation works.** The renovation and rehabilitation works for HCWs under recurring expenditure involve some improvements within the facility. The PWD and central public sector institutions undertake such works and have a long track record. 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.

131. **Operation of facilities and worker safety.** At an individual health care facility and laboratory level, the generation of additional biomedical wastes associated with PM-ABHIM 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.

132. 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 BMWM. 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 (annex 4).

Key gaps

- Occupation safety to update knowledge on occupational risk management and good environmental mitigation practices for dust and noise control.
- 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).
- 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

System and capacity assessment: 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.

133. 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

134. 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. **Therefore, risks of land acquisition and involuntary resettlement are not applicable under the Program.**

135. **Additionally, the ESSA negative list, reproduced below, is in complete adherence with World Bank's PforR guidelines:**¹¹

¹¹ Operational Guidelines for State Health Societies; PM-ABHIM, Ministry of Health and Family Welfare, Government of India.

- Land should be available for the selected facilities and land purchase cost should not be covered under PM-ABHIM.
- Repair and renovation works already undertaken under the NHM Funds

Recommendations

- Environmental and social screening mechanism is to be instituted during the planning phase of any new construction (including healthcare facilities and waste management pits) under the Program to identify any adverse social risks and impact.
- Though land acquisition and/or resettlement is not anticipated during preparation, in rare scenarios, if any need arises, World Bank's ESF policy, particularly ESS5 on land acquisition and resettlement will be followed and due process to be instituted in consultation with World Bank task team.
- The ESSA includes a screening template for monitoring land requirements at the health care level, if required.

CORE PRINCIPLE 5 - INDIGENOUS PEOPLES AND VULNERABLE GROUPS

System and capacity assessment: 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.

Key gaps

- **Risks of exclusion in aspirational districts and ITDA blocks** (a) uptake and utilization of health facilities by traditionally vulnerable groups in unserved and underserved areas, including tribal blocks and Schedule V areas of Odisha, Andhra Pradesh, Meghalaya, and Tamil Nadu; (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.
- **Functionality of community-level platforms (JAS, MAS) in aspirational districts and ITDA blocks:** 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.

Recommendations

- **Development of an inclusion monitoring template** to track rollout of PM-ABHIM in aspirational districts and ITDA blocks in select states. States with aspirational districts and Schedule V and VI areas will adopt the inclusion template to monitor (a) specific key performance indicators (KPIs) to track tribal health programming and outreach and (b) functionality of JAS in ITDA blocks. *(Four of the seven participating states under the EHSD Program have designated Schedule V and VI areas. In addition, across seven states, 15 aspirational districts are included under the Program).*

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.

Key gaps identified

- 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.

Recommendations

- No relevant recommendations.

IV CONSULTATION AND DISCLOSURE

A. SUMMARY OF DISCUSSIONS AND MULTI STAKEHOLDER CONSULTATION WORKSHOP

136. Consultations have been conducted both at the national level with MoHFW officials and NHSRC officials and at state level with officials from seven state health societies as part of the ESSA preparation process. Given COVID-19 restrictions, virtual consultations were organized with MoHFW and the seven participating states on April 4, 2022.

137. State officials responsible for BMW, 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. The stakeholders have adequate capacity to deal with likely issues from implementation.

138. Overall, during the consultations it was understood that both at the federal and state level there is adequate capacity to manage environmental and social risks. The ESSA team proposed a due diligence screening form as a part of the EHSD Program, which will improve the awareness and monitoring capability of representatives during evaluation and monitoring of environmental and social aspects.

139. 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.

140. A stakeholder consultation workshop was undertaken on April 4, 2022, in virtual format with MoHFW and the states. The participants included representative from various government departments including from state health directorates, NHM directors, Tamil Nadu Health Society, BMW supervisors, and quality control officers. A list of participants is appended to the minutes. The workshop started with introductory remarks by Mr. Vishal Chauhan, Director Policy, followed by the World Bank team presenting the process of undertaking the ESSA, applicability of Core Principles, and identified risks regarding the Program activities. Comments and suggestions were invited on the assessment scope and practices currently being undertaken at the state level. The key discussion points, comments, and suggestions from the participants and next steps that emerged are given in tables 15 and 16.

141. Additionally, in the first quarter after project effectiveness, MoHFW will hold a multi-stakeholder consultation workshop with participating states to engage with state-level NGOs, civil society representatives, grassroots service providers and think tanks working in the public health sector to seek feedback on state-level programming for tribal communities, women and other vulnerable communities. This action will be reflected in the program implementation plan documents for states.

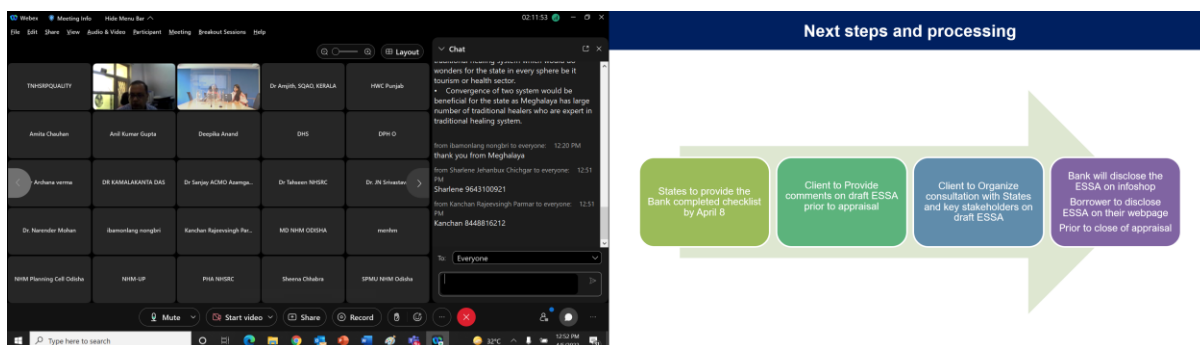


Table 15. State-level experiences on BMWM and infection control management

Suggestions and good practices from Participating Stakeholders	How the Program Design Can Addresses These
Meghalaya - decentralized treatment biggest challenge as most of the state is rural and hilly environment. Currently, biomedical waste is largely being managed at the facility level through waste segregation and management. A system-level improvement is required since in the absence of such a facility.	Strengthen training curriculum on decentralized management of health care waste
Kerala - BMW equipment management EPR, all works carried out by accredited agencies	Accreditation criteria for agencies will be looked into if they include environment and social criteria to scale up/ apply in other states.
Odisha - currently has 6 CBMWTF but plans for 6 new to meeting CPCB guidelines	Current coverage as per 2019 data - Odisha has significant gaps. However, the state informed that 6 new CBMWTFs are planned which will provide sufficient coverage for treatment.
Tamil Nadu - CBMWTF has been established for the next 10 years; each facility has an infection control officer.	Good practices can be shared with other states. The Program design will include measures for disseminating learnings nation-wide.

Table 16. State-level initiatives and experiences shared by states on tribal health programming

State	Summary
Andhra Pradesh	<p><i>Significant government focus to improve uptake of health schemes in ITDA blocks</i></p> <ul style="list-style-type: none"> Peer educators creating awareness in schools Nutritious diet in schools Tuberculosis camps
Kerala	<p><i>>1% of population lives in areas with limited access</i></p> <ul style="list-style-type: none"> Mobile medical units Mobilization camps
Meghalaya	<p><i>Designated Schedule VI areas; policy aims to focus on preventative care</i></p> <ul style="list-style-type: none"> Tribal health center in Shillong
Odisha (focus state for the ESSA)	<p><i>Designated Schedule V areas: 40% of the population is SC/ST</i></p> <ul style="list-style-type: none"> Major investments by the state government to create awareness in tribal areas –awareness, beneficiary identification and tracking Budget allocation and expenditure tracked for KBK districts and tribal blocks

State	Summary
Punjab	<i>No notified tribes</i>
Uttar Pradesh	<p><i>High levels of poverty; more than a crore of the population experiences health shocks due to OOP payment</i></p> <ul style="list-style-type: none"> • Improve institutional delivery and post-delivery care for women of the Tharu tribe
Tamil Nadu (focus state for the ESSA)	<p><i>Designated Schedule V areas; targeted initiatives for ITDA blocks</i></p> <ul style="list-style-type: none"> • Tribal waiting rooms, bed grant scheme, tribal counselors • Referral services • Mobile medical units • Special interventions to improve institutional deliveries in tribal blocks and unserved areas.

Table 17. List of officials from MoHFW and states

Sl. No.	Names of officials
1	Mr. Vishal Chauhan, JS (Policy), MoHFW
2	Dr. Sachin Mittal, Director, NHM, MoHFW
3	Dr. Dareez, MD NHM, Tamilnadu
4	Ramkumar, MD, NHM, Meghalaya and Project Director, Meghalaya Health Systems Strengthening Project.
5	Suresh K, State Admin & HR Manager & Nodal Officer for NHM PIP & PM-ABHIM, Kerala
6	Dr. J N Srivastava, Advisor Quality Improvement & Officiating ED NHSRC
7	Dr. Narinder Mohan, Deputy Director, PHSC, Punjab
8	Dr. Kamalakant Das, Additional Director (BMWM), Odisha
9	Dr. Himanshu Bhushan, Advisor - Public Health Administration, NHSRC
10	Dr. Poonam, PHA Division, NHSRC
11	Dr. Amit kumar Ojha DGM NATIONAL PROGRAM COMMUNICABLE DISEASE, Uttar Pradesh
12	Dr. Aashima Bhatnagar, PHA Division, NHSRC
13	Dr. Abu Talha, DGM -DHS , IMEP, UP
14	Dr. R. M. Meenakshi Sundari, Team Lead, Quality Improvement Cell, TNHSRP.
15	Abhay Diwedi
16	Adil Shafie
17	Gaurav Anand Shukla,
18	Md Ataur Rab, DGM-CP & CPHC, NHM-UP
19	Kaushal Singh Bisht
20	Moiz Ahmad
21	Suresh KS,
22	VK Mishra, GM, NP, NHM, UP
23	Dr. Shipra Pandey, UP
24	Ibamonlang Nongbri
25	Dr. Simran Dahiya
26	Dr. Guranam Deep, Punjab
27	Anil Kumar Gupta, Public Health Expert, ADB, MoHFW

B. DISCLOSURE

The draft ESSA report is being disclosed by the World Bank and MoHFW for receiving feedback from government officials, (at the centre and states) and other relevant stakeholders. Additionally, virtual consultations with nodal officials and district-level representatives from participating states, Stakeholders included state-level nodal officials from the participating states—Punjab, Uttar Pradesh, Tamil Nadu, Kerala, Meghalaya, Odisha, and Andhra Pradesh. Main issues discussed at the stakeholder

workshop were as follows: (a) training priorities for BMWM; (b) compliance with public health and safety aspects; and (c) environmental and social compliance: challenges faced by states for tribal health programming in aspirational districts and Schedule V and VI areas; (d) awareness raising and training campaigns; (e) community-led platforms and functionality of JAS and MAS platforms; and (f) barriers experienced by women-headed households and adolescent girls in accessing health care.

142. The consultative workshops were instrumental in securing information to support the major findings and recommendations emerging from the ESSA process. MoHFW, participating state officials, and other stakeholders contributed to the emerging recommendations of the draft ESSA report.

V CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

143. 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 other wastes and liquid effluents. 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.

144. PM-ABHIM operational guidelines and HCW refurbishment guidelines adequately cover BMW, 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. MoHFW and the state health societies will ensure that social safeguard screening form is filled and included in the Project implementation document to exclude activities that have any social safeguard impact from the Program, consistent with the Program's design.

145. The institutional setup has the potential to develop required capacity and institutional strengthening measures for monitoring and supervision oversight to deal with the potential environmental risks and challenges. 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.

Environment

146. 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, 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.

147. The provisions of the existing systems require strengthening institutional and technical capacity and multi-sector coordination. While the provisions of the Biomedical Waste (Management and Handling) Rules 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 oversight. Additionally, as there will be more outsourced agencies and contract workers, 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.

- The capacity to manage EHS risks in PM-ABHIM 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; there is no dedicated capacity in MoHFW that can look at EHS in a consolidated manner.
- Through PM-ABHIM implementation there will be an increase in BMW, and other wastes aggregated. While many states have unutilized capacity 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, and septic tanks so that they do not pose risk to the environment or nearby communities. This would also strengthen data collection and planning mechanism that includes environment, health, urban, and rural local bodies.
- At present, there is no formal mechanism for screening and identifying any potential environmental and social issues before undertaking any 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 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.
- As part of PM-ABHIM, many contracted workers/outsourced agencies would be hired to undertake cleaning, housekeeping, and BMW collection services, which may not fall under the ambit of the formal training programs under NHM/PM-ABHIM. 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.
- PWDs and other accredited agencies will carry out works related to upgrade of the HCWs. While national laws and standards exist for labor work safety, due to the small nature of these works, these contracts are also often outsourced to smaller contractors. It is important that these contractors' teams undergo structured and formal trainings in OHS management, use of PPE, and maintaining of cleanliness, and sanitation, to ensure minimal disruption to the environment and visitors.
- States do not have all CBMWTFs connected to the OCEMS to supply data on emissions from the treatment facilities.

B. RECCOMENDATIONS FOR PROGRAM EXCLUSIONS

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

148. 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
- Construction of boundary walls, entrance, pavements, footpaths, and so on (in line with PM-ABHIM guidelines)
- Any activity that may have potential involuntary resettlement will be excluded (screened out) from the Program boundary.

C. RECOMMENDATIONS TO BE INCLUDED IN THE PAP

149. 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 18. Recommended environmental and social actions for PAP

Description	Source	By	Timeline	Indicator for completion
Designating environmental and social (E&S) specialists for the Program	Environmental and Social Systems	MoHFW	Within 3 months of the Effective Date	Designation of qualified staff, with defined scope of work (including the preparation of E&S guidance, monitoring the implementation of E&S actions and reporting protocols).
Development and issuance of guidance to Priority States for updating terms of references for state-level bio-medical waste management advisory committee to look holistically at management of all wastes	MoHFW	MoHFW	Within 6 months after the Effective Date	Development of guidance to states for updating terms of references for state-level bio-medical waste management advisory committee to look holistically at management of all wastes
Priority States shall conduct periodic occupational health and safety training to all outsourced agencies engaged in the cleanliness activities for HWCs	MoHFW	Priority States	Yearly	Priority States to include action and costing in their annual work plans submitted to MoHFW

Description	Source	By	Timeline	Indicator for completion
Development of an inclusion monitoring template to track roll-out of PM-ABHIM in aspirational districts and integrated tribal development blocks in Priority States	Environmental and Social Systems	MoHFW	Within the first year after the Effective Date	Submission of a template for Priority States to monitor: (a) fund utilization in integrated tribal development blocks; (b) specific KPIs to track tribal health programming, utilization; and (c) functionality of JAS in aspirational districts.
Produce a biannual ESSA monitoring report and submit it to the Bank immediately thereafter, based on a desk review of the quarterly progress reports, other information sources, and sample-based field monitoring visits in Priority States.	Environmental and Social Systems	MoHFW	Recurrent	Regular reporting in implementation support missions

ANNEXURES

ANNEX 1: LIST OF DOCUMENTS REVIEWED

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.
5. Annual Report on Bio-medical Waste as per Bio-medical Waste Management Rules 2016 for the year 2019. CPCB.
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 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://ab-hwc.nhp.gov.in/download/document/45a4ab64b74ab124cfd853ec9a0127e4.pdf> on 16 April 2021.
12. CPCB. Environmental Training Unit. Viewed at <https://cpcb.nic.in/openpdffile.php?id=TGF0ZXN0RmlsZS9fMTYxMDk3MjY3OV9tZWRpYXB0b3RvMTk4NTcucGRm> 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.
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/openpdf.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 on 11 April 2021.
19. Kumar, A., Panigrahi, A. Occupational health hazards among health care personnel working in public health facilities in Bhubaneswar, India. *J Public Health (Berl.)* (2019). <https://doi.org/10.1007/s10389-019-01167-0>
20. Guidelines to Reduce Environmental Pollution due to Mercury and E-Waste in Central Government Hospitals and Health Centers. Viewed at <http://toxicslink.org/docs/rulesandregulation/Mercury-phase-out-order.pdf> on 11 April 2021.
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
23. Biomedical waste management guidelines 2016 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
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
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.nhsrcindia.org/sites/default/files/Swachhta%20Guidelines%20for%20Public%20Health%20Facilities.pdf>

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

Institution	Roles and Responsibilities	Capacity Gap Analysis
National Level		
Ministry of Health and Family Welfare (MoHFW) and Department of Health (state level)	<ul style="list-style-type: none"> ● Deals with health care, including awareness campaigns, immunization campaigns, preventive medicine, and public health services ● Administratively control many national health programs such on HIV/ AIDS, TB, Cancer, Filariasis, Iodine deficiency, Leprosy, Mental health, Blindness and Deafness, Tobacco Control, Vector Borne Diseases, on Prevention and Control of Diabetes, CVD and Stroke, and Universal immunization ● Heads many statutory bodies, such as, Medical Council of India (MCI), Indian Nursing Council, Dental Council of India, and Pharmacy Council of India (PCI) ● Provides funds for BMWWM. State health departments also have provided assistance to government hospitals for HCW management in the form of personnel training, waste management auditing, preparation of hospital-specific plans, procurement of materials and supplies, and construction of on-site disposal facilities. ● Grant of license to health care facilities or nursing homes or veterinary establishments with a condition to obtain authorization from the prescribed authority for bio-medical waste management. ● Monitoring, Refusal or Cancellation of license for health care facilities for violations of conditions of authorization or provisions under BMWWM Rules. ● Publication of list of registered health care facilities with regard to bio-medical waste generation, treatment, and disposal. ● Undertake or support operational research and assessment with reference to risks to environment and health due to bio-medical 	<ul style="list-style-type: none"> ● No significant gaps identified ● MoHFW is well equipped to handle their current programs and have well laid out guidelines and processes for implementation within the applicable legal and regulatory framework. Health schemes are quite inclusive and well implemented. But need dedicated capacity on environment, health and safety issues. This is currently being managed part- time by technical officials. ● All programs integrated under the NHM are committed to adoption of the IPHS and implementation of the Biomedical Waste Management Rules and the Infection Management and Environment Plan (IMEP). ● MoHFW has access to comprehensive high quality national guidelines on BMWWM, Infection Control, Construction safety, HCW cleanliness and maintenance, HCF Swachhata, and Hospital Safety (NDMA). The MOH&FW should focus on how the best practices from these guidelines can be mainstreamed into MoHFW guidance to states. Knowledge gained from implementation of these guidelines should be institutionalized.

Institution	Roles and Responsibilities	Capacity Gap Analysis
	<p>waste and previously unknown disposables and wastes from new types of equipment.</p> <ul style="list-style-type: none"> • Coordinate with State Pollution Control Boards for organizing training programs to staff of health care facilities and municipal workers on bio-medical waste. • Constitution of Expert Committees at National or State level for overall review and promotion of clean or new technologies for bio-medical waste management. 	
<p>MoEF&CC Central Pollution Control Board</p>	<ul style="list-style-type: none"> • The MoEFCC is the nodal agency for planning, promoting, coordinating and overseeing the implementation of environmental programs. The Hazardous Substances Management Division in the MoEF is responsible for the overall implementation of the rules related to waste management (solid and healthcare). • The Central Pollution Control Board (CPCB) establishes standards, compiles data and plays an advisory role to the MoEF on technical matters. • The CPCB is the key authority at national level for regulation of air pollution, water pollution with regards to construction activities and disposal of construction wastes. • CPCB, the State Pollution Control Boards (SPCB) and Pollution Control Committees (PCC) enforce environmental legislations in the states and in union territories, respectively. Both CPCB and SPCBs/PCCs are scientific/technical organization which are also responsible for setting the technology • standards of equipment, issuance of authorizations and licenses for operations of health-care facilities and their waste treatment equipment (incinerators, autoclaves etc.) • CPCB is the key authority for provide consent to establish CBMWTFs, monitoring performance, and reporting on BMW 	<ul style="list-style-type: none"> • No significant gaps identified • Although the MoEFCC/ CPCB has notified the BMW Rules, 2016 implementing agencies specified in the rules (such as municipalities, hospitals and district authorities) do not fall under its administrative control. Attempts at enforcement therefore need to be strengthened, especially within the public health-care sector. Better institutional coordination could help strengthen BMW management. • Collection, Transport and final disposal of BMW is in most cases done by certified agencies in the private sector that provide the color coded bags and bar codes, CPCB monitors this aspect through annual reports from SPCBs and CBMWTFs along with online monitoring. • There is No dedicated “Bio-medical Waste Management Cell” in central or state pollution control boards with dedicated manpower and infrastructure for monitoring and implementing provisions of the Bio-Med Rules. However, sufficient technical knowledge and capacity exists.

Institution	Roles and Responsibilities	Capacity Gap Analysis
	<p>handling and disposal, accident reporting from health care facilities.</p> <ul style="list-style-type: none"> ● CPCB Prepares Guidelines on bio-medical waste management and submit to the Ministry of Environment, Forest and Climate Change, and Conducts training courses for authorities dealing with management of bio-medical waste ● Lay down standards for new technologies for treatment and disposal of bio-medical waste (Rule 7) and prescribe specifications for treatment and disposal of bio-medical wastes (Rule 7). ● Lay down Criteria for establishing common biomedical waste treatment facilities in the Country. ● Random inspection or monitoring of health care facilities and common bio-medical waste treatment facilities. 	
State Level Institutions		
State Health Society National Health Mission (NHM)	<ul style="list-style-type: none"> ● Works to pool all resources available in implementation of the programs ● All national health programs at the State and District level are brought under one umbrella of NHM ● Provides funding allocation for support for BMWM and IC activities ● 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 	<ul style="list-style-type: none"> ● No significant gaps identified on the social side except a better coordination will help bring synergy between BMW and IC committees, and better public awareness and feedback on these issues ● While adequate funding is provided, need to improve monitoring of BMWM. ● 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.

Institution	Roles and Responsibilities	Capacity Gap Analysis
	<p>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.</p> <ul style="list-style-type: none"> ● 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 ● 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 robust monitoring of the units of various components under PM Ayushman Bharat Health Infrastructure Mission, under the overall supervision of the District Collector. ● 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. 	

Institution	Roles and Responsibilities	Capacity Gap Analysis
State Public Works Department (PWD)	<ul style="list-style-type: none"> 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. Will construct or rehabilitate and repair healthcare facilities and laboratories including for TB unit 	<ul style="list-style-type: none"> 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. Need to enhance capacity in managing issues related to contracted labor Need to improve health and safety of workers at construction sites and follow good construction management practices
State Disaster Management Authority	<ul style="list-style-type: none"> Both Health and Disaster Management along with the state public works department, will play a crucial role in implementing these building safety guidelines on the ground. of hospitals 	<ul style="list-style-type: none"> Institutional coordination mechanisms with MoHFW (national and state), BIS, and NHSRC need to be strengthened to making safety provisions mandatory in the design, construction and functioning of hospitals 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.
State Pollution Control Board	<ul style="list-style-type: none"> 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). State pollution Control Board is entrusted with monitoring and ensuring compliance to environmental regulations including Biomedical Waste Management Rules, 2016 Grant of authorization to Common Biomedical Waste Treatment Facilities. Action against health care facilities or common bio-medical waste treatment facilities for violation of these rules. 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. 	<ul style="list-style-type: none"> SPCBs are generally understaffed for adequate monitoring, and enforcement capacity (violations on waste burning etc.) but have adequate technical capacity and role clarity.

Institution	Roles and Responsibilities	Capacity Gap Analysis
	<ul style="list-style-type: none"> Organize training programs 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. Inventorisation of Occupiers and data on bio-medical waste generation, treatment & disposal. Grant consent to and publish the list of registered or authorized Recyclers. (E -Waste) Undertake and support third party audits of the common bio-medical waste treatment facilities in their State 	
State Bio Medical Waste Committee	<ul style="list-style-type: none"> 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 organization. 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. 	<ul style="list-style-type: none"> 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. 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
<i>District and Sub-District Level Institutions</i>		
Committee on Biomedical Waste Management and Infection Control (SC-	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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,

Institution	Roles and Responsibilities	Capacity Gap Analysis
BMW/IC) under the District Health Society	<p>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.</p> <ul style="list-style-type: none"> 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 organizations 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. 	<p>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	<ul style="list-style-type: none"> Provide or allocate suitable land for development of common bio-medical waste treatment facilities in their respective jurisdictions as per the guidelines of CPCB 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. 	<ul style="list-style-type: none"> Coordination mechanisms with RLBs to identify sites for disposal pits (decentralized management), better monitoring of waste burning and disposal of liquid wastes such as reagents and disinfectants need to be strengthened. 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 immunization. There are gaps in some hilly states with difficult terrain where solid waste is not collected on daily basis by ULBs. Efficient monitoring in the SWM dumpsites for BMW needs to be reported (through citizen monitoring committees and ULB officials)
District and Village Health and Sanitation Committee (under NHM)	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

Institution	Roles and Responsibilities	Capacity Gap Analysis
	<p>level community action' under NRHM, which would develop to support the process of Decentralized 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</p>	
<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 PRIMARY HEALTH CARE

(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 firefighting 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 (overhead 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 HCWS

Area of Concern - F: Infection Control	
Standard F1	The facility has established program for infection prevention and control
ME F1.1	Facility ensures that staff is working as team and monitor the infection control practices
Standard F2	The facility has defined and Implemented procedures for ensuring hand hygiene practices
ME F2.1	Hand Hygiene facilities are provided at point of use & ensures adherence to standard practices
Standard F3	The facility ensures standard practices and equipment for Personal protection
ME F3.1	The facility ensures availability of personal protection equipment and ensures adherence to standard practices
Standard F4	The facility has standard procedures for disinfection and sterilization of equipment and instruments
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
Standard F5	The facility has defined and established procedures for segregation, collection, treatment and disposal of Bio-Medical and Hazardous Waste
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 BMW 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	8,369.8
2.	SHC – HWC with residential facilities	3,766.0
	SHC - HWC building without Residence	2,098.0
3.	Community Health Centre (30 bedded)	22,596.0

ANNEX 4: ENVIRONMENTAL AND SOCIAL BASELINE DATA CHECKLIST (SHARED WITH STATES)

Questionnaire for NHM/ State Health Society

Name of State _____

Environment Management Aspects: Questions

Section 1 Medical Waste Disposal (including biomedical, E-waste and Hazardous)

- Q1 How many Common Bio-medical Waste Treatment Facility (CBWTF) established in the state?
- Q2 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?
- Q3 Are district level and tertiary healthcare facilities treating liquid waste (including laboratory and sewerage) before final disposal?
- Yes
- No
- If no, please provide specific details
- Q4 What percentage of healthcare facilities at the state/district levels have functional ETPs/STPs or connected?
- Q5 Are CPCBs guidelines for COVID-19 waste disposal followed?
- Q6 Please describe briefly describe method of disposal of
- a. hazardous waste _____
- b. e-waste _____
- c. plastic waste _____
- d. chemical waste (expired medications, radioactive, cytotoxic, cytostatics)
- _____
- Q7 Are there any budgetary gaps in terms of required budget and actual budget made available for BMWM?
- Yes
- No
- If no, please provide specific details
- Q8 Are Biomedical Waste and infection control committees established, and at what level? State/ District/ etc. and are they functional? (Tick all that apply)
- Yes (State, District, Block)
- No
- If no, please provide specific details

Section 2 Healthcare facility refurbishment

- Q1 Which departments are involved in undertaking rehabilitation/ refurbishment/? renovation works at Health Care Facilities?
- Q2 If there is a screening procedure, are any of the following criteria considered as part of the screening of a site for Health Care Facility for undertaking rehabilitation/ refurbishment/ renovation works? (Tick all that apply)
- Presence of any nearby sensitive receptors (that may get disturbed or impacted because of the rehabilitation/ refurbishment/ renovation works)

- Presence of hazardous construction materials such as Asbestos Containing Materials (roofing sheets, pipes, insulation material, etc.) in the existing Health Care Facility building
- Structural safety of the existing building
- Other (please specify)

Section 3 Healthcare Worker Safety

- Q1 What measures exist in enforcing occupational health and safety practices for labor is engaged in any civil/ construction work in the health sector?
- Q2 What is the mechanism to ensure that labor laws are being adhered to in any of the civil works? Are they being monitored?
- Q3 What is the approved strategy/ guideline for immunization programs for workers
- Q4 What is the strategy/ arrangement for monitoring occupational health and safety Facilities
- Q5 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 HCFs?
- Yes
 - No

If no, please provide specific details

- Q6 Management and Infection Control Practices? (tick all the records that are regularly maintained)
- Check all that apply.
- Record of Authorization from State Pollution Control Board under Bio-medical Waste Management Rules
 - Record of formal agreement with Common Biomedical Waste Treatment and Disposal Facility for collection and treatment of Bio-medical Waste
 - Record of Bio-medical Waste generation, collection/disposal
 - Record of Annual Reports submitted to State Pollution Control Board under Bio-medical Waste Management Rules
 - Record of Accident Reports submitted to State Pollution Control Board under Bio-medical Waste Management Rules
 - Record of minutes of meetings of Bio-medical Waste Management Committee (for Health Care Facilities with more than 30 beds)
 - Record of Batteries Wastes handed over to authorized sellers/dealers/recyclers Record of Recyclable Wastes handed over to authorized recyclers
 - Record of quality test results of effluent generated
 - Record of trainings provided to staff on Bio-medical Waste Management Record of immunization of all employees
 - Record of annual health check-up of all employees

- Q7 Do Health Care Facilities with more than 30 beds have a Biomedical Waste Management Committee?
- Yes
 - No

If no, please provide specific details

- Do Health Care Facilities with less than 30 beds have a designated Biomedical Waste Management Supervisor?
- Yes
 - No

If no, please provide specific details

Q8 Is there adequate coordination between Health Care Facilities and Local Government Authority (Municipality, Panchayat, etc.) for management of General Waste?

Yes

No

If no, please provide specific details

Section 4 Community Health & Safety

Q1 What measures are used in avoiding, minimizing, and/or mitigating community risks while the construction work is in progress?

Q2 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)

Yes

No

Q3 Do buildings meet life and safety objectives? And are Life and fire safety systems and equipment installed in HCFs?

Yes

No

If no, please provide specific details

Q4 Transportation of high-risk materials (infectious waste, laboratory samples etc.) Tick all that apply

Containers properly labelled with the quantity of the contents, and its associated hazards in addition

Workers involved in the transportation are trained regarding emergency procedures

Q5 Are wastewater outflows from hospitals adequately connected to city sewerage system? are there any gaps?

Yes

No

If no, please provide specific details

Q6 What control strategies are adopted for vector borne diseases

Q7 Are there occurrences where BMW service providers have not picked up waste within 48 hours?

Section 5 Training and Capacity Building on BMW and infection control practices

Q1 Is there a training and capacity building plan available for the health sector staff/workers at different levels on biomedical waste management and infection control?

Q2 What are the institutional arrangements for providing training/capacity building?

Section 6 Stakeholder Consultations

Q1 Please describe the process of collecting feedback from healthcare facility users. Who reviews this feedback and how is it acted up on?

Q2 If any problems and issues are observed on Biomedical Waste Management and Infection Control Practices in SCs, what action is taken (select all that apply)?

Check all that apply.

Instructions are given to staff

- Issue is reported to responsible authority No action is taken
- Other:

Social Management Aspects: Questions

Section 1: Tribal development blocks and aspirational districts

Q1. Does the state have a monitoring system for HCFs located in aspirational districts and tribal development blocks?

- Yes
- No
- If yes, please provide specific details

Q2. Does the state have a specific strategy/mechanism/policy/guideline to improve access and quality of health services in rural areas/aspirational districts/tribal blocks?

- Yes
- No
- If yes, please provide specific details

Q3. Does the state health department coordinate with the Tribal Welfare Department to improve the Health and Nutrition programming amongst tribal communities?

- Yes
- No
- If yes, please provide specific details.

Q4. Does the state health department coordinate with the Panchayati Raj Department to improve the Health and Nutrition programming amongst rural communities?

- Yes
- No
- If yes, please provide specific details.

Q5. Does the state health society receive central funding for implementation of the tribal sub-plan or SC component for disadvantaged groups? Please provide details on utilization.

- Yes
- No
- If yes, please provide specific details.

Q6. Do aspirational districts/tribal districts have additional budget allocations to improve functioning of HCFs?

- Yes
- No
- If yes, please provide specific details.

Section 2: Adolescent girls and Rashtriya Kishor Swasthya Karyakram

Q1. Does the state have specific strategies for reaching adolescent girls (age 11-18 yrs)?

- Yes
- No
- If yes, please provide specific details.

Q2. Does the state health department coordinate with Women and Child Development Department on health and nutrition programming of adolescent girls?

- Yes
- No
- If yes, please provide specific details.

Section 3: Institutional Assessment and state capabilities

Q1. Does the state health society coordinate with the urban local bodies to improve the Health and Nutrition outcomes amongst slum dwellers, daily wage workers and urban poor?

- Yes
- No
- If yes, please provide specific details.

Q2. Does the state health society maintain a record of land disputes across HCFs?

- Yes
- No
- If yes, please provide specific details.

Q3. Please provide the number of female employees currently employed in technical positions across HCFs.

Q4. Please provide the number of male employees currently employed in technical positions across HCFs.

Q5. Please provide the number of female employees currently employed in non-technical positions across HCFs.

Q6. Please provide the number of male employees currently employed in non-technical positions across HCFs.

Section 4: Citizen Engagement, information outreach and grievance redressal

Q1. Does the State Health Society have a functional Internal Complaints Committee, as per requirements of the POSH Act?

- Yes
- No

Q2. Does the State Health Society develop and roll-out awareness and outreach campaigns?

Q3. Please provide details of the budget allocated the outreach campaign vis-à-vis the expenditure for the last two years.

Q4. What are the main components/key priorities of the outreach campaign?

Q5. Has the State Health Society undertaken any measures to improve uptake of health insurance amongst rural communities?

Q6. Has the State Health Society undertaken any measures to improve uptake of health insurance amongst urban poor?

Q7. Does the state have a functional Grievance Redressal Mechanism to address complaints received from patients at HCFs?

Q8. If yes, can the State Health Society please share details of complaints/queries received and redressed over the last 6months?

Q9. Does the State Health Society have a citizen engagement platform/dashboard to engage with citizens and private service providers?

Q10. Has the State Health Society developed/introduced feedback monitoring mechanisms/tools to gather feedback from patients?

Q11. Does the State Health Society coordinate with W&CD and Police Department to improve the responses to domestic violence/abuse?

Q12. Does the State Health Society have guidelines for HCFs regarding responses to victims of domestic violence?

Q13. Does the State Health Society have good practice examples/anecdotal evidence of improving public health response for victims of gender-based violence?

Section 5: Community engagement

Q1. What were the community-based/community engagement structures in place leveraged by the State Health Society for implementation of NHM? How?

Q2. Are there barriers to engaging with women-led groups in existing community engagement structures? Please provide details.

Q3. Do women-headed households/widows/single women in the state experience specific barriers in accessing health care? Please provide details on the initiatives undertaken by the State Health Society to reach women headed households/widows/single women.

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

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

ANNEX 6: WORLD BANK HEALTH SECTOR IMPLEMENTATION EXPERIENCE OF PROGRAM STATES

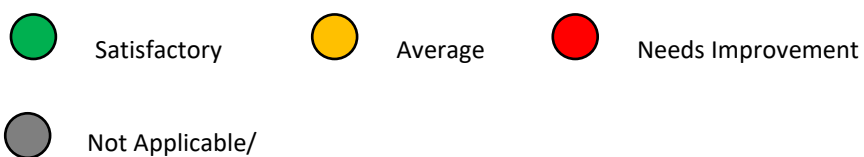
Table 19. Implementation experience of Program states

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.

ANNEX 7: STATE LEVEL ANALYSIS OF SOCIAL SYSTEMS

The following annex analyses the state health practices across Andhra Pradesh, Kerala, Meghalaya, Odisha, Punjab and Uttar Pradesh under the 4 categories a) tribal health, b) community strengthening c) GRM systems and d) innovations, if any.

Scheme	Andhra Pradesh	Kerala	Meghalaya	Odisha	Punjab	Uttar Pradesh	Tamil Nadu
Tribal Health							
Community Strengthening							
GRM systems	●	●	●	●	●	●	●
Innovations							



Andhra Pradesh: Disease Burden Profile, 1990 to 2016

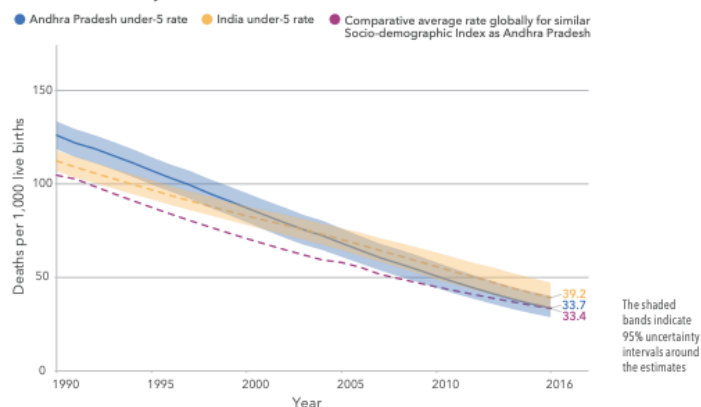
1990 life expectancy

Females: 58.4 years Males: 57.7 years

2016 life expectancy

Females: 71.9 years Males: 67.3 years

How much did the under-5 mortality rate change from 1990 to 2016?
Under-5 mortality rate, both sexes combined, 1990-2016



STATE SPECIFIC CONCERNS:

- As per the recent survey conducted by the Comprehensive School Health Programme on predefined conditions in tribal areas the Health situation/conditions is very poor. It is found that 76% are diagnosed under this category and 11% are coming under referral, which is alarming. The reasons found to be non-safe drinking water, un-healthy life styles, poor diet and nutrition.
- Every year there are several incidents of tribal deaths in the agency areas of Andhra Pradesh due to various health reasons. One of the major reason for the death of the ST students studying in Tribal Welfare Educational Institutions is due to various types of anemia viz., 23 % children are critical anemic (i.e., <8mg>) and 65% children are anemic (i.e., <8mg><11mg>)
- Most of the children are diagnosed positive under predefined conditions which results in school drop-out.
- To counter this Tribal Welfare Department has initiated to improve quality Health and Education to reduce OOPE (Out of Pocket Expenditure) to implement Comprehensive (Pregnancy- 18 Yrs) in coordination with Health, WDCW & Education Dept, thereby Inclusive of Development from 1. Maternal, 2. WD&CW, 3. RBSK, 4. SSA, 5. RMSA & 6. RKSK
- **In spite of taking all the necessary steps, as internalizing the provisions of the schemes are slow in tribal areas, the performance of health status in tribal areas is not up to expectations**

¹² Burden of disease: https://www.healthdata.org/sites/default/files/files/Andhra_Pradesh_-_Disease_Burden_Profile%5B1%5D.pdf

KEY INITIATIVES TO BRIDGE GAPS:

CHINNARI VAIDYULU

- In every school for each section two active students are nominated as Chinnari Vaidyulu as peer educators. One Chinnari vaidyudu to each 10-15 students with a minimum of 12 Chinnari Vaidyulu in each school .
- These educators cover health related topics such as communicable diseases, non-communicable diseases, menstrual hygiene
- Another element of the program is to create Awareness through Chinnari Doctors.

SYSTEMATIC ACTIVE CASE FINDING EFFORTS IN TRIBAL TB UNITS

- Burden of TB is high in tribal population and owing to their cultural practice of staying in clusters/close hamlets transmission is likely to be higher. Difficult geographic terrain makes it difficult for them to approach Health facilities frequently. India mainly uses passive case finding to detect tuberculosis (TB) patients through the Revised National Tuberculosis Control Programme (RNTCP). Systematic Active case finding activities can bring TB services closer to the Tribal community.
- The Tribal communities gather in large numbers at certain specific places like weekly markets, bus stations, during patient-health care provider meetings, Gram sabhas, monthly religious rituals etc.
- The Medical Officer of the Primary Health Centre, the RNTCP Supervisory staff and the Laboratory Technician participate in the camps. House to house awareness campaigns are conducted throughout the year by the Health staff about these camps. These camps are called 'Shandy Camps' and act as Sputum Collection Centers. All patients with symptoms are encouraged to give spot sample of sputum for testing and asked to report with early morning sample at the nearest Health facility.

STATE FOCUS: KERALA¹³

- Tribals form more than 1% of the State's total population and they belong to 35 communities. 22% of them are still living in the forest areas. Wayanad district with 1,36,062 Tribal population, Idukki district with 50,973 and Palakkad district with 39,665 account for the majority of the tribal population of Kerala
- In order to provide primary Health care services for the tribals living in the remote and hard to reach tribal settlements, 13 tribal Mobile Medical units are functioning in the state. Five of these units are functioning in the Wayanad district, two each in Idukki and Palakkad districts and one each in Kasaragod, Malappuram, Kannur and Trivandrum districts. These units are conducting on an average 20 medical camps per month in the remote tribal settlements under the leadership of a medical officer with the supporting para-medical staff like pharmacists, staff nurse etc.
- The field workers and the supervisors of the respective areas do the mobilization of the community to the camps. In these camps the essential primary health care needs of the community namely the treatment of the basic illnesses, antenatal and postnatal care, immunization services, prevention and control of the communicable diseases etc. are provided. Also necessary health education programs including the prevention of waterborne diseases are imparted through these medical camps.

STATE FOCUS: MEGHALAYA¹⁴

State's policy: The current health system in the State has put priority on curative care, the policy aims to shift this to preventive care which would focus on positive health care. The policy will take steps to ensure that

¹³ Kerala NHM website: <https://arogyakeralam.gov.in/2020/03/27/tribal-health/>

¹⁴ Meghalaya State Health policy: <https://meghealth.gov.in/docs/Meghalaya%20Health%20Policy%202021.pdf>

citizens are empowered with the right knowledge to take better care of themselves; citizens will also be made aware of various health milestones (check-ups, immunizations) that they should keep track of in order to bring about healthy living.

STATE SPECIFIC CONCERNS:

- Maternal and Infant Mortality Rates are of great concern to the State with 197 MMR (SRS, 2016-18) and 3.4% IMR (34 deaths per 1000 live births) as per HMIS, Apr-Sept 2020. These can be attributed mainly to teenage pregnancy, multiple gravida and untimely healthcare intervention. The State is proactively taking steps to ensure the safety of mother and child during pregnancy.
- According to NHFS-4, 43.8% of children under 5 are stunted in Meghalaya. Factors that contribute to stunted growth and development include poor maternal health and nutrition, inadequate infant and young child feeding practices, and infection.
- According to an HMIS report based on the immunization dashboard, in 2018-19, Meghalaya ranked the lowest in immunization rates on having achieved 44%. There has been significant improvement in 2019 and 2020 with the state achieving 84% and 91% respectively. This has been attributed to the proactive response of the State by using PDIA techniques which the State will propel forward in other aspects of healthcare.
- As per State data, only 29% of children receive proper nutrition and diet.

TRIBAL HEALTH WELLNESS CENTRE - SHILLONG

- In its bid to develop health tourism in Meghalaya, the State Government is now going to promote Ayurveda in convergence with Khasi traditional healing system which would do wonders for the state in every sphere be it tourism or health sector.
- Convergence of two systems would be beneficial for the state as Meghalaya has a large number of traditional healers who are expert in traditional healing systems.

Tamil Nadu: Disease Burden Profile, 1990 to 2016

1990 life expectancy

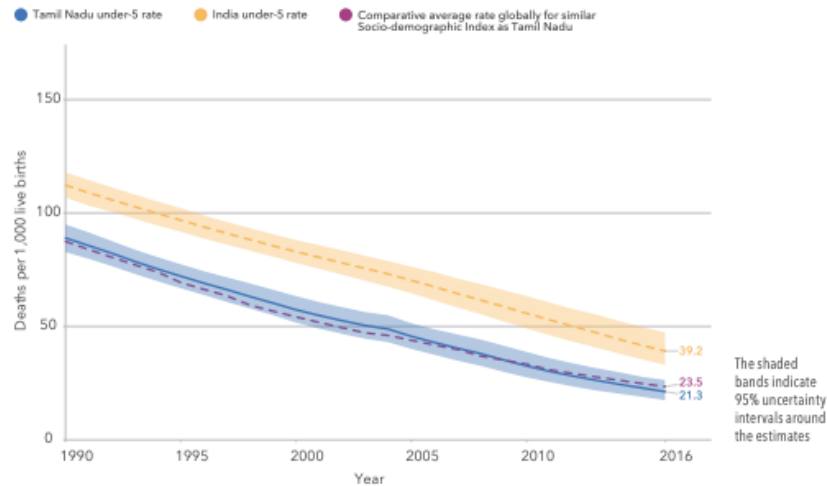
Females: 61.9 years Males: 59.4 years

2016 life expectancy

Females: 73.5 years Males: 68.9 years

How much did the under-5 mortality rate change from 1990 to 2016?

Under-5 mortality rate, both sexes combined, 1990-2016



CURRENT SITUATION:

- The Maternal Mortality Ratio (MMR) has been considerably reduced to 60 as per the SRS 2016-18. The State has achieved nearly 100% institutional delivery and 97.6% Antenatal mothers are registered within the first trimester of pregnancy.
- The Infant Mortality Rate which was 37 per 1000 Live Births in 2005 has been reduced gradually to 15 per 1,000 live births in 2018 as per the Sample Registration System. Tamil Nadu is the second lowest among the major states in the country.

FOCUS ON TRIBAL HEALTH:

ACCREDITED SOCIAL HEALTH ACTIVISTS (ASHAS):

In tribal / hilly / remote / difficult areas, 2,650 ASHAs are being engaged in PHCs to deliver health services. Since ASHAs are from the same tribal community, they motivate the tribal mothers for regular antenatal checkups in Health Subcenters and Primary Health Centres, which results in promoting the institutional safe delivery practices and also create awareness about health schemes.

BIRTH WAITING ROOM IN 17 TRIBAL PHCS:

In non-motorable roads and villages with a long 152 distance to a health facility, the tribal mothers are being admitted two weeks before the Expected Date of Delivery in birth waiting rooms established in 17 PHCs in the foot hills of tribal areas for safe delivery under institutional care. In Birth Waiting Room (BWR), nutritious diet is

¹⁵ Tamil Nadu Health Policy

provided to the antenatal mother & attender during their entire period of stay. Since April 2020- March 2021 totally 1,601 Tribal Antenatal mothers have benefitted through the tribal birth waiting rooms.

REFERRAL SERVICES IN TRIBAL DISTRICTS:

The State has a well-established emergency referral transport system established through National Ambulance Services. In order to reach those tribal villages which are inaccessible by regular ambulances, four-wheel drive vehicles suitably equipped as ambulances have been provided in 76 identified points in tribal / hilly areas. These vehicles ensure timely referral of tribal people to higher referral centers and prevent adverse outcomes in the tribal community.

TRIBAL BED GRANT SCHEME:

Tribal Bed Grant is a Scheme where free Diagnostics, Drugs for IP patients, Surgeries & diet are being given to the tribal people who are hospitalized in tribal areas. This scheme is being operated through NGOs. This Scheme has increased the health seeking behavior in the tribal Community, access to quality health care and has reduced out of pocket expenditure. 704 tribal patients have benefitted through this scheme during 2020-21.

TRIBAL COUNSELLORS:

Tribal Counsellors have been placed in the 10 Government Hospitals in the tribal districts. They act as ambassadors between the health systems and tribal community. They also function as health activists in the institution where they not only create awareness on health and its determinants but also motivate the community towards healthy living practices.

PREVENTION AND CONTROL OF HEMOGLOBINOPATHIES:

Among the South Indian States, Tamil Nadu is the first state to implement Prevention and Control of Hemoglobinopathies program for early detection of Hemoglobinopathies like Sickle Cell Anemia, Thalassemia among the tribal population. NHM-TN along with other Directorates are screening for Hemoglobinopathies (Sickle Cell Anaemia and Thalassemia) in adolescent children studying in 10th and 12th standard and unmarried school dropouts above the age of 14 in 30 selected tribal blocks in 13 Districts since November 2017.

MOBILE MEDICAL UNITS:

Mobile Medical Units have been provided to all blocks of Tamil Nadu under NHM and they are functioning since 2009 to cover remote, hilly/tribal and inaccessible areas. This scheme has been renamed as Hospital on Wheel Programme with additional staff of one Laboratory Technician and Attendant. The Hospital on wheels is manned by one Medical Officer, one nurse, one lab technician, one driver and one attendant. Each Mobile Medical Unit covers 42 villages on an average being visited on fixed days as per the Fixed Tour Program (FTP). During the year, April 2020 to March 2021 totally 1,63,39,805 people were benefitted through 2,22,720 camps conducted by 396 vehicles.

Odisha: Disease Burden Profile, 1990 to 2016

1990 life expectancy

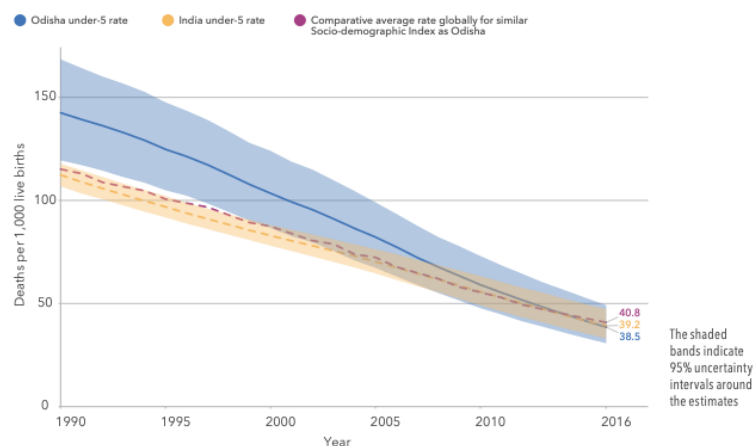
Females: 55.3 years Males: 53.7 years

2016 life expectancy

Females: 68.6 years Males: 66.1 years

How much did the under-5 mortality rate change from 1990 to 2016?

Under-5 mortality rate, both sexes combined, 1990-2016



KEY INITIATIVES TO BRIDGE GAPS:

AMA SANKALPA (AN INITIATIVE TO REDUCE THE INFANT AND MATERNAL DEATH) – RAYAGADA, ODISHA

- Rayagada, a mineral-rich district in the southern part of Odisha has a predominant tribal population of 57.52%. Apart from Odia, several adivasi languages like Kui, Kondha, Soura are spoken in the district. All 11 blocks of the district are covered under the Tribal Sub-plan. As citizens were not availing health services due to poor connectivity, non-availability of referral systems in hard to reach areas, and low literacy, the District Administration developed a specific Action Plan to identify the real beneficiaries to uplift their standards by reducing IMR and MMR.
- The programme relies on a bottom-up demand-driven approach to improve uptake, with IEC & BCC relevant methods. Three 'Ama Sankalpa Ratha' Yatras were organized to spread a message about the precautionary measures for maternal and child health. This was accompanied by folk shows on District-specific issues played at the village level through which Health messages were disseminated. In addition to this, supply side interventions were also strengthened. 126 Integrated Special VHND/RI sessions were conducted in the hard to reach areas (apart from the regular sessions), where Antenatal, Post Natal, Newborn and Child Health screening and services, and weekly tracking of high risk pregnancies were enabled.
- For the early identification and referral of Severely Acute Malnourished (SAM) children between 6 months to 6 years; a special plan 'Project Surjyamukhi' under Ama Sankalpa was prepared. Under the special plan tracking Red & Yellow Zone children, facilities to provide therapeutic treatment and counselling were imparted, under the guidance of technical assistants to improve the nutritional status of each child in the district.

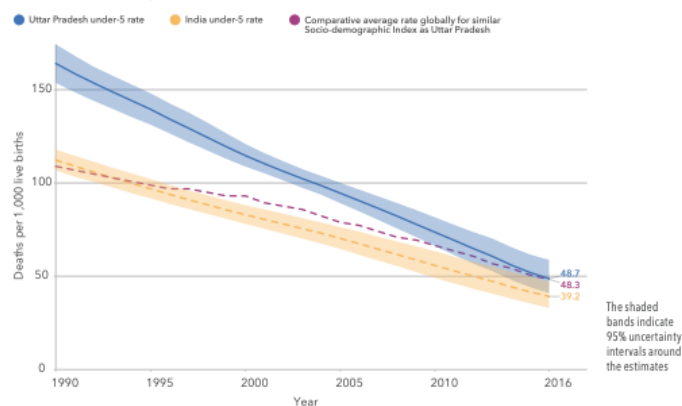
No Notified Scheduled Tribes in Punjab.

Uttar Pradesh: Disease Burden Profile, 1990 to 2016

1990 life expectancy
 Females: 53.5 years Males: 54.9 years | **2016 life expectancy**
 Females: 66.8 years Males: 64.6 years

How much did the under-5 mortality rate change from 1990 to 2016?

Under-5 mortality rate, both sexes combined, 1990-2016



- Uttar Pradesh (UP), the most populous state in India, has an under-five (U5) child mortality rate of 78 per 1000 live births, one of the highest in the country. One factor contributing to the high U5MR is the high proportion of the population living in rural areas (77.7 %) which may limit access to child health services.
- In UP, the mortality rate among U5 children living rurally (82 per 1000 live births) is more than 30 % higher than those living in urban areas (62 per 1000 live births)
- States of Uttar Pradesh and Bihar account for around half of the country’s maternal and child disease burden.
- And three out of every five children and/or adolescents are anaemic. Rural and marginalized poor face considerable barriers and are among the most vulnerable populations, lacking both access to services and basic health information.

**Leading Risk Factors Associated with Disease Conditions
 India and Uttar Pradesh, 2016 (Age-standardized, both sexes)**

Risk Factors Rank	Uttar Pradesh	India
1	Malnutrition	Child & Maternal Malnutrition
2	Air Pollution	Air Pollution
3	Tobacco Consumption	Dietary Risks
4	WaSH	High Blood Pressure
5	Dietary Risks	High Fasting Plasma Glucose
6	High Blood Pressure	Tobacco Consumption
7	High Fasting Plasma Glucose	WaSH
8	Alcohol & Drug Use	High Cholesterol
9	Occupational risks	High BMI
10	High BMI	Alcohol & Drug Use

KEY FOCUS AREAS IN STATE'S HEALTH POLICY:

EQUITY IN SERVICE DELIVERY:

The notion of both horizontal and vertical equity must be ensured in service delivery. 'Horizontal Equity' as a notion must realize that equal resources are committed for equal needs, while 'Vertical Equity' must ensure that additional resources are available for special needs of vulnerable and socioeconomically weaker sections of the population. It particularly seeks to address disparities arising on account of gender, with the aim of improving the health status of girls and women in the State.

COMMUNITY PARTICIPATION:

Community participation in decision-making and ownership is likely to accelerate access and improve quality of care in public health system. While on the other hand, a wider participation of different constituencies in the overall health system, including health authorities, practitioners, social mobilizers, civil society organizations, local governments, professional bodies and private industry, is expected to inspire confidence, enhance access, promote quality and save cost to the society at large.

STATE SPECIFIC CONCERNS:

MORE THAN A CRORE POPULATION GETTING IMPOVERISHED DUE TO OOPS PAYMENT:

Nearly 1.07 crore population in the State experience impoverishment because they had to pay for OOP expenditure. Similarly, a higher OOP is also expected to result in catastrophic payments by households. During the period under consideration, it was noted that the proportion of households paying catastrophic expenditure considerably rose from 19.9% to 22.5%. As a result, it is estimated that 4.83 crores of population suffer from financial catastrophe every year in the State. However, State average hides significant variation in impoverishment and catastrophic payments across districts. **In forty-eight out of seventy-one districts, impoverishment is higher than State average.** In ten districts, it is observed that over 15% of population are pulled below poverty line because they had to pay for health care out of pocket. Households in thirty- seven districts reported catastrophic expenditure that are more than the State average.

KEY STATE INITIATIVES:

OPERATION MAMTA:

- Operation Mamta was launched as a pilot project to improve institutional delivery and post-delivery care for women of the Tharu tribe, which has a population of around 50,000 on Indo-Nepalese border. The administration has given priority to recruiting auxiliary nurse midwives (ANMs) from the Tharu community at the six sub-health centres in order to ensure their availability 24x7.
- The health centers are claimed to have accommodation facility for ANMs. Besides, two other staff are deployed at the sub-health centres. Roads to and from these centres have also been renovated and a solar power plant of 1 kilowatt (KW) has also been installed to ensure power supply at night.
- A proposal has been prepared to launch 48 similar sub-health centres in remote countryside, including at Raninagar and Kiratpur soon.

SECTION B: COMMUNITY STRENGTHENING

ANDHRA PRADESH:

COMBATING UNDER-NUTRITION THROUGH SYSTEM STRENGTHENING AND COMMUNITY NUTRITION HUB- ANDHRA PRADESH ¹⁶

The two major approaches of our nutrition intervention are:

1. *System Strengthening through Facilitation of Implementation:*

Working closely with block and district level officials of various line departments to improve efficiency of existing interventions such as Village Health Sanitation and Nutrition Day, model Anganwadis, and other services delivered by the frontline workers through: a) Demonstration b) Consolidation of learning, knowledge creation and transferring the learning to the system through systematic dissemination of knowledge products, periodic meetings, workshops, training of trainers, etc. c) Coordination with various line departments spread across all tiers between national and block level to improve convergence, remove bottlenecks, and attain operational excellence.

2. *Deployment of A Customisable Community Nutrition Hub:*

The Community Nutrition Hub has various customisable modular components such as: a) Nutri-garden and open nutri-kitchen to improve diet-diversity: In the nutri-garden the community representative and/or the Anganwadi Workers learn to grow micro-nutrient rich local produce (primarily iron-rich dark green leafy vegetables, Vitamin C rich citrus, Vitamin A rich vegetables and fruits) in resource-limited settings in a demonstrative as well as participatory manner. To address space constraints, vertical and horizontal methods of cultivation are developed. Often these gardens are created at the Anganwadi Centres to improve diversification of supplementary foods provided at the Centres and sustain the intervention. In the nutri-kitchen simple nutri-dense indigenous recipes, food-preservation techniques (e.g. technique using solar drier) are demonstrated for replication at Anganwadi Centres as well as at the home of the beneficiaries. b) Community Nutrition Counsellors: The frontline workers, representatives from Self Help Groups (SHGs) and Village Organizations (VOs) are trained as nutrition-counsellor to improve overall nutrition awareness, WASH practices, dietary diversity, and other measures to prevent and combat undernourishment. c) Nutrition audit and action plan: SHG members get capacitated to capture information on the nutrition status of mothers and children in their own community, to identify barriers to best practices and access to services, to critically review gaps in service delivery and collectively generate demand for nutrition services. d) Specialists' consultation through telemedicine and tele nutrition: Severely and moderately malnourished (SAM, MAM) children and ANC, PNC mothers with low BMI and severe anemia are identified through anthropometric drive in coordination with front-line workers and are provided with specialists' consultation through telemedicine and tele nutrition services.

MEGHALAYA

OUTLINING STATE POLICIES ON COMMUNITY PARTICIPATION

STRENGTHENING ROLE OF COMMUNITIES:

Initiative will be taken to strengthen the health cadres which will not only include healthcare workers but also grassroots mobilization of Self-Help Groups (SHGs) which can have a vital role in strengthening healthcare in the State and will act as a last mile delivery institution for participation. SHGs can be trained to give awareness

¹⁶ Footnote 19

programs and can serve as an important platform where community members participate in discussions on positive health practices and to improve health seeking behaviors for accessing the services provided by public health institutions.

- The policy will outline Rights and Responsibilities of the residents, which will encourage citizens to become active partners with the state rather than just beneficiaries of the system. **The State aims to pioneer a bottom-up health system which is driven by the community and village organizations.** Emphasis will be put on strengthening village health and sanitation bodies. Issues relating to gender inequality, gender violence and health will be taken up where various forums will be constituted at the village level and public health institution level. There will be emphasis put on developing mechanisms for creating and empowering the decentralized monitoring committees at all levels, both rural and urban and seeking their feedback in a structured manner.
- The policy shall lay down rules for and establish community-based monitoring frameworks, to strengthen the direct accountability of the health system to the community and beneficiaries. The policy will strengthen Village Health and Nutrition Days (VHNDs) with proactive restructuring by enabling measures such as better infrastructure along with basic amenities such as stethoscopes, weighing machines, waiting chairs etc. This will create a better environment which will encourage citizens to avail services even more.

MEGHALAYA COMMUNITY PARTICIPATION AND PUBLIC SERVICES SOCIAL AUDIT ACT, 2017

- Under this Act, village and locality level Social Audit Committees (SAC) have been formed to bring about transparency and accountability in healthcare. The SAC will monitor and evaluate healthcare related programs which can lead to better performance. The Social Audits shall be conducted at village and institutional levels including the PHCs/CHCs to improve the quality of services and to increase the awareness and uptake of services by the communities with special focus on helping the poor and marginalized in accessing their due health entitlements. This social audit mechanism would enable the general public and various groups and organizations to give free and independent feedback about health care services.
- The Social Audit body would record the issues and where possible immediately recommend actions regarding cases of denial of health care or violation of rights enumerated herein or suggest follow-up actions by the parties; similarly it would recognize service providers acknowledged for providing exemplary good services.

ODISHA

KALPANA PROGRAMME FOR BETTER HEALTH – DHENKANAL, ODISHA

- Kalpana Poshan Kendra helps in recovering the lost weight of children through intensive feeding of therapeutic food (rich in micronutrients) supplements. Capacity building of primary care givers in preparing home-made nutritious food from locally available ingredients and counselling of mothers on family planning are also conducted here.
- The Kalpana Programme has been instrumental in improving the sex ratio from 852 in March 2018 to 972 in August 2019. This has been possible due to mass community awareness programs across Dhenkanal advocating the message of 'gender equality', to change the predominant societal mindset of preference for a male child.

GAON KALYAN SAMITI

- The Village Health Sanitation and Nutrition Committee which is known as Gaon Kalyan Samiti (GKS) in Odisha has demonstrated unique ability to drive the local health agenda. Functioning as a community level platform, GKS take collective action on issues related to health and its social determinants at village level. They are central to local level community action under NHM which is gradually develop to support the process of decentralized health planning.

- There are around 45000 Gaon Kalyan Samiti in the State of Odisha functioning at the Village level. Ward Member acts as the President, AWW acts as the Convener and ASHA acts as the facilitator for the functioning of GKS. It provides an institutional mechanism for the community to be informed of health programs and government initiatives. Further they also provide a platform for convergent action on social determinants and all public services directly or indirectly related to health. Annual untied fund of Rs.10000/- provided to GKS to take up local level action to address health related issues.

TAMIL NADU

KEY INITIATIVES TO BRIDGE GAPS:

COMMUNITY BASED ASSESSMENT CHECKLIST:

In order to control Non-Communicable Diseases, the state is using a Community based assessment 37 checklist (CBAC) for universal screening of eighteen plus population to sensitize and mobilize the community for availing services for chronic illness at HWC.

HOSPITAL ON WHEELS PROGRAMME:

Mobile Medical Units were launched to provide health care services in remote villages and far flung areas in 2007. 100 Mobile Medical Units were procured for implementation of this scheme. Further 285 Mobile Medical Units were procured during 2008.

UTTAR PRADESH

SHGs:

Women's self-help groups have been shown as an effective social platform for empowering marginalized populations and improving access to micro-finance. There are currently more than 175,000 in Uttar Pradesh. Typically, such groups include spaces in which eight to twelve women can come together and learn financial literacy, save money, and support each other. Since 2012, Population Council evaluations have demonstrated these groups as a promising platform for supporting maternal and newborn health, through the sharing of pertinent health and nutritional information and providing mutual support.¹⁷

GATES FOUNDATION PROJECT OUTCOMES LEVERAGING COMMUNITY ENGAGEMENT:¹⁸

- Use of Village Health Nutrition Day as a platform for providing prenatal health care, family planning services, and nutrition services as well as appropriate reproductive, maternal, new-born, and child health and nutrition (RMNCHN) counselling across the state.
- Expansion of community health worker mentoring to improve reproductive, maternal, new-born, and child health service delivery.
- Improved identification and tracking of high-risk pregnancies, along with referrals to facilities. For example, registration of pregnancies in the first trimester more than doubled, from 29 percent to 65 percent, between 2014 and 2019, and the number of women receiving prenatal care in the third trimester rose from 36 percent to 72 percent during the same period.

¹⁷ Population council research: <https://www.popcouncil.org/research/evaluating-the-integration-of-health-and-nutrition-messages-into-self-help>

¹⁸ Gates Foundation website: <https://www.gatesfoundation.org/our-work/places/india/uttar-pradesh>

- Improved home-based maternal and newborn care, including identification and tracking of low-birth-weight newborns.
- Improved nutrition services, especially focusing on pregnant women, infants, and young children, through home visits and community-based Anganwadi centers. These nutrition efforts have led to substantial increases in behaviors and practices such as complementary feeding and the consumption of at least four food groups by children between 6 and 11 months in age.

SECTION C: PRESENCE OF GRM SYSTEMS

ANDHRA PRADESH

State	Summary
Andhra Pradesh	Unified grievance redressal system
Kerala	Unified grievance redressal system
Meghalaya	Unified grievance redressal system
Odisha	Unified grievance redressal system
Punjab	Unified grievance redressal system
Uttar Pradesh	Appellate authority designation on the website, contact details on a separate webpage
Tamil Nadu	District wise list of appellate authority contact details (email, phone) on the website

IT SYSTEM FOR SCREENING AND FOLLOW-UP OF NCD PATIENTS (MAHILA MASTER HEALTH CHECKUP)

- NCDs are on the rise amongst the rural population. Women are particularly impacted because of poor health-seeking behavior, financial and social disempowerment and lack of access to good quality health resources.
- The MMHC programme by the Government of Andhra Pradesh aims to screen and treat as needed, all 7 million rural women between the ages of 30 and 60 years for 7 non-communicable diseases which include oral, breast, cervical cancers, hypertension, diabetes, hormonal and vision disorders. Basic screening is done by the ANMs. Medical officers in the Mobile Medical Unit or PHC will screen for & manage hypertension, diabetes and vision disorders. Suspected cancer cases are referred to secondary & tertiary levels for investigation, diagnosis and treatment as needed.
- It is being implemented in more than 7000 health sub centers across the state and covers 6 Million Rural Women between 30-60years for screening of 7 health conditions namely Oral, breast and cervical cancers, hypertension, diabetes, hormonal disorders and vision disorders. MMHC uses a software based technology, consisting of the tablet application for the health workers, the web apps for the secondary level and tertiary level doctors, and dashboards for the health officials. The solution is run and managed by the Health Department on NIC cloud infrastructure.

LifeCare NCD – Android App Features



- To ensure good implementation, the programme is enabled by a technology innovation for stakeholders. It is a mobile, cloud, analytics solution with a unique, Aadhaar health record for every individual that can be securely viewed, modified and updated by the caregiver at primary, secondary and tertiary level. Dashboards allow health officials to monitor performance at every level, and to drill down to village-level. Health workers use android app on tablets that is in the local language with many user-friendly features. All other stakeholders use web portals.

HOSTELS FOR PREGNANT TRIBAL WOMEN - VIZIANAGARAM IN ANDHRA PRADESH

- A number of villages in Vizianagaram are very remote and lack proper road connectivity. Earlier, pregnant women of these villages were carried by dollies resulting in many casualties with very high maternal mortality rate. Thereafter, the District Administration along with the Integrated Tribal Development Agency came up with the idea of constructing Hostels for pregnant women of these villages. All the frontline workers including ASHAs and Anganwadis are creating awareness among the villagers about these Hostels.
- Pregnant women are brought to the Hostel one month prior to the Expected Delivery Date (EDD). There, they are provided with home-like care and support along with nutritional food and intensive medical care, under the close observation of gynaecologists. Separate ambulances have been allotted to these Hostels. Post-delivery, the mother and child are shifted to their homes by Talli Bidda Express. So far, around 100 women from hill-top villages have been taken care of in these Hostels. The Hostels are evoking good response from the tribes. Pregnant women admitted have expressed great satisfaction over the facilities being provided in these Hostels.

IMPROVING THE NUTRITION STATUS FOR THE TRIBAL WOMEN AND CHILDREN OF PADERU AGENCY AREA – ANDHRA PRADESH¹⁹

Background: Paderu agency area is a hilly, forest-covered region in the Vishakhapatnam district. It consists of 11 mandals with 91% of the population belonging to Scheduled Tribes. It is home to more than 11 different tribal communities including three Particularly Vulnerable Tribal Groups (PVTGs) of Khonds, Gadaba, and Poorja.

Problem: Most tribal habitations are in remote, hard-to-reach areas, scattered across a large area, and often beyond the reach of major forms of communication and transport. This context coupled with other socio-economic factors contribute to the strenuousness of the tribal welfare work in the agency area which is the

¹⁹ Piramal Case study: <https://swasthya.tribal.gov.in/objects/ca2db116-df71-451a-9206-d3a9d581df6e.pdf>

prime responsibility of the Integrated Tribal Development Agency (ITDA) of Paderu. ITDA Paderu is committed to contributing towards improving upon the health and nutrition status of the tribal communities of this area.

Solution: Through the Giri Poshana scheme, pregnant women, lactating mothers, and children (3-6 years) are provided with nutrient-rich food such as multigrain sweets, fried gram chikki, ragi-jaggery cookies, eggs, milk etc. at the anganwadi centres. Additionally, YSR Sampoorna Poshana Plus, a tailor-made programme for the pregnant women, lactating mothers, and children up to the age of 6 years was launched in September 2020 for the tribal mandals. This is designed in line with the POSHAN Abhiyan recommendations that emphasises on the nutritional needs during the critical days of first 1,000 days from pregnancy to a child's second birthday to break the inter-generational cycle of undernutrition.

Society for Elimination of Rural Poverty (SERP), Paderu implemented a nutrition-sensitive livelihood generation model of poultry farming that was targeted towards the families with pregnant women, lactating mothers, and children up to the age of two years (first 1000 days). Each beneficiary (the pregnant women/ lactating mother) was provided with a loan of INR 70,000 to acquire one unit of poultry animal (96 hens) which would serve as a recurring source of protein for the beneficiaries. Various nutri-gardens and kitchen gardens were created, community members were trained to maintain and use the garden-produce as a sustained source of micronutrients and vitamins.

KERALA

E-HEALTH

One electronic health record for every citizen is the aim of the scheme.

- An electronic health record of every citizen accessible via a unique identifying number at any government hospital, telemedicine and online appointment booking are some of the features of the new Digital Health Mission project
- The new digital health system will ensure ease of access to doctors, regulation of patient crowds in out-patient departments (OPDs), easier referrals and also telemedicine facilities for online consultations.
- Under the new system, health workers would visit homes to gather health details of all family members and in this way we will get a blueprint regarding the infectious and lifestyle diseases prevalent amongst the general public.

DISTRICT MENTAL HEALTH PROGRAMME

- District Mental Health Programme (DMHP) was started in Kerala in Thiruvananthapuram in 1999. Since then DMHP has been rolled out in 14 districts.
- Mental Health Clinics are being conducted in all PHCs and CHCs in the district by trained doctors of the concerned institutions and psychiatric medicines are made available at PHCs. 26 day care centres, school mental health prog, 'ASWASAM'- Depression management at PHCs, 23 de-addiction Centres, 10 new de-addiction centres are being started under 'VIMUKTHI' scheme with financial support from Excise Department and mobile medical team.

FAMILY HEALTH CENTRE APPROACH FOR UNIVERSAL HEALTH COVERAGE

- The rising number of communicable diseases and the increasing prevalence of non-communicable diseases among people ailing per population and people seeking care in the state is largest in the country and most of the services are availed from private sector leading to out of pocket expenditure driving families to impoverishment and poverty.

- Effective Primary care service delivery has proven across the globe to be an effective strategy to improve the morbidity burden of communities. The programme envisions a family based health care approach.
- The components of the programme are:
 - Increase in the scope of services and ensuring the quality of care: A set of 52 common conditions that can be managed in a FHC are identified and clinical guidelines are prepared for management.
 - Community engagement: Arogyasena health care volunteerism 25 per ward a total of 500 per 30,000 population.
 - Family health plan: Mapping health needs of FHC area, mapping the services that are being currently provided, identify new services that needs to be integrated, mapping the provider at each level. e-health plat form will be integrated.
 - Specific focus projects for tribal and marginalized population in urban and rural areas

MEGHALAYA:

BIOWAT

BIOWAT, (Acronym for Biomedical Waste Water Treatment) has been developed as a low cost primary care intervention for the treatment and safe disposal of liquid waste generated at the PHC. Under the Initiative, the liquid waste, after a simple primary treatment (Sedimentation & Filtration) undergoes four stages of treatment. The BIOWAT is technically simple to operate and utilizes existing manpower to run. No complicated laboratory tests are involved. The intervention does not require energy source.

Health Department Govt. of Meghalaya is in the process of replicating the BIOWAT across PHCs and CHCs of the state.

ODISHA

ENGAGEMENT OF BIKE AMBULANCE, AUTO AMBULANCE AND DELIVERY VAN TO PROMOTE INSTITUTIONAL DELIVERIES – KANDHAMAL, ODISHA²⁰

- To avoid delivery on the way to hospitals and encourage Institutional Deliveries, the Aspirational District of Kandhamal has introduced Delivery Vans to enable Institutional Deliveries, touted as first-of-its-kind initiative, in the State. Being a tribal area, traditional healing systems are given more importance over institutional systems, leading to several deaths. Childbirths were usually conducted by untrained 'dais' in the villages and pregnant women hardly went to the hospitals for delivery, as community norms treat childbirth as part of a natural process, not requiring much external intervention. To bring the community onboard, the district doubled its efforts for increasing the demand and supply side interventions. On the supply side, all delivery points were made functional.
- 5 Bike Ambulances and 11 Janani Auto vehicles were deployed in outreach pockets. 7 Maternity Waiting Homes (MWHs) were also established that have significantly contributed to the Institutional Deliveries. Apart from the '108' and '102' Ambulance service, all existing vehicles including Government Ambulances, Arogya Plus vehicles, MHU & MHT vehicles were also engaged to transport pregnant women to the Government health facilities. On the demand side, awareness generation activities were undertaken to improve intake of the services provided. The Bike & Auto Ambulances along with the Delivery Vans in Kandhamal have improved the last mile connectivity for pregnant mothers. As a result, the rate of

²⁰ Best Practices document, NITI Aayog accessed here: https://www.niti.gov.in/sites/default/files/2020-08/Best_Practices_from_Aspirational_Districts_Volume_1.pdf

Institutional Deliveries in Kandhamal is now the highest in the State at 97% & maternal deaths have reduced by 65%

KALPANA PROGRAMME FOR BETTER HEALTH – DHENKANAL, ODISHA

- Pregnant women at the Aspirational District of Dhenkanal were prone to skip radiology tests due to inaccessibility. To facilitate these women, the District Administration enabled mechanism for mandatory Ultrasound Sonography (USG) testing for all pregnant women by scheduling mass USG test dates across the sub-district hospitals under the Kalpana Programme.
- Bringing all pregnant women together at these hospitals resulted in discussions regarding their lifestyle, food habits and sharing of experiences. Established in January 2019 in the District Headquarters Hospital of Dhenkanal, 'Kalpana Poshan Kendra' derives its name from Kalpana Dash (renowned mountaineer). It is based on the concept of establishing Nutritional Rehabilitation Centres under the umbrella programme of National Health Mission. Kalpana Poshan Kendra helps in recovering the lost weight of children through intensive feeding of therapeutic food (rich in micronutrients) supplements. Capacity building of primary care givers in preparing home-made nutritious food from locally available ingredients and counselling of mothers on family planning are also conducted here.

MISSION API – 10: REDUCTION OF MALARIA- KORAPUT, ODISHA

- In the Aspirational District of Koraput, the incidents of Malaria-related deaths were very high due to hilly terrain, forest cover, inadequate health facility coverage and low education levels of the population. To combat this, Mission API-10 was launched on July 15, 2017.
- The two main interventions under API-10 include use of Long Lasting Insecticidal Nets (LLINs) coupled with supply side interventions, complemented by bottom-up incentives and nudges such as 'bell ringing' as reminders to use nets and night patrolling by ASHA/AWW/Volunteers. The health team has also received an 'Award of Appreciation' by the State. This innovative initiative to create awareness about Malaria has brought down the Annual Parasite Incidence (API) to 2 in the affected area. Extensive sensitization was ensured through demonstrations in local markets, posters, Nidhi Ratha and rallies.

PERFORMANCE MONITORING OF MAS THROUGH GRADING SYSTEM

- In order to assess the performance of individual members and MAS as a whole, a ranking based on set of 10 parameters is done.
- Similar set of indicators are used for assessment of individual members of MAS. The eligibility criteria for assessment of MAS and its individual members is completion of one year. The assessment is done by ASHA (U)/President of MAS. The ASHAs in urban area collect the assessment report and submit it to concerned ANM. This report is validated by ANM/Public Health Manager. Based on this report, MAS prepares their quarterly plan of action

PUNJAB

IMPLEMENTATION OF OUT-PATIENT OPIOID ASSISTED TREATMENT (OOAT) FOR DRUG-DEADDITION IN THE PUBLIC HEALTH FACILITIES

- OOAT is OPD based treatment of substance abusers by empowering Medical officers posted at CHC, drug de addiction centre and rehabilitation centre. The main features of this Programme are the Central digital recording of individual patients along with generation of unique identity number. Unauthorized access of the data is prevented by a three-layer security. Another added feature of this web portal is that it is platform and device independent with minimum bandwidth requirement of 512 kbps. The target population of this Programme are the substance users

- With the implementation of CRS, sharp decline in patient registration for treatment has been noted. The reason behind the decline in number of patients is a removal of duplicate/ghost patients and impact of this system is further visible in consumption of medicines. There is an evidence of 25% decline in expenditure on purchase of medicine too.

OUT-REACH CAMPS IN URBAN AREAS FOR VULNERABLE POPULATION

- Over a three-year period, increasingly larger health camps have been organized in urban areas with provisions for screening of the vulnerable and marginalized (including sanitary workers and construction labourers). Those needing further management are referred to neighboring UPHCs where they are registered on-line to facilitate further follow-up. During year 2017-18, mega camps have been organized by clubbing weekly camps and increasing access to specialists; 3208 camps with 4,60,532 people screened (and an average OPD load of 150-200 per camp) have been organized so far.
- While the camp approach will increase awareness and access for the urban marginalized, concurrent efforts should be made to integrate service access to the health system through routine outreach and service delivery at UPHCs.

UTTAR PRADESH

KANGAROO CARE PROJECT

The UP-Kangaroo Care Project is being rolled in 8 District Women's Hospitals across the state, and 13 community health centres across 4 districts through an implementation research model in close collaboration between the Health department and Community Empowerment Lab as a technical partner.

The key strategies include:

- Expanding ownership beyond conventional stakeholders: building ownership for Kangaroo Care amongst stakeholders across the political leadership administrative system, health system, clinical care providers, public and private health facilities, and community stakeholders.
- Establishing KMC as a social norm: An innovative 'Hug of life' campaign has been launched across the state to spread awareness of KMC, enhance visibility and normalize behavior.
- Creating KMC lounges to promote mother and baby centric humanized care: setting up beautifully designed spaces within facilities to maximize the comfort of mothers and prolonging their stay to allow for timely initiation and maintenance of lifesaving new-born care practices.
- Technology platform for learning and sharing: participating facilities and providers can learn and share strategies and innovations.
- CSR partnerships for availability of Kangaroo kits: basic supplies for prolonged KMC include cap, mittens, blanket, diapers, etc. that are being made available to all low-birth-weight babies through CSR partnerships

FRU STRENGTHENING THROUGH REGIONAL RESOURCE TRAINING CENTER

Uttar Pradesh has second highest MMR.

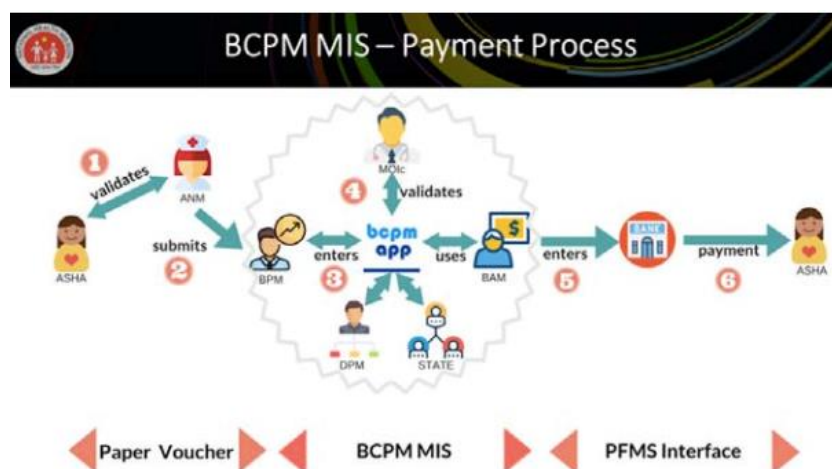
- To improve complication management at the tertiary level and to reduce mortality and morbidity related indicators (Case Fatality Rates due to maternal and new-born complications), UP-TSU with support from NHM engaged Medical Colleges as Regional Resource and Training Centres (RRTCs) for training and mentoring of Medical Officers & Specialists in 50 FRUs including district women hospitals located in 25 HPDs. RRTCs supported the FRUs in continued medical education, on site mentoring, and regular supportive supervision.

STRENGTHENING QUALITY OF MNCH DATA UPHMIS

- Use of govt data for Programme review and planning is a key challenge due to poor data quality of HMIS/MCTS, in Uttar Pradesh.
- In order to improve the data quality of HMIS (UPHMIS), UPTSU adopted a strategy where a TSU team (M&E and clinical) works with facility level staff to systematically audit data, identify reasons for data gap, provide on-site solutions (if feasible) and prepare action plan for data quality improvement.
- A field team is constituted by TSU to qualitatively understand the reasons for high performance vis-à-vis low performing facilities. The qualitative methods such as in-depth interview and discussion with the facility staff to understand the pathways of change in facilities which improved their performance and those who did not. The initial findings suggest that facility level ownership is one of the factor for improving the data quality.

DIGITAL ASHA PAYMENT

- Uttar Pradesh has over 1.5 lakh ASHAs and despite improvement in payment process for incentives, delays in ASHA payments continue to be a challenge. In addition, the payment processes are impacted by reliance on paper-based systems for reporting and incentive calculations which affects transparency. Paper based data limits detailed analysis and provision of actionable insights. It also makes it difficult to review FMR-wise ASHA incentive disbursement and utilization, limiting Programmes capacity to review and plan for corrective measures.
- “Block Community Process Managers (BCPM) MIS” was created for standardized mapping of Geographies (District, Blocks, and Villages), Health Facilities (DH, CHC, PHC, SC), and Health Workers (ASHA, ASHA Sangini, ANM, MoIC, BCPM, BAM etc.). The application includes a module to digitize ASHA and Sangini incentive payment process to reduce delays and build transparent payment process.



- Since the launch in Oct, 2018, **90% of functional ASHAs are paid incentives by 5th of the following month.** Granular data access has helped improve functionality of ASHAs by 67%. Overall average monthly incentive per ASHA has increased by 35%. Programme dashboard, called Analytica has enabled strategic use of data for physical and financial review and monitoring at state, division, district, and block level, greatly strengthening the programme.

HAUSALA SAJHEDARI: GIVING IMPETUS TO PRIVATE SECTOR ENGAGEMENT FOR FAMILY PLANNING SERVICES

- GoUP rolled out Hausala Sajheedari, a web-enabled e-governance digital platform' in UP that addresses the entire value chain from online application for accreditation, verifications, approvals, online MOU, maintaining digital data of FP beneficiaries by the accredited private providers, to submission of online claim and online reimbursement of claims using PFMS systems of GoI.
- The portal provides real-time information through a simple dashboard for quick stock taking and review of progress and grievances. The model has a robust verification process, which mandates physical verification of the facility to assess infrastructure and assures that mandatory norms defined by the FP sub-Committee of DQAC are met with.
- A strategic purchase model with zero CapEx and the cost of reimbursement is also fixed and decided by NHM-GOI. **This model demonstrates responsible use of public money towards providing the quality family planning services to the marginalized section.**

TAMIL NADU

PUBLIC HEALTH CADRE

Public health interventions are delivered by different bottom-top level stakeholders lacking regulatory authority and powers to systematically enforce public health in the state (Parthasarathi & Sinha, 2016). In Tamil Nadu, there is a dedicated Public Health Cadre that works in administrative and management positions and manages the primary health services. A separate, systematically trained Cadre has helped handle stressful situations like tsunami etc Implementation of the practice:

- A fresh medical graduate can join as Municipal Medical Officer (MMO) in the Cadre. Within 4 years of joining, the MMOs can also complete a diploma in public health (from Madras Medical College). MMOs with completion of diploma get regularized and depending on the vacancy can also be promoted to the Deputy Director level.
- Three categories of such posts are – a) district level officer to head primary health services b) principal of training institutes c) faculty in the community medicine department in medical colleges 40 Further, with an MD degree, career progression may include working in medical colleges or field services. The promotions can reach further up to the director through joint director and additional director posts Invalid source specified.
- There are also incentives for working in rural areas, such as: o Allowance for working in rural areas is INR 1000 per month. o Residential accommodation is provided to the medical officers in majority of the cases.

Results of practice

- Better health outcomes without high expenditure on health- Tamil Nadu without spending more than the national average on health has been the state with one of the best health indicators. Kerala also with better health outcomes, in contrast, has public health expenditure more than the national average and private expenditure more than twice of the national average (Kumar, Bothra, & Mairembam, 2016)
- Disaster Management- Cadre adopts annual pre-emptive planning for responding to potential natural disasters such as floods and cyclones. This ensures that when catastrophic disasters like the tsunami of 2004 strike, the state has the internal preparedness to deal with them

"MAKKALAI THEDI MARUTHUVAM" (MTM) SCHEME

It is a flagship program of Government of Tamil Nadu offering holistic and comprehensive set of "Home Based Health Care Services" to ensure continuum of care, sustainability of the services and also meet the health needs of beneficiaries in the family as a whole.

TRANSGENDER CLINICS

To cater to the specific needs of Transgender people, Government has established Multi-Specialty Transgender Clinics at Rajiv Gandhi Government General Hospital, Chennai and Government Rajaji Hospital, Madurai. The Multi-Specialty Transgender Clinic at RGGGH, Chennai runs every Friday.

Now in order to further improve the accessibility of transgender services in other parts of the State, Hon'ble Health Minister has announced in the floor of the Assembly (2019-20) that Multi-Specialty clinic for transgender will be established in 3 Government Medical College Hospitals at a cost of Rs.60 lakhs

SCHOOL HEALTH PROGRAMME -VAZHVOLI THITTAM

The Vazhvoli Thittam (Thursday school health programme), funded by the State Government, is also used for conduct of adolescent clinics. The staff who are involved in this programme will be sensitized towards adolescent friendly health services. The following services are being provided during the school health programme visits currently :

- T.T immunization
- IFA distribution
- Nutrition counselling

The Scheme is currently being implemented in all the 31 Districts (42 HUD's) of the State.

CADAVER TRANSPLANT PROGRAMME AND TISSUE TRANSPLANTS²¹

The Cadaver Transplant programme was started in 2008. In order to further streamline the programme the Transplant Authority of Tamil Nadu was set up in 2014. It functions as the Regional Organ and Tissue Transplant Organization (ROTO) and State Organ and Tissue Transplant Organization since 2015.

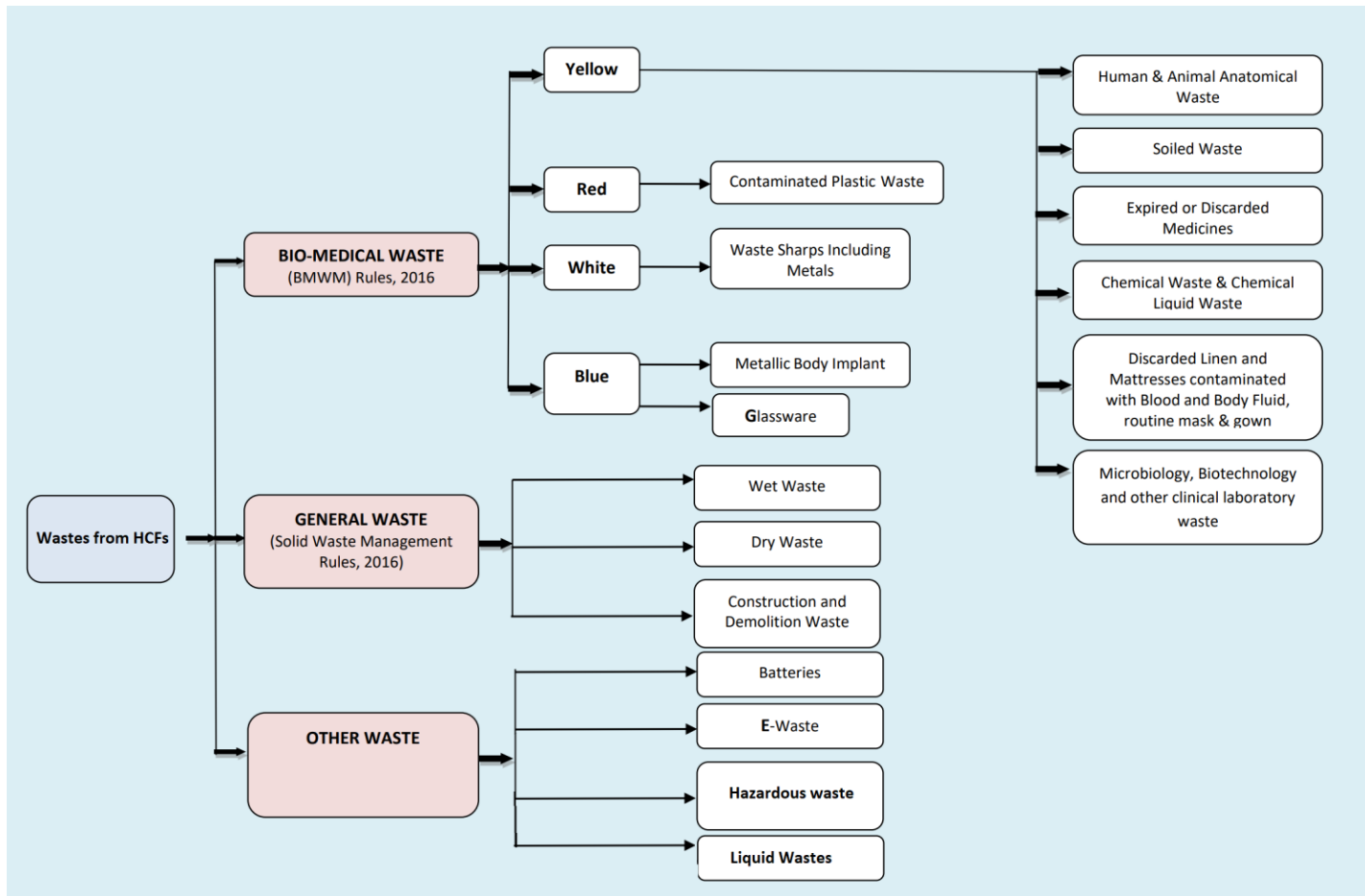
Its functions include streamlining all procedures related to Cadaver and living organ transplantation, helping hospitals identify brain stem death, distributing organs in a transparent manner, maintaining an online waitlist registry, improving capacity related to donor maintenance, helping hospitals in medico-legal procedures, liaising with police on providing Green Corridor for transport of organs, compiling state and regional database and leasing with Gol. The registry is available publicly online ensuring transparency.

The programme provides a methodology to help cope with the shortage of donors which is an acute problem throughout the country.

²¹ NHM Book accessed here: https://nhm.gov.in/images/pdf/in-focus/MP/Day-1/Coffeetable_Book.pdf

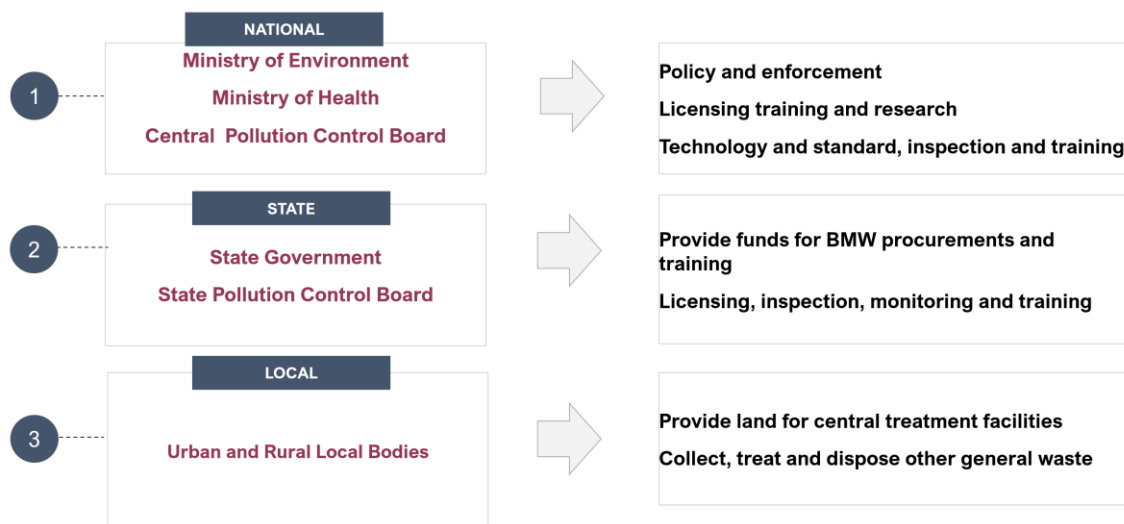
ANNEX 8: A BIO-MEDICAL WASTE MANAGEMENT SCENARIO IN THE COUNTRY

Categorization of waste from HCWs



All health care facilities are required to obtain consent to establish (CTE) and/or consent to operate (CTO) under the purview of the Air Act and the Water Act; and authorization under the purview of the BMW Rules from the respective state pollution control board (SPCB). The consents provided by the SPCB to the health care facilities incorporate the requirements of the BMW Rules pertaining to BMW and liquid waste. This ensures that no health care facility is operational without having the requisite infrastructure and human resource capacity to manage BMW.

Figure 7. Roles and responsibilities for BMW management



Responsibility and accountability under the BMW rules is also clear, 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 BMW 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

	SC	PHC/CHC (non First Referral Unit)	PHC/CHC (First Referral Unit)
Infrastructure	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 waste management	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
Training	-	-	Infection Management and Environment Plan (IMEP)
Equipment	Needle and Hub cutter Color coded bins	Functional Needle Cutter	Functional Needle Cutter
Quality parameters	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&CC²². 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

²² Annual Report on Bio-medical Waste as per Bio-medical Waste Management Rules 2016 for the year 2019. CPCB.

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.).

STAFF CAPACITY IN SC AND PHC

The HWC at the SC is staffed by a team, comprising of a Mid-Level Health Provider / Community Health Officer, 1-2 Multi-Purpose Health Workers (MPW) commonly known as Auxiliary Nurse Midwife (ANM), and 5 Accredited Social Health Activists (ASHAs) for outreach. PHCs upgraded to HWCs are staffed by the regular staff of the PHC (1 MBBS doctor, 1 staff nurse, 1 pharmacist, 1 lab technician, 1 Lady Health Visitor). In urban areas, other than U-PHC staff, the team consists of the MPW-F (for 10,000 population) and the ASHAs (one per 2500 population). PHCs have provision for a **sanitary worker**²³ who is the frontline worker engaged in maintenance of cleanliness and management of waste in the HCF. SCs do not have a designated worker but may hire local workers for maintenance of cleanliness and management of waste in the HCF. 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**.

CURRENT FUND AVAILABILITY

Each SC is provided with an untied grant of INR 10,000 per year. Guidelines for use of these funds specify that it may be used for the following purposes:

- Minor modifications to SC – curtains to ensure privacy, repair of taps, installation of bulbs, other minor repairs, which can be done at the local level
- Ad hoc payments for cleaning up SC, especially after childbirth.
- Purchase of bleaching powder and disinfectants for use in common areas of the village.
- Labor and supplies for environmental sanitation, such as clearing or larvicidal measures for stagnant water.

Each PHC is provided with an untied grant of INR 25,000 per year and an annual maintenance grant of INR 50,000 per year. The annual maintenance grant is to be utilized for improvement and maintenance of physical infrastructure – with priority to provision of water and maintenance of toilets. Suggested areas for use of untied grants include the following (in addition to the areas listed for the SC untied grant) provision of running water

²³ Indian Public Health Standards (IPHS). Guidelines for Primary Health Centers. 2012.

supply; provision of electricity; purchase of bleaching powder and disinfectants for use in common areas; repair/operationalizing soak pits.

TRAINING

National level initiatives: The CPCB organizes training programs on bio-medical waste management for Public Health Departments, Hospitals, CBWTFs, etc. The National Institute of Occupational Health (NIOH) through its head office and regional offices organizes training programs on occupational health and safety for medical professionals – this includes ongoing trainings on Basic Occupational Health and Safety among primary health care physicians to improve state capacity on occupational health and safety at the primary level

State level initiatives: The State Pollution Control Boards (SPCBs) organize training programs on bio-medical waste management for HCFs. The most recent available annual reports of the SPCBs in the Program states report that the following training programs were conducted: Andhra Pradesh (248 training programs in 2017), Odisha (22 training programs in 2019), Punjab (122 training programs in 2018), Tamil Nadu (87 training programs in 2019). There is, however, no information on the number of HCFs that are yet to be trained, and the action plan for the same. Training materials on bio-medical waste management have also been developed by the SPCBs. For example, in Uttar Pradesh, under the World Bank supported Uttar Pradesh Health System Strengthening Project, IEC material and training modules were developed, and division-level sensitization workshops were conducted. Similarly, in Odisha, a manual on bio-medical waste management was developed under the UNIDO supported project 'Environmentally Sound Management of Medical Wastes in India' (2011-2019).

CBWTF and HCF level initiatives: 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 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. The recent trainings by HCFs in the Program states are as follows: Andhra Pradesh (238 training programs in 2017), Odisha (7 training programs in 2019), Punjab (1164 training programs in 2018), Tamil Nadu (719 training programs in 2019).

IMPLEMENTATION RESOURCES

This section provides details on the institutional resources for management of bio-medical waste, infection control, worker health and safety and infrastructure.

Bio-medical Waste Management: As per the CPCB's annual report for 2019, the bio-medical waste generated by 322,425 HCFs in the country amount to 619 tons/day – of which 544 tons/day was treated by 202 CBWTFs and by 18,015 captive treatment facilities of HCFs. The remaining 74 tons/day is assumed to be disposed through deep burial pits.

As per the Rural Health Statistics 2019, 46 percent of HWC-SCs practice deep burial for bio-medical waste. While 79 percent of rural HWC-PHCs and 65 percent of urban HWC-PHCs have provision for bio-medical waste management – the details of this 'provision' are not available, and it is of concern that 21 percent of rural HWC-PHCs and 35 percent of urban HWC-PHCs have no provision for bio-medical waste management depend on in-situ treatment and disposal mechanism.

The CBWTFs in the country are operating at cumulative treatment and disposal capacity of 1200 MT/day. Considering the present bio-medical waste generation of 619 MT/day, this may look adequate – however, there are variations in CBWTF capacity utilization by states. In the Program states of Kerala, Odisha and Tamil Nadu, the capacity utilization of existing CBWTFs has exceeded 75% indicating the need for augmenting capacity to meet future needs. Stakeholder consultations revealed that all states are planning ahead to expand coverage of CBWTFs and ETPs.

Table 21. CBMWTF utilized in the project states

	State	BMW generation (tons/day)	No of CBWTFs	BMW treatment (tons/day)	Authorized capacity CBWTF	Capacity utilized
1	Andhra Pradesh	15.1	12	15.1	44.4	34%
2	Meghalaya	1.2	1	1.2	0.8	Meghalaya is largely rural hilly terrain , and needs to explore decentralized waste management options
3	Odisha	18.0	5	17.4	14.9	6 new CBMWTF are planned
4	Tamil Nadu	58.3	8	58.3	72.9	80%
5	Uttar Pradesh	52.5	18	52.5	91.3	58%
6	Kerala	42.9	2	40.3	48	84%
7	Punjab	16.05	5	16.05	29.1	55%

As per BMW rules, every CBWTF with incinerator facility is required install online continuous emission monitoring system (OCEMS) and report the real time emission data to SPCB and CPCB servers. As per status report, 75% of CBWTFs have installed OCEMS systems. States namely Andhra Pradesh, Assam, Chandigarh, Delhi, Haryana, Himachal Pradesh, Puducherry, Punjab, and Telangana, have ensured data transfer from all CBWTFs in respective States. One or more CBWTFs in the States namely Bihar, Chhattisgarh, Gujarat, Jharkhand, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, 10 Uttarakhand, Uttar Pradesh and West Bengal have yet connected with CPCB server. None of the CWBTFs in Odisha have installed OCEMS. As per information available at CPCB OCEMS server, about 153 out of 202 CBWTFs have installed OCEMS analysers and transmitting data to CPCB server.

Infection control: Infection control practices in PHCs and SCs need strengthening. A recent study²⁴ on PHCs' preparedness for outpatient service provision during the COVID-19 pandemic found that infection control deficits stemmed from issues in infrastructure, facility provision and practice. The deficits included limited physical space and queuing capacity, lack of separate entry and exit gates (49 percent), inadequate ventilation (57 percent), inadequate facilities for hand washing (24 percent) and hand hygiene (27 percent). Airborne infection control measures were reported to be absent in 76 percent of sites, but chemical disinfection was being undertaken at most (82 percent) sites. Another study undertaken as part of the preparatory phase of the Bank supported Andhra Pradesh Health System Strengthening Project (P167581, 2019-2024) corroborates these findings – it found that District Hospitals, Areas Hospitals and CHCs perform better on infection control measures such as mechanism for decontamination, hand washing, use of protective equipment and handling of sharps – while PHCs and SCs require further strengthening on these areas.

Worker Health and Safety: The primary study undertaken as part of the preparatory phase of the Bank supported Andhra Pradesh Health System Strengthening Project (P167581, 2019-2024) found that worker health

²⁴ 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

and safety measures are relatively better in District Hospitals and Area Hospitals and need to be strengthened in CHCs, PHCs and SCs.

The infrastructure improvements planned as part of the up gradation of SCs to HWCs include well-ventilated clinic room, separate toilets for males and females, assured water and electricity supply, proper system for drainage, and deep burial pit for biomedical waste management, repairs of roofs and walls as well as tiling of floors as per requirement, rainwater harvesting facility as per requirement²⁵.

The concerned Block Medical Officer and a representative from the Engineering wing at the district level undertake a joint site inspection and gap analysis for repair/renovation in existing SC and PHC buildings. The analysis is based on the requirements stated in the preceding paragraph²⁶

²⁵ 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.

²⁶ 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.

ANNEX 9: LAND MANAGEMENT SCREENING CHECK LIST

FOR PRELIMINARY ASSESSMENT OF HEALTH CARE FACILITIES: To be issued as guidance by MoHFW to states

(This screening format needs to be filled under the guidance of health care facility in-charge i.e. Medical Superintendent for District/Regional Hospitals and/or Medical College Hospitals, Medical Officer for CHCs and PHCs, and the ANM for the SCs to rule out any adverse social impacts due to program intervention.)

1	Name of the District	
2	Name of the Block	
3	Name of the Health Facility	
4	Category of health facility	
5	Requirement of Land for any construction beyond exiting land available with the health facility	Yes/ No (If Yes, give details below; In case No – Q.6 to Q.11 are not applicable)
6	Is the site identified for the proposed activities under the program	Yes/ No (If Yes, give details below)
7	Area Required (specify unit – acres/ sq.mt/ sq.ft. etc.)	
8	Type of Land and ownership details	
9	Currently in possession of	
10	Number as per land record	
11	Is there a need to acquire the land for proposed activities	Yes/ No If No, go to Q.No. 13
12	Proposed mechanism for acquiring the land	Through Land Acquisition Process/ Direct Purchase/ Lease/ Other mechanism (specify)
13	Are there any squatters living on the land proposed	Yes / No (If Yes, give details below)
14	Are there any commercial structures on the land proposed	Yes/ No (If Yes, give details below)
15	Is the land being used as common property resources - such as water supply structure; sanitation structures; power supply infrastructure etc. or approach way	Yes/ No (If Yes, please write details about the structure and its use)

		by local residential/ commercial/ institutions)
16	Is there any encroachment or any claim on the proposed land	Yes/ No (If yes, give details of from when and what kind) If Yes, report to TNHSP-PMU for necessary action
17	Any other specific information related to land	Give details
18	Is the photograph of the additional construction site/ land enclosed	Yes/ No
19	Does the proposed activities require any land acquisition as per point #11 above	Yes/ No If Yes, Report to TNHSP-PMU for necessary action
20	Has there been any 'Yes' answer to any of the screening point # 13,14 and 15 above	Yes/ No If Yes, Report to TNHSP-PMU for necessary action

Officer In charge for preliminary screening

Name.....

Designation:

Phone No.

Signature

Date:

In-charge of Health care facility

Name:

Designation:

Phone No.

Signature.....

Date:

ANNEX 10: ENVIRONMENT REGULATORY PLANNING CHECKLIST

This checklist is recommended for HCWs undertaking refurbishment activities in areas with sensitive environmental receptors.

Sl. No.	Key Question	Answer		Risk Category	Due diligence/ Actions
		Yes	No		
1	Is there any risk/ impact/ disturbance to forests and/ or protected areas because of subproject activities?				If yes, the selected site/ interventions should be avoided.
2	Is the health facility within 100 meters of any cultural, historic, religious site/ buildings under Archaeological Survey of India (ASI)?				If yes, the selected site/ interventions should be avoided ¹ .
3	Is the health facility between 100 - 200 meters of any cultural, historic, religious site/ buildings under ASI?				If yes, due permission to be taken from ASI for any construction. Where there is no impact, chance finds procedures would be applicable and ASI norms would need to be followed.
4	Does the subproject involve additional land for upgradation/ expansion and/ or new construction through land acquisition or direct purchase and/or restrictions on land use?				If yes. This cannot be supported by the project. Alternate options to be explored.
8	Does the subproject require shifting of any common property resources (CPRs) - such as water supply structure; sanitation structures; power supply infrastructure etc. or approach way				Adequate provision to be made for shifting of the CPR along with proper coordination with respective departments and consultations with local users of the CPR/ community.
9	<input type="checkbox"/> Is there civil works/ building rehabilitation envisaged at the facility which will involve the following: <ul style="list-style-type: none"> <input type="checkbox"/> Increase in dust and noise from demolition and/or construction <input type="checkbox"/> Generation of construction waste <input type="checkbox"/> Impacts on accessibility to the facility 				If yes, an Environment and Social management and monitoring plan to be prepared and shall include among other things: <ul style="list-style-type: none"> • All legally required permits (to include not limited to resource use, dumping, sanitary inspection permit) have been acquired for construction and/or rehabilitation. • Address Occupational Health & Safety (OHS) and Community Health & Safety measures during construction

Sl. No.	Key Question	Answer		Risk Category	Due diligence/ Actions
		Yes	No		
	<input type="checkbox"/> Excavation impacts and soil erosion <input type="checkbox"/> Increase sediment loads/wastewater discharges in receiving water <input type="checkbox"/> Removal and disposal of toxic and/or hazardous substances ¹ <input type="checkbox"/> Increase in soil erosion or changes in local drainage pattern				<ul style="list-style-type: none"> Measures addressing pollution and waste management during civil work. Use screens or nets to avoid flying debris and dust and use of regular water sprays to suppress dust Hazardous waste separated from non-hazardous waste on site and disposed off to designated sites Measure and report noise (decibel) levels regularly Manage oil leaks/spills from heavy machinery The worksite site will establish appropriate erosion and sediment control measures to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers. And keep all drains clear of silt and debris.
13	Will the facility be connected to a formal wastewater disposal and treatment system?				If no, then adequate provision of septic tank and soak pit will need to be made
14	Is there adequate provision of clean water and sanitation services at the facility?				If no, specify the mitigation measures to be adopted to provide adequate supply of potable drinking water.
15	Is there adequate STP-ETP/ Soak Pit if facilities are not connected to the municipal wastewater scheme?				If No, adequate wastewater treatment and disposal systems, such as package treatment plants and chlorination, where appropriate for the size, capacity, and services offered at the health facilities.
16	Is BMW being suitably segregated? (this includes clinical waste, sharps, pharmaceutical products, cytotoxic and hazardous chemical waste, radioactive waste, organic domestic waste, non-organic domestic waste)				<p>If No, then specify the on-site measures/ equipment needed for waste segregation and follow CPCB guidelines on</p> <p>(i) Guidelines for Management of Healthcare Waste as per Biomedical Waste Management Rules, 2016 (and amendment 2018)</p>

Sl. No.	Key Question	Answer		Risk Category	Due diligence/ Actions
		Yes	No		
					(ii) Guidelines for Bar Code System for Effective Management of Bio-medical Waste
17	Is the HCF connected to a CBMWTF?				If No, then specify the on-site measures for waste disposal.
18	Are appropriate color coded Bins/ bags provided for bio-medical waste disposal?				If no, specify how consumables will be provided at HCF level, and follow CPCB Guidelines for Bar Code System for Effective Management of Bio-medical Waste
19	Is there SOP to manage accidents/ spills at HCF level including mercury				Develop SOP for accident management and systems for reporting and recording: <ul style="list-style-type: none"> i. Occupational accidents and diseases ii. Dangerous occurrences and incidents iii. These systems should enable workers to report immediately iv. Follow CPCB guidelines on management of mercury.¹
20	Are healthcare and sanitation workers provided with necessary and appropriate health screening, precautionary measures and immunizations?				If no, ensure the following practices are implemented: <ul style="list-style-type: none"> i. Yearly health screening of all HCF and Sanitation staff ii. Immunization for staff members as necessary (e.g. vaccination for hepatitis B virus, tetanus) iii. Provisions of gloves, masks, and gowns iv. Adequate facilities for hand washing are available. If hand washing is not possible, appropriate antiseptic hand cleanser and clean cloths / antiseptic towelettes should be provided. v. Adequate procedures and facilities for handling dirty linen and contaminated clothing
21	Does the facility have appropriate fire safety evacuation, and signage ?				If No, please refer to 'Occupational Health and Safety' in the WBG General EHS Guidelines Additional recommendations for fire safety include: <ul style="list-style-type: none"> i. Installation of smoke alarms and sprinkler systems

Sl. No.	Key Question	Answer		Risk Category	Due diligence/ Actions
		Yes	No		
					<ul style="list-style-type: none"> ii. Maintenance of all fire safety systems in proper working order, including ventilation ducts, escape doors. iii. Training of staff for operation of fire extinguishers and evacuation procedures iv. Development of facility fire prevention or emergency response and evacuation plans with adequate guest information (this information should be displayed in HCF main locations and clearly written in relevant languages).

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

Name.....

Designation:

Phone No.

Government of India
Ministry of Health & Family Welfare
Department of Health & Family Welfare
Nirman Bhawan, New Delhi – 110001

PUBLIC NOTICE

No:7(58)/2021-NHM-1

Dated: 19-05-2022

In reference to the Environment and Social Systems Assessment Document (ESSA) under India's Enhanced Service Delivery Program uploaded on the Ministry of Health & Family Welfare website is a fulfilment of one of the legal covenants of the World Bank support project. ESSA document does not require submission of proposals for providing resources or empanelment of organizations. Further the Department of Health & Family Welfare has not issued any such communication. Thus, no proposals in this regard are required to be submitted by the organizations to the Ministry of Health & Family Welfare.

Sd/-
Joint Secretary, MoHFW