



INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

**ENVIRONMENT AND SOCIAL SYSTEMS ASSESSMENT**

**FOR OFFICIAL USE ONLY**

ON A PROPOSED LOAN

IN THE AMOUNT OF US\$900 MILLION  
TO

INDIA

FOR

**Skills: National ITI Upgradation program (P507910)**

**Draft Disclosed: March 21, 2025**

**Education (Lead Practice Area)**

**South Asia Region**

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## Abbreviations and Acronyms

ADB	Asian Development Bank	NIMI	National Instructional Media Institute
BPL	Below Poverty Line	NPMU	National Program Management Unit
CAP	Corrective Action Plan	NSDC	National Skill Development Corporation
Capex	Capital expenditure	NSTI	National Skills Training Institute
CHS	Community Health and Safety	OHS	Occupational Health and Safety
CITS	Craft Instructor Training Scheme	Opex	Operational expenditure
CSTARI	Central Staff Training and Research Institute	PAB	Project Approval Board
CTS	Craftsmen Training Scheme	PAD	Program Appraisal Document
DLI	Disbursement Linked Indicator	PAP	Program Action Plan
DLR	Development Linked Results	PforR	Program for Results
DGT	Directorate General of Training	PMC	Program Management Consultants
E&S	Environmental and Social	POM	Program Operations Manual
EHS	Environment, Health and Safety	PPP	Public Private Partnership
EIA	Environmental Impact Assessment	RA	Results Area
EMP	Environmental Management Plan	RCA	Root Cause Analysis
ESSA	Environmental and Social Systems Assessment	SC	Scheduled Caste
FLFP	Female Labor Force Participation	SD	Skills Development
FY	Financial Year	SIDH	Skill India Digital Hub
GDP	Gross Domestic Product	SIMO	Skill India Mission Operation
HSIC	Hub and Spoke Industry Consortium	SIP	Strategic Investment Plan
IFSA	Integrated Fiduciary System Assessment	SPMU	State Program Management Unit
IMC	Institute Management Committee	SPV	Special Purpose Vehicle
INR	Indian Rupee	SSC	Sector Skill Council
ITI	Industrial Training Institute	ST	Scheduled Tribe
MIS	Management Information System	SIMO	Skill India Mission Operation
MoEFCC	Ministry of Environment, Forests and Climate Change, Government of India	STRIVE	Skills Strengthening for Industrial Value Enhancement
MSDE	Ministry of Skill Development and Entrepreneurship, Government of India	TRUE	Total Resource Use and Efficiency
NCVET	National Council of Vocational Education and Training	VTIP	Vocational Training Improvement Project
		WB	World Bank

## Skills: National ITI Upgradation Program (P507910)

### ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT

#### SUMMARY

##### *Introduction*

1. An Environmental and Social Systems Assessment (ESSA) was conducted by the World Bank E&S team for the proposed Skills: National ITI Upgradation program (NITIUP - P507910) of the Ministry of Skill Development and Entrepreneurship (MSDE), Government of India supported by a Program-for-Results (PforR) financing instrument of the World Bank. Following the requirements of the World Bank PforR Policy, these rely on country-level systems for the management of environmental and social effects.<sup>1</sup> 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.

2. This ESSA Report is organized into five Chapters introducing the Program, Purpose, Objectives of ESSA, Description of Environmental and Social Characteristics of the Program Region, Potential Environmental and Social Effects, Assessment of Environmental and Social Management Systems, and Implementation Capacity based on PforR Policy of the Bank and its Core Principles; Environmental and Social Inputs to the Program Action Plan, and Details on Consultation and Disclosure.

##### *Program Boundaries of the PforR Operation*

3. The Program Development Objective (PDO) is to increase the number of graduates, enhance their employability and labor market outcomes, and strengthen the governance and management of selected ITIs in the Program area. The scheme proposes a Hub-Spoke model for upgradation of ITIs. The following Results Areas are envisaged under the Program (in brief):

4. RA1: Empowering ITIs for Higher Performance. This RA will focus on the governance and management reforms and upgrading of ITIs through the creation of hub-and-spoke consortia (HSICs) as outlined in the first component of the government program above. The governance structures introduced will enable additional private mobilization beyond Program-targeted ITIs, three years from Program closing at the rate tracked through the Program.

5. RA2: Creating a State/UT-Level Enabling Environment for the ITI Ecosystem. Activities in RA2 focus on building the capacity of states and UTs to facilitate the selection and creation of HSICs, grant increased autonomy to HSICs, monitor the performance of HSICs, create platforms for public-private sector dialogue across all relevant economic sectors, with the appropriate stakeholders to foster better labor market outcomes of ITI graduates; strengthen data systems and liaise with relevant central and state government agencies to enhance coordination and promote synergies that support the objectives of the program, including linkages with relevant labor migration initiatives.

6. RA3: Strengthening Central-Level Capacity in Policy Coordination, Program Management, and Monitoring and Evaluation. This RA will support two main activities. Each NSTI will develop and implement a five-year SIP for transformation into world-class institutes specializing in vocational teacher training, with strategic partnerships with international industry partners and/or international education agencies such as institutes for training of trainers and universities. The second activity under RA3 focuses

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<sup>1</sup> "Effects" is used throughout this document to refer collectively to benefits, impacts, and risks. The term "benefits" refers to positive consequences and the term "impacts" refer to adverse or negative consequences of actions taken. Risk is used to denote the potential for loss or damage of something of environmental and social value. Risk is typically expressed in terms of probability and severity of consequences occurring in the future.

on strengthening the institutional capacity of MSDE and relevant central agencies to coordinate, assure quality, and monitor and evaluate the Program.

### ***Program Implementation Arrangements***

7. The institutional and implementation arrangements will be at three levels: national, states/UT, and hub-and-spoke ITIs consortium levels to balance national leadership with decentralized implementation.

8. At the national level, MSDE through the DGT and its subunits will be responsible for overall government program coordination and management. The Director General of DGT, supported by the Director of Projects, will oversee the day-to-day operation of the Program with support from a competitively recruited National Project Management Unit (NPMU). The NPMU will include specialized units, such as technical, monitoring and evaluation (M&E), financial and procurement, and E&S management. The NPMU can include a competitively hired project management consultant (PMC) to provide technical expertise to the specialized units. Its role will be to support implementation and monitoring of the Program and coordinate with the states/UT that will be part of the Program. The DGT with the support from the NPMU will also be responsible for coordinating and managing Program activities linked to the five selected NSTIs under RA3. The DGT has prior experience of successfully implementing World Bank-financed operations.

9. At the state/UT level, a State/UT Steering Committee (SSC) will provide overall guidance and strategic direction for the implementation of the Program. The Director of the SSD department with support from a competitively recruited State Project Management Unit (SPMU) will oversee the day-to-day operations of the Program. The SPMU will include various functional units, including technical, M&E, financial, and E&S management to ensure adequate Program implementation. The SPMU can also include a competitively hired PMC to provide technical expertise to the specialized units.

10. Each HSIC will be responsible for program implementation for the ITIs at the cluster level. The HSIC will be structured as a Section 8 company or as any other body corporate that ensures greater accountability for results.

### ***Environmental and Social Systems Assessment***

11. This Program will be implemented through the Program for Results (P4R) instrument, as part of which a comprehensive assessment of the environmental and social systems is undertaken during the Preparation. This assessment helps to gauge the adequacy of environmental and social systems at national, state and ITI levels. The objective of ESSA is to ensure consistency with six “core principles” outlined in the World Bank’s Guidance on Environmental and Social Systems to effectively manage the Program risks and promote sustainable development. These principles are:

Core Principle#1: Program E&S management systems are designed to (a) promote E&S sustainability in the Program design; (b) avoid, minimize, or mitigate adverse impacts; and (c) promote informed decision-making relating to a Program’s E&S effects.

Core Principle #2: Program E&S management systems are designed to avoid, minimize, or 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.

Core Principle #3: Program E&S management systems are designed 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.

Core Principle #4: Program E&S systems manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement and assists affected people in improving, or at the minimum restoring, their livelihoods and living standards.

Core Principle #5: Program E&S systems 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: Program E&S systems avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

12. The specific **objectives** with which the ESSA was undertaken include the following:

- Identify potential environmental and social benefits, risks and impacts applicable to the program interventions.
- Review the policy and legal framework related to management of environmental and social impacts of the program interventions.
- Assess the institutional capacity for environmental and social management system within the program system.
- Assess the program system performance with respect to the core principles of the PforR instrument and identify gaps, if any.
- Describe actions to be taken to fill the gaps that will be used as input/s to the Program Action Plan.

### ***ESSA methodology***

13. The ESSA was carried out through a combination of site visits with direct consultations with the stakeholders, and desk-based exercises with virtual interactions/consultations. It included a review of the completed and ongoing works of similar nature at ITIs, and borrower's systems including policies, guidelines, regulations, standards, and procedures including the Environmental and Social Management Framework for the earlier Vocational Training Improvement Project (VTIP) and ESSA of Skill India Mission Operation (SIMO) and Skills Strengthening for Industrial Value Enhancement (STRIVE) Program. States and ITIs in various physical regions of the country were covered by site visits and utilizing the possibility of virtual platforms. The ESSA team also ensured that the consultations were evenly spread across the hierarchy of institutions involved, including Central and State level agencies (such as Central Staff Training And Research Institute (CSTARI), NSTIs, MSDE, State Departments), ITI level officials, Contractors and Engineers of the agencies that implements works for it is (such as various levels of offices of the PWD, Housing Board, Contractors), industry partners who set up and operate specific workshops and instruction platforms at ITI premises, students, instructors, administrative staff at ITIs, and the communities. The team reviewed the capacity of existing systems at the National, State, and ITI levels to plan (including cases of Private party supported /operated ITIs) and implement effective measures for the environmental and social management of the Program and determine if any additional measures are required to strengthen it to manage risks and enhance benefits. Sample ITIs and other stakeholders in the states of Maharashtra, Madhya Pradesh, West Bengal and Tamil Nadu were visited in person for this assessment; in addition to discussions with various other State/UT offices including Andaman & Nicobar, Andhra Pradesh, Odisha, and Assam to confirm the findings.

14. The ESSA specifically delved into systems and institutional capacities (planning, implementation, supervision and monitoring) for a) environmental due-diligence of the proposed interventions in various institutes and ITIs across the Country; b) regulations and monitoring; and incorporation of screening for potential risks, alternative analysis, feasibility, design, implementation, and operations; (c) process followed for multi-party virtual stakeholder consultations at the state and district level and interactions of program agencies with Central/State/ITI officials, engineers, contractors and communities, (d) Teaching – Learning at ITIs, NSTIs.

## ***Summary of Environmental and Social Risks and Impacts of the PforR***

15. The ESSA included a detailed assessment of environmental and social risks and impacts of the RAs and interventions related to the DLIs proposed in the PforR. The assessment concluded the following:

### **Environmental Risks and Impacts**

16. **The Program aims to enhance the infrastructure, facilities, and the overall teaching-learning environment in selected ITIs and NSTIs, which is expected to yield significant environmental benefits, and ensures a future workforce with a positive culture on safety, with adequate skills in EHS.** The Program Environmental and Social Systems Assessment (ESSA) has rated the overall environmental risk as “**Substantial.**” This rating is due to two main factors: (i) the unknown extent of construction or upgradation activities (such as construction and/or upgradation of workshops, hostel facilities, classrooms, etc) across 1000 ITIs and 5 NSTIs in diverse environmental and geographical settings some of which may be in/near sensitive receptors, with large-scale constructions being considered a Significant risk according to National Environmental Regulations<sup>14</sup>; and (ii) the insufficient capacities of the Program’s implementing agencies to manage Environmental, Health, and Safety (EHS) risks and the risk of multi-agency co-ordination at the National, State and ITI levels by the proposed (new) institutional system.

### **Social Risks and Impacts**

17. The program is expected to have significant positive social impacts, such as: (i) improving employment outcomes for trainees under this program through improved quality of trainings. In particular, this would benefit various vulnerable groups such as women, Scheduled Tribes, Scheduled Castes and Persons with Disabilities in terms of their participation in the labour force; (ii) improvement in enforcement of good labour practices, and human resource management in the operation of ITIs as well as in the planning and execution of civil works under the Project. There would be improvements in systems for monitoring and tracking compliances and improved HR practices; (iii) improvement in safety for women trainers, trainees and other participants in the ITI ecosystem through strengthened implementation of the POSH Act. This will contribute to providing an enabling environment for enhancing female labour force participation; (iv) improvement in the grievance redressal mechanism in the ITI ecosystem, making it more accessible, responsive and accountable to all stakeholders.

18. The key social risks involved in the program include: (i) exclusion of vulnerable groups from program benefits, accessing ITIs and subsequent employment opportunities. These include women, Scheduled Tribes, Scheduled Castes and Persons with Disabilities; (ii) Risk of unfair labour practices in the civil works as well as management of trainers and other administrative staff in ITIs and NSTIs; (iii) Risk of SEA/SH with increased number of adolescent girls and women as trainees, trainers and staff under the program; (iv) Risks arising out of inadequate grievance redressal mechanisms.

### ***Findings from the Analysis of Applicable E&S Systems: Policy, Legal and Regulatory Framework Governing the Program***

19. **Assessment and Management of Environmental Risks and Impacts:** National/State systems or regulations are not in place to screen, avoid, assess, mitigate, or manage environmental risks and impacts of the type of activities envisaged, unless these are part of large building construction projects (>20,000 sqm; <1,50,000 sqm) or area development projects (Covering an area ≥ 50 ha and or built up area ≥1,50,000 sqm). Large constructions or area developments are not yet ruled out under the Program. However, usual works expected under the Program such as workshop, hostel or classroom construction or upgradation which are of smaller extents is neither explicitly mandated by regulations to follow any screening or assessment mechanism nor are there capacities or systems for managing these. The proposed Program is much wider in scope than the earlier Projects/Programs supported by the World Bank, with large scale construction envisaged in around 1000 institutions (200 Hubs and 800 Spokes; and 5 NSTIs). The institutional capacities for Environmental Risk management as part of earlier Projects and Programs were not well institutionalized during the respective Project/Program period, and hence not



transcended beyond the Program duration or institutions. There is also no existing system to plan and improve legacy non-compliances.

20. **National and State Regulations and Systems for Minimizing Pollution and Health & Safety:** The Program activities, including construction and Teaching-Learning, are governed by existing pollution and Health and Safety standards and guidelines at National and State Levels. Program agencies must be made aware of these regulations to ensure adherence, and monitoring to ensure safe and pollution free learning environment and nurturing future skilled technicians with positive safety culture. There is no system or mechanism in place to address non-compliances including legacy ones. Enforcing Environment, Health & Safety (EHS) is crucial during upgrades, operations and Teaching-Learning at these NSTIs and ITIs. Although regulations and guidance exist, awareness and compliance are minimal.

21. **National/State Regulations and Systems for protection of Natural Habitats, and Cultural Heritage:** Regulations, standards and guidelines for protection of Natural Habitats, and Cultural Heritage applicable to the Program activities are in place; even though Program agencies need more awareness to adhere to regulations during works and Teaching - Learning. There is also no system or existing mechanism to improve legacy non-compliances and impacts on Natural Habitats or cultural heritage.

22. **Social Inclusion:** From a social inclusion perspective, the overall legal and policy framework was found to be adequate. The legal framework on inclusion of vulnerable groups including women, Scheduled Tribes, Scheduled Castes and Persons with Disabilities is found to be strong. There also a strong enabling policy environment through dedicated facilities for multiple vulnerable groups as well as other incentives. However, there are various socio-economic and systemic barriers which inhibit the practical realization of these inclusion initiatives.

#### ***Findings from Analysis of Institutional Arrangements (Capacities) for Implementing the PforR and Managing E&S Risks***

23. **Environmental:** Program agencies across various levels include graduates in Engineering disciplines (such as Civil, Mechanical, Electrical, Computer, etc.) who have undergone comprehensive training in Health and Safety and Pollution management as part of their qualifications. However, an evaluation of institutional arrangements for the PforR indicates that key implementing agencies possess limited capacities and experience in managing environmental risks, including risk identification, planning, and environmental management related to works and Teaching – Learning activities. There is a noticeable deficiency in capacities for environmental management, health, and safety, as well as in promoting a safety culture essential for producing ITI graduates skilled in EHS, critical for the future workforce. Significant efforts are required to enhance the capacities of Program management agencies, instructors, and students in pollution control and health and safety management.

24. **Social:** The assessment found that there is a significant gap in the institutional capacity to manage risks and address issues related to inclusion, citizen engagement, gender and other social aspects. Further, there are gaps in the monitoring and reporting systems and capacity related to social risk management at the ITIs, grievance redressal mechanisms, and stakeholder engagement. Further, where civil works are involved in construction and upgradation of facilities, there are no mechanisms for monitoring and reporting of labour welfare and compliance with legal requirements on labour. At an institutional level, there is a paucity of trainers and one of the factors includes the widespread system of *ad hoc* and contractual recruitment and dismissal. In the absence of a Human Resource Policy to safeguard the interests of trainers, these issues remain a challenge.

#### ***Findings from Assessment of Program System Consistency with Core Principles of Bank's PforR Financing***

25. The ESSA assessed program system consistency with the six core principles of ESSA. The broad summary of the assessment is as follows:

### **Core Principle #1 (Adequacy and Appropriateness of the Program's E&S Management Systems)**

- The Program's environmental and social management procedures do not explicitly follow the avoid-minimize-mitigate-compensate or offset E&S risk mitigation hierarchy especially when the construction/upgradation are less than 20000 sqm built up area; as expected under the Program. Capacities, opportunities and priority are minimal to manage environmental risks including legacy non-compliances,
  - to manage the environmental risks associated with the proposed Program, MSDE shall develop systems to screen, assess, manage and mitigate environmental risks and impacts of all Program activities at various levels, and EHS in Teaching – Learning,
  - Environmental management plans (EMPs) shall include mitigation measures for impacts and risks on biodiversity, pollution prevention, linked facilities, possible use of contaminated land (if encountered), and vulnerability of sensitive receptors, climate impacts, etc.,
  - Prior to developing plans for upgradation, an Environmental Audit shall be carried out to identify and incorporate the required aspects in plan to fill the gaps on legacy non-compliances in existing facilities. This includes fire safety and other permits, licenses, absence of mechanisms to safe keep hazardous materials, etc.,
  - Appropriately Qualified Environmental experts and OHS experts shall be appointed at National / State, SPV/ITI levels (all applicable institutional levels) to ensure screening, audit, EMP preparation, implementation, supervision and reporting (quarterly) of works and other Program activities,
  - Safety-First Cell shall be established at Program Implementation/Management units at National, State, HSIC as may be applicable to ensure Safety upskilling, through training and certification on safety in all ITIs and NSTIs during Teaching - Learning, to ensure full PPEs and standard awareness materials, and training,
  - The details of systems and capacities (above) shall be included in Environmental Guidance, as part of the Program Operations Manual and shall be in place before the start of Program Activities (including prior results).
  - There is a robust framework on social inclusion for various vulnerable groups including women, Scheduled Castes, Scheduled Tribes, Persons with Disabilities etc. There are also additional measures like dedicated facilities, hostels, reservations and other incentives. However, there is a gap in implementation on the ground as enrollment figures for these groups remains low.
  - There is a gap in the implementation of the requirements of the POSH Act to prevent sexual harassment of women at the workplace. The Internal Complaints Committees to be constituted as per the Act are not operationalized or actively functioning as envisaged in most implementing agencies and ITIs. It is critical to strengthen this aspect as there are large numbers of vulnerable adolescent girls entering the workspace and creating a safe environment for them is required.
  - There are currently multiple grievance redressal mechanisms operating simultaneously. However, there are no common SOPs for their operation nor any comprehensive system for reporting and monitoring.
  - Stakeholder engagement is part of the curriculum development and updation process. At the ITI level stakeholders including industry are consulted in an opportunistic and adhoc manner. This system requires planning and strengthening for more effective engagement.

### **Core Principle #2 (Impacts on Natural Habitats, Physical and Cultural Resources)**

- To the extent known and identified, if there are any potential adverse impacts of project activities and/or interventions on **recognized** (at National/State levels) natural habitats, physical cultural property, the activities and/or interventions are avoided, or managed. There are no formal procedure or guideline that mandates project proponents to follow the mitigation hierarchy principle in the management of risks on natural habitats, physical and cultural property except critical habitats and biodiversity hotspots, and recognized physical and cultural properties covered under National/State

regulations. The program shall adopt exclusions (in line with P for R Exclusions) to avoid impacts and risks on non-recognized habitats and cultural properties,

- Screening shall be ensured for all investments under the Program, to identify and avoid / mitigate/manage risks and impacts on recognized and other cultural resources and natural habitats,
- There shall be training programs to update the Program agencies on regulations, use these for better planning (for example: Siting guidance), and systems in place to monitor and manage risks and compliance,
- Further, few legacy non-compliances (esp. impacts on neighboring natural features due to deposition of wastes and wastewater from ITIs, probable impacts on facilities neighboring or housed in cultural properties) were observed in facilities visited during the ESSA preparation. These shall be identified through an Environmental Audit prior to upgradation planning and all gaps shall be addressed in the Plans, Designs and Estimates.

### **Core Principle #3 (Protection of Public and Worker Safety)**

- National and state laws governing public and workers' safety, prevention of child and forced labor, etc. are robust and adequate. Program implementing agencies (including PWD who carries out construction) lack the required resources and skills to ensure that contractors engaged in implementing the Program activities comply with the laws in letter and spirit.
- There is a gap in the system for monitoring labour law compliance as there is a fragmentation of responsibility and authority where civil works are carried out. Most civil works are conducted by the Public Works Department (PWD) of the respective state, which hires contractors for the works. The contract documents may contain stipulations to comply with labour laws and undertake other relevant steps to ensure a safe working environment for labour and the host community. However, the responsibility for oversight is divided between the PWD and the Labour Department.
  - Design for upgradation and new construction, or equipment installations shall follow the Environmental Guidelines, including required clauses in Bid Documents, and ensuring construction supervision. Enforcing regulations, and monitoring and reporting on pollution and OHS are very important in all program activities including those for prior results.
  - Preparation and use of Environmental Guidelines for the Program and adherence/compliance to regulations shall be verified by third party / independent Environmental Audit process; and as part of IVA verification for applicable Dis/DLRs.
  - EHS in ITI Teaching - Learning is very important for nurturing a future work force who may be involved in various Projects/Programs throughout the country and abroad. It is important to note that in ITI workshops, adolescents (children of 14-18 years as per National Regulation) get trained in activities that involve potential hazardous and flammable materials and processes. This is a very important risk not only in the proposed improved facilities, but also in all ITIs and NSTIs; and requires strong supervision and training on Health & Safety and overall Environmental Management as per the National Regulations<sup>2</sup>. NCVET accreditation guidelines point out the need to ensure safety at workshops. However, EHS is not prioritized, and the capacities to supervise and ensure EHS especially at workshops is minimal.
  - EHS upskilling of ITI instructors and students is very important. OHS modules shall be developed specifically for each trade and disseminated through efficient modes (online, Offline) and a work force shall be developed with competence on OHS and positive safe culture. There shall be a focal institute or cell on OHS with dedicated curriculum and responsible for OHS oversight in all ITIs (Hubs & Spokes) and NSTIs.
  - There are no systems currently for monitoring and reporting on the contractor's compliance with contractual obligations related to labour. The PWD issues work contracts, but monitoring remains ad hoc.

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<sup>2</sup> The Child & Adolescent Labour (Prohibition & Regulation) Act, 1986; The Factories Act, 1948

#### **Core Principle #4 (Management of Land Acquisition, Loss of Access to Natural Resources and Involuntary Resettlement)**

- This Core Principle is not applicable. No involuntary acquisition of land for the activities planned under this project is currently envisaged. All infrastructure requirements for ITIs and NSTIs would be met within the footprint of land already available with the government. Any activities which involve involuntary acquisition of land would be excluded from the Program. When securing any land required for Program activities, the following shall be adhered to in order to ensure no adverse effects:
  - The land in question must be free of squatters, encroachers or other encumbrances
  - No physical relocation should result from securing the land required
  - There should not be any restrictions on access or transit as a result of securing such land
  - There should be no significant adverse impacts on the livelihoods as a result of securing the land.

#### **Core Principle #5 (Cultural Appropriateness, Equitable Access to Program Benefits, Rights of Tribal and Underserved Communities)**

- There is a strong legal framework to safeguard the interests of Scheduled Tribes in India, including various policy and regulatory initiatives to support the skilling requirements of tribal youth, in particular. Some Schedule Five<sup>3</sup> states like Mizoram have framed and adopted state level policies as well. The Government of India (GoI) has the Special Central Assistance to Tribal Sub Scheme (SCA to TSS) as a flagship program to improve welfare of tribal people with special financial assistance for scholarships, skill development, reservations in government jobs and public institutions. In addition, there is an array of incentives like scholarships, fee waivers, refundable fees, stipends (including for hostellers and day scholars), free start-up tool kits etc.
- However, during the assessment, it was observed that the implementation of such interventions on the ground is inconsistent. The tribal ITIs are mostly located in the tribal districts in the remote areas. The quality of these ITIs was observed to be lower than that of the general ITIs in terms of equipment, infrastructure and trained instructors during the STRIVE assessment. It was also observed that tribals have difficulty in continuing in jobs due to various factors including geographical and cultural constraints. The ITIs for minorities are also seen to be of lower quality than general ITIs in terms of equipment and infrastructure.
- Some of the key factors contributing to the low enrollement are poor local level employment opportunities in tribal areas, inadequate staff for specific trades in tribal ITIs who reside in the tribal areas, geographic inaccessibility, poor hostel facilities in many tribal ITIs, including lack of hygiene, sanitation and mess facility, absence of culturally contextualized trades and poor outreach and communication about schemes and job opportunities

#### **Core Principle #6 (Avoidance of Social Conflict)**

- While there are certain parts of India where there are some conflicts, this project will not exacerbate these risks. Accordingly, this core principle does not apply.

#### **Environmental and Social Risks and Management**

##### ***Environmental***

26. To mitigate environmental risks, the Program will implement the following measures: (a) exclude high-risk environmental activities (as in the Banks PforR Guidance), conduct screenings to avoid sensitive receptors, and address legacy non-compliances identified through an Audit and implementing its findings while constructing/upgrading; (b) apply an EMP for construction works, addressing direct, indirect,

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<sup>3</sup> The Indian Constitution makes special provisions for the administration of states which are predominantly inhabited by tribal groups, which devolve greater administrative autonomy to local self governing institutions

cumulative and induced pollution and safety risks, including those from linked activities; (c) strengthen institutional supervision and monitoring mechanisms for both Construction and Operations. Additionally, there is a need for system improvement in the Teaching-Learning framework concerning the overall safety and housekeeping of the workshop, its equipment, material and fuel management, processes, and quality supervision on safety, as it is important to ensure as per National Regulation that adolescents (between 14 to 18 years as per National Regulations) are trained in a safe environment. Critical Environment, Health, and Safety (EHS) considerations have been integrated into the Program through: (i) establishing a Safety-First Cell at NPMU for co-ordination with States and H&Ss to ensure EHS, promoting better environmental management (Total resources use and efficiency (TRUE) campuses) and ‘safety culture’ in teaching -learning; (part of respective DLIs/DLRs for National, H&S governance and infrastructure upgradation) and (ii) developing a robust environmental management system at the Program level (national, UT/state, hub-and-spoke (SPVs), and ITIs), which includes the preparation and use of Environmental Guidance (as part of Program Operation Manual) and ensuring appropriate capacities at all levels (PAP#01).

## **Social**

27. The Program Environmental and Social Systems Assessment (ESSA) has rated the overall social risk as “Moderate.” This is on account of the following risks: (i) exclusion of vulnerable groups from program benefits, accessing ITIs and subsequent employment opportunities. These include women, Scheduled Tribes, Scheduled Castes and Persons with Disabilities; (ii) Risk of unfair labour practices in the civil works as well as management of trainers and other administrative staff in ITIs and NSTIs; (iii) Risk of SEA/SH with increased number of adolescent girls and women as trainees, trainers and staff under the program; (iv) Risks arising out of inadequate grievance redressal mechanisms.

28. In order to manage these risks, systems will be strengthened for overall social risk management. Human resource capacity would be enhanced at all levels of the institution for social. Mechanisms for monitoring and reporting on social aspects including grievance redressal mechanisms would be strengthened. There is also a requirement for enhancing systems to manage the risks related to safety of women at the workplace, particularly trainees and institutional strengthening for this would be prioritized. The gap in terms of monitoring of compliance of labour laws by contractors would also be strengthened. These measures would be implemented through inputs into the Program Action Plan, Program Operations Manual, and some would be linked to disbursements as well.

29. **Exclusions:** The following activities will be excluded from the program (also for prior results<sup>4</sup>) because of the high environmental and social risks:

### **General**

1. All activities excluded as per the World Bank’s P for R policy (as in Bank’s PforR Guidance Manual)

### **Environmental**

2. New Construction/Upgradation / Rehabilitation or repairs to existing Buildings or campuses or facilities in campuses that do not follow National/State/Local Body Regulations or Guidance for siting, works, management and disposal of wastes (various types), and wastewater and others; except when the proposed development includes measures to comply with regulations
3. Any activity involving purchase or use of Asbestos, or harmful lead-based products. In case of removal and disposal of existing asbestos specially developed Standard Operating Procedures shall be followed strictly to minimize adverse impacts.

### **Social**

4. No large-scale changes in land use or access to land and/or natural resources.
5. No land acquisition and/or resettlement would be undertaken under the Program. The project activities would not involve any construction where private land acquisition is required or any land for which clear title or any recognizable claim is not available with the government.
6. No physical relocation should result from securing the land required

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<sup>4</sup> All Program activities including those considered for prior results shall follow these Exclusions

7. There should not be any restrictions on access or transit as a result of securing such land
8. There should be no significant adverse impacts on the livelihoods as a result of securing the land
9. No activities that involve the use of forced or child labour;
10. No activities which could lead to marginalization of, or conflict within or among, social groups

### ***Inputs to DLIs / DLRs on Environmental Aspects***

30. Various applicable IRIs and DLIs for institutional strengthening and capacity building include the requirement to ensure EHS compliance and reporting on EHS Compliance & Program Action Plan on Environmental aspects. This ensures Resource allocation (both funds and manpower), ensuring EHS compliance during Teaching – Learning in workshops, and its reporting. This has been included in the DLI verification Protocol and will be reflected in the ‘Environmental Guidance’ of the POM. EHS Compliance will be verified by the IVA for disbursements based on applicable DLIs.

### ***Ensuring EHS Compliance in Teaching & Learning***

31. It is proposed to ensure EHS compliance through ‘Safety-First’ Cells at all levels including HSIC and at NSTIs to ensure that EHS is imbibed into the Work Culture of ITI pass outs; so that they are ‘Industry Ready’. As noted during ITI and NSTI visits for the preparation of this ESSA, and highlighted in Tracer Studies of various States under the STRIVE Program (P156867), there remains an opportunity to enhance Environmental, Health, and Safety (EHS) practices, particularly safe work areas (Life and Fire Safety), awareness, use of Personal Protective Equipment (PPE) and the overall ‘safety culture’ within workshops. Observations from site visits revealed that less than 5% of students or staff utilize PPEs, primarily limited to welding shields. Adequate funding and dedicated efforts are crucial to ensure improved EHS standards.

32. In sectors where trades and craftsmanship are central, involving tools and equipment in workshops and work sites, effective training requires elevated EHS standards. Emphasizing health and safety training for both staff and students creates a workforce with a positive safety culture, confidence, and lower incident rates, making them prepared for industry work. Instructors should also receive advanced EHS training and international Occupational Health and Safety (OHS) certifications, such as NEBOSH, to properly oversee the adolescents being trained in jobs (some hazardous activities involving welding, electrical etc.) under workshop conditions. Hence, it is proposed to have Safety-First Cells at all applicable levels of institutional setup (such as National, State, Hub & Spokes etc. as may be applicable), to ensure EHS in ITI Teaching Learning (including accreditation of Trainers, regular roll-out of EHS Trainings, OHS certification of Instructors, and provision & use of appropriate PPEs and Awareness Material) and Transforming ITIs into TRUE Campuses. Safety-First cells shall continue beyond Program duration and function to ensure EHS and safety culture. Detailed activities contributing actions to its completion are presented in ***Annexure VIII***.

### ***DLI on Social Aspects***

33. Based on the ESSA findings, the key gaps will be addressed through different channels. These would be inputs into the Program Action Plan (PAP) and the Program Operation Manual (POM) and would cover aspects related to institutional staffing, grievance redressal mechanisms, measures to ensure safety at the workplace for women etc. In addition, monitoring and reporting of contractual obligations related to labour at worksites emerges as a critical gap. The measures to address this gap and strengthen institutional systems would be linked to disbursements and would be detailed in the PAD.

### ***Inputs to the Program Action Plan (PAP)***

#### ***Environmental***

- Proposed PAP: Implement a robust subproject Environmental Management System to do facility audit, screen, prepare, implement Environmental Management Plans with Disaster Management Plans, monitor and report; with capacities, resources at National, State, H&Ss

34. **Proposed System:** Findings of the screening and facility audit (can be a unified checklist if there is confirmation that all infrastructure will be developed in existing campuses) shall be included in the design, EMP and EMoP and budget and responsibilities shall be allocated to ensure its implementation. The Program shall ensure the findings of the Facility Audit are implemented, so that overall learning environment is improved with direct correlation to ITI performance, skilling, and jobs. The Program must develop and follow a sustainable infrastructure design incorporating the end-to-end approach for all program activities thus preventing pollution and safety risks, including compounded risks during climate hazards. The need to make Environmental Screening, Facility audit of existing Infrastructure and develop standard guidelines for design a part of SIP and preparation and use of EMP, EMoP, Bid documents and Contract agreements to ensure its implementation; and shall be made part of the Program Operations Manual. The Program shall support disaster preparedness, mitigation, and emergency response through adoption of good design and mitigation measures for climate risks integrated into EMPs. This shall apply to prior results as well and continued throughout the Program.

35. **Proposed Capacities:** It is recommended to ensure appropriate capacities for Environmental and Social Management at all levels (Environmental Management Unit at NPMU, SPMU, Hubs & Spokes), during preparation, Implementation, regular supervision and monitoring. Project Management and Supervision consultants shall also be mandated to identify environmental and social risks and hazards, train contractors and workers, and supervise all construction packages and report on EHS (half yearly) and incidents (within 48 hours). Safety First Cells constituted (through Office Order) at all levels shall eventually take up the responsibility of EHS management during Operation of ITIs. This shall continue even after the end of Program Activities and is part of Sustainability Plan to ensure continued oversight on EHS and to instill safety culture in ITIs. Program Mid and end term Environmental Audits to report on EHS aspects and its implementation in line with Environmental Guidance are also proposed. Detailed description of the proposed capacities in terms of number and qualifications of the staff at various levels is presented in **Annexure III**.

36. Program Action Plan on Environmental Aspects is presented in the following **Table**.

**Table A: Recommended Program Action Plan (PAP) on Environmental Aspects**

<b>Action description</b>	<b>Source</b>	<b>Responsibility</b>	<b>Timing</b>	<b>Completion measurement</b>
<ul style="list-style-type: none"> <li>Implement a robust subproject Environmental Management System to do facility audit, screen, prepare, implement Environmental Management Plans with Disaster Management Plans, monitor and report; with capacities, resources at National, State, H&amp;Ss (HSIC)</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Systems Assessment</li> </ul>	<ul style="list-style-type: none"> <li>MSDE, DGT PMUs &amp; All IAs</li> </ul>	<ul style="list-style-type: none"> <li>Constitute before initiation of Activities including Prior results and continue throughout the Program</li> </ul>	<ul style="list-style-type: none"> <li>Safety-First Cells, Qualified Experts all levels</li> <li>Follow Environmental Guidance (with EHS Policy)</li> <li>Implement EMP with DMP, emergency response through design, climate risk mitigation</li> <li>ESSA compliance confirmed by Mid, End Term Environmental Audit</li> </ul>

**Social:**

37. Program Action Plan on Environmental Aspects is presented in the following **Table**.

**Table B: Recommended Program Action Plan (PAP) Social Aspects**

Action description	Source	DLI#	Responsibility	Timing	Completion measurement
Strengthen institutional capacities and reporting on social risk management	ESSA		DGT / PMU	Within 3 months of project effectiveness Within 9 months of project Effectiveness Within 9 months of project effectiveness	<ul style="list-style-type: none"> <li>• Skilled social staff designated for program.</li> <li>• Develop and adopt the screening and Social Management Plan for upgradation of ITIs and integrate in the bid documents.</li> <li>• Monitoring and reporting systems to track social outputs and outcomes are adopted.</li> </ul>
Develop and adopt ICT system for evidence-monitoring and reporting of labour welfare mechanisms as per contractual requirements for all civil works with budget and resource allocation.	ESSA		PMU	Within nine months of effectiveness	Digital platform using ICT tools for tracking and reporting contractual performance on real time basis developed and adopted by PMU and implemented by SPVs.
Establish systems for conducting and acting on beneficiary (trainees and Industries) feedback.	ESSA		DGT / State	Annual	Systems for citizen feedback established and operational. Feedback would be sought through beneficiary feedback surveys conducted in the first year (to establish baseline), at mid-term and end term of the program.
Strengthen systems on safety for women (students and teachers) at workplace	ESSA		State SPV	Within three months of effectiveness	Undertake mid-term and end term audit of the workplace safety. Strengthen the implementation of POSH Act including ICCs, awareness and training, and reporting.
Strengthen systems for monitoring and reporting on grievances	ESSA		All IAs	Within three months of effectiveness	<ul style="list-style-type: none"> <li>• Establish SoP for strengthening GRM including consistent timebound resolution, escalation and closure of grievances across the Program</li> <li>• Establish system for tracking, aggregating and reporting on grievances related to the program from all sources</li> <li>• Establish toll free number for grievances for the Program</li> </ul>
Develop and adopt Human Resources Policy by all implementing partners for all	ESSA		PMU	Within three months of effectiveness	<ul style="list-style-type: none"> <li>• HR Policy developed and adopted by national PMU. To be implemented by state PMUs, NSTIs and SPVs</li> </ul>



Action description	Source	DLI#	Responsibility	Timing	Completion measurement
employees, contracted and ad hoc staff.					<ul style="list-style-type: none"> <li>SPVs to develop their SoPs to operationalize HR Policy</li> </ul>

### ***Recommendations for Implementation Support***

38. The Bank's implementation support should focus on building the environmental and social management capacity of program agencies through: (a) Guidance on establishing the Environmental Management System and Safety-First Cell on OHS, (b) Review of ToRs for Environmental and Social experts in various agencies, (b) guiding the preparation of the Environmental and Social Guidance Document as part of POM, including Screening and Auditing Formats, EMPs, guidance on setting up systems and procedures for screening, monitoring, and reporting on environmental effects under the Program; (c) ToRs for Third Party Environmental Audit to track the overall performance of the Program on environmental risks management, and (d) guidance for the awareness and competence building on environmental and social issues at all levels. The Bank would also support in reviewing the OHS training modules, ToRs and the process of developing and capacitating the Safety-First Cell on EHS. The Safety-First cells shall be strengthened to continue implementing EHS even after Program duration. The POM shall be reviewed in detail by the Program PMU and ensure that adequate resources are allocated to implement PAP & DLIs, and this shall be clearly mentioned in the POM. The POM shall be discussed with relevant Bank team members and confirmed before start of the Program to ensure implementation of the required environmental and social management and EHS measures.

### ***Disclosure and Consultations***

39. The team undertook consultations at the State and ITI / NSTI levels (during the development of the instrument) with relevant stakeholders including institutions, government departments, voluntary organizations, and communities. Consultations were also held with NSTI and CSTARI, and MSDE. The findings of the ESSA and the proposed DLIs were collectively discussed during the full-day Workshop with MSDE on February 11, 2025. The draft ESSA (with its summary translated to the local language: Hindi); will be disclosed on MSDE and select State websites by March 2025, to enable its wider reading before consultations. Final ESSA will also be disclosed in-country and on the World Bank's external website before appraisal completion, after incorporating the comments and suggestions that emerge from reviews and consultations.

### ***Way Forward***

40. The Program shall ensure that Environmental and Social Management Capacities are existent and functional with required designated/hired and capacitated EHS experts at various applicable Program institutional levels. Environmental and social Guidance documents shall be ready by the start of program activities, to guide all Program activities. All Program activities including those that shall be considered for 'prior results' shall follow the Design guidelines, Exclusions, Screening, and mitigation measures, EMP with Pollution management, health and safety requirements. Resources and capacities to implement EMP and manage EHS in contracts shall be included in the Bid documents, implemented, monitored and reported. A Safety – First cell shall be created to ensure EHS management and upskilling students and instructors on EHS. The key recommendations are made part of the DLIs and Program Action Plan. Adequate resources shall be ensured for the timely and effective implementation of environmental and social measures included in DLIs and PAPs under respective RAs; and this shall clearly be included in Program Expenditure Framework and Program Operations Manual.

# 1 INTRODUCTION TO THE PROGRAM AND ITS ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT

## 1.1 Background and Context

1. In July 2024, the Government of India requested support from the World Bank and Asian Development Bank (ADB) to develop a new skilling program focused on the transformation of ITIs to deliver more, better-skilled workers. The new program builds on previous national skilling programs implemented in the skilling sector since 2015. The government's program is emphasizing a holistic approach for transforming ITIs into well-performing skilling institutions to address skills gaps and mismatches and improve labor market outcomes, through granting more academic, financial, and managerial autonomy, integrating the private sector more thoroughly into the ITI governance and management, all within an enhanced accountability framework. Both the World Bank and ADB have provided technical advice for this newly structured skilling program, drawing on global and domestic best practices in TVET skilling and institutional and participatory arrangements.

2. Together with the ADB financing, this Program-for-Results (PforR) financing will support all government program activities except high-value contracts and High E&S Risk activities as per the Bank's P for R Guidance, including land acquisition. Program activities are grouped under three interrelated results areas (RAs). Financing for the Program totals approximately US\$6 billion for three result areas (RA), including a US\$900 million IBRD loan and a US\$900 million ADB loan. The Program area will be defined through an agreed list and the detailed information on the geographic scope of the Program area will be finalized in the POM.

## 1.2 Program Design and Components

### *Program Boundaries of the PforR Operation*

3. The PDO of the Program is to increase the number of graduates, enhance their employability and labor market outcomes, and strengthen the governance and capacity of selected Industrial Training Institutes (ITIs) in the Program area. The scheme proposes a Hub-Spoke model for upgradation of ITIs. The following Results Areas are envisaged under the Program:

4. **RA1: Empowering ITIs for Higher Performance.** This RA will focus on the governance and management reforms and upgrading of ITIs through the creation of hub-and-spoke consortia (HSICs) as outlined in the first component of the government program above. The governance structures introduced will enable additional private mobilization beyond Program-targeted ITIs, three years from Program closing at the rate tracked through the Program. Under RA1, each HSIC will: (i) develop and implement a five-year holistic Strategic Investment Plan (SIP) with Key Performance Indicators (KPI), centering on delivering demand-driven trades and increasing the employability of graduates; (ii) build the capacity of ITI trainers to design and provide diversified and industry-relevant gender neutral courses, including introducing new courses and updating existing courses which not only incorporate industry standards and best practices but also integrate green sustainability mindset to support green jobs, and soft-skills; (iii) upgrade existing ITI infrastructure (both physical and digital), with planned contributions from industries up to one-sixth of capital, with state-of-the-art equipment and facilities, while ensuring the climate resilience of ITIs using energy-efficient appliances, renewable sources of energy, and rainwater harvesting structures and complying with the provisions of Rights of Persons with Disabilities Act 2017; (iv) provide innovative student services, including job placement and post placement support, career counselling, employment services, remedial classes for addressing gaps in foundational learning, internship and apprenticeship opportunities, and image-promoting activities (social marketing campaigns, skills competitions); (v) develop partnerships with industries to boost training delivery and employment opportunities; (vi) develop a comprehensive

feedback system covering trainees (from enrollment until after graduation), families and communities, trainers, administrators, and employers, to inform a broad view of the performance of ITIs; (vii) ensure trainer vacancies are filled and that trainers receive the necessary training to effectively implement newly introduced and revised courses; (viii) develop and maintain production units to generate revenues, and (ix) strengthen the inclusion of women, persons with disabilities (PwD), and other marginalized groups.

5. **RA2: Creating a State/UT-Level Enabling Environment for the ITI Ecosystem.** Activities in RA2 focus on building the capacity of states and UTs to: (i) facilitate the selection and creation of HSICs around specific priority industries including industries with potential to address climate vulnerabilities, with the appropriate legal and organizational structures; (ii) grant increased autonomy to HSICs with regards to course development; operation, management, and financing of HSICs, and management of contractual and part-time trainers and industry experts for the HSICs; (iii) monitor the performance of HSICs based on key KPIs including enrollment and employment outcomes; (iv) create platforms for public-private sector dialogue across all relevant economic sectors, with the appropriate stakeholders to foster better labor market outcomes of ITI graduates; (v) strengthen data systems including carrying out regularly skills audits, employer surveys, and ITI faculty satisfaction surveys, and supporting the use of data for decision-making and dissemination of good practices; and (vi) liaise with relevant central and state government agencies to enhance coordination and promote synergies that support the objectives of the program, including linkages with relevant labor migration initiatives.

6. **RA3: Strengthening Central-Level Capacity in Policy Coordination, Program Management, and Monitoring and Evaluation.** This RA will support two main activities. The first activity is outlined in the second component of the government program above. Each NSTI will develop and implement a five-year SIP for transformation into world-class institutes specializing in vocational teacher training, with strategic partnerships with international industry partners and/or international education agencies such as institutes for training of trainers and universities. This transformation of NSTIs will enable them to play a catalytic role in shaping policy and research in the TVET sector in India, as well as providing a bigger supply of better-qualified trainers to work in the ITI system (in both government and private ITIs). The second activity under RA3 focuses on strengthening the institutional capacity of MSDE and relevant central agencies to coordinate, assure quality, and monitor and evaluate the Program. Strengthening the institutional capacity of these agencies will be done through: (i) facilitating public-private dialogue platforms (in line with RA2) and coordinating with relevant sectoral ministries and national programs;<sup>5</sup> (ii) developing/revising administrative and regulatory guidelines for enhanced institutional autonomy of NSTIs and other relevant agencies; (iii) streamlining the course and curriculum approval processes to enable HSICs to develop and revise courses (in line with RA1); (iv) improving data systems to collect, monitor, and evaluate Program indicators and relevant outcomes for Program impact, including tracking alignment of ITIs, public employment services, with the demands of both migrant-sending and destination labor markets; and (v) carrying out advocacy, dissemination, and adoption of good practices of skill training and industrial linkages in the ITIs.

7. Through RA3, the Program will also support the institutional capacity of MSDE and relevant central agencies, the state/UT-level agencies, and the HSICs, to carry out Program implementation. Program support will include: (i) hiring staff responsible for procurement and financial management activities, E&S management and adherence to good practices and standards, technical oversight, and monitoring and evaluation; (ii) recruiting an Independent Verification Agency (IVA); (iii) carrying out critical sectoral studies, such as female participation in ITI training, performance-based financing evaluation, research for improving climate change resilience, and others; and (iv) carrying out national skills audits and surveys, tracking

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5 Examples of national programs are the national apprenticeship promotions and employment subsidy scheme.

trainees into employment, and supporting the use of data for decision making (in line with RA2). Particularly, the Program will support an impact evaluation of the National Scheme for ITI Upgradation to measure outcomes and identify good practices to be scaled up to other ITIs not supported under the Program.

### Program Implementation Arrangements

41. The institutional and implementation arrangements will be at three levels: national, states/UT, and hub-and-spoke ITIs consortium levels to balance national leadership with decentralized implementation.

42. At the national level, MSDE through the DGT and its subunits will be responsible for overall government program coordination and management. The Director General of DGT, supported by the Director of Projects, will oversee the day-to-day operation of the Program with support from a competitively recruited National Project Management Unit (NPMU). The NPMU will include specialized units, such as technical, monitoring and evaluation (M&E), financial and procurement, and E&S management. The NPMU can include a competitively hired project management consultant (PMC) to provide technical expertise to the specialized units. Its role will be to support implementation and monitoring of the Program and coordinate with the states/UT that will be part of the Program. The DGT with the support from the NPMU will also be responsible for coordinating and managing Program activities linked to the five selected NSTIs under RA3. The DGT has prior experience of successfully implementing World Bank-financed operations.

43. At the state/UT level, a State/UT Steering Committee (SSC) will provide overall guidance and strategic direction for the implementation of the Program. The Director of the SSD department with support from a competitively recruited State Project Management Unit (SPMU) will oversee the day-to-day operations of the Program. The SPMU will include various functional units, including technical, M&E, financial, and E&S management to ensure adequate Program implementation. The SPMU can also include a competitively hired PMC to provide technical expertise to the specialized units.

44. Each HSIC will be responsible for program implementation for the ITIs at the cluster level. The HSIC will be structured as a Section 8 company or as any other body corporate that ensures greater accountability for results.

**Table 1: Alignment between Government's Program and the P for R Program**

	Government program	PforR Program	Reasons for non-alignment
<b>Objective</b>	To increase the number of graduates, enhance their employability and labor market outcomes, and strengthen system governance and management of selected institutions.	To increase the number of graduates, enhance their employability and labor market outcomes, and strengthen the governance and management of HSICs in the Program area.	The Program will support the entire government program except for: <ul style="list-style-type: none"> <li>- high-value contracts</li> <li>- high E&amp;S risk activities including land acquisition</li> </ul>
<b>Duration</b>	2025–2030	2025–2030	
<b>Geographic coverage</b>	National	Program Area	<i>n.a.</i>
<b>Results areas</b>	RA 1–3	RA 1–3	<i>n.a.</i>
<b>Overall financing</b>	US\$7 billion	US\$6.0 billion, of which US\$3 billion from the Government of India, US\$2 billion from the state governments, and US\$1 billion from the private sector (industry partners in the HSICs). Out of the central share of US\$3 billion, US\$1.8 billion will be financed by ADB and the World Bank, each providing US\$900 million.	The PforR will finance eligible activities as defined in the Program Expenditure Framework.

### 1.3 Expenditure Framework

8. The Program Expenditure Framework (PEF), derived from the government program, outlines the financial structure and budgetary allocations necessary to achieve the expected outcomes under the three RAs. The PforR Program accounts for about 86 percent of the overall government program, and 46 percent of it will be financed through counterpart funding—central budget, state budget, and private sector (industry partners in the HSICs).

**Table 2: Program Expenditure Framework and Financing Sources**

Expenditure category	Government program (US\$ million)	Proposed PforR Program (US\$ million)		
		Government program	ADB funding	World Bank funding
Upgradation of existing ITIs as HSICs with improved course offering				
Upgradation of 200 ITIs as hub ITIs	1,895	1,624	244	244
Capital costs	1,237	1,060	159	159
Operational costs	658	564	85	85
Upgradation of 800 ITIs as spoke ITIs	3,815	3,270	491	491
Capital costs	2,240	1,920	288	288
Operational costs	1,575	1,350	203	203
Course development (new and revision)	929	796	119	119
Subtotal	6,639	5,690	854	854
Capacity augmentation of NSTIs				
Upgradation of 5 NSTIs (capital costs)	117	100	15	15
In-service and pre-service training of trainers and operation costs	58	50	8	8
Subtotal	175	150	23	23
Governance, institutional capacity building, and project management support				
Capacity building of central and state departments and bodies	23	20	3	3
Office expenditure	12	10	2	2
IT and digital infrastructure	70	60	9	9
TA support	12	10	2	2
PMU support	47	39	6	6
Media advocacy	12	10	2	2
Evaluations, field studies, and other studies commissioned under the scheme	12	10	2	2
Sub-total	187	160	24	24
Total program cost	6,888	6,000	900	888
Financing cost (World Bank front-end fee)	2	0	0	2
Total financing	7,000	6,000	900	900

9. **Program Beneficiaries.** The direct beneficiaries include present and future trainees of ITIs who will benefit from better-quality training and education, estimated at a total of 2 million trainees by Program closing. The Program will also benefit trainers and principals by professionalizing and capacitating them through a more modern system of staff training and, in the case of institutional leadership, greater managerial autonomy. Indirect beneficiaries also include the overall ITI ecosystem and India's economy by producing better-educated and more-skilled workers with technical and skills relevant to the needs of the labor market.

## 1.4 Introduction to ESSA

10. As discussed in Section 1.1, since the program is supported by the World Bank's PforR financing instrument, it would rely on country-level systems for the management of environmental and social effects. The PforR Policy of the Bank requires that the Bank conduct a comprehensive ESSA to assess the degree to which the relevant PforR Program's systems promote environmental and social sustainability and to ensure that effective measures are in place to identify, avoid, minimize, or mitigate environmental, health, safety, and social impacts consistent with the six core environmental and social principles contained in Section III of the PforR Policy (hereafter, Core Principles), as may be applicable or relevant under PforR circumstances.

11. The ESSA (i) identifies the Program's environmental, health, safety, and social effects, (ii) assesses 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; (iii) assesses the implementing institutional capacity and performance to manage potential adverse environmental and social issues; and (iv) recommends specific actions to address gaps in the program's environmental and social management system, and in the policy and legal framework and implementation capacity.

12. ESSA guides actions to ensure environmental and social management within the program at all levels. The ESSA also informs decision-making by the relevant authorities in the borrower country and aids the Bank's internal review and decision process associated with the program. The ESSA has been prepared in close coordination with the MSDE, and its Program agencies including States & ITIs. The findings, conclusions, and opinions expressed in this document are those of the World Bank.

## 1.5 ESSA Methodology

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

14. Towards this, an assessment of the government's program and various associated activities was made; mainly focusing on the proposed upgradation of facilities and services, which has a higher probability of risks and impacts. The assessment also took into consideration locational differences in activities, compliance with applicable policies and regulations, institutional capacities, and tools to support these. This helped in understanding the gaps and formulating the required actions to ensure that the proposed program activities are environmentally and socially acceptable.

15. The following are the tasks involved in Environmental and Social Assessment:

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

#### **• Subtask 1.1: Understanding the Ongoing Program**

16. The World Bank team undertook a comprehensive review of program documents and other available details to understand the program and the extent and nature of various activities involved. In preparing the ESSA, a review of available secondary data was carried out, including extensive references to earlier Projects and Programs, available Environmental and Social Assessments. Reports on program implementation, past studies, and newspaper/media reports were also reviewed. The team also held detailed discussions with the representatives of the various Government Departments, and other stakeholders involved in the program to understand the ongoing program and its activities. In-depth interviews and semi-structured focus group

discussions were held with officials across constituent agencies and departments at the Central Level and in various States.

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

17. The team reviewed the program activities viz a viz the locational characteristics to understand the differentials in risk profiles in varied geographies of the country, through a comprehensive review of available documents/literature, audit reports, site visits, discussions with stakeholders. The locations were chosen to ensure diversity in the stage of project implementation, demographical characteristics, local culture, regional considerations, industry presence and terrain. For discussions on the Program and its risk management, to ensure sufficient spread of the sample; various Program States and ITIs were covered through consultations in person and utilizing the possibility of virtual platforms. Further, focused discussions on specific subjects such as social and environmental management and health and safety during the construction stage were conducted among the functionaries at the State and local levels. The ESSA team also ensured that the consultations were evenly spread across the hierarchy and support agencies by consulting Assistant Engineers, Executive Engineers, and Superintending Engineers of various departments (such as PWD in different in different states/projects) and agencies (private agencies especially where MDB supported works were held) that undertakes construction on behalf of ITIs.

18. A careful stakeholder mapping was carried out to ensure that all relevant stakeholders are covered in the consultation process. Discussions and 'site reviews' were undertaken from December 2024 – February 2025. Key stakeholders including ITI heads, teachers and other staff, students, Private parties engaged in Public-Private Partnerships with ITIs, NGOs, industries, state government functionaries, were consulted and in certain cases the views expressed and suggestions during larger program-related meetings were noted. Discussions were also held with State and District offices of regulators including the Pollution Control Board, service providers like the Water Supply and Sanitation Departments, Local bodies and their overarching agencies. During these consultations, the respondents shared how they are involved in the ITI works, their role, impacts and risks, and the suggestions to address risks and gaps. The task team had detailed semi-structured questionnaire-based discussions with departments/ officials who manage the programs in regions with different climatic conditions<sup>6</sup> (appropriateness and longevity of the equipment and construction technology, waste and waste water management, overall hygiene, greening, labor working conditions, overall safety during extreme events such as rainfall, cyclones, flash floods, coastal conditions, dust and heat, need for special considerations, emergency response, and resilient recovery procedures).

19. The States & ITIs are in distinct geographic areas, such as (i) coastal plains and inland plains Eg: Indo-Gangetic Plains, Coastal States extending from Gujarat in the West coast to Kerala & Tamil Nadu to the South Peninsular India to West Bengal to the East; and Island Territories of India such as Andaman and Nicobar and Lakshadweep, (ii) High hills of some Northern mountainous States, (iii) Plateau and moderately Hilly areas Eg: Deccan Plateau, Malwa Plateau. They are also located in parts of the country having distinct socio-economic and cultural characteristics. Some of the characteristics relevant from a social perspective which were considered during the sampling for field visits included covering areas having predominantly tribal communities, presence of other vulnerable groups, proximity to industrial hubs and urban centers.

20. The ESSA team undertook consultations and site visits at distinct geographically and environmentally distinct locations including the States of Maharashtra, Madhya Pradesh, West Bengal, Delhi, Mizoram and Jharkhand. The team also visited NSTIs including a women-only NSTI in Kolkata. Such discussions helped in

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<sup>6</sup>Special considerations are necessary in different regions in response to climatic conditions. Some examples: In areas prone to heavy rainfall and flood, special emergency response procedures are necessary. Equipment performance can vary due to weather conditions and elements, especially humidity, heat, or dust. It is also necessary to ensure safety against floods, cyclones, slips and tree falls.

understanding the environmental and social risks under which teams in such areas operate and the additional measures required to address some of them. Discussions also centered on the upgradation to existing infrastructure and construction of completely new infrastructure as well to indemnify risks. To ensure that all issues are covered as exhaustively as possible the team prepared detailed checklists or questionnaires which are available in **Annexure VI**, whereas a description of the Program Geographies and their Socio-economic and Environmental Characteristics are presented in **Annexure II**.

- **Subtask 1.3: Review of similar programs and their risks and benefits**

21. A study of similar programs and assessments of other ongoing Government programs and Bank Projects / Programs in the sector and region, involving Construction of buildings and other facilities, capacity building, and consultancies were carried out to understand the risks and benefits associated with such programs and activities. This includes SIMO, STRIVE, DAKSH, VTIP etc.

## **Task 2: Review of Regulatory Aspects**

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

22. The World Bank undertook a comprehensive literature review of existing policies, regulations, and standards at the National, State, and Local level applicable to overall environmental management and various Program activities. A review of subproject documents, and supervision documents of previous and ongoing World Bank projects/Programs in the sector were also conducted. The Bank also reviewed the existing policies, Environmental Management Frameworks (EMFs) of other completed and ongoing projects supported by the Bank and other Multilateral and Bilateral agencies for understanding the frameworks used to manage environmental aspects in similar programs. This includes EMF and ESSAs of VTIP, SIMO and STRIVE as well as ADB requirements.

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

23. The Bank team discussed with Central Agencies, States, ITIs, NSTIs, Local Bodies and various departments involved and regulatory agencies to understand the compliance to regulations and policies that support better environmental effects. The Bank discussed the procedures followed for taking permits/consents labor management, and for other various program activities.

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

24. The Bank team assessed the level of compliance with existing regulations, especially on pollution and OHS, and siting in sensitive areas. Mechanisms were formulated to address the gaps in regulatory compliance identified as part of the above subtasks.

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

- **Subtask 3.1: Review of Environmental Benefits and Impacts of proposed Program activities and their magnitude and likelihood**

25. Through the above tasks, the Bank team reviewed the risks and benefits associated with various program activities, considering the Core Principles of ESSA. The team also assessed the magnitude and likelihood of risks and benefits associated with this program which will be implemented in multiple geographical locations of the country. During state visits, the ESSA team held several meetings with head of offices, staff, including those directly involved in implementing the initiatives: the contracts, and the procurement department (to understand the responsibilities for environmental and social considerations in the contracts with vendors) and officers of implementing departments and contractors. This was essential to understand their perceptions about the benefits and risks of these programs and how the systems could be improved. The details of the stakeholders consulted are available in **Annexure V**.



### ***Assessment of Environmental and Social Benefits***

26. The task team assessed the environmental benefits due to the proposed Program. The following were the components of the analysis:

Environmental benefits (larger) of each program intervention in terms of

- a. Improved infrastructure and Facilities at the Hubs & Spokes: Improving the campus environment, facilities, structurally safe and functionally appropriate learning & workspaces leading to better healthy and safe teaching, learning environment; and overall better management of pollution to the benefit of all stakeholders,
- b. Improved EHS while operating the facilities created for learning (especially in workshops/laboratories): Better health and safety outcomes of management of wastes, wastewater, energy / other resource savings, greening, climate change, increased environmental awareness, and other environmental performance,
- c. Skilling on OHS and Green jobs: Improved learning on EHS grooming instructors and students to sustainable and safe work practices in their future jobs; inculcating the safety culture,
- d. EHS during expected Construction activities: Better management of pollution and wastes during works, preventing disturbance to environment and communities during works, Better Health and Safety of workers, communities and students during construction.

Social benefits (larger):

- a. Overall, it is expected that there would be an improvement in the quality of training provided and available to trainees. There would also be an improvement in the overall infrastructure and methodology of trainings. The trainings are also expected to align better with the job market which would enhance employment opportunities for trainees.
- b. The hub and spoke model is expected to improve the access of ITIs and training courses in relatively remote areas as well.
- c. The hub and spoke model is also expected to provide improved human resource management in terms of trainers (full-time as well as contractual) and administrative staff.
- d. The Program is expected to provide better access to technical training for vulnerable groups including women, Scheduled Tribes, Scheduled Castes and Persons with Disabilities.

### ***Assessment of Environmental and Social Risks***

27. Existing and probable **environmental** risks due to various activities were assessed with respect to the core principles. The following were the components of the analysis:

- Types of environmental risks experienced during the project cycle (construction of infrastructure and provision of better facilities/equipment, their operations and management; teaching and learning in ITIs) as reported by various reports and studies, students, staff, officials, and as observed during site visits and discussions. These are especially related to environmental management, natural habitats and heritage, health and safety of students, staff, workers, and communities, including the risks during special occasions and disasters,
- Appropriateness of the efforts and considerations to ensure environmental risk management during project design and implementation,
- National state regulations and guidance for environmental risk management viz a viz actual compliance and implementation, awareness levels of these at National, State and it is on these regulations that are aimed at better environment, health and safety.

11. Existing and probable social risks due to the proposed activities were assessed in reference to the ESSA core principles:

- The risks were assessed in relation to the process of commissioning, construction and operation of the ITIs. This included management of labour, management of human resource personnel during the operation of the institutes, and the inclusion and safety of students, staff, workers and communities through all these activities. The assessment also looked at systems related to grievance redressal management and compliance with key relevant social legislations.
- The institutional capacity to manage these social risks was assessed.
- National and state level regulations for managing risks in relation to the activities and core principles were assessed in terms of awareness, compliance, implementation and monitoring mechanisms.
- ***Subtask 3.3: Arriving at possible risk avoidance, mitigation, management, and benefit enhancement measures***

28. An understanding of the benefits, risks, their severity; and availability of frameworks/standards/guidelines/regulations to manage it led to recommending possible management measures. To validate the risks and benefits, the bank team discussed with stakeholders and the various sections of this document have been written in consultation with the program teams.

#### **Task 4: Assessment of Institutional Capacities and constraints**

- ***Subtask 4.1: Review of the existing institutional mechanism at State/ Program and ULB Levels to manage the Program activities its risks, benefits, and regulatory requirements***

29. Review of Program documents, Government Orders, and discussions with various departments and implementing agencies helped in understanding the existing institutional mechanism for planning, designing, implementing, supervising, and monitoring the program. Roles, responsibilities, and capacities of various institutions involved at the National, State, ITI levels were reviewed. The review focused on the management of environmental and social aspects in an existing program and previous Bank-supported projects, mainly risk avoidance, reduction, mitigation, and management and enhancing the benefits during project design, implementation, and Monitoring and Evaluation (M&E) stages. To understand institutional aspects and gaps, the team undertook a) multi-party stakeholder consultations at the state and ULB levels, b) in-depth interactions with Program agencies; and c) interactions with Regulators.

- ***Subtask 4.2: Gap Assessment in terms of capacities, tools, and interagency linkages co-ordination***

30. Following the previous subtask, a gap assessment was undertaken on the need and provision of management 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 aspects well during all stages.

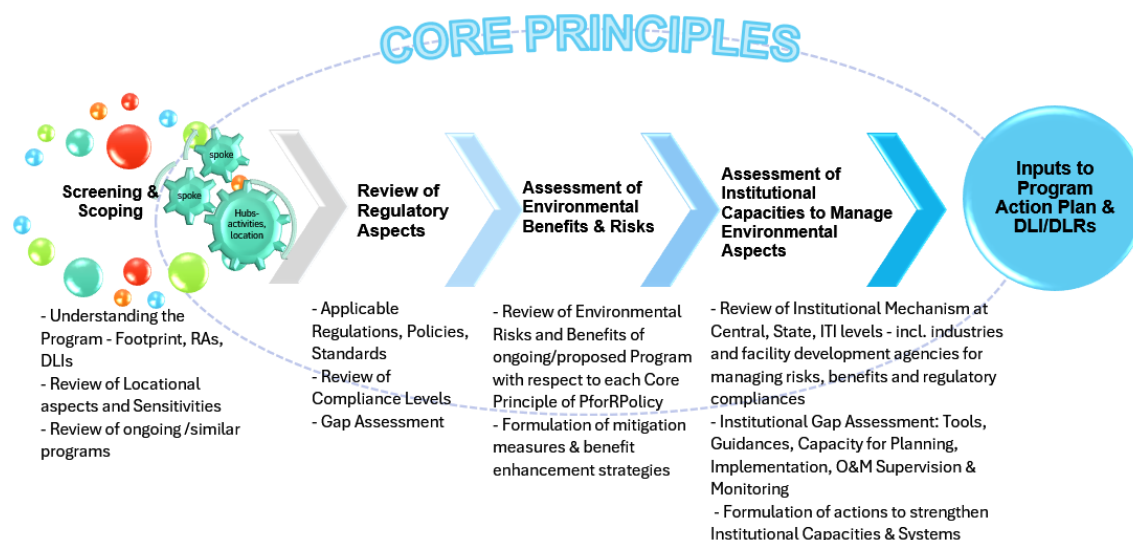
- ***Subtask 4.3: Assessing the need to strengthen the existing mechanism to manage the environmental aspects of the proposed program***

31. Based on the gap assessment conducted during the subtask above, recommendations were made to strengthen existing mechanisms to manage environmental aspects. This includes suggestions on required staff capacities at the National, State, and ITI levels; frameworks to be followed for better environmental effects, tools, and mechanisms to ensure long-term management. This highlighted the possible opportunities for improving environmental performance including the following:

- (a) Developing Institutional capacity of partnering agencies at all levels to effectively manage environmental risks and ensure compliance to existing regulations and guidance.
- (b) Developing procedures to avoid, mitigate, and manage environmental risks, and
- (c) Design of training and capacity-building activities to ensure risk avoidance and enhancement of benefits.
- (d) Developing systems for monitoring and reporting, to adopt timely actions to ensure better environmental performance

(e) Integrating EHS in ITI curriculum for the best skilling outcomes

32. During the Appraisal Mission, the preliminary findings – benefits, risks, gaps, and recommendations were shared with MSDE, State level functionaries, and ITIs. A draft ESSA was shared with MSDE and other agencies for comments in March 2025 and subsequently for disclosure and consultations, and based on the consultations and feedback received, the report was revised for final disclosure. Details of the stakeholders consulted are presented in **Annexure V**. The methodology for ESSA preparation (environmental aspects) is presented in **Figure 1** here.



**Figure 1: Methodology adopted for Environmental Systems Assessment**

## 1.6 The organization of ESSA Report

33. This report is the ESSA for **Skills: National ITI Upgradation Program** and discusses the assessment of E&S systems and capacities for the Program. The report is organized into seven Chapters, as follows:

- **Chapter 1: Introduction to the Program:** presenting the overall program context and the details of the Governments program this program would support scope, and result areas of the Bank-financed PforR, the program implementation arrangements, and identification of environmental and social effects of program activities, **Purpose and Objectives of ESSA** and its methodology and organization of this Report. It also refers to **Annexure II that includes the Environmental Characteristics of the Program Region** where program activities will be implemented and set the background for analysis of Environmental aspects.
- **Chapter 2: Potential Environmental and Social Effects** discusses Result Area (RA) wise Environmental and Social Effects (Benefits, Risks, and Opportunities to manage these),
- **Chapter 3: Assessment of Environmental and Social Management Systems and Implementation Capacity** discusses the guidance on E&S management for PforR Financing of the Bank, discusses the systems, regulatory aspects, gaps, and proposed actions to bridge the gaps through a systematic description of E&S effects to be considered as part of each of the ESSA 6 core principles namely; Environmental and Social Management, Natural Habitats, and Cultural Resources, Public and Worker Safety, Land Acquisition, Indigenous Peoples and Vulnerable Groups; and Social Conflict. 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,
- **Chapter 4:** presents the **Environmental and Social Inputs to the Program Action Plan** for mitigating impacts and risks and enhancing environmental & social benefits and overall E&S management. This section lists the actions that the ESSA Team recommends be undertaken to address the system and capacity gaps and shortcomings identified in Section 3, which are grouped into two categories: (a) those

that have been mainstreamed into program design and DLIs, and (b) those that are to be included in the Program Action Plan,

- *Chapter 5:* is on ***Consultation and Disclosure*** and 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.

## 2 POTENTIAL ENVIRONMENTAL AND SOCIAL EFFECTS OF THE PROGRAM

1. The following sub-sections discuss the Program activities planned under its Results Areas and their effects and risks. This helps understand the potential environmental and social effects of each activity. The expected works at ITI / NSTI levels are expected to be in existing campuses, and hence mostly moderate except in case of large construction above 20000 sqm area. As large constructions are yet not ruled out from the Program, the Program Environmental and Social Systems Assessment (ESSA) has rated the overall environmental risk as “Substantial.” This rating is due to two main factors: (i) the unknown extent of construction or upgradation activities across 1000 ITIs and 5 NSTIs in diverse environmental and geographical settings of multiple States of India; some of which may be in/near sensitive receptors, with large-scale constructions being considered a Significant Risk according to National Environmental Regulations<sup>7</sup>; and (ii) the absence of capacities of the Program’s implementing agencies to manage Environmental, Health, and Safety (EHS) risks; and the risk of multi-agency co-ordination at the National, State and ITI levels.

2. A detailed description of the Program activities in terms of its type of work and guidance, institutional responsibilities for implementation, supervision, and monitoring; impacts and risks, and opportunities for improvement are presented in this chapter. A discussion on the existing environmental regulatory regimes in the country and for States as applicable for the proposed program is presented in **Annexure I**.

3. ***Observations from the visit to representative ITIs / NSTIs in Madhya Pradesh, Maharashtra and West Bengal and other ITIs visited as part of earlier Projects and Programs:***

a. ***Infrastructure and Facilities at ITIs:*** Overall, some Government Industrial Training Institutes (ITIs) were found to be in poor structural and functional condition, with issues such as rusted truss work, dilapidated walls and floors of workshops, and poorly maintained tools and equipment. Exceptions included refurbished computer or COPA classes, audio-visual rooms, and a few modern pieces of equipment procured mostly under the STRIVE initiative or through corporate social responsibility (CSR) support. Workshops often had service ducting filled with dust and waste, a pest menace, unclean toilets, improper storage and disposal of fuel, chemicals, and cleaning cotton without adherence to regulations, and inadequate segregated storage or management of biodegradable and non-biodegradable waste. In contrast, ITIs operated by private agencies under public-private partnership (PPP) arrangements, which are relatively new, as well as privately owned ITIs, were better maintained and offered superior quality buildings, spaces, services, and facilities. Buildings constructed under the Vocational Training Improvement Project (VTIP) were mostly in a dilapidated condition due to lack of maintenance. However, most campuses visited had available land for further construction, moderate day lighting and ventilation in old campuses compared to low natural lighting and ventilation in many new campuses, water supply from borewells and public sources, ramp access for individuals with disabilities, and separate toilets for boys, girls, and staff.

The maintenance of campus facilities, including toilets and solid and liquid waste management, was rated from good to average in colleges run by private institutions, whereas it was poor in Government ITIs. Fire safety measures were generally inadequate, limited to randomly placed firefighting equipment, which was often poorly maintained without updated licenses, blocked exit ways, and sand buckets filled with waste. Most staff and students were unaware of how to use the firefighting equipment. Additionally, signages, evacuation drills, and standing fire orders were missing in all cases.

b. ***Teaching & Learning:*** As per NCVT MIS, of the 12657<sup>8</sup> ITIs in India, 2573 are Government ITIs while the rest are Private. ITIs provide trade training (Engineering, non-Engineering and Divyaang - mostly

7 If area is >20000 sqm, <1,50,000 sqm; it is Category B as per EIA notification, 2006 requiring Environmental Clearance at State Level

8 <https://ncvtmis.gov.in/Pages/ITI/TradeStats.aspx>; accessed on 3 Jan 2025

NSQF 3, 3.5, 4) in Sectors including Automobile, Chemical, Construction, Construction material and Real estate, electronics and hardware, fabrication, agriculture, food processing and preservation, healthcare, production and manufacturing, IT and ITES, mineral and mineral processing safety and security, leather and leather goods, textiles and apparels, travel tourism and hospitality, cutting sewing, horticulture, Lift and Escalator mechanic, Plastic Processing Operator and others. The most popular courses electrician courses offered by 12657 ITIs and fitter courses offered by 9976 ITIs; and others such as Welder, Mechanics Diesel, Wireman, Electronic Mechanics, Computer Operator and Programming assistant, Cosmetology, Painter, Plumber etc. Of the 3417628 seats, most are distributed among electrician, welder, electronic mechanic, Fireman and the like. Minimum Age for admission is 14 years, with 10<sup>th</sup> pass for two-year engineering trades and 8<sup>th</sup> pass for some trades of one year duration.

It was observed that, in most of the Government, Private and PTP ITIs visited, the students of 14 – 18 years (adolescents as per National Regulation) or beyond, were not using PPEs, safe protocols were not followed while working with electricity, fuels, fire or machines. Awareness materials were non-standard with no uniform standards on safety displayed. Incidents are not recorded, and first aid kits are often absent. NCVET norms and national state regulations points out the importance of working safely in such trades / areas (with activities involving electricity, rotating equipment, pumps, paints and fuels, work pits, heavy equipment etc. under supervision by competent supervisor, use of PPEs, and proper training and awareness. Even though there are few exceptional cases of Private and Government ITIs where safety is prioritized (for Eg: Dollyganj ITI in Port Blair, Andaman & Nicobar Islands); in all facilities visited, safety and housekeeping in the workshop and facilities to store wastes in a segregated manner (till wastes are channelized to local bodies and auctioned through Government or private mechanisms) need improvement. Workshop wastes and materials such as fuels (even when in small quantities and reused), grease, cotton and waste used for cleaning spilt/dripped fuel and oil, are not stored separately or arranged to be disposed as hazardous wastes. Many times, these are disposed or burned in the open in campuses. Thus, overall safety and housekeeping of the workshop and its processes need improvement, mainly as it is not congenial for adolescents to get trained in unsafe environment, without proper supervision by trained and certified supervisors.

4. For the **social** systems assessment, the team visited ITIs in Maharashtra, Madhya Pradesh, West Bengal, Jharkhand, Mizoram and Delhi. The team also visited NSTI, Kolkata and CSTRAI in Kolkata. The key findings are reflected in the following assessment and the detailed consultations are recorded in **Annexure V**.

## **2.1 Assessment of Environmental Effects**

5. Key Environmental risks categories of Program activities and possible measures to mitigate and manage these are presented here: (Risk categories are presented from Substantial – Low)

**Table 3: Key Environmental Risks of Program Activities**

<b>SI No</b>	<b>Program RAs</b>	<b>Program Activities</b>	<b>Environmental Risks</b>	<b>Risk Category</b>	<b>Measures to mitigate risks</b>	<b>Responsibility &amp; Mechanism to ensure implementation of proposed measures</b>
<b>1</b>	<b>RA1: Empowering ITIs for higher performance.</b>	<ul style="list-style-type: none"> <li>- Major civil works including construction or upgradation of buildings, hostels, workshops etc., equipment, consultancy services, workshops, and operating costs; Operational Improvements</li> </ul>	<ul style="list-style-type: none"> <li>- Need more attention to regulatory requirements on Pollution and Health and safety during construction and Operations</li> <li>- Teaching-Learning – adolescents (as per National Regulations) involved in workshop activities, processes and near materials that are hazardous as per National regulations, needing better awareness and supervision</li> </ul>	<p>Moderate to Substantial</p>	<ul style="list-style-type: none"> <li>- In case of new construction or upgradation, and/or when there are no new constructions or upgradations, all institutions that do not follow Regulations (legacy non-compliance) shall be supported to improve compliance and better environmental performance based on an Audit while preparing ISP or Plan Program activities</li> <li>- The Program implementation arrangements at respective levels shall arrange permits and licenses on time as applicable</li> </ul>	<ul style="list-style-type: none"> <li>- Dedicated unit or arrangement for Environmental Management within Implementing Agencies at National, State, and Hub &amp; Spoke Consortium and ITI levels are responsible; implementation is through their appropriately qualified (designated/hired) Environmental Experts available full time for the Program. Screening, Audit, EMP &amp; EMOF Preparation, incorporation in Bid documents, implementation Supervision, shall be ensured and reported as part of Quarterly Progress reports</li> </ul>
<b>2</b>	<b>RA2: Creating State-level Enabling Environment for the ITI ecosystem.</b>	<ul style="list-style-type: none"> <li>- Minor works, furniture and equipment, as well as consultancies, and workshops</li> </ul>	<ul style="list-style-type: none"> <li>- Existing / legacy non-compliance &amp; unsafe learning &amp; building environment</li> <li>- Noncompliance to regulatory requirements (aimed at Pollution management &amp; safety) for new Program activities, resulting in pollution &amp; health and safety risks augmented</li> <li>- Works in existing &amp; new building or campuses may impact Health &amp; Safety, Heritage areas, CRZ areas, Protected or sensitive areas or</li> </ul>		<ul style="list-style-type: none"> <li>- Develop institutional capacities at all Program levels including National, State, Consortium/ITI levels for managing Environmental Risks and impacts</li> <li>- The Program shall prepare, use the screening sheets &amp; exclusion criteria for high-risk projects/activities (as per Banks P for R Guidance) &amp; guide PIUs/Consultants to exclude such projects at the Concept stage. This will be further crosschecked during mid and end term Program Environmental Audit</li> <li>- The Program shall conduct Environmental Audit of existing institutions and include all measures to address the gaps in</li> </ul>	<ul style="list-style-type: none"> <li>- Guidance Manual on environmental shall be detailed out as part of POM</li> <li>- 6 monthly (or as required) Training on environmental aspects of Program Planning, Implementation, Supervision for officials at all levels through National Program Implementing Agency</li> <li>- Integrating appropriate H&amp;S training into course curriculum through CSTR</li> </ul>

<i>SI No</i>	<i>Program RAs</i>	<i>Program Activities</i>	<i>Environmental Risks</i>	<i>Risk Category</i>	<i>Measures to mitigate risks</i>	<i>Responsibility &amp; Mechanism to ensure implementation of proposed measures</i>
			habitats or their buffers through Pollution & disturbance  - Possible locational and purchase related risks activities due to absence of screening, planning, management  - All works in existing & new building or campuses activities which may impact Health & Safety, Heritage areas, CRZ areas, Protected or sensitive areas or habitats or their buffers  - Unsustainable resource use		pollution management, H&S in the Plans for improving infrastructure and facilities  - The Program agencies will Prepare EMP and incorporate in Bid documents for implementation by Contractors and Consultants as applicable  - Supervise implementation, monitor, supervise, report on EMP and EMoP implementation  - Conduct Facility Environmental Audit to understand the Gaps on regulatory requirements, service provision, structural requirements, water, sanitation and wastes and ensure comprehensive development while upgrading	
<b>3</b>	<b>RA3: Strengthening the Central Capacity in Policy, Coordination, Monitoring and Evaluation.</b>	- MIS, ITI Learning resources & Learning Management systems, Central agencies capacity improvement, Constituting a Safety Cell	- Minor works or equipment purchase at Centers of Excellence - Delay in MIS creation and use - Unsustainable resource use	Low to Moderate	- Preparation and Use of MIS (integrated with Program MIS or separate in case of no Program MIS) for monitoring risk mitigation actions, status of development of Centers of Excellence on Health and Safety, Guidance on Green jobs  - Follow Environmental regulations, guidance's, EMP and EMOP Preparation and implementation as above in case of any work or equipment purchase for Safety-First Cell	



## 2.2 Assessment of Social Effects of the Program

The key social risks categories of Program activities and possible measures to mitigate and manage these are presented here

**Table 4: Key Social Risks of Program Activities**

<b>Sl No</b>	<b>Program RAs</b>	<b>Program Activities</b>	<b>Social Risks</b>	<b>Risk Category</b>	<b>Measures to mitigate risks</b>	<b>Responsibility &amp; Mechanism to ensure implementation of proposed measures</b>
<b>1</b>	<b>RA1: Empowering ITIs for higher performance.</b>	<ul style="list-style-type: none"> <li>- Major civil works including construction or upgradation of buildings, hostels, workshops etc., equipment, consultancy services, workshops, and operating costs; Operational Improvements, ToT in ITIs and NSTIs</li> </ul>	<ul style="list-style-type: none"> <li>- Non-compliance with applicable labour laws resulting in risks for labour.</li> <li>- Risk of involuntary relocation for squatters or encroachers on the worksites.</li> <li>- Construction induced adverse impacts on host communities in the vicinity of the construction site.</li> </ul>	Moderate	<ul style="list-style-type: none"> <li>- In case of new construction or upgradation, and/or when there are no new constructions or upgradations, systems to monitor compliance with labour laws will be developed and implemented.</li> <li>- The Program implementation arrangements at respective levels shall arrange permits and licenses on time as applicable</li> </ul>	<ul style="list-style-type: none"> <li>- Dedicated personnel or unit for management of social risks within Implementing Agencies at National, State, NSTI and Hub &amp; Spoke Consortium and ITI levels; implementation is through Social Experts available full time for the Program. Screening, incorporation of social requirements into bid documents and implementation supervision, shall be ensured and reported as part of QPRs</li> </ul>
<b>2</b>	<b>RA2: Creating State-level Enabling Environment for the ITI ecosystem.</b>	<ul style="list-style-type: none"> <li>- Minor works, furniture and equipment, as well as consultancies, and workshops.</li> </ul>	<ul style="list-style-type: none"> <li>- Possible locational and purchase related risks activities due to absence of screening, planning, management</li> <li>- Enhanced risk of SEA/SH due to increase in women's interface at institutes and other bodies in the ITI ecosystem</li> </ul>		<ul style="list-style-type: none"> <li>- Develop institutional capacities at all Program levels including National, State, NSTI, Consortium/ITI levels for managing Social Risks and impacts</li> <li>- The Program shall prepare, use the screening sheets &amp; exclusion criteria for high-</li> </ul>	<ul style="list-style-type: none"> <li>- Manual on social aspects shall be detailed out as part of POM</li> <li>- 6 monthly (or as required) Training on social aspects of Program Planning, Implementation, Supervision for officials at all levels through National Program Implementing Agency</li> <li>- Integrating appropriate social sustainability, inclusion and labour</li> </ul>

<b>SI No</b>	<b>Program RAs</b>	<b>Program Activities</b>	<b>Social Risks</b>	<b>Risk Category</b>	<b>Measures to mitigate risks</b>	<b>Responsibility &amp; Mechanism to ensure implementation of proposed measures</b>
					<ul style="list-style-type: none"> <li>risk projects/activities (as per Banks P for R Guidance) &amp; guide PIUs/Consultants to exclude such activities at the Concept stage.</li> <li>- Strengthen implementation of the Prevention of Sexual Harassment at the Workplace Act</li> </ul>	<ul style="list-style-type: none"> <li>related training into course curriculum through CSTRl</li> <li>- Monitor the establishment and functioning of Internal Complaints Committees and implementation of the POSH Act in all institutes at the national, state and consortium levels.</li> </ul>
<b>3</b>	<b>RA3: Strengthening the Central Capacity in Policy, Coordination, Monitoring and Evaluation.</b>	<ul style="list-style-type: none"> <li>- MIS, ITI Learning resources &amp; Learning Management systems, Central agencies capacity improvement, constituting Safety cell</li> </ul>	<ul style="list-style-type: none"> <li>- Design of systems not adequately informed by regulatory framework and stakeholder concerns</li> </ul>	Low to Moderate	<ul style="list-style-type: none"> <li>- Preparation and Use of MIS (integrated with Program MIS or separate in case of no Program MIS) for monitoring risk mitigation actions</li> <li>- Follow applicable labour laws and other regulatory requirements in case of any work or equipment purchase for ensuring EHS by Safety – First Cell</li> </ul>	<ul style="list-style-type: none"> <li>- Dedicated personnel or unit for management of social risks within Implementing Agencies at National, State, NSTI and Hub &amp; Spoke Consortium and ITI levels</li> <li>- Manual on social aspects shall be detailed out as part of POM</li> </ul>

## 2.3 Summary of E&S effects

6. The key environmental effects of the program are summarized as follows:

### Environmental Benefits

- Improved Skilling of ITI students and capacities and resources for Teaching, that would ensure better living environment in the long run
- Improved infrastructure, equipment and facilities at ITIs (Hubs and Spokes) and Central organizations that ensures clean, sustainable, healthy, safe teaching-learning environment for the students, staff, and the communities
- Overall Program management that focuses on Environmental aspects ensures sustainable systems (during planning, construction & operations)
- Skilling on new avenues such as Green Jobs contributes to conservation of the environment and promoting sustainability; through transition to a low-carbon, resource-efficient community and also support economic growth and job creation in eco-friendly industries and a socially inclusive economy
- Improved focus on Health and Safety trainings for the Staff and students creates a new workforce with positive safety culture, high self-esteem, lesser exposure to incidents

### Environmental Risks

- Less attention to regulatory requirements, Pollution during construction and Operations and Teaching-Learning (especially since adolescents are getting trained/working due to lack of awareness and capacities in workshops)
- Existing / legacy non-compliance & unsafe learning & building environment
- Possible locational and equipment purchase related risks activities due to absence of screening (to avoid high risk activities), planning (including legacy non-compliance and risks), management
- Noncompliance to regulatory requirements (aimed at Pollution management & safety) for new Program activities, resulting in pollution & health and safety risks augmented
- Works in existing & new building or campuses may impact Health & Safety, Heritage areas, CRZ areas, Protected or sensitive areas or habitats or their buffers through Pollution & disturbance
- All works in existing & new building or campuses activities which may impact Health & Safety, Heritage areas, CRZ areas, Protected or sensitive areas or habitats or their buffers
- Unsustainable resource use
- Minor works or equipment purchase at Centers of Excellence
- Delay in monitoring tools, impacting overall positive effects

7. The key social effects of the program are summarized as follows:

### Social Benefits

- Improving employment outcomes for trainees under this program through improved quality of trainings. In particular, this would benefit various vulnerable groups such as women, Scheduled Tribes, Scheduled Castes and Persons with Disabilities in terms of their participation in the labour force
- Improvement in enforcement of good labour practices, and human resource management in the operation of ITIs as well as in the planning and execution of civil works under the Project. There would be improvements in systems for monitoring and tracking compliances and improved HR practices
- Improvement in safety for women trainers, trainees and other participants in the ITI ecosystem through strengthened implementation of the POSH Act. This will contribute to providing an enabling environment for enhancing female labour force participation

- Improvement in the grievance redressal mechanism in the ITI ecosystem, making it more accessible, responsive and accountable to all stakeholders
- Improved skilling on key social issues such as workers rights, civic responsibilities and creating a safe working environment for women.

#### Social Risks

- Exclusion of vulnerable groups from program benefits, accessing ITIs and subsequent employment opportunities. These include women, Scheduled Tribes, Scheduled Castes and Persons with Disabilities
- Risk of unfair labour practices in the civil works as well as management of trainers and other administrative staff in ITIs and NSTIs
- Risk of SEA/SH with increased number of adolescent girls and women as trainees, trainers and staff under the program
- Risks arising out of inadequate grievance redressal mechanisms

### 3 ASSESSMENT OF ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEMS AND IMPLEMENTATION CAPACITY

#### 3.1 Guidance in P for R Financing

1. As per the P for R Financing of the Bank: A *Program system* is constituted by the rules and “arrangements within a program for managing potential environmental and social effects,”<sup>9</sup> including “institutional, organizational, and procedural considerations that are relevant to environmental and social management”<sup>10</sup> 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.”<sup>11</sup> This includes existing laws, policies, rules, regulations, procedures, and implementing guidelines, etc. that apply to the program or the management of its environmental and social effects. It also includes inter-agency coordination arrangements if there are shared implementation responsibilities in practice.<sup>12</sup>

2. Program *capacity* is the “organizational capacity” 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.”<sup>13</sup> This ESSA has examined the adequacy of such capacity by considering, among other things, the following factors:

- a) The adequacy of institutional organizations and division of labor, and the likelihood that the applicable E&S management systems can meet their goals.
- b) The adequacy of institutional capacity (staff, budget, availability of implementation resources, training, etc.) to carry out defined responsibilities under the applicable Program system.
- c) The effectiveness of interagency coordination arrangements where multiple agencies or multiple jurisdictions are involved.
- d) The past performance of the implementing agencies in ensuring that the rules and procedures are being followed.

3. An assessment of the environmental and social management systems was carried out by the Bank team in co-ordination with the borrower (various States and central agencies) to understand the adequacy of existing capacities to manage environmental and social effects identified as part of ESSA including management of risks and impacts (regular and during emergencies) and to enhance benefits. Capacity to manage risks and impacts and enhance benefits were reviewed in terms of institutional capacities and gaps, the existence of appropriate legal and regulatory frameworks, procedures, tools, and guidance at the National, State, and Program level to effectively implement and manage the E&S requirements. Assessments are carried out to understand if 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. Gaps identified through the assessment are proposed to be addressed through a set of actions that are compiled as Environmental and Social inputs to the Program Design, DLIs/DLRs, and Program Action Plan.

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<sup>9</sup> Drawn from Bank Guidance: *Program-for-Results Financing Environmental and Social Systems Assessment*, The World Bank Effective July 2019

<sup>10</sup> *Ibid*

<sup>11</sup> *Ibid*

<sup>12</sup> *Ibid*

<sup>13</sup> *Ibid*.

## 3.2 Assessment of Core Principles - Environment

### 3.2.1 Core Principle 1: Environmental Management Procedures

#### *National Systems for Environmental Assessment*

##### 3.2.1.1 Rules, regulations and Standards on Environmental Assessment, Biodiversity, Pollution Prevention and Health and Safety

4. **National/State Level:** In India, MoEFCC is responsible to lead the activities on the Environment agenda, including planning, promotion, co-ordination, and implementation. Broadly, the role of the MoEFCC includes (i) Conservation and survey of flora, fauna, forests, and wildlife; (ii) Prevention and control of pollution; (iii) Afforestation and regeneration of degraded areas; (iv) Protection of the environment and (v) Ensuring the welfare of animals. The above responsibilities are effectively discharged with the support of a host of robust policies and legislations promulgated at the National level and aimed at conserving and protecting the environment. Besides, important policies such as the National Conservation Strategy and Policy Statement on Environment and Development, 1992; National Forest Policy, 1988; Policy Statement on Abatement of Pollution, 1992; and the National Environment Policy, 2006 also guide the MoEFCC's work. In the implementation or enforcement side, agencies such as the Central Pollution Control Board (CPCB), Forest Department, Department of Archeology, Coastal Regulation Zone (CRZ) Authorities, and others are the technical arms of MoEFCC which carry out specific legal and regulatory functions. They provide permitting and clearance functions when required in projects/programs. Monitoring is undertaken directly through relevant agencies, or state counterparts. Separate committees are constituted for specific issues such as Forests and Biodiversity, and others, while a capacitated National Green Tribunal (NGT), a judicial body<sup>14</sup> acts as the environmental watch-agency setting stringent standards and monitoring the issues and non-compliances on the ground.

5. The above National-level regulatory and institutional systems are full-grown, in place and reasonably enforced across all sectors all over the country. Although individual states may also have promulgated state regulations on the same/similar themes, the National level regulations are the basic umbrella, under which the state-level regulations are created, and are expected to follow at the minimum. Various environmental regulations at the National and State Levels and their applicability to the program are discussed in detail in **Annexure I**.

6. Key regulations, rules and guidance governing the Proposed activities that are important for construction / upgradation of buildings, developing/improving and operating liquid and solid waste management systems on campus, equipment purchase, teaching - learning, trainings, and ITI Operations include: (i) Environmental Impact Assessment (EIA) Notification 2006, (ii) CRZ Notifications, (iii) The Air Act, (iv) The Water Act, (v) National Building Code, and the Building Regulations of the Local Body, (vi) Forest Acts, (vii) Special Area Regulations, (viii) AMASR Act, (ix) Fire Safety Regulations, (x) Waste management Rules (Including Hazardous Waste, E-Waste, Municipal solid waste, Bio Medical Waste, Plastic Waste, Batteries Management, Construction & Demolition wastes etc), Noise Pollution (Regulation and Control) Rules and its amendments etc. In addition, there are many rules and regulations applicable to specific activities. There are guidance including categorization of industries, siting criteria as per Master Plans and PCBs, Standards for Discharge of Wastewater into the environment, Guidance on contaminated sites, Tree Acts and guidelines on tree transplantation and compensatory plantations, consent conditions for Concrete Plants and DG sets etc. that may be applicable to specific activities. While EIA Notification 2006 mandated Environmental Clearance (EC) at State Level for proposed building construction above 20000 sqm or 150,000 sqm of campus area, in 2015 this requirement was waived for educational institutions. However, this requirement has been reinstated as of 2022 by the MoEFCC. Hence, new buildings of more than 20000 sqm or in campuses more than 150,000 sqm will need EC.

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<sup>14</sup> A specialized judicial body equipped with expertise solely for the purpose of adjudicating environmental cases in the country.

### ***Existing Systems at MSDE/DGT/ITIs/other supporting agencies, and Recommendations:***

Key Gaps observed in ensuring Environmental management systems:

7. *Existing system:* Usually, the construction or upgradation of facilities is carried out by Central Public Works Department in case of buildings for National Level Agencies, and the respective State Public Works Department or in some States by other Government Agencies (such as the Housing Board) who have experience in building construction activities. In case of private ITIs this is done by private contractors whom they hire. The system for managing the environmental aspects including regulatory requirements is met when the need arise, as in the case of a plan for new construction. ITI raises the need for upgradation in their Institute Development Plans (IDPs) that shall be ready by April 15 of every year. The implementing department takes the responsibility to meet the regulatory compliances such as clearances or permits. There is no system or mechanism to audit existing facilities and plan, design, monitor and ensure compliance in existing campus or structures to arrive at the environmental improvement requirements (such as Fire Safety, greening, regulatory aspects etc) or screening of the proposed investment and its location for sensitivities, assessment of environmental impacts in case of buildings not more than 20000 sqm area, or more than 1.5 hectares campus area, that do not attract Environmental Clearance. NCVT Guidelines for ITI accreditation requires Building, Electrical and Fire Safety Certificates. It also lays down the essential and desirable safety requirements for all Institutes including those seeking new affiliation.

8. *Gaps observed:* In all the ITIs visited, there is room for design interventions best suited to deal with climate and other risks; and environmental enhancements, including resource efficiency and adopting a circular economy; and most importantly, adopting environmental best practices that would add to the overall enhancement of program effects and benefits. Absence of mechanisms to promote environmental sustainability and OHS in project designs by incorporating design considerations in DPRs, and tools/formats and capacities at various implementing agencies to review, monitor, and enforce Pollution management, O&M of assets for long-term pollution management, OHS, CHS, O&M of assets are notable.

9. Fire Safety regulations and Health & Safety of *Teaching – Learning* need considerable improvement in all it is and NSTIs throughout the country despite the need to follow this as per regulations and attempts through MDB supported Programs and Projects. NCVET guidelines are not explicit on maintenance and training on fire safety equipment, renewal of fire safety certificates, Fire storage and plumbing to ensure availability of water etc. and hence, beyond the initial accreditation requirements, these are usually not maintained well. Lightning arrestors are observed in new buildings. Electric lines are laid crisscrossed, with possible trampling in many workshops and activity areas of campuses. Transformer rooms and panel areas are exposed in many cases without safety signs. Ducting is not well maintained, with pests and dust accumulated resulting in pulling of wires out of the ducts during maintenance, especially in old buildings. Continual maintenance is not ensured barring some Private ITIs. Incident reporting protocols and Corrective Action Plans are not recognized in NCVT norms. General guidelines for response during Natural Disasters are presented in NCVT norms, however planning and design to avoid and minimize these are not seen adopted. NCVET norms need updation to include the measures to address the gaps identified.

Gaps can be thus consolidated:

- Planning of new infrastructure to consider siting and other regulations and area and resource allocations for these,
- Designs to suit the purpose, ensuring regulatory requirements for ventilation, lighting, health and safety of workers, visitors, communities nearby, water, sanitation, waste management, resource efficiency, ease of maintenance and long-term sustainability
- Systems to supervise, monitor, report on Environmental Performance, and Incident management for construction and continually during operations
- Gaps in EHS focus and implementation at all levels

10. *Experience in earlier MDB Operations:* In the earlier World Bank supported projects/programs such as VTIP and STRIVE, the infrastructure created were minimal. Notwithstanding the same, the activities were mainly coordinated by DGT at the central level or NSDC, MSDE and other central agencies; and executed by ITIs through government agencies like PWD. Small works were executed locally by local contractors or by hiring workers. In all cases, gaps were observed in planning, design, supervision to ensure good infrastructure development, overall environmental management, and operation and maintenance. Key areas that needed improvement include quality and usability of buildings and facilities, environmental footprint of the equipment and fixtures, adherence to siting criteria, worker health and safety during construction, overall upkeep of the environment including housekeeping, sanitation facilities, asbestos management, fuels and hazardous waste management, and solid and liquid waste management in the campus specifically the workshops. The following are the experiences on Environmental Management under the Past three operations of the World Bank:<sup>15</sup>

- STRIVE (PforR, Moderate Environmental Risk) assessments (ESSA of STRIVE) assumed that institutional mechanism of VTIP will continue, but that did not materialize, as the Program level systems were not well subsumed into ITI management beyond the Project though there was an Environmental Management Framework (EMF) for VTIP. Under STRIVE, all 200 Program ITIs prepared Environmental Action Plans, but its comprehensive implementation was not achieved due to non-allocation of funds for the same. Following long term deliberations by WB E&S teams, NPMU of STRIVE (DGT) sent a circular that E&S actions can be included for funding under Results Area 2, but most States/ITIs were not aware of this, as E&S co-ordinators changed continuously at ITIs. There was high turnover (5 officers during the Program Period) of E&S nodal officer (designated, with varying capacities) at all levels, specifically at the DGT / PMC level, hence the continuity of Program E&S implementation was not well achieved specifically and more critically on Occupational Health at workshops & Safety or Hazardous Waste Management. To the end of the Program, there was agreement to undertake additional online trainings on OHS (IGnITE (Indo-German Initiative for Technical Education) Safety course<sup>16</sup>), and to report on E&S implementation using an online Google form, and with this, half yearly (though delayed) progress reports were prepared since 2021. Trainings were conducted to improve the capacities of E&S Focal points at States & ITIs. However, there were challenges due less capacities and lack of subject expertise and co-ordination issues.
- VTIP (IPF, Safeguards Category B): EHS performance and EMF compliance varied between VTIP States. Gujarat, Goa, Maharashtra and Punjab displayed good environmental practices, while Andhra Pradesh and Tamil Nadu did not perform to that extend as per Program Reports. The required Environmental Management Sustainability Plan was still missing at ICR. Overall, the infrastructure created as part of VTIP lacked maintenance and deteriorated by the end of the Project period (10 years). Some of the equipment purchased under VTIP were not used, for want of supporting infrastructure, spares, or operators. Centers of Excellence constructed, and toilets and other facilities developed under VTIP were observed dysfunctional and dilapidated during the site visits for this ESSA.
- SIMO (PforR, Moderate Environmental Risk): As reported in ICR of SIMO, no dedicated environment and social specialist within the PMU or PMC led to limited oversight and support. Although the PAP actions were completed by mid-term, there was no monitoring of the application of the guidelines developed around crowd management or migrant labor participation. After completing the PAP items, the environment and social initiatives were not tracked or monitored.

The above experiences present the need for (i) A robust environmental management system – through a dedicated Environmental Management Cell / Unit - for works with dedicated and qualified capacities at all levels to ensure country systems are followed and reported equally by all States, continuous training, and

<sup>15</sup> Source: *Implementation Completion and Results Reports (ICRRs) (Drafts for STRIVE, SIMO and Final for SIMO)*

<sup>16</sup> <https://online.atingi.org/course/view.php?id=4556> (need login)



time bound monitoring and reporting mechanisms using an MIS that is accessible and transparent; (ii) adequate allocation of funds for EHS, and overall campus development in all Program ITIs or Hubs and Spokes, (iii) permanent capacities on EHS through curriculum revamp and focal institution development

11. *Improvements Suggested to ensure Environmental Management system in proposed Program:* Program activities include upgradation of existing structures, and construction of new buildings in existing campuses. Such activities would need proper system to screen, audit and plan to correct legacy non-compliances, assess the risks and impacts, and regulatory requirements, prepare EMP and Environmental Monitoring Plan (EMoP) and include these in bid documents for implementation, and supervise, monitor and report. This is also important for purchase and installation of major equipment. Long term maintenance of ITI infrastructure, facilities, and equipment is important and NCVET norms shall be updated including these and establishing a system and capacities for continual monitoring and safe keeping of the premises to ensure EHS.

12. Assessment shall include risks and impacts during construction and purchase of equipment's, O&M of facilities and *Teaching – Learning* at ITIs and NSTIs. This includes those related to siting criteria, regulatory requirements in terms of waste and wastewater management, pollution management, occupational and community health and safety, resource efficiency, circular economy and climate change, impacts on biodiversity and cultural heritage. Consultations with students, parents, teachers, communities shall be an integral part of design, implementation and operations for better results.

13. A Facility Audit of the existing campus and facilities and screening would help understand the legacy and probable future risks and impacts of each Program activity. This would help integrate measures to minimize the environmental risks and impacts and ensure sustainability during all stages. To monitor, course correct and learn about the integration of environmental aspects in the Program it is important to have midterm and end-term Environmental Audits of representative sample of the activities supported by the Program.

### **3.2.1.2 Environmental Management: Assessment of Program Capacities**

14. Existing *Institutional Mechanism*

- i. *Infrastructure Improvement:* Currently, the upgradation or development of new infrastructure, and purchase are managed at the respective institute level. Depending on the location, the planning, design, construction activities and repair and maintenance are carried out by government agencies involved in construction such as the public works department, housing board, other such agencies. These agencies arrange required permissions from the local bodies and other agencies. In many cases it is observed that the start of construction activities and permissions are often delayed by absence of fire and safety permits and other clearances. At the ITIs, there is no specific focal point to understand and manage the requirements with respect to environmental management and regulatory compliance. Junior and Assistant Engineers of PWD or government departments who have other overlapping responsibilities on works for various Government departments, supervise and report to the Executive Engineers on work quality. System and Capacities for reporting EHS need substantial improvement.
- ii. *Teaching – Learning:* There are various institutions in MSDE that are involved in various aspects of ITI Teaching – Learning. These include CSTARI that develops the ITI curriculum, NIMI that develops teaching – learning material based on the curriculum prepared by CSTARI, NSTI that performs as centers of specific skilling also to trainers/instructors.

15. *Experience in earlier World Bank supported Projects and Programs:* The awareness of the Program agencies, and capacities to plan, design, supervise, monitor, and maintain sustainable infrastructure and facilities was 'low' in earlier Programs and Projects. The institutional arrangement for environmental management, which was expected to be sustained from one program to another, did not function as anticipated. Institutional capacities relied on existing staff at the Industrial Training Institutes (ITI), State Directorates, and the central Directorate General of Training (DGT), either through an 'assigned' focal/nodal person (mostly training officers) with other highly demanding departmental responsibilities; or part-time environmental 'or' Social expert of the Project Management Consultants. Due to capacity constraints,

variations in Environmental and Social (E&S) capabilities across states, and high staff turnover, outcomes largely depended on individual capacities and interests. Overall, the institutionalization of an environmental management system was not achieved. Financial constraints regarding the implementation of E&S related interventions were also reported during Implementation Support Missions and at the Closing Workshop. Continuous support, supervision, and training by the World Bank were critical in achieving compliance with safeguards/environmental aspects and the successful execution of Program Action Plans.

16. *Proposed Institutional Mechanism for the Program:* The Program will be implemented by MSDE at the National level with a Hub and Spokes mechanism (Hub and Spoke Industries Consortium – HSIC) at local level, with key ITIs forming the Hubs that support and manage activities in the Hub ITIs, as well as the Spoke ITIs around. For ITI-level interventions some may resort to the support of PWD or Project Management Consultants for implementation, depending on their location and their need for additional capacities to implement these interventions. However, the exact arrangement will be known when Hubs and Spokes are selected implementation mechanisms are agreed. However, there will be coordinating body at MSDE (NPMU) and at the State (SPMU) and/or Hubs. Institutional Mechanism Proposed for the Program is hence at National, State and Consortium/H&S levels. Institutional mechanism for environmental aspects will be finalized in the POM in line with ESSA recommendations.

17. *Observed Gaps and Improvements Suggested to ensure Environmental Management Capacities for the proposed Program:*

18. Key Gap observed is the following:

- Capacities (qualified human resources at Program agencies and continuous capacity building on environmental management) to supervise, monitor and manage risks and impacts, and ensure sustainability

19. Considering the scale of works under the Program it is important to have appropriately qualified and experienced Environmental and OHS experts at the Program agencies at National, State and Hubs, designated and capacitated EHS focal points at ITI levels. While the Environmental and Health and Safety coordinators at the National level coordinates with the State/consortium Hubs, designated capacities at States and Hubs shall closely interact with various ITIs, Program / Project Management Consultants and Implementing Agencies for timely permits, clearances, to oversee environmental management and OHS/CHS will help systematizing effective environmental management, supervision, and reporting. Trainings and peer to peer exchanges from similar projects on best practices and environmental management will help in overall capacity strengthening at the State & ITI levels to ensure long term sustainable outcomes. Dedicated trainings and certification shall be arranged for OHS focal persons at ITIs not only to ensure worker and community safety during implementation of works, but also to instructors and students ensure high standards of OHS in ITI teaching – learning environment.

#### ***Environmental Management: Recommendations***

20. To address the gaps highlighted through the assessment, ESSA recommends the following:

##### ***(a) For Construction/Upgradation and Operation of Facilities***

- Environmental management through Environmental and Health and Safety management capacities at National, State, Consortium and ITI levels (as applicable) to ensure screening, Facility Environmental Audit of existing facilities, address legacy non-compliances, pollution and safety issues, provide inputs to plan and designs, coordinate clearances and permits, preparation of EMP and its incorporation in Bid documents, supervise its implementation and monitoring.
- Support disaster preparedness, mitigation, and emergency response through adoption of good design and mitigation measures for climate risks integrated into EMPs.
- MIS to clearly track and manage environmental management is important considering the minimum capacities and frequent turnover of EHS focal points in earlier Projects/Programs

- Ensure compliance to legacy compliance issues and improved environmental management including water, sanitation, waste management, Life and Fire Safety, greening.
- Preparation of environmental guidance for Program activities and ITI operations.

**(b) For Teaching - Learning**

- Review and improve EHS focus (Trade wise) in the curriculum and teaching – learning material
- Strengthened EHS focus through Safety-First Cells

Detailed **Table** presenting the Assessment of Environmental aspects against Core Principle 1 is presented in **Annexure VII**.

### **3.2.2 Core Principle 2: Natural Habitats and Physical Cultural Resources**

21. This core principle applies only to those Program activities which may impact habitats or cultural resources (For example, works or activities in the banks of water bodies including in coastal zones, water bodies, city lakes, hazard-prone areas, notified eco-sensitive zones, near forest areas, or in heritage buildings or premises used for any purpose or are valued by the communities; or discharge of waste, waste water or sludge). Proposed program activities will be implemented in existing ITI (or other existing campuses in case of National Institutes), with minimal possible risks on natural habitats and Physical Cultural Resources (PCR). However, such risks cannot be completely ruled out as some ITIs operate in campuses near sensitive areas, and in heritage buildings. In addition, (a) disposal of wastewater, and wastes from program facilities, (b) noise levels and vibration and resultant (mostly construction stage) risks and impacts on air, water, land, cultural heritage and biodiversity, may be expected to have a minor impact on these resources if encountered in or near existing campuses of any of the 200 Hubs or 800 Spoke ITIs in different parts of the country, planned to be upgraded under this Program.

#### **Assessment of Program Systems**

22. *Existing Regulations:* National and State level laws and regulations exist for the guiding activities in/near natural habitats, critical natural habitats, in the proximity of protected monuments, and for the management of chance finds. These include the Forest Conservation Act 1980 which regulates the use of forest land for non-forest purposes including the construction of buildings; the Wildlife (Protection) Act 1972 which prohibits activities that are harmful to protected species and areas; Eco-Sensitive Zone Notifications that regulate up-gradation/ development activities in ecologically sensitive areas around existing protected areas; Wetland (Conservation and Management) Rules 2017 that regulate activities in notified wetland areas; CRZ Notification 2019 that regulates construction activities in coastal areas; State/local level Rules and bylaws that regulate the cutting of trees and provide for compensatory afforestation, Ancient Monuments and Archeological Remains Act 2010 etc. Also, there are multiple notifications, rules, and permit/license requirements, and guidelines to prevent impacts of new developments, wastes and wastewater management, and discharge/disposal of rejects, inerts, treated sewage. However, implementation of guidelines and regulations need much improvement in ITIs and NSTIs specifically with respect to management of wastes (incl. hazardous waste even when it is minimal quantity).

23. Certain aspects of Program activities may impact sensitive resources, which can be mitigated by adhering to siting guidelines, regulations, and permit conditions. Some areas require additional diligence and guidance, such as the disposal of treated sewage, sludge management (from STP, ETP), and the potential introduction of alien species in landscaping works. The Program must establish clear exclusion criteria and guidance on these matters prior to the commencement of activities. Additionally, there may be instances of legacy non-compliance with regulations and existing facilities that are in or affecting sensitive environmental components, which may not be explicitly recognized by current regulations but remain important for communities and biodiversity.

### *Experience from other National / State level Programs:*

Infrastructure development was not at a large scale in earlier ITI projects/programs; barring VTIP. A screening checklist was utilized for projects involving new infrastructure development. Local authorities also require clearances and permits related to siting when approving building plans. Therefore, siting-related compliances are largely adhered to, with variation between States. However, there were difficulties in improving infrastructure, and monitoring of guidelines and regulations, particularly concerning waste management (including minimal quantities of hazardous waste) from ITI classrooms, workshops and hostels, and wastewater management.

### **Assessment of Program Capacities:**

24. Awareness and capacities at the National, State, Consortium and ITI levels of this Program on existing legal/regulatory regimes or the need to follow National/State/Local regulations are less. There is no dedicated responsibility at any level to ensure that requisite permits/licenses are arranged for the works/facilities before start of works or to periodically update such licenses and follow license/permit conditions especially with respect to natural habitats and physical cultural resources. It is important to improve capacities and awareness of regulations and clearance procedures before initiating any activity.

### **Recommendations:**

Based on the gaps identified through the assessment, the ESSA recommends the following activities to be undertaken by the Proposed Environmental Management Unit, with suitable institutional capacities at all levels:

#### **(a) For Construction/Upgradation and Operation of Facilities**

- Prepare and Use Exclusion criteria, Facility Environmental Audit tool to evaluate existing impacts, and design guidance to avoid high impacts and risks on recognized and not-recognised Natural Habitats and Physical Cultural resources (applicable for prior results)
- Environmental enhancement measures shall be built into the design itself, respecting the natural habitats and cultural resources. This includes activities to retain existing trees as much as possible and follow compensatory plantation norms of ten times the no: of cut trees, green belt around all facilities, prohibition on the use of alien species, the greening of campus, material recycling and reuse including C&D wastes & waste water (so that wastes would not impact habitats or cultural resources), energy saving measures including selection of fixtures and appurtenances with energy star ratings, better water and sanitation, etc. IDP and ISP shall include these with resources allocated.
- Develop institutional capacities to list out and follow applicable regulations (National, State, Consortium, ITI) and timely receipt and update of permits for all program activities and records kept in MIS.
- Include training on regulatory provisions and protection of natural habitats and cultural resources for implementing agencies.

#### **(b) Teaching - Learning**

- Develop institutional Capacities at all levels to monitor impacts if any on natural habitats and cultural resources through training; and for overall environmental upkeep
- Include Environmental Management in curriculum for trade specific management of wastes and wastewater

A Detailed **Table** presenting the Assessment of Environmental aspects against Core Principle 2 is presented in **Annexure VII**.

### **3.2.3 Core Principle 3: Public and Worker Safety**

25. The works include the construction of classroom blocks, workshops and other facilities at ITIs and NSTIs under the Program, purchase and installation of equipment etc. Some works are likely to have risks or impacts on health and safety unless managed well. There could be construction and O&M stage risks emerging from improper design, construction, and O&M practices; mainly health and safety risks to host communities, workers who construct or carry out operations and maintenance, and other staff at locations of works, pollution due to smoke/noise/dust during construction and maintenance activities and pollution of water sources nearby due to discharge of solid and liquid wastes. There are also chances of disaster risks and impacts mainly due to climate/hazard proneness of some areas (such as cyclones and floods along the coastal areas, and landslides). Further, ITIs are learning centers for the country's future workforce. It is important to ensure that students and instructors understand and practice safety in their teaching-learning environment and carry this forward to future works.

26. Occupational Health and Safety (OHS) aspects of Construction, Operation and Teaching – Learning (esp. in Workshops) under the Program include overexertion and posture-related discomforts, carrying of heavy loads and injuries to workers, slips (into pits mainly for foundations) and fall, work at heights (for example; works above 2m height), striking objects and moving machinery, large equipment, and vehicles as in construction/demolition, traffic conflicts, and other hazards due to fuels (used in diesel generators, machinery) / chemicals/paints and solvents, electrical hazards on site, burst of water and waste water pipes while utility shifting, and poor water, sanitation and other facilities at the labor camps. Child labor and hazardous work conditions for those between 14 to 18 years are also important. All hazards specifically High Energy Hazards and Fire Risks shall be carefully mitigated and managed during construction.

27. Community Health and Safety related issues include general work site hazards due to poor housekeeping or barricading (with reflectors, especially during situations when light is less, and during emergencies), poor work site lighting, machinery, and materials on-site, labour camps, temporary disturbance to existing water/sewerage systems in case of upgradation works, increased incidence of communicable and vector-borne diseases and movement safety. It is very important to close (permanently or safely but temporarily, if work remains for next day) the opened pits and trenches however small or big they may be, when workers move out of the pit or trench, with adequate lighting, awareness boards and watch and ward. It is important to have watch and ward to prevent students and communities from entering the workspaces after class, or work hours. In case of an outbreak of communicable disease such as COVID 19 type pandemic-related risks, the interaction of workers/workspace with communities need good attention.

28. Disaster risks and impacts, primarily due to the climate and hazard proneness of certain areas (such as cyclones and floods along coastal regions, and landslides), must also be considered. Given that ITIs function as learning centers for the nation's future workforce, it is crucial to ensure that these environments promote and practice safety, thus instilling safe work practices in the students' future professional endeavors.

#### **Assessment of Program Systems**

29. *Existing Systems:* The works; and teaching and learning at ITIs would benefit from including careful considerations on the health or safety of students, staff, visitors and workers, during the construction and repairs, and in teaching-learning. The country has appropriate regulations including Building and Other Construction Workers Act and Rules, Public Liability Insurance Act, The Factories Act, and others to ensure OHS and CHS. Labour Codes (Draft) are also drafted by the Government of India for discussions. The regulations clearly mandate the need for following safety procedures and standards on site, insurance for workers, supervision responsibilities, accident reporting and support, maintenance of records on site. There are clear rules on management of various wastes (so that they do not create health and safety impacts on workers and communities), and fire and life safety. The contract agreement used by the public works department includes explicit mention of applicable regulation and mandates public works department who is the principal employer as responsible for ensuring that the contractor follows this. There is also a provision to remedy and deduct the cost for such remedy from the contractor in case they failed to do so. However,

these are not followed or monitored and reported for the works undertaken through government departments. Such systems do not exist also in case of the works undertaken by the private contractors (mainly for Private ITIs).

30. Old, dilapidated, and unsafe buildings shall be utilized only after appropriate strengthening and holistic redevelopment. Asbestos is frequently used, primarily for roofing workshops or sheds on existing old ITI campuses. The removal and disposal of asbestos must be handled with care during upgrading or reconstruction activities. Additionally, any work involving the purchase and use of asbestos and lead-based paints is prohibited under the Bank-supported Program using an 'Exclusion Criteria'. Occupational Health and Safety (OHS) and Community Health and Safety (CHS) risks shall be assessed, and safety considerations and mitigation measures included in Bid Documents. Learnings on OHS and CHS from previous Programs and Projects (supported by the MDBs) will also aid in the implementation of this Program.

31. Probable environmental issues during the construction stage include Noise and vibration due to construction and demolition work, localized erosion of materials and soil especially during rains/cyclones, disturbance to water bodies/water sources, local air quality impacts during excavations (for foundations), and material transport through unsurfaced roads, or open stacking of materials, stacking and use of hazardous materials or chemicals, and fuels (used in construction or in workshops), wastes, and wastewater discharges. Probable environmental issues during O&M include noise and vibration of machinery and work processes, transport-related air pollution during material transport, discharge of treated sewage, wastes (including solar panels, e-waste, batteries, waste oil, oil absorbent cloths etc.), excavated soil, sludge; and odor, and fire risks of gases used. In addition, the use of banned pesticides, and removal of topsoil, and invasive species need attention in case of greening efforts.

32. Safety consideration is also missed out during *Teaching – Learning*. Students are spotted without essential safety gears of appropriate quality and size in Public and Private ITIs and NSTIs. Guidance to implement and train on Health and Safety is absent. During trades of welder, fitter, mason, turner and even modern trades it is important to prepare training modules, arrange OHS certification for trainers and students, and provide them appropriate safety gears, proper standard awareness materials for all workshops etc.

### ***Assessment of Program Capacity***

33. Though the regulations require Project proponents and contractors to fully adhere to OHS, and CHS and Labour laws during works and operations; and adequate supervision through a safety committee and trained safety officers, the works (mainly by small and medium-sized contractors to whom works are awarded by the PWD/other government agencies, or Private) are carried out without adequate safety considerations, supervision, monitoring or reporting. Junior and Assistant Engineers supervise works and report to the Executive engineers. However, systematic supervision, reporting or remedies on work zone safety are yet to be in place.

34. Multiple layers of contractors and subcontractors and workmen hired daily from labor suppliers add to the poor safety culture. Though the Labour Commissioner is responsible for Labour related aspects, it is noteworthy that there is no specific institutional responsibility or capacity at National, State or program levels to ensure safe work practices and monitor these; to avoid impacts on communities, workers, and others. While engineers, workers, and communities are aware of the structural improvement needs, awareness on the need to follow and enforce safe worksite practices and, labor facilities are minimal.

35. In ITI Teaching – Learning, there is no certified Health and Safety related coordination at National, State level or in ITIs to train or guide, and ensure safe practices. It is important also to review unsafe situation and practices and include better facilities in ISP and IDP. The supervisors and foremen would benefit from improved trainings on safety. Students would benefit from improved knowledge on work hazards including high energy hazards, and safety requirements. Improved sense of safety and safety culture will help develop a market-ready work culture and contribute to ITI trained workmen's 'branding' and self-esteem.

## **Recommendations**

Based on the gaps identified through the assessment, the ESSA recommends the following activities to be undertaken by the Proposed Environmental Management Unit, with suitable institutional capacities at all levels:

### **(c) For Construction/Upgradation and Operation of Facilities**

- Institutional mechanism (at all levels) to guide contractors on safe practices, coordinate with various departments, enforce monitoring of work safety, get required permits and record maintenance, incident reporting, RCA, CAP and follow up. Certified EHS Officer at applicable levels to co-ordinate and ensure safety in works and teaching – learning.
- Bid documents to be updated to focus on OHS, CHS and identify all life and fire safety issues hazardous works requiring work permit, works in disaster prone areas/climate related and safety.
- Organize training programs for implementing agencies on safe work practices, EHS and monitor these during construction and operations, integrate monitoring of EHS aspects in MIS.
- A Hazard assessment shall be conducted by the contractor to prepare OHS Plan. OHS briefing shall be provided to workers daily (toolbox talks); mainly as workers might be different during most workdays, considering the volatile labor supply in India. Subcontractors also should have the required capacities to monitor, and guide OHS and CHS. Hazardous installations, materials, safety measures, emergency exits, etc. should be marked appropriately and equipment shall be labeled. All workspaces shall be provided with signages in the local language, Hindi and English (with details of site engineer, and authorities) and work areas/machinery storage areas barricaded with hard barricades and adequate lighting and reflectors shall be provided to avoid falls. Hazards may be physical hazards due to rotating equipment, noise, vibration, electrical hazards, welding/hot works, painting works, site traffic, heat wave/temperature at work area during summers, flooding, cyclones; and working at heights. Chemical hazards are not expected, except in the case of fuel used for diesel generators; chlorine or other chemicals used; and cooking facilities used in labor camps if any. Work involving Asbestos is avoided, while radiological hazards are not expected. However, works involving legacy asbestos on old buildings shall be carefully managed using SOPs. The Guidance shall ensure that any work in confined spaces is based on a work permit and well informed and organized with prior intimation to authorities and carried out by workmen of adequate expertise and PPEs in addition to emergency response arrangements. Wastes like (existing) asbestos if encountered need proper stacking, transport, and disposal in line with good practices; and shall not be disturbed (eg: drilling, breaking, poor stacking). There shall be mechanisms to guide and ensure the use of PPEs by all staff and workers, monitor the works, surveillance of worker health, and training. There shall be a works register on-site to record worker attendance, insurance details, Identification details, health details, and an accident register to record all incidents/ accidents including indicative incidents. Incident Investigation training shall be provided to Supervisors.
- Communities shall be informed in advance about works in nearby areas and probable disturbances. There shall be no pollution or impacts on their properties or drinking water sources or religious structures/common properties due to works. Material transport shall be well managed to prevent impacts on communities. Drivers and vehicles shall have required licenses and approvals, and there shall be minimal interactions of people/students with construction vehicles and equipment. There shall be appropriate barricading or temporary buffers to prevent impacts on communities due to smoke, dust, fall of materials, etc. Training shall be provided for emergency response. It is important to follow any pandemic safety protocols if applicable.
- Accidents/incidents under the Bank supported Program shall be reported within at the earliest (preferably within 24 hours to the Bank) and the program shall investigate the cause and adopt prevention/control mechanisms in all sites immediately. There shall be effective GRM also accessible to workers. Child (up to 14 years) labor shall not be used for any work and those in the 14-18 years age bracket shall not be involved in any hazardous activities, and this will need regular monitoring.

(d) Teaching - Learning

- Safety-First cell to co-ordinate EHS aspects in teaching learning, distribution of appropriate PPE and awareness materials on safety, monitoring safety education imparted, and coordinate certificate courses on Safety. Resources shall be allocated for all the above.
- Certified EHS Officers at Safety-Cells to co-ordinate and ensure safety in works and teaching – learning, and audit of safety trainings imparted in line with curriculum, and safe work practices disseminated.

**3.2.4 Applicability of Core Principles 4, 5, 6 to Environmental Aspects**

36. **Other Core Principles (4 (Land Acquisition), 5 (Indigenous People), 6 (Social Conflict))** are not found applicable to Environmental Aspects of this Program.

37. A detailed **Table** presenting the Assessment of Environmental aspects against Core Principles are presented in **Annexure VII**.

**3.3 Assessment of Core Principles – Social**

**3.3.1 Core Principle 1: Environmental and Social Management Procedures and Processes**

38. This core principle is applicable in terms of social management procedures and processes as one of the key principles of service delivery. A strong legal framework underpins the social sustainability principles of the ITI ecosystem. Prominent laws and policies like the Apprentice Act of 1961, National Policy for Skill Development and Entrepreneurship-2015, Rights of Persons with Disability Act 1995 etc. safeguard the rights and interest of the trainees. Other applicable governing laws related to labor and employee rights and welfare include the Minimum Wages Act 1948, Payment of Wages Act 1936, Employee State Insurance Act 1948, and other social security provisions like the Maternity Benefits Act 1961 etc. For anticipated civil and infrastructure upgradation works; laws like the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 and Inter-State Migrant Workers Act 1979 are relevant. In addition, many states have developed state level policies.

39. The Government of India and State government's policy framework is adequate in terms of social inclusion. The Government of India provides for reservation of ITI seats for women, Scheduled Tribes (ST), Scheduled Castes (SC), Other Backward Castes (OBC) and Persons with Disabilities (PwD). Apart from reservation of seats, there is an incentive (stipend) system for women, SC, ST students and youth from other vulnerable groups. The percentage of reservations and quantum of stipends may vary with each state depending on its demography. The legal framework laying down the reservation policy of the government is well defined and is being implemented in all the states. There are ITIs and NSTIs reserved for women. ITIs in some states also have separate wings for SC population in some states. Additionally, there are also separate ITIs for STs in certain districts which have a substantial percentage of ST population. Apart from these, some ITIs may cater to specific vulnerable social groups in certain districts. From an inclusion perspective, it is also noted that the course content is developed by NIMI in 12 different languages and the Anuvadini software is also used for the same.

40. There is, however, a gap in the practice of these inclusive policies on the ground. In terms of institutional structure as well, there is no dedicated team, cell or personnel which looks at social risk management, issues of inclusion, gender and accessibility.

41. **Training:** Elements of social sustainability, diversity and inclusion, financial literacy, gender sensitization are integrated into the core syllabus of all trainees. In addition, the core syllabus includes modules covering key legal requirements related to labour welfare, sexual harassment of women at the workplace, and other dimensions of financial and legal literacy. Soft skills related to communication and overall human resource management are also included in the trainings at the ITIs and NSTIs.



## Gender Inclusion

42. Despite special provisions by the government to encourage women's active enrollment. ITIs face perpetual challenge in getting healthy representation from women and transgender trainees. Seats reserved for women are often not filled and vacant seats are filled by male candidates. For instance, it was observed as part of the Environment and Social Systems Assessment for STRIVE program that almost 50 percent of the students at the Women's ITI in Nizamabad were male. In 2014-2018, the total enrollment of women trainees was only 37% in all ITIs. Women also have a low representation in apprenticeship opportunities with a study on ITIs (n=367 ITIs) suggesting only 11% women apprentices. A report by NITI Aayog suggest that 16.83% of total ITIs in India are women exclusive ITIs, yet, only 6.6% of female candidates sought admission in ITIs. A tracer study of ITI Graduates from 2014-2022 in Mizoram indicate a skewed gender distribution of students graduated from government ITIs, with 68.27% male students in comparison to 31.73% for female students<sup>17</sup>.

43. Women are mostly present in non-engineering trades like dress making, COPA etc. while their presence is negligible in engineering trades including construction, real estate, logistics etc. Similarly, the quality of the ITIs for women are observed to be poor compared to the general ITIs. In case of women ITIs and NSTIs, the selection of trades is done to prioritize those which are more popular among women trainees. This was also observed at the Women's NSTI, Kolkata. This limits the number and quality of trainers and the placement opportunities in exclusive women institutes. Another major concern is that of high drop-out rates amongst female trainees including midterm drop-outs. The study on administrative data from the ITIs undertaken by the DGT reveals the drop-out rate of an average 23% for female candidates across different categories of ITIs<sup>17</sup>. Poor gender diversity is also found in staff composition with male trade instructors dominating the ITI work culture. The 2021 staff database suggests presence of only 15.83% of the total instructors employed in the ITIs despite difficulty and shortage of getting such vacancies fulfilled.

44. *Transgender Persons:* The government has welfare schemes and special projects in place for rehabilitating and mainstreaming transgender persons through skill development and certified training courses, counseling and economic linkages with interventions like Support for Marginalised Individuals for Livelihood and Enterprise (SMILE), PM-DAKSH, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and Garima Greh –pilot shelter homes for providing secure shelter, recreational facilities and skill training development programs in select states<sup>18</sup>. In addition to these, the government has constituted a National Council for Transgender Persons as an advisory cell for all policies, programs and projects for transgender persons and has a national portal for transgender persons for issuance of identity cards and certificates.

45. Some of the major factors contributing to low enrollment and participation of women in ITIs are related to:

- a. Poor physical access to ITIs due to poor roads, transport connectivity and remote locations. This problem is further compounded for tribal and LWE areas due to difficult terrain, inadequate connectivity infrastructure and limited safe commuting options where last mile connectivity is vital; Concerns around safety and gender-based violence also discourage girls from actively participating in ITI activities.
- b. Lack of clean and safe residential facilities including inadequate provisions for safe WASH services including menstrual hygiene management facilities.
- c. Limited number of trades offered in both traditional and modern market relevant skills.

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17 Directorate General of Training (2023-24), Gender Study to Identify Constraints on Female Participation and Skills Training in Labor Market in India

18 Pilot shelter homes are undertaken for Tamil Nadu, Odisha, Chhattisgarh, Bihar, Rajasthan, West Bengal, Gujarat, Delhi and Maharashtra

- d. Inadequate information and hand holding support during application process and course selection with limited understanding of all the courses offered by their desired ITIs. There is heavy dependence on male relatives for information and logistics.
- e. Poor representation of women staff also has a tacit impact on female enrollments with absence of strong female role models and instructors in the learning environment.
- f. Inadequate career guidance, poor knowledge dissemination and outreach on entrepreneurial schemes, soft skills training etc. impacts female trainees' outcome in job linkages and success.

### **Persons with Disabilities**

46. The National Action Plan for Skill Development of Persons with Disabilities (NAP-SDP) provides vocational/skill training (both short and long term) through public and private sector training institutions along with non-governmental organizations. The MSDE has a dedicated transversal sector skill council for PWDs for empowering them through self-employment, local entrepreneurship, placement and mentorship opportunities. A category wise reservation in ITI admission policy provides inclusive skilling opportunities to the youth hailing from socially disadvantaged backgrounds. This includes 15% admission seats for Scheduled Castes, 7.5% for Scheduled Tribes, 15% for Other Backward Classes and 3% for the PWDs<sup>[3]</sup>. There are other structural barriers as well such as absence of study material in braille by NIMI which develops the course content.

47. The ITIs are also observed to be poorly equipped in terms of inclusion of People with Disabilities (PWD) in spite of reservations. While some disabled students are enrolled in the ITIs, universal access was not observed in terms of infrastructure at the institutes visited as part of the assessment. Other infrastructural adaptations required were also missing. Accessible course material is not developed for PwDs through means like Braille currently. Instructors are also not trained to specifically address students with disabilities.

### **Transparency and Accountability: Grievance Redressal Mechanisms**

48. Government of India transparency and accountability initiatives are based on a combination of grievance redressal mechanisms and the Right to Information Act, 2005. There are certain established institutional arrangements reflecting these priorities. At the Ministry level, the Chief Vigilance Officer who reports to the Secretary, MSDE is responsible for the vigilance function together with the Grievance Officer. In general, the vigilance function of line departments is fulfilled by a Chief Vigilance Officer at the state level and Vigilance Committees are also established at the Block, District and GP levels with various degrees of effectiveness.

49. *Right to Information Act:* The declaration of Right To Information Act (2005) set the stage for the transparency in the functioning of the government and its various agencies. Under this Act, access to information from a public agency is a statutory right of every citizen. In MSDE and DGT, there is a provision to file RTI applications/first appeals online along with payment gateway. For speedy disposal of RTI cases a list of officers and appellate authority subject wise is given in the portal. The State governments also have their own RTI system where one person in the department is designated as the point person to answer any questions that come through RTI. At the ITI level normally one person (usually the Principal) is designated to deal with all queries under RTI.

50. DGT has proactively made a lot of information on its Schemes and funding public on its website for greater transparency. One Public Information Officer is appointed to answer RTI related questions. The states have also tried to make the system transparent by having a section on RTI on the state website. Information about ITIs and Schemes are also posted on the website which is updated from time to time. Apart from that each State Directorate has a designated point person to answer to RTI queries about ITIs relating to the Schemes, courses, opportunities etc. At the ITI level the implementation mechanism of RTI is not uniform.

While some ITIs (typically larger ones in urban centres) has systems for handling RTIs including a person in-charge and maintaining records, many other ITIs do not have any such systems.

51. *Grievance Redressal Mechanisms (National level):* Grievance redressal at the MSDE happens through the Centralized Public Grievance Redress and Monitoring System (CPGRAMS) which is developed and monitored by the Department of Administrative Reforms and Public Grievances and handles public grievances related to central and state government ministries, departments and organizations. A nodal Grievance Redressal Officer appointed in MSDE for CPGRAMS receives and compiles all the complaints received through online and offline mediums. The CPGRAMS grievances are reviewed regularly by the Ministry with the involvement of the Secretary at the highest level. The grievances received through the portal are forwarded to the Ministry's concerned divisions for speedy redressal and entry in the portal. In 2022, the Ministry received 2492 grievances of which 2486 were disposed of in the same year. In addition, the MSDE, attached offices like the Directorate General of Training (DGT), state governments and departments as well as ITIs fall within the ambit of the Right to Information Act 2005 as well.

52. GRM arrangements are also provided under the Directorate General of Training (DGT) which is an apex body under MSDE for developing and coordinating vocational training programmes including policies, norms and standards for vocational training. The DGT has a Complaint Tool with a service desk for assisting trainees and it is through a special portal where they can raise a query and seek information on admission, examination, certification, result declaration etc. The National Council of Vocational Education and Training (NCVET) has also developed the Guidelines for a Grievance Redressal Mechanism to be implemented by its stakeholders including awarding bodies, assessment agencies, training providers for ease of access to grievance redressal and resolution. NCVET regulates the functioning of entities that are engaged in vocational trainings, establishes minimum standards for their functioning, implements the National Skills Qualification Framework and approves the National Occupational Standards.

53. *Grievance Redressal Mechanisms (State level):* At the state level, the Directorates follow institutional mechanisms mandated under the government norms on GRM including links to the CPGRAMS and RTI provisions. Usually, the Director of the Directorate is entrusted to deal with GRM related matters which are escalated to the Directorate by the ITI Principals. A majority of the complaints received and resolved by the state directorates are around delays in timely disbursement of scholarship funds and stipend to the trainees, shortage of attendance and exams related matters of trainees, matters related to instructors and other staff related issues. Records are maintained for all grievances received and resolved which are mediated centrally to the Ministry. In Madhya Pradesh, consultations suggest that an overwhelming majority of cases received and resolved by the Directorate relate to disbursement of scholarships and stipends. In addition, most states have a state level CM portal for grievances as well with a similar mechanism and backend process as the CPGRAMS.

54. *Grievance Redressal Mechanisms (ITI level):* ITI Guidelines lays down elaborate guidelines on who can form a Grievance Redress Committee and the entire redressal mechanism. It lays down clearly that a complaint must be in writing and a Register should be maintained for all complaints. Each complaint would be looked into first by the instructor and then, if not satisfied, taken up to the Principal. The institutional arrangement in government run ITIs for receiving grievances from trainees typically follows a three-level approach with the first level of contact being the craft instructor. The student or trainee related grievances are expected to be received as a written complaint to the concerned craft instructor at level 1. In case the complaint is not addressed or followed by the craft instructor; the second level is to approach a Group Instructor. Failure of level 1 and 2 will lead to approaching level 3 which is the principal. For administrative and office related grievance a written complaint is to be submitted to the Office Superintendent or the Assistant Account Officer. In case of low satisfaction in level 1; the complaint can be re-addressed to the principal for further resolution. There is no special designated officer for dealing with GRM as a grievance redressal officer. ITIs supported by the ADB are required to nominate a safeguard officer who would look into

GRM matters dedicatedly. Most of the complaints are resolved within a working week. Consultations suggest often trainees raise their concerns verbally and these are resolved informally without recording.

55. Site visits and stakeholder consultations suggest poor utilization of complaint box in the premise with most complaints managed informally. Likewise, maintaining a GRM register for reporting is not a standard practice in all ITIs and was found to be present in only World Bank and ADB supported ITIs. Standardized procedures of lodging complaints differ amongst ITIs due to inadequate formalization of the GRMs leaving many candidates to opt for State level Grievance Redressal Portals. Information boards clearly displaying the GRM information, GRC details etc. were only observed in World Bank and ADB supported ITIs. Likewise, there seems to be an overall lack of information dissemination on GRM amongst staff and trainees. Consultations suggest that trainees prefer using the state GRM portals for speedy resolution on matters related to the (a) issuance of certificates determining their economic and social status (SC/ST/OBC/Gen, issuance of BPL cards etc.) and for (b) getting timely reimbursement of their scholarships and stipends through direct benefit transfers. Most of the complaints lodged on the state online portals are resolved within 2 working weeks.

56. A two level GRM provision is also available with the ITIs for seeking resolution on the grades assigned to them under the DGT initiative of using a grading methodology of ranking them for their quality and performance and for identifying those ITIs that can become world class training institutes. The two level GRM provision available to the ITIs include:

- A Grading Grievance Redressal Committee (GGRC): This is formed by one Director level officer of DGT and state directorate level representative of the concerned state. The ITI can submit their grievance to the committee if not satisfied by the grading score.
- Appellate Committee: this committee is comprised of Director General (Training) as its chairperson and 2 other director rank officers as its members. This committee reviews appeals raised by the ITI if it is not satisfied by the grades approved by the GGRC. A total of 15 calendar days are given to the ITI for submitting their grievances on grading score with evidence to the DGT.

57. *Grievance Redressal Mechanism (Industry level)*: There are no formal linkages between the ITIs and the industries to deal with grievances of the apprentices. A dedicated Training and Placement Officer is the direct link between the industry and the apprentice. However, from the consultations it appears that the prospective apprentices are not aware of the GRM. Since the apprentices are not covered under industries' social protection policies like insurance plans etc., they are vulnerable to such incidences. The GRM in this case is dependent on the internal HR policies of their companies.

### **Sexual Exploitation and Abuse, Sexual Harassment and Gender-Based Violence**

58. SEA/SH and GBV are risks relevant to this project considering the large number of adolescent girl trainees as well as multiple avenues for public interaction mediated by positions of power. the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013 mandates among other things, the constitution of an Internal Complaints Committee in all institutions having more than 10 employees, which is responsible for looking into all complaints of sexual harassment at the workplace. At the National level; the ministry has constituted the ICC as per statutory requirements. Most state level Directorates have also constituted the ICCs.

59. Most ITIs are also required to constitute ICCs. However, even where the committees are constituted, they do not meet at regular intervals even in case of no concerns that are to be resolved. Information dissemination and working of ICC is done mostly on an ad-hoc basis during induction class. Appropriate display boards defining POSH act and important terms along with details on ICC members were seen in only STRIVE and ADB supported ITIs. In other ITIs, knowledge on ICC members amongst staff and students was not forthcoming. Appointment of external member representing any local prominent NGO/CBOs is not a standard practice especially in ITIs. Additionally, even where ICCs are constituted, they do not appear to be functional,

engaged in awareness generation, training or even filing mandated annual reports. Due to such gaps, most ICCs seem to be ineffective and dormant.

60. There is a general perception of most ITI staff that such instances of harassment do not occur in ITIs; hence the need for meeting and reporting is being under-valued. At the same time, consultations suggest low understanding of nature and range of abuses (i.e. physical, verbal, mental) that can be defined as a part of harassment. As a result, many ITIs do not report any such cases. During consultations, the team learned of only two staff related cases of misconduct which were received and resolved in 2008 for a women exclusive ITI in Maharashtra. The STRIVE ESSA mentions one ITI in Uttarakhand which reported a case of sexual harassment which was dealt with by the faculty.

61. Some measures are commonly undertaken by ITIs for safety of women in the premises. For instance, most ITIs which have women's hostels do not typically allow male relatives into the premises. GBV and related topics are usually covered during the class induction training. In a few cases, ITIs have collaborated with affinity groups, community clubs and doctors to provide lectures on good touch-bad touch for women students as observed in a women exclusive ITI in Thane, Maharashtra. In another case, the ITI Mandideep of Madhya Pradesh invites some female students to the proceedings of the ICC sometimes to educate them on matters of GBV and for seeking suggestions that improves their experience on the campus. However, these practices are rare and usually remain unreported. There are other gaps as well. For instance, installation of CCTVs is not a standard practice across institutes. Most women's hostels have all male guards as well. Gender sensitization training is not conducted regularly at any of the surveyed ITIs. Additionally, none of the GRMs reviewed under this assessment contain any specific protocols or training to handle grievances related to sexual exploitation and abuse, sexual harassment or gender-based violence.

### Communication and Stakeholder Engagement

62. Curriculum development and updation is done by CSTARI, Kolkata following a comprehensive process of stakeholder engagement. Feedback is sought on an open portal from ITIs as well as industry. A Trade Committee meeting with all stakeholders is also conducted as part of its process. However, in their experience industry feedback has not been forthcoming.

63. At the ITI level, there are some industry relationships and conduct frequent interactions, events and forums, these are usually *ad hoc* and opportunistic. There is no focused communication strategy to guide them on sectoral and thematic requirements as well as frequency of interaction. Similarly, there is no clear record of stakeholder engagement activities as well as uptake channels. There are also no clear guidelines on communication and information disclosure. These gaps limit the effectiveness of these activities.

### Key Gaps

64. The following key gaps are identified in respect of Core Principle 1:

- a. There is a lack of dedicated capacity on social risk management at the Ministry level, state level as well as ITI level.
- b. There are multiple parallel Grievance Redressal Mechanisms with no common standards or monitoring. There is no consistent service standard in the time taken to take action on the grievance, to report back to the aggrieved person and regular reporting and monitoring of data on grievances.
- c. There are many gaps in the implementation of the POSH Act as well as effective functioning of the Internal Complaints Committees.
- d. There is a lack of a clear Communication and Stakeholder Engagement Strategy, which reduces the value from *ad hoc* activities. More focused stakeholder engagement is required for more effective outreach to industries.

**3.3.2 Core Principle 2: Environmental and social management procedures and processes are designed to avoid, minimize, or mitigate adverse impacts on natural habitats and physical cultural resources resulting from the Program**

65. This core principle is not applicable for the social aspects of the program.

**3.3.3 Core Principle 3: Public and Worker Safety**

66. The proposed program would cover the upgradation of ITI facilities including the possible construction of new infrastructure within the premises. There would be a requirement for labour on the worksites which would involve proper management of labour. Additionally, the proposed program would cover the operation of the ITIs which employ a number of trainers, who are both employees as well as contract-based staff. Human Resource management to ensure the safety and welfare of these employees would also be critical.

67. Construction and maintenance of government ITIs is usually done by the PWD. Request for repairs and maintenance is typically made by the Principal of the ITIs, based on which PWD engineers visit the site and prepare an estimate. For new construction, the requisition is typically made by the Department in a predefined template. The work is awarded to a contractor through the e-tendering process. The PWD sends a copy of the work order and other contract documents to the Labour Department as well. The Labour Department has the responsibility to monitor compliance with welfare laws. However, this system is weak and there are no formal means by which PWD monitors or ensures such compliances. While contractual provisions in the bid and tender documents are strong, there are gaps in monitoring and reporting. Monitoring of such civil works is usually through a combination of *ad hoc* site visits by PWD engineers and the e-samiksha governance portal. However, specifically compliance of various legal requirements including labour laws are not expressly monitored or reported.

68. During the assessment, it was understood that the training staff are a mix of employees and contract-based staff. There are, however, gaps in terms of the attrition, supply of adequately qualified trainers, *ad hoc* appointments and dismissals. It is critical to address these gaps especially given the centrality of the issue of constraints in supply of trainers.

**Key Gaps**

69. The following key gaps are identified for this Core Principle:

- a. There is no mechanism currently for monitoring the compliance of the contractor with labour laws during civil works involved in construction and maintenance work.
- b. There is no comprehensive Human Resource Policy to protect the interests of trainers (employees as well as contracted trainers) employed at ITIs from *ad hoc* changes to their employment status.

**3.3.4 Core Principle 4: Land Acquisition**

70. This Core Principle is not applicable. No involuntary acquisition of land for the activities planned under this project is currently envisaged. All infrastructure requirements for ITIs and NSTIs would be met within the footprint of land already available with the government within the premises of the ITI or NSTI. Any activities which involve involuntary acquisition of land would be excluded from the Program. When securing any land required for Program activities, the following shall be adhered to in order to ensure no adverse effects:

- a. The land in question must be free of squatters, encroachers or other encumbrances
- b. No physical relocation should result from securing the land required
- c. There should not be any restrictions on access or transit as a result of securing such land
- d. There should be no significant adverse impacts on the livelihoods as a result of securing the land
- e. In case of government owned lands, the relevant department shall provide a certification that the land in question is free of encroachers and squatters and no negative impacts are envisaged.

### **3.3.5 Core Principle 5: Rights and Interests of Indigenous Peoples and Vulnerable Groups**

71. The Government has rolled out specific technical and vocational development schemes for the minority groups in the form of financial assistance, scholarships, stipends, seat reservations, hostel facilities etc. These include centrally sponsored schemes like the post-matric scholarship scheme for meritorious schedule caste students<sup>[2]</sup>, of which 30% scholarships are earmarked for girl students, construction of hostels for OBC boys and girls to enable them to pursue higher education and skill trainings. Additionally, sector schemes are also launched by various line ministries to generate productive employment and entrepreneurial development schemes including Ministry of Finance's Stand-up India scheme for financing SC/ST and/or women entrepreneurs through bank loans, Ministry of Micro, Small and Medium Enterprises sponsored Prime Minister's Employment Generation Programme (PMEGP) for generating micro enterprise led self-employment opportunities with special benefits for unemployed youth hailing from social backgrounds including SC, ST, OBC, minorities, women, differently abled, transgender and those residing in aspirational districts, hills and border areas.

#### **Scheduled Tribes**

72. There is a strong legal framework to safeguard the interests of Scheduled Tribes in India, including various policy and regulatory initiatives to support the skilling requirements of tribal youth, in particular. Some Schedule Five<sup>19</sup> states like Mizoram have framed and adopted state level policies like the Mizoram State Policy on Skill and Entrepreneurship Development 2018 by the Labour, Employment, Skill Development and Entrepreneurship Department in line with the National Apprenticeship Act of 1961, the National Policy for Skill Development and Entrepreneurship 2015 and the National Skill Development Mission.

73. The Government of India (GoI) has the Special Central Assistance to Tribal Sub Scheme (SCA to TSS) as a flagship program to improve welfare of tribal people with special financial assistance for scholarships, skill development, reservations in government jobs and public institutions. Other tribal welfare initiatives include the Prime Minister's Adi-Adarsh Gram Yojana (PMAAGY), the Aspirational Blocks. Program (ABP)<sup>[4]</sup>, PM's Particularly Vulnerable Tribal Groups (PVTG) Development Mission etc. Furthermore, the Schedules V and VI of the Indian Constitution provide special governance arrangements aligned to the tribal customary institutions and practices and separate councils/legal and administrative frameworks to safeguard tribal interests.

74. In addition, there is an array of incentives like scholarships, fee waivers, refundable fees, stipends (including for hostellers and day scholars), free start-up tool kits etc. Available for Scheduled Tribe students under schemes including the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), National Apprenticeship Promotion Scheme (NAPS), Pradhan Mantri Vishwakarma Scheme (PMVS), the Craftsmen Training Scheme (CTS)<sup>20</sup> and the Post-Matric Scholarship Scheme for ST Students etc. which provides the Ministry of Tribal Affairs funding support under 'Special Central Assistance to Tribal Sub-Scheme' (SCA to TSS) for vocational training in tribal areas with emphasis on skilling tribal youth in traditional and modern vocations based on their educational qualifications. Other supportive state sponsored quality skill development, placement, employment and entrepreneurial interventions for tribal youth include initiatives like the Mizoram's flagship program of Bana Kaih (Handholding) Scheme<sup>21</sup> and the Scheme on Skill Development for Mizoram Building

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19 The Indian Constitution makes special provides for the administration of states which are predominantly inhabited by tribal groups, which devolve greater administrative autonomy to local self governing institutions

20 The CTS provides employable technical and industrial vocational skills to the youth through a network of it is. Presently training courses under the CTS are offered by 14955 ITIs (government owned 3248 and private owned 11707) across the country with total of 150 NSQF compliant trades with total of 26.58 lakhs enrolled trainees.

21 The state led scheme aims to mainstream Mizo youth including women through employment, entrepreneurship development and sustainable livelihoods in industrial and agricultural clusters along with the provision of collateral free and interest free bank loans.

and Other Construction Workers Welfare Board (SSD-MBOCWVB)<sup>22</sup> under its Directorate of Labour, Employment, Skill Development and Entrepreneurship. In Jharkhand, a similar scheme is operational called the Saksham Kaushal Vikas Yojana; which is a component of Mukhyamantri Sarthi Yojana<sup>23</sup>.

75. In addition, the Government has also made special interventions for areas facing Left Wing Extremist (LWE) in India<sup>24</sup>, which are characterized by inaccessibility and remoteness due to geographical and/or extreme climatic reasons giving its population a distinct social and cultural identity with a relative sense of economic deprivation. The Government's National Policy and Action Plan ensures and safeguards the rights and entitlement of local communities residing in LWE areas including their security related infrastructure and human development. The MSDE has a special focus on skill development in 34 LWE affected districts with the objective of establishing ITIs and Skill Development Centers imparting demand driven short and long term vocational trainings. The Ministry of Rural Development also has a Placement Linked Skill Development Scheme (Roshni) for the youth hailing from 27 most critical LWE affected districts to provided educational, economic and social development support to the residing tribal youth.

76. *Assessment of Implementation:* However, during the assessment, it was observed that the implementation of such interventions on the ground is inconsistent. The tribal ITIs are mostly located in the tribal districts in the remote areas. The quality of these ITIs was observed to be lower than that of the general ITIs in terms of equipment, infrastructure and trained instructors during the STRIVE assessment. It was also observed that tribals have difficulty in continuing in jobs due to various factors including geographical and cultural constraints. The ITIs for minorities are also seen to be of lower quality than general ITIs in terms of equipment and infrastructure.

77. In Mizoram, during field visits it was observed that apprenticeship programs have little value and recognition socially. Consultations with the tribal youth in some of the ITIs including those from the LWE affected districts in Jharkhand suggest that there is limited awareness of these welfare schemes and avenues which they can access and leverage in the skill, employment and entrepreneurial ecosystem. These trends are found despite provision of incentives like provision of study material, laboratories, equipment, interactive classroom infrastructure, hostels etc. Current government interventions are not translating into favourable enrollment rates in tribal areas especially LWE affected districts that were visited. A tribal verification study for ITIs<sup>25</sup> suggests an extremely low representation of ST youth, with only 1.35% of tribal youth constituting the ITI enrollments despite an overall seat reservation of 7.5% on an average. A study conducted by NITI Aayog on ITIs suggests a general trend of low enrollment rates for Schedule Five and Six states like Jharkhand and Mizoram. The study records enrollment rates for 2021 for Jharkhand (40.11%), Mizoram (32.04%), Himachal Pradesh (47.9%) and Tripura (33.16%) representing all class and economic status categories<sup>26</sup>.

78. Based on the consultations and secondary research conducted during this assessment, the following key factors are identified as contributing to the low enrollment of ST youth in ITIs:

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22 The scheme enables registered construction workers or their dependents to set up wage or self-employment ventures through NSQF aligned short term training courses in accordance to demands of the modern industry. In December 2024, 523 trainees were trained of which 485 trainees received certifications and 272 were placed.

23 The SJKVY was launched by the Department of Labour, Employment, Training and Skill Development, Jharkhand with the aim of providing quality skills trainings to the youth (18-35 years) for job creation and placements in several trades affiliated to different Sector Skill Councils. The program is operating through 19 empanelled partners and 72 training centers

24 There are 100 LWE districts across 10 states that are under the LWE category including Andhra Pradesh, Telangana, Bihar, Chhattisgarh, Maharashtra, Jharkhand, Odisha, Madhya Pradesh, Uttar Pradesh and West Bengal.

25 Tribal Verification Study for IITs under Skills Strengthening for Industrial Value Enhancement (STRIVE) project

26 Niti Aayog (2023) Transforming Industrial Training Institutes [https://www.niti.gov.in/sites/default/files/2023-02/ITI\\_Report\\_02022023\\_0.pdf](https://www.niti.gov.in/sites/default/files/2023-02/ITI_Report_02022023_0.pdf)



- a. Poor local level employment opportunities in tribal areas reflecting low private sector penetration and weak economic development.
- b. Inadequate staff for specific trades in tribal ITIs who reside in the tribal areas. Also, the process for recruitment for permanent as well as contractual staff is highly time-consuming, which is resulting in availability of limited staff for limited trades despite provision for a greater number of trades<sup>27</sup>.
- c. Geographic inaccessibility as tribal areas are often characterized by unique terrain and remoteness. This results in long commutes for students to come to ITIs, who have to either travel long distances everyday or pay for expensive accommodation near the ITI. Combined with responsibilities in household and caregiving duties, this results in low enrollment.
- d. Poor hostel facilities in many tribal ITIs, including lack of hygiene, sanitation and mess facility deters many students from enrollment, especially women trainees.
- e. Absence of culturally contextualized trades in many tribal areas also discourage students from enrolling. This could be due to lack of NCVET certified trades or non-availability of trainers.
- f. Poor outreach and communication about schemes and job opportunities mean that attitudes towards ITIs as a desirable career path continue to prevail. In particular, women trainees are highly impacted by male family members over any information they may be able to access easily and independently. This challenge is exacerbated in LWE areas which may have poor internet connectivity and language barriers compared to the mainstream.

## Key Gaps

79. The following key gaps are identified with respect to this Core Principle:
  - a. There is a lack of clear data and analysis on the low level of enrollment of trainees from vulnerable groups – women, Scheduled Castes, Scheduled Tribes and Persons with Disabilities.
  - b. There is no targeted action for tribal ITIs to address critical bottlenecks in enhancing enrolment.
  - c. There is a lack of information and outreach about ITIs, trades offered, schemes, and potential industry linkages, especially among vulnerable populations.

### 3.3.6 Core Principle 6: Avoid Exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial dispute

80. While there are certain parts of India where there are some conflicts, this project will not exacerbate these risks. Accordingly, this core principle does not apply.

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<sup>27</sup> In Jharkhand, for example the selection of instructors is via the Jharkhand Training Officers competitive examination followed by document verification which is a standard procedure followed by the State Staff Selection Commission. Even state policies for horizontal reservations to benefit and mainstream those from socially weak backgrounds i.e. SC, ST, OBC, EWS and PwD candidates does not guarantee a quick turn of post filling. The State of Jharkhand for example has a reservation quota for such groups in government job postings including 26% for STs, 10% for SCs, 14% for OBC, 10% for EWS and 5% for PwDs. Moreover, the state has passed the Jharkhand Reservations of Vacancies in Posts and Services (Amendment) Bill of 2023 for horizontal reservation and quota of 5% for dependents of Jharkhand Andolankaris (participants of separate statehood movement). Resultantly, in absence of craft instructors; many trades can't be offered to interested candidates aspiring for both traditional and modern vocations. In Mizoram, for example there is a provision for offering 24 trades in the three government ITIs under CTS. However, due to shortage of course instructors only 5-6 trades are being offered to trainees in two ITIs that are in remote districts. In 2021, Mizoram's instructor dashboard suggested that of 52 sanctioned posts only 7 could be filled. Presently, the department is seeking to fill vacancies for at least 14 vacant instructors sanctioned posts. Similar trend is observed to be in other tribal states like Rajasthan with only 16% and Odisha with 36.30% of instructor positions filled in 2021. (Niti Aayog (2023) Transforming Industrial Training Institutes [https://www.niti.gov.in/sites/default/files/2023-02/ITI\\_Report\\_02022023\\_0.pdf](https://www.niti.gov.in/sites/default/files/2023-02/ITI_Report_02022023_0.pdf))



## 4 ENVIRONMENTAL AND SOCIAL INPUTS TO THE PROGRAM ACTION PLAN

1. The previous sections examined environmental and social risks, their impacts, and benefits within the existing legal framework, and assessed the program's alignment with PforR policy principles. They also evaluated the capacity of current institutions for social and environmental management. This section summarizes those assessments, proposing specific actions to mitigate identified risks. It details E&S inputs for the Program Action Plan to address identified gaps.

2. The risk screening indicates that the overall contribution of the Program is anticipated to be positive due to their benefits. Expected positive impacts of the Program interventions include improved infrastructure and facilities, better trained / capacitated staff and students, better health and safety of students, enhanced safety standards, and better environmental conditions in the Program institutions. While the Program risks related to environmental and social aspects are generally well-managed, additional efforts will be required to address the remaining gaps identified in the previous chapter.

3. A set of actions has been formulated to address system and capacity-related gaps. These issues were discussed with stakeholders during the preparation process for the PforR, and their suggestions were considered in developing the action plan. The action plan was reviewed with program counterparts and stakeholders to include them in the DLIs and Program Action Plan (PAP) for the Program, ensuring sustainable outcomes in the long term. During implementation, the World Bank will continue to consult with program counterparts and provide support to resolve implementation issues. The Bank will also monitor PAP implementation and its effects as part of its progress review.

### 4.1 Proposed Actions to Improve Environmental Systems and Capacities

4. The Proposed Program is aimed at bringing in substantial improvement to skilling and ITI infrastructure throughout the Country, through supporting infrastructure and facility upgradation, curriculum improvements, and industry collaboration. However, the absence of a dedicated unit to focus on environmental and social considerations in program design and implementation is noteworthy. While the existing program incorporates considerations for using durable materials and standard designs for civil construction in their program operations there exist ample opportunities to suitably factor in environmental considerations in program planning, implementation, and operation maintenance stages. Prior program screening, auditing to understand the gaps, and planning to avoid and/or mitigate impacts arising out of its operations and incorporating environmental enhancement opportunities in Program design are essential for better outcomes.

The **Table 13** in **Annexure VII** summarizes the specific gaps between the program systems and the applicable core principles for environment aspects and recommendations.

#### 4.1.1 Program Exclusions

5. *Screening and Exclusion of High-Risk Activities:* It is proposed to screen the project activities and exclude those which will entail higher risks. The following activities will be excluded from the program (also for prior results<sup>28</sup>) to avoid high environmental risks:

Exclusions: (also applicable for Prior Results)
<b>General</b>
1. All activities excluded as per the World Bank's P for R policy (as in Bank's PforR Guidance Manual)



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<sup>28</sup> All Program activities including those considered for prior results shall follow these Exclusions

**Exclusions: (also applicable for Prior Results)****Environmental**

2. New Construction/Upgradation / Rehabilitation or repairs to existing Buildings or campuses or facilities in campuses that do not follow National/State/Local Body Regulations or Guidance for siting, works, management and disposal of wastes (various types), and wastewater and others; except when the proposed development includes measures to comply with regulations
3. Any activity involving purchase or use of Asbestos, or harmful lead-based products. In case of removal and disposal of existing asbestos specially developed Standard Operating Procedures shall be followed strictly to minimize adverse impacts.

**Social**

4. No large-scale changes in land use or access to land and/or natural resources.
5. No land acquisition and/or resettlement would be undertaken under the Program. The project activities would not involve any construction where private land acquisition is required or any land for which clear title or any recognizable claim is not available with the government.
6. No physical relocation should result from securing the land required
7. There should not be any restrictions on access or transit as a result of securing such land
8. There should be no significant adverse impacts on the livelihoods as a result of securing the land
9. No activities that involve the use of forced or child labour;
10. No activities which could lead to marginalization of, or conflict within or among, social groups

6. A detailed Exclusion and screening checklist will be prepared and used by the Environmental and Social Management team at the central level. Screening will determine the environmental and social sensitivities of each Program activity. Part 1 of the Screening checklist should be developed carefully to confirm the exclusions as the P for R excludes High Risk activities. Only if the activity is not excluded, shall it proceed to the next stage of screening.

7. The screening will determine the environmental and social sensitivities of each Program activity. Part 1 of the Screening checklist should be developed carefully to confirm the exclusions as the P for R excludes High Risk activities. Only if the activity is not excluded, shall it proceed to the next stage of screening. In case of upgradation / repairs to existing facilities or campuses, there shall be a checklist-based Audit that confirms alignment with permits and regulations and identify the need for additional facilities to ensure overall better EHS and social performance. Findings of the screening & audit (can be a unified checklist if there is confirmation that all infrastructure will be developed in existing campuses) shall be included in the design, ESMP and EMoP and budget and responsibilities shall be allocated to ensure its implementation. The Program shall ensure the findings of the Audit & are implemented, so that overall learning environment is improved with direct correlation to ITI performance.

**4.1.2 Proposed DLI on E&S****Inputs to DLIs / DLRs on Environmental Aspects**

8. Various applicable IRIs and DLIs for institutional strengthening and capacity building include the requirement to ensure EHS compliance and reporting on EHS Compliance & Program Action Plan on Environmental aspects. This includes Resource allocation (both funds and manpower), ensuring compliance during Construction and Teaching – Learning and its reporting; Training of Instructors and ensuring better infrastructure and facilities at the ITIs and NSTIs. This will be worked out in detail in the DLI verification Protocol and reflected in the Environmental Guidance of the POM. EHS Compliance will be verified by the IVA for disbursements based on applicable DLIs.

### EHS Compliance in all Program Activities

9. It is proposed to ensure EHS compliance through 'Safety-First' Cells at all levels including HSIC and at NSTIs to ensure that EHS is followed during works and imbibed into the Work Culture of ITI pass outs; so that they are 'Industry Ready'.

10. As noted during ITI and NSTI visits for the preparation of this ESSA, and highlighted in Tracer Studies of various States under the STRIVE Program (P156867), there remains an opportunity to enhance Environmental, Health, and Safety (EHS) practices, particularly the use of Personal Protective Equipment (PPE) and the safety culture within workshops. Alarming, observations from site visits revealed that less than 5% of students or staff utilize PPEs, primarily limited to welding shields. Adequate funding and dedicated efforts are crucial to ensure improved EHS standards.

11. In sectors where trades and craftsmanship are central, involving tools and equipment in workshops and work sites, effective training requires elevated EHS standards. Emphasizing health and safety training for both staff and students creates a workforce with a positive safety culture, confidence, and lower incident rates, making them prepared for industry work. Instructors should also receive advanced EHS training and international Occupational Health and Safety (OHS) certifications, such as NEBOSH, to properly oversee those adolescents being trained under workshop conditions, in certain trades, in the presence of some hazardous tools, materials (some inflammables, explosives even in minimal quantities), and conditions. Hence, it is proposed to have Safety Cells at all applicable levels of institutional setup (such as National, State, Hub & Spokes etc. as may be applicable), to ensure EHS in ITI Teaching Learning (including accreditation of Trainers, regular roll-out of EHS Trainings, OHS certification of Instructors, and provision & use of appropriate PPEs and Awareness Material) and Transforming ITIs into TRUE Campuses. Detailed activities contributing actions to its completion are presented in **Annexure VIII**.

### **DLI on Social Aspects**

12. Based on the ESSA findings, the key gaps will be addressed through different channels. These would be inputs into the Program Action Plan (PAP) and the Program Operation Manual (POM) and would cover aspects related to institutional staffing, grievance redressal mechanisms, measures to ensure safety at the workplace for women etc. In addition, monitoring and reporting of contractual obligations related to labour at worksites emerges as a critical gap. The measures to address this gap and strengthen institutional systems would be linked to disbursements and would be detailed in the PAD.

#### **4.1.3 Recommended PAPs on E&S**

- **Recommended PAP on Environmental Aspects:** Implement a robust subproject Environmental Management System to do facility audit, screen, prepare, implement Environmental Management Plans with Disaster Management Plans, monitor and report; with capacities, resources at National, State, H&Ss (HSICs)

13. Proposed System: Findings of the screening and facility audit (can be a unified checklist if there is confirmation that all infrastructure will be developed in existing campuses) shall be included in the design, EMP and EMoP and budget and responsibilities shall be allocated to ensure its implementation. The Program shall ensure the findings of the Facility Audit are implemented, so that overall learning environment is improved with direct correlation to ITI performance, skilling, and jobs. The Program must develop and follow a sustainable infrastructure design incorporating the end-to-

end approach for all program activities thus preventing pollution and safety risks, including compounded risks during climate hazards. The need to make Environmental Screening, Facility audit of existing Infrastructure and develop standard guidelines for design a part of SIP and preparation and use of EMP, EMoP, Bid documents and Contract agreements to ensure its implementation; and shall be made part of the Program Operations Manual. The Program shall support disaster preparedness, mitigation, and emergency response through adoption of good design and mitigation measures for climate risks integrated into EMPs. This shall apply to prior results as well and continued throughout the Program.

14. **Proposed Capacities:** It is recommended to ensure appropriate capacities for Environmental and Social Management at all levels (Environmental Management Unit at NPMU, SPMU, Hubs & Spokes), during preparation, Implementation, regular supervision and monitoring. Project Management and Supervision consultants shall also be mandated to identify environmental and social risks and hazards, train contractors and workers, and supervise all construction packages and report on EHS (half yearly) and incidents (within 48 hours). Safety First Cells constituted (through Office Order) at all levels shall eventually take up the responsibility of EHS management during Operation of ITIs. This shall continue even after the end of Program Activities and is part of Sustainability Plan to ensure continued oversight on EHS and to instill safety culture in ITIs. Program Mid and end term Environmental Audits to report on EHS aspects and its implementation in line with Environmental Guidance are also proposed.

15. Program Action Plan on the Environmental Aspects is presented in the following **Table 5:**

**Table 5: Recommended Program Action Plan (PAP) Environmental Aspects**

Action description	Source	Responsibility	Timing	Completion measurement
<ul style="list-style-type: none"> <li>Implement a robust subproject Environmental Management System to do facility audit, screen, prepare, implement Environmental Management Plans with Disaster Management Plans, monitor and report; with capacities, resources at National, State, H&amp;Ss (HSICs)</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Systems Assessment</li> </ul>	<ul style="list-style-type: none"> <li>MSDE, DGT, PMUs &amp; all IAs</li> </ul>	<ul style="list-style-type: none"> <li>Constitute before initiation of Activities including Prior results and continue throughout the Program</li> </ul>	<ul style="list-style-type: none"> <li>Safety-First Cells, Qualified Experts all levels</li> <li>Follow Environmental Guidance (with EHS Policy)</li> <li>Implement EMP with DMP, emergency response through design, climate risk mitigation</li> <li>ESSA compliance confirmed by Mid, End Term Environmental Audit</li> </ul>

#### **Recommended PAP on Social Aspects**

**Table 6: Recommended Program Action Plan (PAP) Social**

Action description	Source	DLI#	Responsibility	Timing	Completion measurement
Strengthen institutional capacities and	ESSA		DGT / PMU	<ul style="list-style-type: none"> <li>Within 3 months of project effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>Skilled social staff designated for program.</li> </ul>

Action description	Source	DLI#	Responsibility	Timing	Completion measurement
reporting on social risk management				<ul style="list-style-type: none"> <li>• Within 9 months of project Effectiveness</li> <li>• Within 9 months of project effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and adopt the screening and Social Management Plan for upgradation of ITIs and integrate in the bid documents.</li> <li>• Monitoring and reporting systems to track social outputs and outcomes are adopted.</li> </ul>
Develop and adopt ICT system for evidence-monitoring and reporting of labour welfare mechanisms as per contractual requirements for all civil works with budget and resource allocation.	ESSA		PMU	Within nine months of effectiveness	Digital platform using ICT tools for tracking and reporting contractual performance on real time basis developed and adopted by PMU and implemented by SPVs.
Establish systems for conducting and acting on beneficiary (trainees and Industries) feedback.	ESSA		DGT / State	Annual	Systems for citizen feedback established and operational. Feedback would be sought through beneficiary feedback surveys conducted in the first year (to establish baseline), at mid-term and end term of the program.
Strengthen systems on safety for women (students and teachers) at workplace	ESSA		State SPV	Within three months of effectiveness	Undertake mid-term and end term audit of the workplace safety. Strengthen the implementation of POSH Act including ICCs, awareness and training, and reporting.
Strengthen systems for monitoring and	ESSA		All IAs	Within three months of effectiveness	<ul style="list-style-type: none"> <li>• Establish SoP for strengthening GRM including consistent timebound resolution,</li> </ul>

Action description	Source	DLI#	Responsibility	Timing	Completion measurement
reporting on grievances					escalation and closure of grievances across the Program • Establish system for tracking, aggregating and reporting on grievances related to the program from all sources • Establish toll free number for grievances for the Program
Develop and adopt Human Resources Policy by all implementing partners for all employees, contracted and ad hoc staff.	ESSA		PMU	Within three months of effectiveness	• HR Policy developed and adopted by national PMU. To be implemented by state PMUs, NSTIs and SPVs • SPVs to develop their SoPs to operationalize HR Policy

#### 4.1.4 Climate Adaptation and Mitigation Measures

16. The construction standards in the country mainstream disaster-mitigation measures of civil construction, while they adopt National guidelines for capacities and mechanisms for preparedness and response. The program will support disaster preparedness, mitigation, and emergency response through adoption of good design and mitigation measures for climate risks integrated into EMPs.

17. The Program is also aligned with the National Action Plan on Climate Change, which acknowledges the role of education and training programs in preparing young people to take advantage of new employment opportunities arising from the shift to greener technologies. The Program will build adequate capacity at ITIs and NSTIs for the planning and implementation of skills training programs designed to develop the skills needed to support the transition toward green jobs. Specifically, the Program will support creation and revisions of courses that respond to growing climate change issues and green skills and include digitalization initiatives for disaster resilience and multidisciplinary programs that promote climate technologies and research.

18. The Program will incentivize the purchase of energy efficient machines and appurtenances and overall campus improvement including greening, sanitation and solid, hazardous and e-waste recycling and reuse in around 1000 ITIs and 5 NSTIs, leading to a progressive (medium-to-long term) reduction of GHG emissions. TRUE campus principles focusing on increasing green space and green belts will help mitigate heat island effects, increase rainfall infiltration, and contribute to carbon sequestration. Some of the geographical areas under the Program have a high exposure to climate change risks, particularly water scarcity, floods, and extreme heat. The Program's climate risk reduction measures would help ITIs to adapt to them. The Program will incentivize the adoption of



robust building designs by each HSIC, which includes preparation of campus development plans based on a Facility Audit to upgrade existing or construct new facilities to minimize climate risks, following the Green Building criteria, using durable materials resistant to extreme climatic conditions and incorporating bioclimatic design principles that optimizes the use of natural energy for heating, cooling, and lighting buildings can reduce building vulnerability. RA1 prioritizes the construction of ITIs based on assessment of climate vulnerability, and existing Facility Audit, energy efficiency in lighting and ventilation, identifying alternative water sources, promoting access to improved sanitation, and ensuring that the infrastructure is resilient to flooding and other disasters.

#### **4.1.5 Capacity Building for E&S Aspects**

##### ***Capacity Building***

19. *Training & Capacity building of all IAs and stakeholders on Environmental Aspects*
  - Audience: E&S units at all levels and departments, PMC, PCB, PWD other associated agencies
  - Topics: environmental management, regulatory environment for construction, campus management, managing wastes and wastewater, enhancing environmental effects through best practices, and risk management, MIS, etc; including screening, EMPs, natural habitats, cultural resources, wastes and pollution, OHS, CHS, safe practices during construction, and teaching – learning; Incident Reporting, RCA, CAP implementation, and emergency response
  - Type of training:
    - Dedicated expert sessions, Site visits, Peer-to Peer learning and knowledge sharing between program States, Hubs-Spokes, and between ongoing ITI programs in various States
    - Trainings to Contractors & workers during construction phase
    - Trainings to State & ITI leadership on sustainable management of assets
20. *Training of IA and contractors, consultants on Social Aspects would include:*
  - Audience: E&S units at all levels and departments, PMC, PCB, PWD other associated agencies
  - Topics: social inclusion, GRM, gender sensitization, SEA/SH, POSH Act compliance, labour laws compliance, KPIs and MIS reporting
  - Type of training:
    - Dedicated expert sessions, Site visits, Peer-to Peer learning and knowledge sharing between program States, Hubs-Spokes, and between ongoing ITI programs in various States
    - Trainings to Contractors & workers during construction phase
    - Trainings to State & ITI leadership on sustainable management of assets

#### **4.1.6 Monitoring and Reporting on Environmental and Social Aspects**

21. The PMU is responsible for preparing Progress Reports semi-annually, following the program's effectiveness. These reports should adhere to an agreed-upon format and can either be part of overall program progress reports or standalone documents. The purpose is to report its activities to the Program Director and subsequently to the Bank.
22. All necessary documents, data, and best practice notes must be provided regarding the implementation status of environmental and social management mechanisms for Implementation Support Missions, Mid Term Review (MTR) of Environmental and Social aspects (with a draft prepared before the MTR mission), and Implementation Completion. These reports/progress notes must detail

the status of environmental and social management capacities and systems at all levels, including contact details of Nodal Persons, training provided to staff, completed reporting formats and guidelines issued to agencies, documentation of EHS implementation and best practices (including photographs or short site videos), MIS, exclusions monitoring and management mechanisms, status, challenges, and actions required to achieve DLI, along with environmental and social inputs to PAP and other pertinent information.

23. **Indicators for Reporting on Environmental Aspects include** (1) Number, qualifications and Training received by Environmental Experts and EHS Experts at NPMU, SPMU, H&S ITIs, NSTIs, (2) No: of ITIs where works are happening, and status of works and EMP Implementation during Construction & equipment installation (Report on all items of EMP), (3) Compliance to Exclusions, (4) Key Good and Poor Practices of EMP implementation, (5) Incident Reporting and implementation of Corrective Action Plans (CAPs), (6) No: type and content of EHS Training for Instructors, and No: of instructors certified in International OHS Certifications (7) Implementation of activities of Safety Cell during ITI operations (Report on all aspects of Detailed Table on Safety-First Cell's activities).

24. **Indicators for Reporting on Social Aspects will include:** (i) Continued staffing of Social Experts at NPMU, SPMU, H&S, ITI and NSTI levels; (ii) Social screening reports for all civil works; (iii) Implementation of ESMP during civil works; (iv) Deployment of labour and compliance with applicable legislations for labour welfare and contractual management; (v) Status of citizen feedback surveys; (vi) Status of ICCs, trainings under POSH Act, status of annual reports for all implementing agencies at all levels - national, state, ITI, NSTI, H&S, and private partners; (vii) Status of women's safety audit; (viii) Status of Grievance Redressal Mechanism and grievances received from all channels (viii) Communication, stakeholder engagement and outreach activities; (ix) Course content and training on social sustainability.

#### **4.1.7 ESSA inputs to Implementation Support Plan**

25. The Bank's implementation support will focus on building the environmental management at all levels. This would include the following:

- (a) Review of ToRs for hiring / designating appropriate Environmental and Social Experts as specified in the ESSA
- (b) Review and Guidance on Environmental and Social Guidance included as part of the Program Operations Manual
- (c) Review of updated sample ToRs / Bid docs for Construction works
- (d) In coordination with Program agencies, provide guidance and training to implementing agencies on exclusions, screening, facility audit etc. and to enhance their capacity and effectiveness on Environmental and Social Management. This will include the following (till capacities are developed at IAs):
  - Review of 'Exclusion' of high-risk activities from the P for R and Screening (compiled Table)
  - Review of Generic EMPs prepared for various moderate risk activities
  - Review of Updated EMPs (based on screening, audit) as required for substantial risk activities
  - Guidance on developing an institutional structure/plan for more effectively discharging environment and social management-related functions at various levels and reporting/coordinating at the National, State, Consortium and ITI levels
  - Guidance on Developing environmental and social capacity building plan and training calendar
  - Guidance on monitoring of labour laws compliance
- (e) Support to the PMUs and IAs in orientation and training on Environment and Social Management and OHS of:
  - Newly appointed project E&S staff
  - Departmental staff (engineering as well as others)

- Contractors (senior management), Subcontractors, Vendors
- Contractors (site supervisors and other site staff), workers
- (f) Guidance for Preparation of modules on environmental improvement (water, sanitation, SWM, greening, Health & Safety)
- (g) Guidance for preparation of modules on social sustainability, inclusion, gender sensitization and other applicable laws.
- (h) Review of study and updated Curricula and teaching learning material with focus on Health & Safety and social sustainability
- (i) Review of tendering and contracting procedures and standard Bid documents with Environmental and social aspects included
- (j) Provide guidance on environmental and social monitoring, record keeping, and responding to emerging issues as and when required
- (k) Guiding the implementing agencies in periodically reviewing the environmental and social performance of the project and preparing progress reports
- (l) Review of the ToRs for third-party environmental audits and guidance on audits
- (m) Guidance on best practices for environmental and social enhancement and follow-up / ensuring its implementation in all activities
- (n) Review of Incident RCA and CAP and guidance on its implementation

## 5 CONSULTATION AND DISCLOSURE

### 5.1 Disclosure

26. This is the ESSA for the Skills: National ITI Upgradation Program, the draft of was disclosed in March 21, 2025 (along with its executive summary translated to local language Hindi to enable its wider reading before consultations) in-country preferably in MSDE and State websites (see: <https://-----pdf>) and on the World Bank's external website, for stakeholder's review (government officials, ITIs, local bodies, industry associations, non-governmental organizations, civil society organizations, teachers, parents, students, communities and other relevant stakeholders), discussions, and formal comments. Stakeholder workshops to disseminate the findings of the assessment and the proposed inputs to the program actions took place during March 2025 with national agencies, ITIs, NGOs / CSOs, communities, and other stakeholders. The final ESSA will be disclosed in-country and on the World Bank's external website before closing of appraisal after incorporating comments and suggestions.

### 5.2 Stakeholder Consultations on ESSA

27. Stakeholder consultations were an integral part of the ESSA process and were carried out consistent with applicable World Bank principles. Visits of the Essa preparation team to Sample Central level organizations, State & ITI discussions started in November 2025 during the identification mission, and detailed consultations and visits started as early as December 2025, through January 2025. Consultations were carried out with relevant institutions and government departments/agencies, experts, and beneficiaries, host and beneficiary communities, and workers for identification and assessment of environmental and social effects, and to recommend measures to improve environmental and social management capacity based on their comments and suggestions. The list of consultations and compilation of issues and comments discussed are presented in **Annexure V**.

28. During the consultations, the stakeholders provided inputs on the institutional arrangement for the proposed program, management of environmental and social aspects including implementation of works, Institutional Arrangement and Involvement of communities, Guidance, Training, Purchase of materials, Natural Habitats, and heritage near work areas, Pollution and Wastes, Land related aspects, OHS, and CHS, Monitoring, design, Greening, Complaint Redressal, and Disaster management. In addition, inputs for overall improvement of ITI infrastructure and teaching learning outcomes (including on Health and Safety) were provided. Inputs from the stakeholders are compiled in **Annexure V**.

29. The summary of findings from the stakeholder consultations are as follows:

#### **Social**

- There are no dedicated personnel for social risk management at any level. There is no institutional focus on managing social aspects of the program.
- Various parallel Grievance Redressal Mechanisms are operational. However, in practice there is poor information and knowledge about these GRMs, inconsistent service standards and negligible reporting.
- Implementation of the POSH Act is limited to constitution of ICCs on paper. Awareness is low and the ICCs are not fully active as per the legal requirements.
- There is a lack of a consistent Communication and Stakeholder Engagement Strategy.
- While there are legal provisions for inclusion of vulnerable groups like women, SCs, STs and Persons with Disabilities, their enrollment remains low. Structural and systemic barriers inhibit their effective inclusion.
- There are severe staffing and capacity constraints on the side of trainers at most ITIs visited. Trainers face *ad hoc* and temporary job prospects particularly as consultants.
- There are no monitoring mechanisms for labour law compliance during civil works.

## **Environment**

- Institutional Arrangements – Various national, state agencies in the Program need much support in planning, designing, implementing EHS. There shall be clear responsibilities and time allocation for designated officers and hired officers and they need training/capacity building. In addition, as and when required, experts on Biodiversity, Pollution management and Cultural Heritage may need to be arranged and trained.
- Overall Program - Overall, the existing program and the Proposed one are very beneficial to the skilling environment and ITI infrastructure. ITIs lack the resources and capacity to plan these. Industry collaboration is very important.
- Guidance, Training - All agencies and contractors need required training for environmental management. Though there are regulations, however, officials at various levels are not fully aware of their contents or requirements.
- Water Availability and Quality - Water availability is a very important aspect in ITIs especially. Recycling and reuse of treated water is important.
- Wastes - ITIs produce different types of wastes. However, usually, these are seen piled up in the facility or on nearby roads. This needs proper management; else this creates a menace during floods and contributes to poor housekeeping in the campus. A key component of wastes from works in old ITIs are hazardous Asbestos, that need proper management and awareness to workers and supervisors.
- Safety from Pandemics - It will be good to prevent impacts of pandemics by adopting precautionary measures, especially in worker camps.
- OHS - OHS & CHS is very important, especially during ITI work hours. Mostly the contractor's subcontract works to small contractors and hires labor (also migrants) from manpower vendors. They do not have systems to manage or train workers and OHS. This is important for the works of nature proposed here.
- Monitoring - Monitoring of works is very important, and it should be regular and results accessible to all.
- Design - Due diligence in design is very important. Currently, the works happen without much alignment with the proposed designs. It is important for pollution management, long-term sustainability, and OHS in Workshops.
- Greening - Greening and energy efficiency measures are important for all infrastructure.
- Disaster management - Designs shall consider the impacts of Floods, winds, Drought, Cyclones, Monsoons, Winds, and others and manmade disasters such as Fire.
- ITI teaching – learning environment shall be healthy and safe, supervised by OHS trained and certified instructors.

30. **Annexure VI** provides a detailed list of questionnaires/probe areas utilized for consultations. The consultation inquiries included the issues related to the capacity of related agencies, and community representatives to address these challenges, concerns, and risks.

31. Discussions and feedback from these consultations have helped in the preparation of the ESSA report and finalization of recommendations/actions for the Program Action Plan. This includes a National -level consultation which would be held in March 2025, with participants from a wide spectrum, including civil society representatives to provide feedback on the Program design and the recommendations made by ESSA.

32. The draft ESSA report would be revised considering suggestions from Bank's internal system as well as feedback from government officials, non-governmental organizations, civil society organizations, and other interested stakeholders and redisclosed in line with the Bank's requirements.

# **A N N E X U R E S**

## **ANNEXURE I: Environmental and Social Management System Assessment**

### **Environmental Management System**

**Existing System:** This section describes the environmental management system of the proposed program and is organized as per the following sections. Availability of specific frameworks for environmental management:

**Policy and Legal Framework:** This section provides an overview of the relevant environment and education sector laws, policies, regulations, procedures, and guidelines at the national and state levels. Below is a review of selected policies, laws, and regulations relevant to environmental management under the Program.

#### *Relevant Environmental Sector Laws*

##### *National & State level Regulations*

Applicable National and State regulations guide effective management of environmental and social aspects; including siting criteria, environmental pollution control requirements, institutional mechanisms, occupational health and safety requirements, resource utilization, considerations for cultural heritage, and social aspects as well as land acquisition, labor and working conditions, livelihoods, consultations, and information disclosure. A compilation of the key environmental and social regulations and guidelines applicable to various aspects under consideration in this project is presented here. There are several national/state-level regulations and policies potentially applicable to the Program. Following section details out these.

*The Constitution of India:* Article 48-A of the Constitution of India lays down a directive principle noting that the state shall endeavor to protect and improve the natural environment. Article 51-A of the Constitution declares it a fundamental duty of every citizen of India to protect and improve the natural environment and to have compassion for living creatures. The right to live in a healthy environment has been considered as a part of the fundamental right to life under Article 21 of the Constitution.

The need for protection and conservation of the environment and sustainable use of natural resources is reflected in the constitutional framework of India and the international commitments of India. The Constitution under Part IVA (Art 51A-Fundamental Duties) casts a duty on every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife, and to have compassion for living creatures. Further, the Constitution of India under Part IV (Art 48A-Directive Principles of State Policies) stipulates that the State shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country.

After the Stockholm Conference, the National Council for Environmental Policy and Planning was set up in 1972 within the Department of Science and Technology to establish a regulatory body to look after environment-related issues. This Council later evolved into a full-fledged Ministry of Environment and Forests recently renamed as Ministry of Environment, Forests and Climate Change (MoEFCC).

MoEFCC was established in 1985, and today is the apex administrative body in the country for regulating and ensuring environmental protection, and lays down the legal and regulatory framework for the same. Since the 1970s, several environmental legislations have been put in place. Today, MoEFCC and the Central and State Pollution Control Boards (CPCB and SPCBs) together form the regulatory bodies; while National Green Tribunal is tasked with providing an effective and expeditious remedy in cases relating to environmental protection, conservation of forests, and other natural resources, and enforcement of any legal right relating to the environment. Some of the important legislations at the national level for environmental protection are as follows:

*National Environment Policy of India:* This policy aims at mainstreaming environmental concerns into all developmental activities. The objectives of the policy include the conservation of critical environmental resources, integration of environmental concerns in economic and social development, efficiency in environmental resource use, etc. The policy outlines a range of strategies that aim at the conservation of existing environmental resources through regulatory reforms; emphasis on education, information, capacity building; inter-sectoral collaboration; etc.

#### Act/Rule/ Guidelines

#### Regulations/Policies related to Environmental Conservation & Management

- National Environment Policy, 2006
- The Environment Protection (Act) 1986 and The Environmental Protection Rules 1986
- Environmental Impact Assessment Notification, 2006
- The Water (Prevention and Control of Pollution) Act, 1974 and The Water Cess Act 1977
- The Air (Prevention and Control of Pollution) Act. 1981
- The Noise Pollution (Regulation and Control) Rule, 2000
- The Wildlife Protection Act, 1972
- The Wetlands (Conservation and Management) Rules, 2017
- The Biodiversity Act of India, 2002
- The Manufacture, Storage And Import Of Hazardous Chemical Rules, 1989
- Batteries (Management and Handling) Rules, 2001
- The Motor Vehicle Act, 1988 & Motor Vehicles Rules, 1989
- Coastal Regulation Zone Notification, 2019
- Regulations Related to Waste Management
- Solid Waste Management Rules, 2016
- Construction and Demolition (C&D) Waste Management Rules, 2016
- Plastic Waste Management Rules, 2016, amended 2018
- Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, amended 2019
- E-Waste Management Rule, 2016, amended 2018
- Bio-Medical Waste Management Rules, 2016 And Their Subsequent Amendments
- The Regulation of Persistent Organic Pollutant Rules, 2018
- The Regulation of Polychlorinated Biphenyls Order, 2016
- The Recycling of Ships Act, 2019

#### Pesticides/Insecticide-related Regulations:

- Insecticide Act 1968 and Rules 1971
- Draft Bill on Pesticide Management, 2020 introduced in Rajya Sabha in March 2020

Other Regulations/Policies/Guidelines applicable to various construction/implementation activities



- Central Ground Water Authority- 'Guidelines to control and regulate groundwater extraction in India' September 2020
- The Building & Other Construction Workers (Regulation of Employment & Conditions of Service) BOCW Act, 1996
- Child Labour (Prohibition and Regulation) Act, 1986 and Rules, amended 2016 and
- Child Labour (Prohibition and Regulation) Amendment Rules, 2017
- Minimum Wages Act, 1948
- The Bonded Labor System (Abolition) Act 1976
- Workmen's Compensation Act, 1923 & Rules 1924
- Interstate Migrant Workmen Act 1979
- Ancient Monuments and Archaeological Sites & Remains (Amendment and Validation) Act 2010
- Indian Treasure Trove Act, 1878
- Right to Information Act, 2005
- Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act 1989 and further Amendments 2018.
- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013
- The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013

These important environmental legislations have been briefly explained here with a description of their relevance in this project, availability of technical guidelines for its implementation, and institutional responsibility.

### ***Technical Guidelines***

ITIs being educational institutions where construction works and improved operations are proposed, the activities during construction and O&M and teaching learning shall also adhere to various available guidance; mainly those on water, sanitation and SWM issued by the Central Government agencies. The most important guidance applicable to this project is listed herewith a description of the guidelines presented.

Central Public Health and Environmental Engineering Organisation (CPHEEO), Ministry of Urban Development (MoUD)

- Manual on Sewerage and Sewage Treatment Systems, 2013
- Manual on Storm Water Drainage Systems, 2019
- Manual on Operation and Maintenance of Water Supply System, 2005
- Manual on Solid Waste Management (applicable to screenings, sludge, grit, and other wastes from premises)
- Manual on Municipal Solid Waste Management – 2000
- Manual on Water Supply and Treatment -1999

Guidelines and Advisories

- Guidelines for Decentralized Wastewater Management
- Standard Operating Procedure (SOP) for Cleaning of Sewers and Septic Tanks
- Advisory note on Septage Management in Urban India
- National Policy on Faecal Sludge and Septage Management

- Advisory on Public and Community Toilets
- Advisory on Tariff for Water supply and Sewerage
- Recent Trends in Technologies in Sewerage System.

#### Central Pollution Control Board

- Guidelines for Management of Sanitary Waste, 2018
- Guidelines on Environmental Management of Construction & Demolition (C & D) Wastes
- Guidelines for management of health care waste as per BMW management Rules, 2016

### State-Level Regulations

Key State-level regulations applicable to the program include the following. Specific regulations applicable to Program activities shall be updated and discussed in EIAs. A detailed description of these regulations is presented here.

The following **Table 8** discusses the Environmental Rules and Regulations and their applicability to Program Operations

**Table 7: Applicable Environmental Policies, Rules, and Regulations at the National & State Level**

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
The National Building Code of India, 2016 (NBC, 2016)	NBC is the primary document that governs the standards practices related to building construction in India. It provides guidelines for various aspects of construction, such as design, safety, and material use such as: Guidelines on fire prevention, fire escape routes, fire-resistant materials, and fire protection systems like sprinklers and alarms; Standards for building layout, accessibility, and ventilation, ensuring compliance with standards for various types of buildings (residential, commercial, industrial); Rules governing the installation of water systems, drainage, and waste management, Electric Safety, Plumbing & Sanitation etc. <i>All State Building byelaws takes into account the suggestions of NBC. All bye laws &amp; guidelines of NBC shall be followed,</i>	Project Proponent to follow. To be included in Bye-laws and ensured by LB
<b>Regulations/ Policies related to Environmental Conservation &amp; Management</b>		
National Environment Policy, 2006	The National Environment Policy by the MoEFCC aims at mainstreaming environmental concerns into all developmental activities. It emphasizes the conservation of resources and points out that the best way to aid conservation is to ensure that people dependent on resources obtain better livelihoods from conservation than from degradation of the resources. It argues that environmental degradation often leads to poverty and poor health outcomes among populations. The objectives of the National Environmental Policy are- <ul style="list-style-type: none"> <li>• Conservation of Critical Environmental Resources</li> <li>• Intra-generational Equity: Livelihood Security for the Poor</li> <li>• Inter-generational Equity: ensure judicious use of environmental resources</li> <li>• Integration of Environmental Concerns in Economic and Social Development</li> <li>• Efficiency in Environmental Resource Use</li> <li>• Environmental Governance</li> <li>• Enhancement of Resources for Environmental Conservation</li> </ul>	MoEFCC
The Environment Protection (Act) 1986 and The	The Environment (Protection) Act was enacted in 1986 to provide for the protection and improvement of the environment. It empowers the Central Government to establish authorities [under section 3(3)] charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country. The Act was last amended in 1991. This act was passed as an overall comprehensive act “for protection and improvement of environment”. Under this act, rules	MoEFCC, State Department of

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
Environmental Protection Rules	<p>have been specified for the discharge/ emission of effluents and different standards for environmental quality. These include Ambient Noise Standards, Emission from Motor Vehicles, Mass Emission Standard for Petrol Driven Vehicles, General Effluent Standards, etc. in the exercise of the powers conferred under the Act, the following rules are devised</p> <ul style="list-style-type: none"> <li>• The Water (Prevention and Control of Pollution) Act, 1974 and Water Cess Act, 1977</li> <li>• The Air (Prevention and Control of Pollution) Act, 1981</li> <li>• The Noise Pollution (Regulation and Control) Rules, 2000</li> <li>• Environment Protection (EP) Act, 1986</li> <li>• National Green Tribunal Act, 2010</li> <li>• Waste Management Rules under EP Act including <ul style="list-style-type: none"> <li>○ Solid Waste Management Rules, 2016</li> <li>○ Construction and Demolition Waste Management Rules, 2016.</li> <li>○ Hazardous Waste (Management, Handling &amp; Transboundary Movement) Rules, 2016, amended 2019</li> <li>○ E-Waste (Management) Rules, 2016, amended 2018</li> <li>○ Bio-medical Waste Management Rules, 2016, amended 2019</li> <li>○ Plastic Waste Management (Amendment) Rules, 2018</li> <li>○ Batteries (Management and Handling) Amendment Rules, 2010</li> </ul> </li> </ul> <p><i>This umbrella Act brings in capacities at the Central and State levels to monitor and regulate environmental performance. It also laid the foundation for sector/ sub-sector-specific Rules and guidelines applicable to all States</i></p>	Environment & Forest CPCB, SPCB
Environmental Impact Assessment Notification, 2006	<p>EIA notification 2006 and its subsequent amendments list out the type of project that requires Environmental Impact Assessment and Environmental Clearance from MoEFCC or State Environment Impact Assessment Authority before the commencement of any developmental work or project expansion. The notification gives stage-wise guidance for the processing of Environmental Clearance. The objective of the notification is to formulate a transparent, decentralized, and efficient regulatory mechanism to:</p> <ul style="list-style-type: none"> <li>• Incorporate necessary environmental considerations at the planning stage</li> <li>• Involve stakeholders through the public hearing process</li> <li>• Identify developmental projects based on impact potential</li> <li>• Securing provision for mitigation efforts</li> </ul> <p>Educational institutions may need to comply with this notification under the following circumstances: New Construction or Expansion Projects: If an educational institution plans to construct new buildings or expand an existing campus, especially in ecologically sensitive areas (e.g., near forests, wetlands, or coastal areas), an Environmental Impact Assessment may be required. Research and Development Projects: Some research activities, particularly those involving the use of hazardous materials, laboratories with chemicals or biological waste, or large-scale environmental impacts (e.g., construction of research facilities), may require an EIA. Infrastructure Projects: Educational institutions that are involved in major infrastructure projects, such as setting up large-scale hostels, sports complexes, or other amenities, may need to go through the EIA process if the project could impact the environment. Environmental Clearance is to be received before Area Development of more than 1.5 Hectares, and Building Construction Projects of more than 20000 sqm (Cat B),</p>	SEIAA/ MoEFCC
The Water (Prevention and Control of Pollution) Act, 1974 and The Water Cess Act 1977	The Act is enacted to prevent pollution of water sources through industrial or any other construction activity and for maintaining or restoring of wholesomeness of water. The Act prohibits the discharge of pollutants into water bodies beyond a given standard and lays down penalties for non-compliance with its provisions.	CPCB, SPCB, LBs

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
	<p>The act resulted in the establishment of the Central and State Level Pollution Control Boards whose responsibilities include managing water quality and effluent standards, as well as monitoring water quality, prosecuting offenders, and issuing licenses for construction and operation of any facility. This will include the generation of liquid effluent during construction/ civil engineering activities or from domestic activities in workers' colonies. Water (Prevention and Control of Pollution) Cess Act was enacted in 1977, to provide for the levy and collection of a cess on water consumed by persons operating and carrying on certain types of industrial activities. This cess is collected to augment the resources of the Central Board and the State Boards for the prevention and control of water pollution constituted under the Water (Prevention and Control of Pollution) Act, 1974. The Act was last amended in 2003.</p> <p><i>Prior CTE and CTO are applicable to establish STPs if any in ITI premises. Consent to Establish &amp; Operate/ Authorization shall be obtained, before Establishing and commissioning the subprojects eligible for this under the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, and the relevant Rules under Environment (Protection) Act 1986.</i></p> <p><i>Effluent and stormwater analysis reports and flow details (once a week) and Water consumption returns (Monthly) shall be furnished to the District office of the State PCB.</i></p>	
The Air (Prevention and Control of Pollution) Act. 1981	<p>The purpose of this act is to prevent, and control air pollution and preserve air quality. This act empowers Central and State Pollution Control Boards for managing air quality and emission standards, as well as monitoring air quality, prosecuting offenders, and issuing licenses for construction and operation of any facility. Air quality includes noise levels also. This act has notified the National Ambient Air Quality Standard for different land uses.</p> <p><i>Prior CTE and CTO are applicable to establish STPs if required in ITIs under the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, and the relevant Rules under the Environment (Protection) Act 1986. DG sets, Batching Plants etc also would need Consent from PCB. Emission analysis report and flow measurement (monthly) shall be submitted to the District office of SPCBs.</i></p>	CPCB, SPCB
The Noise Pollution (Regulation and Control) Rule, 2000	<p>The Noise Pollution (Regulation and Control) rules are promulgated under the Environmental (Protection) Act, 1986. The noise pollution rules lay down terms and conditions as are necessary to reduce noise pollution, including during night hours. The rule provides ambient noise level standards for various types of land uses. PCB can take action if the sound level exceeds the standards by 10 dBA. Noise standard for different zones.</p> <ul style="list-style-type: none"> <li>- Industrial zone- 75 &amp; 70 dBA Leq during daytime and night-time respectively</li> <li>- Commercial zone- 65 &amp; 55 dBA Leq during daytime &amp; night-time respectively</li> <li>- Residential zone- 55 &amp; 45 dBA Leq during daytime and night-time respectively</li> <li>- Silence zone 50 &amp; 40 dBA Leq during daytime and night-time respectively</li> </ul> <p><i>Construction vehicle/ equipment, construction and operation activities/works should comply with the standards as stipulated in the rule.</i></p>	CPCB, SPCB
The Wildlife Protection Act, 1972	<p>The Wildlife Protection Act, 1972 has allowed the government to establish several Protected Areas like National Parks and Sanctuaries over the past 37 years, to protect and conserve the flora and fauna and their habitat.</p> <p><i>Prior recommendation of the National Board for Wildlife (NBWL) will be required</i></p> <ul style="list-style-type: none"> <li>• <i>in case any subproject activity is proposed within the boundaries of a Protected area</i></li> <li>• <i>in case any project requiring Environmental Clearance (under the purview of EIA Notification 2006 and its subsequent amendments) is located within the eco-sensitive zone around a Wildlife Sanctuary or National Park or in the absence of delineation of such a zone, within a distance of 10 km from its boundaries</i></li> </ul>	NBWL, SBWL

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
	<i>There may be many sensitive/ protected areas in different States, and siting shall take care of existing regulations.</i>	
National Urban Sanitation Policy, 2008	Prioritizes state-wide sanitation strategies and city sanitation plans (CSP) with a focus on service-level benchmarking. The policy envisages a city sanitation task force. Provision for septage management exists but is not part of service-level benchmarking.	
Advisory Note on Septage Management, 2013 & National Urban Faecal Sludge and Septage Management Policy, 2017	Development of a septage management sub-plan as part of CSP. Recognition of fecal sludge and septage management as a sanitation solution. Recommends septage management as an essential component for citywide sanitation. Focused on areas with no sewers, emphasis on the need for onsite and offsite sanitation systems to exist in tandem.  Important for Upgradation or Operation of Sanitation Facilities & Buildings – sewage treatment plans, septic tanks etc.	
The Wetlands (Conservation and Management) Rules, 2017	Wetlands (Conservation and Management) Rules, 2017 are promulgated under the Environmental (Protection) Act, 1986 for prohibiting reclamation and degradation through drainage and landfill, pollution (discharge of domestic and industrial effluents, disposal of solid wastes), hydrological alteration (water withdrawal and changes in inflow and outflow), over-exploitation of their natural resources resulting in loss of biodiversity and disruption in ecosystem services provided by wetlands by conservation of wetlands. As defined in the rule, 'wetland' means an area of marsh, fen, peatland, or water; whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish, or salt, including areas of marine water the depth of which at low tide does not exceed six meters, but does not include river channels, paddy fields, human-made water bodies/ tanks specifically constructed for drinking water purposes and structures specifically constructed for aquaculture, salt production, recreation, and irrigation purposes. Whereas, 'wetlands complexes' means two or more ecologically and hydrologically contiguous wetlands and may include their connecting channels/ ducts <i>The rules shall apply to the wetlands or wetlands complexes of the following types-</i> <i>(a) wetlands categorized as 'wetlands of international importance under the Ramsar Convention</i> <i>(b) wetlands as notified by the Central Government, State Government, and Union Territory Administration</i> <b>Section 4</b> of the rule elaborates on Restrictions of activities in wetlands which include handling or storage or disposal of construction and demolition waste covered under the Construction and Demolition Waste Management Rules, 2016; hazardous substances covered under the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 or the Rules for the Manufacture, Use, Import, Export, and Storage of Hazardous Microorganisms/ Genetically Engineered Organisms or Cells, 1989 or the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008; Solid waste dumping; Discharge of untreated wastes and effluents from industries, cities, towns, villages and other human settlements; and any construction of a permanent nature.  <i>Since all activities will be implemented in the various States, there may be the presence of wetlands, this may be applicable; esp. construction, disposal of treated sewage, sludge, wastes, C&amp;D wastes, SW etc</i>	State Department of Environment
<b>Regulations Related to Waste Management</b>		
Solid Waste Management Rules, 2016	The Rules shall apply to every urban local body, other areas, and to every domestic, institutional, commercial, and any other non-residential solid waste generator except industrial waste, hazardous waste, hazardous chemicals, biomedical wastes, e-waste, lead-acid batteries, and radioactive waste. The rules define the duties of solid waste generators. The rules outline the responsibilities of line ministries, ULB's and other stakeholders, and the duty of the operator of the Solid Waste Processing and Treatment Facility.	MoEFCC, Waste Generators, CPCB, SPCB, various stakeholders at the state/ local level, etc., LBs

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
	<i>Labor camps, wastewater, WTP units, and all Program activities shall follow SWM Rules 2016. All capacity building/ training activities shall ensure management for bio waste, and packaging waste. General SW from ITIs shall be channelized to the Local Body's SWM system. Mechanisms to segregate at source, store, collect, transport, treat biowaste and garden waste at source and dispose rejects and inerts through local body's SWM system shall be built into the campus planning.</i>	
Construction and Demolition Waste Management Rules, 2016	<p>Construction and demolition waste include waste comprising of building materials, debris, and rubble resulting from the construction, remodelling, repair, and demolition of any civil structure.</p> <p>As per rule-</p> <ol style="list-style-type: none"> <li>1. Every waste generator shall prima-facie be responsible for the collection, segregation of concrete, soil, and others and storage of construction and demolition waste generated, as directed or notified by the concerned local authority in consonance with these rules ((Rule 4 sub-rule (1))</li> <li>2. there should be no littering or deposition of construction and demolition waste to prevent obstruction to the traffic or the public or drains (Rule 4 sub-rule (4))</li> </ol> <p><i>All construction activities under the subprojects shall follow the C&amp;D waste management rules. As much as possible materias shall be recycled &amp; reused</i></p>	MoEFCC, C&D Waste Generators, CPCB, SPCB, various stakeholders at state/ local level, LBs
Plastic Waste Management Rules, 2016, amended 2018	<p>MoEFCC issued the Plastic Waste Management Rules, 2016 to give thrust on plastic waste minimization, source segregation, recycling, and disposal effectively.</p> <p>These rules shall apply to every waste generator, local body, Gram Panchayat, manufacturer, Importers, and producer. Section 6 and Section 8 of the rule explain the Responsibility of the Local Body and the Responsibility of the waste generator respectively.</p> <p><i>All activities under the subprojects &amp; capacity-building activities shall follow the Plastic waste management rules. Waste plastics from Program agencies &amp; supported facilities shall be channelized to the SWM system.</i></p>	MoEFCC, Waste Generators, producers, CPCB, SPCB, LB
Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, amended 2019	<p>The rule dictates the entity generating hazardous wastes (as defined in the rule), to take all practical steps to ensure that such wastes are properly handled without any adverse effects, which may result from such wastes. It stipulates proper collection, reception, treatment, storage, and disposal of such wastes and provides for the process/ mechanism to do so. Waste generators will need to obtain permission from the State Pollution Control Boards and other designated authorities for the storage and handling of any hazardous material.</p> <p><b>Schedule I</b> of the rule lists processes that generate hazardous wastes.</p> <p><b>Schedule II</b> of the rule provides a list of waste constituents with concentration limits</p> <p>Chapter 2 Section 4 states</p> <p><i>(3) The hazardous and other wastes generated in the establishment of an occupier shall be sent or sold to an authorized actual user or shall be disposed of in an authorized disposal facility. This also applies to the use and management of asbestos and silica and other hazardous materials under the Program, and all chemicals/ fuel used must be checked for quantity to be stored on site; and permissions taken from competent authority. Mitigation and management measures shall be devised</i></p>	MoEFCC, CPCB, SPCB, State Government/ Administration, LB
E-Waste Management Rule 2016, amended 2018	<p>These rules shall apply to every manufacturer, producer, consumer, bulk consumer, collection center, dealer, e-retailer, refurbisher, dismantler, and recycler involved in the manufacture, sale, transfer, purchase, collection, storage, and processing of e-waste or electrical and electronic equipment listed in Schedule I of the rule, including their components, consumables, parts, and spares which make the product operational. These rules are applicable</p>	MoEFCC, CPCB, SPCB, ULB

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
	<p>Two categories of electrical and electronic equipment namely (i) IT and Telecommunication Equipment and (ii.) Consumer Electricals and Electronics such as TVs, Washing Machines, Refrigerators Air Conditioners including fluorescent and other mercury-containing lamps are covered under these Rules</p> <p><b>Section 5</b> of the rule defines the responsibilities of the producer of e-waste.</p> <p><i>This applies to any E-Wastes generated as part of equipment installation, end-of life disposal, capacity building activities or general upgradation/ construction of facilities, including electric/ electronic appurtenances, bulbs, switches, wires, etc. Storage facility for safe storage of all waste shall be an integral part of new upgraded buildings. Mechanisms to maintain stock register for wastes and timely auction are important to ensure safety.</i></p>	
Bio-medical Waste Management Rules, 2016, amended 2019	<p>To improve the collection, segregation, processing, treatment, and disposal of these bio-medical wastes in environmentally sound management thereby, reducing biomedical waste generation and its impact on the environment.</p> <p>These rules shall apply to all persons who generate, collect, receive, store, transport, treat, dispose, or handle biomedical waste in any form including hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories, blood banks, Ayush hospitals, clinical establishments, research or educational institutions, health camps, medical or surgical camps, vaccination camps, blood donation camps, first aid rooms, forensic laboratories, and research labs.</p> <p><b>Schedule I</b> provides guidelines for storage and disposal of various types of biomedical waste (including Liquid Waste)</p> <p><b>Schedule II</b> defines Standards for Treatment and Disposal of Bio-Medical Waste i.e. incinerators, Plasma Pyrolysis or Gasification, Autoclaving, microwaving, deep burial, etc.</p> <p><b>Schedule III</b> of the rule defines the responsibilities of Municipalities or Corporations, Urban Local Bodies, and Gram Panchayats along with other line ministries and concerned entities.</p> <p><i>This Program may not deal with Biomedical waste except marginal quantities which might be emerging from First Aid facilities during construction and Operations. There shall be proper segregation, collection, and channelization of such waste to nearby authorized BWM facility through Local Body.</i></p>	MoEFCC, Waste Generators CPCB, SPCB, LB
Batteries (Management and Handling) Rules, 2001	<p>MoEFCC under the provisions of the Environmental Protection Act, 1986 issued the Batteries (Management and Handling) Rules, 2001. The rules were enacted with the primary objective of ensuring the safe disposal of discarded lead-acid batteries. Rules mandate proper control and record-keeping on the sale or import of lead-acid batteries and recollection of the used batteries by registered recyclers to ensure environmentally sound recycling of used batteries.</p> <p><i>All activities having applicability of batteries, shall have in their plan measures stipulated to prevent the batteries from reaching the municipal stream. Here batteries management may be important from Workshops and Construction activities</i></p>	MoEFCC, CPCB, SPCB, LBs
The Motor Vehicle Act, 1988 & Motor Vehicles Rules, 1989	<p>The Act regulates all aspects of road transport vehicles. It provides in detail the legislative provisions regarding licensing of drivers/ conductors, registration of motor vehicles, control of motor vehicles through permits, traffic regulation, insurance, liability, offenses, and penalties, etc.</p> <p><i>This act will be applicable to all construction equipment/ plant and machinery including vehicles deployed during implementation. Motor Vehicles Rules, 1989 mandates Pollution Under Control (PUC) certificate for motor vehicles and valid licenses for eligible drivers.</i></p>	CPCB, SPCB, State Motor Vehicles Department, LBs
<b>Chemicals, Pesticides/ Insecticide related Regulations:</b>		

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 (MSIHC Rules, 1989)	These rules aim at providing control for the generation, storage and Import of hazardous chemicals. According to these rules, the user of hazardous chemicals has to follow procedures as stipulated in the rules to prevent and control hazards from such chemicals and to ensure safety and permission has to be obtained from the authority concerned for such activity. The list of chemicals and threshold limits of handling falling under the purview of these rules is provided in the schedule to the rules. <i>Hazardous chemicals if any stored/used for the Program (such as commonly seen Asbestos, Diesel, Lead) attracts the provisions.</i>	CPCB, SPCB
Insecticide Act 1968 and Rules 1971	The Insecticides Act, 1968 and Insecticides Rules, 1971 regulate the import, registration process, manufacture, sale, transport, distribution, and use of insecticides (pesticides) to prevent risk to human beings or animals and for all connected matters, throughout India. All insecticides (pesticides) have to necessarily undergo the registration process with the Central Insecticides Board & Registration Committee (CIB & RC) before they can be made available for use or sale. The Act also has guidelines stipulated for the protective clothing of persons handling insecticides. Disposal of used packages, surplus material, and washing of insecticides are also included in the Act. <i>This act will be applicable for the greening activities. No banned pesticides shall be purchased or used under the Program.</i>	Central Insecticides Board and Registration Committees (CIB & RC), LBs
Draft Bill on Pesticide management, 2020 introduced in Rajya Sabha in March 2020	The purpose of the bill is to minimize risk to human beings, animals, living organisms other than pests and the environment, with an endeavor to promote pesticides that are biological and based on traditional knowledge. The bill on Pesticide management seeks to regulate the manufacture, import, sale, storage, distribution, use, and disposal of pesticides, to ensure the availability of safe pesticides and minimize the risk to humans, animals, and the environment. The Bill seeks to replace the Insecticides Act, 1968	LBs, Ministry of Agriculture and Family Welfare.
<b>Other Regulations/ Policies/ Guidelines applicable to various construction/ implementation activities</b>		
Central Ground Water Authority- 'Guidelines to control and regulate groundwater extraction in India' September 2020	Central Ground Water Authority (CGWA), constituted by the Government of India under Section 3 (3) of the Environment (Protection) Act (EPA) of 1986, in pursuance of the Order of the Hon <sup>ble</sup> Supreme Court of India, has been regulating groundwater development and management in the country and has proposed the guidelines for groundwater withdrawal.  The drawing/ proposing to draw groundwater through a pump of more than 2 HP and/ or through more than one functional tube well shall be required to seek NOC for groundwater withdrawal. NOC will be granted for drinking and domestic purpose only. NOC for groundwater withdrawal will be considered only in cases where the water supply department concerned is unable to supply an adequate amount of water in the area. Government water supply agencies are also required to seek NOC from the authorized officers for existing as well as new schemes based on groundwater sources. NOC shall not be granted for extraction of groundwater for construction activities in the project in Critical/ Over-exploited areas. Quantum of groundwater for purposes other than drinking/ domestic use shall not exceed 25% of total groundwater abstraction  <i>As per the revised guidelines of September 2020, applications for NOC for groundwater abstraction will be processed based on the category of groundwater assessment units and not by notified/ non-notified areas. Clients shall arrange required water for construction purposes from its supply.</i>	LBs
The Building & Other Construction Workers	As per the Act, the employer is required to provide safety measures at the building or construction work site along with other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodation, etc. to the workers.	Dept. of Labour; Center, States



Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
(Regulation of Employment & Conditions of Service) BOCW Act, 1996	These are comprehensive guidelines for the Occupational Health and Safety of Laborers. <i>This applies to all subprojects during construction and O&amp;M stages where labor would be employed.</i>	
Child Labour (Prohibition and Regulation) Act, 1986 and Rules, amended 2016 and Child Labour (Prohibition and Regulation) Amendment Rules, 2017	The Child Labour (Prohibition and Regulation) Act of 1986 designates a child as a person who has not completed their 14th year of age. It aims to regulate the hours and the working conditions of child workers and to prohibit child workers from being employed in hazardous industries. Children between the age of 14 and 18 are defined as "Adolescent" and the law allows adolescents to be employed except in the listed hazardous occupation and processes which include mining, inflammable substance, and explosives-related work, and any other hazardous process as per the Factories Act, 1948. <i>This applies to all subprojects during construction and O&amp;M stages where labor would be employed.</i>	Department of Labour
Minimum Wages Act, 1948	This act sets the minimum wages that must be paid to skilled and unskilled laborers. The act is legally non-binding but statutory. Payment of wages below the minimum wage rate amounts to forced labor. Wage boards are set up to review the industry's capacity to pay and fix minimum wages such that they at least cover a family of four's requirements of calories, shelter, clothing, education, medical assistance, and entertainment. <i>This applies to all subprojects during construction and O&amp;M stages where labor would be employed.</i>	Department of Labour
The Bonded Labor System (Abolition) Act 1976	The Bonded Labor System (Abolition) Act 1976: States that all forms of bonded labor stands abolished and every bonded labor stands freed and discharged from any obligations to render any bonded labor	PIU to ensure compliance
Workmen's Compensation Act, 1923 & Rules 1924	The Act requires if personal injury is caused to a workman by accident arising out of and during his employment, his employer should be liable to pay compensation following the provisions of this Act. <i>Applicable during the construction phase. PIU should ensure through its contractors in case of any accident/ injury/ loss of life the workmen should be paid a minimum compensation as calculated under this act both during the construction and operation phase of the project. The reporting of accidents needs to be done in prescribed forms as per the act and the incident/ accident register needs to be maintained accordingly. The Act also gives a framework for calculating the amount of compensation and wages.</i>	Commissionerate of Labour PIU to ensure compliance
Interstate Migrant Workmen Act 1979	The provisions of this Act regulate the conditions of service and protect the interests of interstate migrant workers. The project requires engaging interstate migrant workers for specialized activities. The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, traveling expenses from home up to the establishment and back, among others	Commissionerate of Labour PIU to ensure contractor's compliance
Ancient Monuments and Archaeological Sites & Remains (Amendment and Validation) Act 2010	This Act is to ensure the preservation of ancient and historical monuments and archaeological sites and remains of national importance and for the regulation of archaeological excavations and the protection of sculptures, carvings, and other like objects. According to this Act, areas within the radii of 100m and 200m from the "protected property" are designated as "prohibited areas" and "regulated areas" respectively. <b>No development activity is permitted in the "prohibited areas"</b> . Development activities are not permitted in the "regulated areas" without prior permission from the Archaeological Survey of India (ASI) if the site/ remains/ monuments are protected by ASI or the State Directorate of Archaeology. <i>If any subproject is proposed within regulated areas of protected monuments, prior permission will be required from ASI. Pertinent to state that the act does not allow the development of any facility within the limit of the Prohibited Area.</i>	Archaeological Survey of India, State Dept. of Archaeology, ULB Department of Heritage

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
Indian Treasure Trove Act, 1878	Whenever any treasure (anything of any value hidden in the soil, or anything affixed thereto) exceeding in amount or value ten rupees is found, the finder shall intimate District Collector in writing as soon as practicable.  <i>The Act gives direction about the process to be followed in case of the chance finds.</i>	Archaeological Survey of India, State Dept. of Archaeology; District Collector, ULB Department of Heritage
The Monuments and Sites Act, 2010 (National Monuments Authority)	The Monuments and Sites Act, 2010, strengthens the framework for the protection and preservation of India's cultural heritage. Under this Act, the National Monuments Authority (NMA) was established to oversee and implement measures for the protection of monuments and archaeological sites.  <i>Applicable only in case any building/campus is in Monuments/Sites</i>	National Monuments Authority
Right to Information Act, 2005	Provides a practical regime of right to information for citizens to secure access to information under the control of Public Authorities. The act sets out (a) obligations of public authorities for the provision of information; (b) requires designating of a Public Information Officer; (c) process for any citizen to obtain information/ disposal of request, etc.; and (d) provides for institutions such as Central Information Commission/ State Information Commission <i>Relevant as all documentation requires to be disclosed to the public.</i>	LBs
Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act 1989 and further Amendments 2018.	To prevent atrocities against scheduled castes and scheduled tribes. The objectives of the Act clearly emphasized the intention of the government to deliver justice to these communities through proactive efforts to enable them to live in a society with dignity and self-esteem and without fear or violence or suppression from the dominant castes. With the reported misuse of the Act, In August 2018, the parliament of India passed the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Amendment Bill, 2018, to bypass the ruling of the Supreme Court of India laying down procedures for arrests under the Act.  <i>Relevant in the context of safeguarding the rights of SC and STs.</i>	LBs
The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013	An act that aims at providing a sense of security at the workplace that improves women's participation in work and results in their economic empowerment. It requires an employer to set up an "Internal Complaints Committee" (ICC) and the Government to set up a 'Local Complaints Committee' (LCC) at the district level to investigate complaints regarding sexual harassment at the workplace and for inquiring into the complaint in a time-bound manner. The ICC needs to be set up by every organization and its branches with more than 10 employees.  <i>Applicable to all institutions of the Project</i>	LBs
The Prohibition of Employment as Manual Scavengers and their Rehabilitation Bill 2011 & Act, 2013	An Act to provide for the prohibition of employment as manual scavengers, rehabilitation of manual scavengers and their families, and for matters connected therewith or incidental thereto. The Bill prohibits the employment of manual scavengers, the manual cleaning of sewers and septic tanks without protective equipment, and the construction of insanitary latrines. <i>All the sub-projects where manual cleaning of the sewers and septic tanks shall be prohibited.</i>	LBs, any person, agency
IS 11972 – 2002: Code of Practice for Safety Precautions to Be Taken When Entering a Sewerage System	The Government has also laid down standard. This standard lays down guidelines for selection of sewer-person and safety measures against gas hazard, infection with a view to provide some basic guidance for nselection of employees for sewer cleaning and proper job instructions for safe working in a sewerage system <i>Applicable</i>	LBs, O&M service providers, contractors
Public Liability Insurance Act, 1991	This act provides for providing immediate relief to the persons affected by accidents occurring while handling any hazardous substance and for matters connected therewith.	All Employers

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
	<i>Applicable</i>	
The National Green Tribunal Act, 2010	This act provides for the establishment of National Green Tribunal for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental. The National Green Tribunal established under this act is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues. The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice.	NGT
Coastal Regulation Zone (CRZ) Notification, 2019	This notification under Environment (Protection) Act, 1986 supplements the law on-site clearance by declaring certain zones as CRZ and regulates activities in these. Projects attracting this notification shall obtain CRZ clearance for implementation from the authority as required. <i>Applicable for all activities if falls under the CRZ purview.</i>	SCZMA, NCZMA, MoEFCC
The Fertilizer (Control) Order 1985 and its amendments	The FCO lays, down what substances qualify for use as fertilizers in the soil, product-wise specifications, methods for sampling and analysis of fertilizers, the procedure for obtaining license/registration as manufacturer/dealer in fertilizers and conditions to be fulfilled for trading thereof, etc. No agency/person can manufacture or sell fertilizer bio/organic fertilizer without conforming to standards notified by Central Government & license based on this from Notified Authority. If the manufacturer of organic fertilizer is a State Government or a municipality, it shall not be necessary for it to obtain the Certificate of Manufacture Specifications of city compost, and Organic Manure in Schedule IV shall, in the case of municipalities, be applicable only when it is traded in packaged form for use in agriculture. Moisture: Max 25% by weight, Color-Dark brown to Black, absence of foul odor, particle size min 90% to pass through 4mm, bulk density <1g/cm <sup>3</sup> , Organic Carbon by weight- 12%, NPK – 1.2 by weight min, etc. Ref Schedule 4, Pg 212. Pathogens Nil, Heavy metals mg/kg: Arsenic 10, Cadmium 5, Chromium: 50, Copper 300, Hg 0.15, Ni 50, Pb 100, Zn 1000 <i>Applicable if treated sludge or wastes from STPs, WTPs used as Fertiliser by farmers</i>	Notified authority –
Energy Conservation Act, 2001	Aims to reduce specific energy consumption in different sectors and sets up a specialized Bureau of Energy Efficiency to institutionalize energy efficiency measures, monitoring, and measurement at plant and macro-levels.	All agencies
Energy Conservation Building Code (ECBC)	The Energy Conservation Act 2001 that was passed by the Indian Parliament empowered the Central Government to prescribe an Energy Conservation Building Code (ECBC). This code applies to new commercial buildings with a connected load of 100 kW & more or contract demand of 120 kVA or more; Introduces passive design features such as daylight requirements and shading provisions; Introduces provisions of installing Renewable Energy Systems; Sets minimum energy efficiency standards for design and construction; Encourages energy efficient design or retrofit of buildings.	Building owners, LBs
The regulation of Polychlorinated Biphenyls order, 2016	regulation of the Polychlorinated Biphenyls order has been framed by the central government in 2016. Vide this order, the manufacture and import of Polychlorinated Biphenyls has been completely banned. Its use shall be prohibited after 31Dec2025. Only research institutes can use this chemical. The procedure for handling and disposal is a hazardous waste management rules	Municipal Administration and Water Supply Department
Septage Management Regulation & Operative Guidelines	Discusses septage management system required and guidelines for operation. Also mentions standards followed by PCB for discharge of treated sewage and Fecal sludge standards to be followed as there is no other standard prescribed	CPCB/SPCB
<b>Key State Regulations</b>		

Act/ Rule/ Guidelines	Relevance	Implementing/ Responsible Agency
Town and Country Planning Acts of States	This includes Andhra Pradesh Urban and Rural Planning and Development Act, 1998; Assam Town and Country Planning Act, 1959; Bihar Urban Planning and Development Act, 2016; Goa Town and Country Planning Act 1974; Gujarat Town Planning and Urban Development Act, 1976 and similar TP acts of Other States Responsibilities for Master Planning, Zoning, Establishment of Urban Development & Town Planning Authorities the State Level; Preparation of Urban Development Plans, Master Plans etc. Act against any illegal construction against Land use Plan, Zoning Regulations, etc. Implement zoning, building codes, development schemes, and enforcement procedures. <i>All Constructions / campuses shall, adhere to land use regulations, Building Bye Laws and Development Control Rules, as applicable.</i>	
Building Byelaws	All Local Bodies have Building Byelaws, that shall be followed for all site and building planning, design and development. Permission from Local Body is sought. It talks about landuses wise setbacks, parking requirements, Fire safety requirements, Floor Area Ratio Permissible etc.	

### Relevant Social Policies, Laws and Regulations

**Table 8: Key National and State Laws and Legislations Relevant for the Program (Social)**

Act / Rule / Guideline	Relevance	Implementing Agency / Responsible Entity
Apprentices Act, 1961	One of the most relevant legislation for the Program is the Apprentices Act of 1961. The Act lays down the objectives of the Apprentice System in the country and mandates establishments to have apprentices up to 10% of the total number of employees in the establishment. The stipend to be paid is also laid down in the Act (First year, 70% of the minimum wages of the state for semi-skilled workers, second year, 80% of the minimum wages of the state for semi-skilled workers and the third year 90% of the minimum wages paid to semiskilled workers). DGT is responsible for implementation of the Act in respect of Trade Apprentices in the Central Government Undertakings and Departments through six Regional Directorates of Apprenticeship Training (RDAT) located at Chennai, Faridabad, Hyderabad, Kanpur, Kolkata, & Mumbai. AITT for trade apprentices are conducted by NCVT twice a year. National Apprenticeship Certificates (NAC) are awarded to those who pass the AITT. Earlier to 2014, DGT would determine the number of apprentices per trade which a particular industrial house should take. However, the Act has been amended in 2014 and this quota has been relaxed and the industry is free to determine the number on their own. While according flexibility, minimum levels of stipend has been stipulated.	DGT
The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013	This Act of Indian Parliament that regulates land acquisition and lays down the procedure and rules for granting compensation, rehabilitation and resettlement to the affected persons in India. The Act has provisions to provide fair compensation to those whose land is taken away, brings transparency to the process of acquisition of land to set up factories or buildings, infrastructural projects and assures rehabilitation of those affected. The Act also establishes regulations for land acquisition as a part of India's massive industrialization drive driven by public-private partnership.	
Constitution of India	The Indian Constitution protects tribal interests through the Fifth and Sixth Schedules. While the Sixth Schedule, applicable in Assam, Meghalaya, Tripura and Mizoram, gives tribal people freedom to exercise legislative and executive powers through an autonomous regional council and an autonomous district council, the Fifth Schedule, applicable in all the other identified tribal regions, guarantees	

	tribal autonomy and tribal rights over land through a Tribal Advisory Council in each State. The Fifth Schedule of the Constitution deals with the administration and control of Scheduled Areas as well as of Scheduled Tribes in States other than Assam, Meghalaya and Tripura. The Executive power of the Union shall extend to giving directions to the respective States regarding the administration of the Scheduled Areas. According to Article 244 of the Constitution the Sixth Schedule lays down special provisions for the protection of the interest and cultural identities of the hill tribe of North. The most important provisions of the Sixth Schedule is creation of the Autonomous District Councils. While tribal's of some of the North-Eastern states have the Autonomous District Councils, Arunachal Pradesh, Nagaland and greater part of Mizoram do not have this.	
National Commission of Minorities Act, 1992	The Union Government set up the National Commission for Minorities (NCM) under the National Commission for Minorities Act, 1992. Six religious communities, viz; Muslims, Christians, Sikhs, Buddhists, Zoroastrians (Parsis) and Jains have been notified as minority communities by the Union Government.	
<b>Labour and Employment Related</b>		
Payment of Wages Act, 1936	The Act ensures payment of regular wages to certain classes of workers.	
The Minimum Wages Act, 1948	The Act lays down the minimum wages that must be paid to skilled and unskilled labours.	
Workmen's Compensation Act, 1923	Under this Act the spouse or the dependent son or daughter of a workman will be provided due compensation if he or she suffers any injury at work place.	
Personal Injuries (Compensation Insurance) Act, 1963	The Act imposes on the employers a liability and pay compensation to workers sustaining personal injuries and to provide insurance for employers against such liability.	
Employees' State Insurance (ESI) Act, 1948	The Act to provides for certain benefits to employees in case of sickness, maternity and 'employment injury' and to make provision for certain other matters in relation thereto.	
Employees Provident Fund and Miscellaneous Provisions Act, 1952.	The Act provides for the institution of provident funds, pension fund and deposit linked insurance fund for employees in factories and other establishments.	
Payment of Gratuity Act, 1972	The Act forces employer to pay Gratuity to the employees who have rendered a continuous service for at least five years to incentivize them so that they continue working efficiently.	
The Factories Act, 1948	The Act was passed with the intention of safeguarding the health of workers.	
The Contract Labour (Regulation & Abolition) Act, 1970	It is an Act to regulate employment of contract labours and to provide for its abolition.	
The Bonded Labour System (Abolition) Act, 1976	The object of the Act is to provide for the abolition of bonded labour system with a view to preventing the economic and physical exploitation of the weaker sections of the people and for matters connected therewith or incidental thereto.	
Child Labour Prohibition and Regulation Act (1986)	An Act to prohibit the engagement of children in certain employments and to regulate the conditions of work of children in certain other employments.	

Trade Union Amendment Act, 2001	An Act to provide for the registration of Trade Unions and in certain respects to define the law relating to registered Trade Unions	
Inter-state Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979	Regulates the employment of inter-state migrant workmen and provides for their conditions of service.  <i>These laws protect labor in the manufacturing sector. The courses offered at ITIs can offer a small session which covers the vast canvas of legal safeguards that workers in India have. Awareness of rights is an empowering tool and can help prepare students better for the job market.</i>	
<b>Social Inclusion</b>		
The Equal Remuneration Act, 1976	These laws protect women from exploitative work conditions.	
The Maternity Benefit Act, 1961		
The Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act, 2013	This law protects staff, students, workers (particularly women) from sexual harassment. All ITIs and government institutions have guidelines to form committees against sexual harassment.	
The Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989	Reservation for SC and ST in all ITIs on the basis of state level criteria. Some states like Haryana have SC wings in ITIs to provide additional impetus to SC enrolment. States with ST population like Maharashtra, Jharkhand, and Chhattisgarh etc. have exclusive ST ITIs.	
The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995	To meet the wide gap of persons with disabilities (PwD) not getting mainstreamed in skill development, Ministry of Social Justice & Empowerment has a scheme since 2015 called Financial Assistance for skills training for PwD. It calls for creation of a separate Sector Skills Council (SSC) for PwD in collaboration with MSDE to devise job roles, occupational standards and training curricula.	
Right to Information Act 2005	Deputy Secretaries and Directors at the MSDE are the appellate authority (within their respective subject matter) for RTI applications.	
Allocation of Business Rules 1961 along with Policy Guidelines for redress of Public Grievances (August 2010)	All Grievances received from the public as well as employees are required to be redressed by the Ministry / Department / Organization concerned to which the area of work for that grievance has been allocated. The Centralized Public Grievance Redress and Monitoring System is operational at MSDE.	
Citizen Charter	The citizen charter of DGT is available which enlists 12 services, the designated staff, contact details, process and documents Required Grievance Redressal Ministry of Skill Development and Entrepreneurship	
<i>Labour laws in India have now been consolidated into the Code on Social Security, 2020, Occupational Safety, Health and Working Conditions Code, 2020, Industrial Relations Code, 2020, and Code on Wages, 2019. These Codes have been passed by Parliament, but state Rules are yet to be enacted, due to which the Codes are not yet operational.</i>		

## **ANNEXURE II: Environmental Characteristics of the Program Region**

### **Physical Characteristics**

#### ***Location, Physiography and Landuses***

The Indian sub-continent, primarily located on the Indian Plate in south-central Asia, extends southwards as a peninsula into the Indian Ocean from the northern mountain ranges. India, the largest country in the sub-continent and the seventh largest globally, lies entirely in the northern hemisphere. The country spans approximately 3,214 km from north to south and about 2,933 km from east to west, covering an area of 3,287,263 sq. km. This vast expanse ranges from the snow-capped northern mountainous peaks to the tropical rainforests in the south. The mainland comprises four regions, namely, the great mountain zone, central planes, the desert region and the southern peninsula. India also includes two island territories: the Andaman and Nicobar Islands in the Bay of Bengal and the Lakshadweep in the Arabian Sea. The nation has a land frontier of about 15,200 km and a total coastline of 7,516.6 km, which includes the mainland and its islands. The coastline features nearly 43 percent sandy beaches, 11 percent rocky shores with cliffs, and 46 percent mudflats with marshy environments.

- Planning, Designs, and Specifications for facilities (slopes, plinth, pumping, networks, etc.) shall be appropriate for different physical regions
- Characteristics of coastal and hilly regions differ and hence, there shall be adequate consultations to inform design in both regions.
- Plans shall consider flash floods which are a reality in most urban & rural areas of the country today. Buildings, material and waste handling facilities & equipment platforms shall be appropriately designed considering this. Adequate provisions may be made to safe keep materials, waste fuels for such days exposed to vagaries of climate

#### ***Climatic Conditions***

India is a country of climatic diversities which are expressed in the variations in the distribution of temperature, pressure, winds and amount of precipitation. The factors which are responsible for determining the climate of different regions of India include her location and latitudinal extent, physiography, the role of Himalayan ranges as a climatic divide, the monsoon winds, upper air circulation, western disturbances and cyclonic storms. Climatic diversity is reflected in regional variations in temperature, amount of rainfall and commencement as well as duration of seasons. The climate of India can broadly be classified as a tropical monsoon one. The Indian Meteorological Department designates four official seasons: Winter, from December to early April, Summer or pre-monsoon, from April to June (April to July in north-western India), Monsoon or rainy, from June to September and Post-monsoon, from October to December. The shape, size, location, latitudinal extent of the country and its contrasting relief have resulted in diverse climatic conditions in different parts of India.

- In the case of coastal areas, design shall consider risks due to coastal impacts and cyclones. In all places planning and design shall make the most use of sunlight while impacts of rain and temperature and floods shall be minimised through design.
- In drought-prone, hot districts, the work schedule shall be modified so that workers do not suffer from heat strokes.
- Interventions shall be assessed considering the extreme climatic conditions such as rains, cyclones and drought, and heatwaves, including EMP and emergency action plan considerations for workers and community health and safety related to the construction and operations

## Environmental Features

### *Water Bodies, Rivers, and the Sea*

The country houses 12 rivers that are categorized as important rivers. The overall drainage basin watered by these rivers is more than 976,000 sq miles or 2,528,000 km<sup>2</sup>. They originate from the high mountains. There are many capes, gulfs, Lakes, and other waterbodies. The Ministry of Jal Shakti has released the report of India's first water bodies census, a comprehensive data base of ponds, tanks, lakes, and reservoirs in the country. The census was conducted in 2018-19 and enumerated more than 2.4 million water bodies across all states and Union Territories. As per Wetland Atlas of India, there are a total of 1304 wetlands, of which 85 are Ramsar wetlands, 113 are significant wetlands, and 1109 other wetlands.

- None of the program activities including wastewater flows during construction or operations shall pollute or disturb waterbodies.
- Recycling of wastewater (for flushing, greening) is important in campuses.
- No wastewater shall be drained to open drains. All sewage and wastewater shall be treated in well designed septic tanks, with soak pit, or to public sewer system. Sediment flows, Fuels and chemicals shall be collected, stored and disposed properly in line with regulations. Proper Stormwater networks shall be constructed.

### *Natural Habitats*

India has rich ecology and biodiversity. This is true for coastal, hills, plateaus and plains. Depending on the geomorphology and coastal processes, a variety of ecosystems can be identified along the coast. Most prominent of these are the mangrove wetlands including the Sundarbans (shared between India and Bangladesh) which form the largest single stand of halophytic mangroves, but there are also stretches of sandy beaches and mudflats. The west (Arabian Sea) coast is different from the east (Bay of Bengal) coast. The west coast is largely rocky with many pocket beaches and backwaters while the east coast has several large deltas. The two major coastal lagoons are the Chilika and the Pulicat while the Vembanad Kol is located on the west coast. Mangroves are coastal trees or shrubs that are adapted to estuarine or even saline environment. In India, they are of three types: tide dominated (E.g. Sunderbans, Mahanadi delta), river dominated (E.g. Godavari, Krishna, Pichavaram), drowned river-valley (Gujarat). Protected Areas are those declared under the Wildlife Protection Act, 1972, the Forest (Conservation) Act, 1980, the Environment (Protection) Act, 1986 and the Biodiversity Act, 2002. This includes National Park, Marine National Parks, Reserve Forests, Wildlife Areas, Sanctuaries and Biosphere reserves.

The ecology and biodiversity aspects encompass the hotspots of various eco-sensitive zones notified by MOEFCC. India has 881 sensitive locations which include National Parks, Wildlife Sanctuaries, Core Biosphere Reserves, Ramsar sites pertaining to Wetlands, major estuaries in the coastal areas, Marine protected areas, potential important bird areas and tiger reserves, notified elephant reserves and critically polluted areas. The entire costal belt of India, up to 500 m from High Tide Line, and all locations where mangroves are present are also environmentally sensitive locations.

- The program shall exclude activities that might impact natural habitats, flora & fauna, coastal fisheries, and other activities and use screening, and assessment to arrive at mitigation measures to manage other impacts on sensitive environmental resources.
- Time and cost factors for clearances (including CRZ clearance) shall be built into the subproject schedule. No activity should initiate without applicable permits and clearances, and mitigation measures shall be followed to mitigate and manage any residual impacts.
- Disposal of solid/liquid wastes (incl solar panels, batteries, C&D wastes, and sludge) and construction-related disturbances shall be avoided in sensitive areas.



- Community involvement in project activities would minimize disturbance to common natural assets.
- Environmental enhancement measures deserve the highest priority

### ***Cultural Heritage***

India has more than 3400 Archaeological properties identified by Archaeological Survey of India. It reflects that the maximum number of archaeological monuments are in the State of Karnataka (506) followed by Tamil Nadu (413). Apart from these there are many properties and occasions which are considered as Heritage by local administration and communities. Several national, state and local level pilgrimages/ mass gatherings and circuits are also considered as part of local culture by various communities. All the urban, peri urban and rural areas show the presence of multiple religious buildings, including temples and their tanks, churches, and Forts (of old English, Dutch, and local) within the city limits. Some of these are recognized and archeologically important while others are important to the communities around them.

- Core areas of many cities are congested temple towns or heritage areas. This has a bearing on related risks and impacts, especially on OHS, CHS, and Pollution during construction and O&M in the ITIs located near these
- Some cities host important temple festivals and ritual observances. These shall be taken into consideration for planning & design
- Risks and impacts like upgradation of existing ITIs in culturally important premises or buildings, the placement of solar panels, etc. on cultural heritage

### ***Disaster Vulnerability***

India is divided into four seismic zones, namely I, II, III, IV, and V. Zone V is the high-risk zone. Coastal India is highly vulnerable to cyclones, with frequent occurrences in the Bay of Bengal, particularly from May to November. Improved prediction and preparedness measures are in place to minimize impacts. Cyclones generate storm surges, causing severe coastal flooding. The Bay of Bengal is especially prone to these surges. Tsunami is an extreme weather situation that was particularly devastating for the Coastal India. Post-2004 tsunami, India has established an advanced tsunami warning system to mitigate risks. Sea-level rise due to climate change and land subsidence poses significant risks, particularly along India's east coast. Cities and towns also experience flash floods during rainy season, disrupting normal lives.

- Some of the program activities may be near or in disaster-prone areas. Storage of materials, scheduling of construction, typology of works, plinth heights, the layout of buildings, etc. shall avoid disaster impacts.
- Contractors, Operators and ULBs, and communities shall be trained and made aware of disaster preparedness and emergency response. Programs /risk screening shall include disaster and climate screening checklist/tool. All infrastructure facilities created under the project shall have Disaster Preparedness and Emergency Response Plan as part of DPR.
- All facilities supported by the Program shall withstand disaster impacts and risks. All infrastructure built under the program shall be above the High Flood level considering impacts due to floods/flash floods.
- Especially in coastal areas, it is important to ensure disaster preparedness during construction and operations. Designs shall be strong to ensure the longevity of the infrastructure constructed.

## **Recommendations**

Impacts and risks associated with location, land use, physiography, natural sensitivities, cultural resources, and pollution must be thoroughly considered during planning, siting, design, construction, permits/clearances, and ongoing operations and maintenance. The design of buildings, campuses, other facilities, and greening interventions may have moderate to substantial effects on the surrounding environment. Therefore, it is crucial to develop well-thought-out designs to minimize these impacts and risks. Equally important is the upkeep and repair of the developed facilities. These factors determine the sustainability and quality of teaching and learning spaces, which in turn influence student performance and skill development. A comprehensive review of the environmental characteristics of the program region highlights the importance of diligent environmental risk screening, assessment, and the establishment of a mitigation hierarchy to manage the risks and impacts of the proposed program.

### **ANNEXURE III: Scope of the Proposed Robust Environmental Management System**

This **Annexure** outlines the proposed Institutional setup for Environmental management at various levels under the Program, as part of the Proposed Environmental Management System which is a PAP. For effective environmental management, environmental management capacities must be introduced and strengthened at all program agencies. This includes:

- Constituting an Environmental Cell for at each ITI – Hubs: (1) Environmental / EHS focal point and (1) EHS Expert to oversee and report on management of Pollution, Health and safety, Natural Habitats and Cultural Resources as applicable to the Program activities and overall functioning of the ITI Teaching - Learning. The cell will be supported by Eco-club, other student and staff groupings partnering to improve overall EHS under the Components under the Program. There shall be periodic training program for skilling the officers on EHS. At Spoke ITIs: an instructor / Civil Engineer to be nominated and trained on Environmental aspects & EHS; to coordinate & report on EHS to the Hub ITI every month during construction. During Operations, for the rest of the Program duration, the EHS trained instructor would manage EHS as part of ITI level Safety-First Cell.
- Constituting a dedicated Environmental Unit at State Level SPMU and Consortium/SPV levels as applicable, with Nodal or Focal Person/s (1) on Environmental Aspects. The officials may be designated from Department of Skills / State Department pool of Environmental (preferably) or Civil Engineers with experience in implementing interventions required for achieving their DLIs and PAPs, who would be trained on various regulations, other environmental aspects and implementing those. There shall be periodic training program for skilling the officers on EHS. The Unit may also hire additional support from qualified and appropriate environmental engineers/planners or EHS trained civil engineers. They co-ordinate with National PMU to implement the DLI and PA on Environmental aspects. They will collect monitoring reports & details and report to NPMU monthly on Environmental aspects including EHS based on reports from various Hub it is and their own reconnaissance and due diligence.
- Constituting an Environmental Management Cell at National Level (MSDE/National PMU) with two designated Engineers (preferably Environmental or Civil) – (1) nodal and (1) assistant/support engineer: the cell will oversee the preparation and implementation of environmental aspects of all activities of respective States, Consortium/SPV/ITIs under the Program / TA. The Cell shall be if required supported by the suitable experts of the respective Program Management Consultants in all aspects of Pollution, Biodiversity and Cultural Heritage. EHS Expert will become part of Safety-First Cell, with support of OHS Consultants hired and co-ordinates with NSTIs and H&Ss on OHS, including PPEs, Awareness, Training, International Certification for Instructors (such as NEBOSH) etc. NPMU shall provide Progress reports semi-annually (once in six months) to the Bank for its records and due diligence. Details of Environmental and EHS capacities at each level are presented in Figure 2.

These units/cells would be primarily responsible for coordinating, streamlining, and mainstreaming environmental aspects in program operations, and regularly reporting on key issues. The units/cells must be adequately staffed by professionals of relevant academic and professional experience, such as environmental and civil engineering, environmental sciences, environmental law, or environmental planning.

Tasks or activities which would fall under the purview of these units would include:

#### **At Program Level**

- Prepare Environmental Guidance as part of PIM/POM to guide environmental aspects of DPRs/EIAs/EMP; and ensure systems to screen, audit, categorize, and guide the preparation of EIA/EMPs to assess, manage, implement, supervise, and monitor environmental aspects
- Prepare Terms of Reference for environmental experts, and TA/studies/mid & end term environmental audit incorporating environmental aspects as per ESSA
- Oversee the designation of nodal officers at all levels to coordinate and monitor environmental aspects
- Support implementation, monitor, and report
- Co-ordinate with various Program agencies, consultants, and State/National agencies/regulators to ensure all regulatory aspects and standards are met for all program activities
- Discuss and coordinate with Engineering wings of agencies at various levels as required to ensure that

exclusions, environmental guidelines, and good practices are embedded in designs, bid documents (before bidding), and implementation

- Participate in the selection of contractors / other agencies to ensure that environmental criteria are met in the selection
- Undertake periodic site visits to ensure effective environmental management/EMP
- Facilitate training, and cross-learning between agencies
- Support Environmental Audit specifically environmental requirements pertaining to each DLI and PAP
- Development of staff and capacity of various support agencies to manage Environmental Aspects. The cells/units would develop and deliver training programs, for operational, technical, and contractual staff as required for each result area and environmental actions, with the support of experts. Provide or arrange Information, Education, and Communication (IEC), and Training to all levels of staff, communities, and contractors/workers. Monitor staff awareness with periodic surveys
- Facilitate compiling good environmental practices to showcase
- Communicate and co-ordinate with the Bank and support during missions and all other times as required for following up and reporting on environmental aspects including incident reporting, follow-ups, and work closure
- Participate in supervision visits and consultations as required
- Prepare, use an Environmental Management Information System (MIS), and update activity-wise preparation details, highlights, implementation stage, pollution and biodiversity issues, environmental enhancement good practices, monitoring of results, etc. (This MIS may be part of larger Program MIS)
- Co-ordination meetings monthly between all environmental officers to review and update on progress and issues on environmental management
- Any other technical activity and guidance for successful implementation of environmental aspects as in PAP actions, Result areas, and TA
- Co-ordinate with State/Consortium/SPV/ITIs as required and supervise periodically, facilitate monitoring studies, and report on the Environmental PAP & DLI achievements periodically (Semi-annually) to the Bank, in addition to comprehensive updates & site visits during and outside Bank missions

At Activity level: During the Preparation phase of Program activities/TA

- Support in preparation and/or Review of ToRs for DPRs and EIAs/EMP to include good environmental considerations in the design and all required regulatory, safety, pollution and waste/wastewater management, natural habitats, environmental management, climate responsiveness, emergency management-related aspects into Program activities and TA
- Support in the selection of consultants / staff / experts / agencies by reviewing their capacities to prepare environmental assessments and management plans, monitoring, and audit or as required for each activity
- Review of DPRs, EIA/EMPs to ensure incorporation of environmental aspects including national/state regulatory requirements, standards, guidelines, Environmental Guidance, and ESSA
- Undertake site visits and discussions with stakeholders as required
- As required, guide and train all agencies, officials, and consultants on environmental aspects related to the preparation of subprojects/activities
- Monitor preparation activities and suggest corrective actions if required

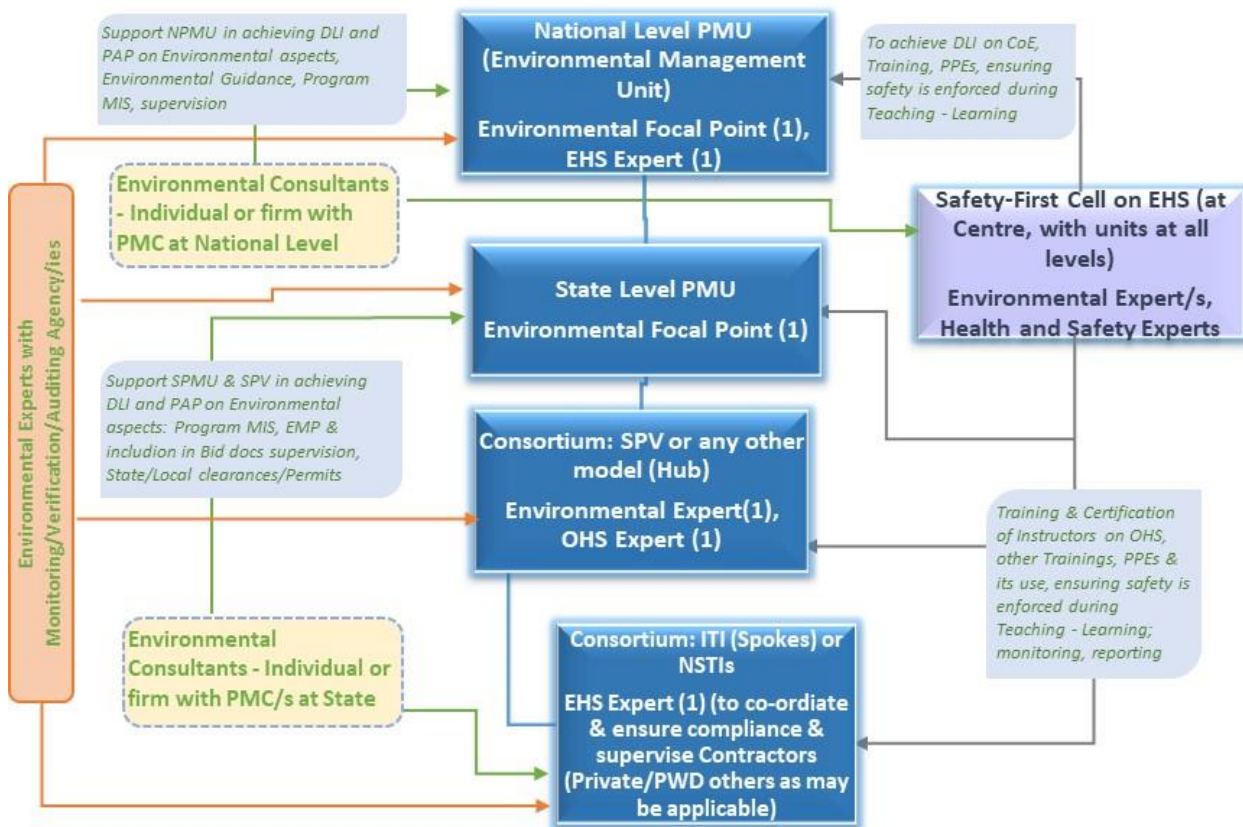
At Activity Level: During Implementation and O&M phases of Program activities & Teaching Learning

- Implementation of PAP actions & DLI / DLR inputs on Environmental aspects at the activity level
- Introduce Supervision and Monitoring Mechanisms across Program agencies to encourage environmental Aspects including safety, disposal of wastes and wastewater, housekeeping, labor facilities to ensure no environmental deterioration, and safety, noise & vibration
- Monitor the implementation of EMP, collect and maintain a log of environmental actions with photographs, permits, minutes of meetings, etc.; and prepare a quarterly report on implementation performance, strengths, and weaknesses to be shared with mid and end term environmental Auditors. These shall be used to also report on environmental aspects in the Progress Reports of PMU to the World Bank.
- Periodical reporting to management on key EHS implementation, compliance, training actions, and any challenges related to specific programs or institutional capacity and co-ordinate with PMU to solve any

environmental issues

- Co-ordinate various regulatory procedures at implementation Level in co-ordination with departments agencies and officials
- Check permits and ensure tender conditions on safe storage, handling, transporting, recycling, and disposal of all types of wastes to Suppliers, Recyclers, and Disposal agencies
- Ensure inclusion of relevant conditions in contract documents of Vendors/Suppliers/Contractors as applicable to ensure compliance with all applicable Rules and Laws
- Incorporate considerations related to environmental Issues due to the Products, operations, Wastes, and placement decisions
- Integrate EMP implementation into an MIS for Environmental aspects on time (with no delay)
- Ensure and maintain stock of PPEs and other safety mechanisms and monitor its use by staff, students
- Ensure periodic training and certification of Craftsman / Instructors and students on safety, hazards and risk management
- Co-ordinate trainings through various local agencies
- Monitoring outcome/outputs of infrastructure and environmental improvements through site visits, stakeholders' opinions, using online MIS
- Participate and showcase program achievements during real/virtual missions
- Incident reporting and follow-up on Corrective actions

An outline of the Proposed Environmental management capacities with number and expertise of officers at each level is presented in the following **Figure 2**.



**Figure 2: Outline of the Proposed Environmental Management Capacities for the Program**

#### **ANNEXURE IV: Outline of the Environmental Guidance of the Program Operations Manual**

1. Purpose of the Environmental Guidance Section
2. Adoption of Environmental Guidance
3. Program Action Plan: Time Schedules of sub-actions to achieve PAPs
4. Mechanism for Environmental Management
  - i. Exclusion List to avoid High Risk activities from P for R,
  - ii. Screening & Existing Facility Audit Checklists with Climate Screening for locations & typology
  - iii. Plan, Formats, Schedule, Responsibilities & Budget for Assessing, Managing, Mitigating, Monitoring, Reporting Impacts and Risks
5. Environmental Management During Preparation, Implementation
  - a) Preparation of Program activities (based on National, State Regulations, Guidance)
    - i. Applicable Regulations, Standards, Guidelines, Procedures for Preparation of each Program Activity (in discussion with departments): with special emphasis on a) Green building / GRIHA guidelines or similar, (f) H&S guidelines for construction and operations, (g) planning the construction works, (i) Type of species used for plantation, Compensatory Plantation requirements (j) guidance on asbestos, lead, exotic species, pesticides
    - ii. Checklist on Environmental Aspects to be included
    - iii. Aspects to be included in Bid Documents & Contracts (EHS, EMP, undertakings, Capacity of Contractors on Environmental Aspects etc)
    - iv. Generic EMPs for each Program Activity
  - b) Process for Implementation of Program activities
    - i. Preparation of EMP
    - ii. Environmental/EHS inclusion in Model Bid Documents
    - iii. Monitoring and Reporting (Contractors weekly reporting, PIU monthly reporting, PMU Quarterly reporting, Accident reporting – ESIRT formats, procedures, Corrective Actions for Incidents etc)
    - iv. ToR for External Audit on Environmental Aspects
    - v. Reporting based on Indicators for Reporting on Environmental Aspects and EHS
    - vi. Process for Implementation of Program activities
  - (c) Process for Implementation of Activities of the Safety Cell (Refer Annexure VIII)
6. Details of Institutional Responsibilities for Environmental Management
  - a) Institutional Responsibilities: Reporting Requirements
  - b) ToR for Environmental Experts at Various Levels
7. Training and Capacity Building Details & Schedule

Annexure A: Monitoring & Reporting Formats

## **ANNEXURE V: Details of Stakeholder Consultations**

### **Table 9: Stakeholders Consulted on Draft ESSA**

(To be updated after SHC after Disclosure of Draft)

#### **Compilation of Stakeholders' Inputs / Suggestions on Ongoing & Proposed Activities**

***The following emerged as the suggestions of MSDEs, NSTIs, State Departments and ITIs during the presentation and Consultation on Draft ESSA held on March 12, 2025***

#### ***Monitoring the Program Implementation:***

1. There would be significant challenges to monitor and report the E&S aspects across all the 1000 ITIs. While checklists and reporting formats would be prepared and shared with them, the logistical issues remain. The client strongly advocated that the E&S monitoring should be done through an MIS and integrated with the overall program monitoring, where reports / data can flow upstream from the SPV level upwards through a portal. This would have to be reflected in the design and budgeting for the portal.

#### ***Institutional Arrangement:***

2. Implementing arrangements especially in terms of staffing is important. Based on past experience, having a 'nodal officer' on E&S will not be adequate. In order to implement the key E&S actions and handle the significant monitoring and reporting requirements across 1000 ITIs, dedicated qualified environmental and social staff would be required at the national, state and SPV levels. For this, clear budgeting is a must.
3. It would be critical to embed the E&S requirements for staffing, screening, monitoring and reporting into program design, SIP format, selection criteria, scheme guidelines etc. The E&S team has been sharing inputs into the program documents and the importance of this was reiterated by the client.
4. It was also agreed that to avoid duplication of effort, ADB and WB reporting requirements on E&S will be harmonized so that one consolidated report would be prepared by the client.
5. The client also emphasized that it would be important for them that some financing is linked directly to E&S. It would be important to have a DLI specifically on E&S so that there is no ambiguity in allocation of funds for E&S management as recommended by the ESSA. This request was based on their prior experience under STRIVE, where implementation of critical E&S actions was a challenge for want of dedicated budget lines and DLI. It was explained that the required E&S inputs will be integrated into all the documents so that the budget for implementation will flow from the respective DLIs. This shall be clearly described in the DLI verification and other relevant documents as well.

#### ***Environmental Aspects & EHS:***

1. Capacity of various agencies on design and implementation: need much support in Environmental aspects. Training/capacity building is important. Specifically, it is important to train instructors and students on EHS.
2. It is essential that all ITIs follow safety requirements
3. Campuses shall be well upgraded; and Audit suggested in the ESSA is very crucial. Currently many Government ITIs lack required infrastructure. Some infrastructure is dilapidated, but the lack of funding hampers improvement of facilities. Structural & functional safety are important to be ensured during the Program.
4. Water, Sanitation, Greening, Workshop housekeeping and safety are important. However, there shall be mechanism to monitor these online, and specific capacities and frequent visits to ITIs are necessary for monitoring.

## Summary of Stakeholder Consultations (Social)

Stakeholder	Key Takeaways from Consultation
<b>Maharashtra (10-11 December 2024)</b>	
Public Works Department Deputy Engineer Executive Engineer Junior Engineer	<ul style="list-style-type: none"> <li>• Consultation for understanding institutional processes on building, upgrading and maintaining ITI building assets and minor civil works. PWD builds and maintains new and old ITI buildings. Minor works are given to contractors and plans are developed internally between them and PWD.</li> <li>• Some projects are carried out with PWD's own funds; funds also come from other user departments. Approval of plans are taken from user departments based on their requirements.</li> <li>• There is a room for consultative processes when designing and carrying out civil works for projects funded by user department to accommodate their needs, i.e. design, bulk quantity, costing etc. Changes can also be made during time of construction through a written request. Labour health and safety concerns are to be taken care by the contractors as they have to abide to all governing state and national laws.</li> </ul>
Directorate of Vocational Education and Training, Maharashtra State Board of Skill, Vocational Education and Training Secretary Director Deputy Director Other departmental staff	<ul style="list-style-type: none"> <li>• Discussions centered around the processes involving designing curriculum, course content including the role of agencies like DGT, CSTRI, NIMI etc within the skill development ecosystem</li> <li>• Admission in ITIs is still low in the state given industry's limited vision towards investing in overall holistic development of the trainees over and above industrial trainings</li> <li>• 17 women exclusive ITIs in the state established. Admission Rules and norms are as per state policy with reservation for 33% women seats which are generally filled low to 20-22%. Stipend of Rs 600/month is provided to trainees.</li> <li>• A Government Resolution was passed in 2015 to close down Centre for Excellence (COE) related schemes in the state under the Vocational Training Improvement Project under DGT for upgradation of 100 ITIs into COEs.</li> </ul>
Rajmata Jijao Thane Girls ITI Thane Principal Teaching and Non-Teaching Staff Ex-Principal Students	<ul style="list-style-type: none"> <li>• Discussions on institutional arrangement and land related information for future expansion. There is no dedicated social cell/focal person for addressing social and gender matters.</li> <li>• No scope for expansion of additional facility in existing land parcel. Aims to acquire more land to the tune of 1000 sq mts for constructing G+3 Structure for auditorium, audio-visual room, more classrooms, a computer lab, conference room etc.</li> <li>• Government owned land (free from encroachment) identified and an internal proposal is prepared; but identified parcel is presently coming under cluster development scheme which is earmarked for social housing for BPL slum residents.</li> <li>• No formal GRM system is established in the institute, course instructor is first point of contact and then principal for resolving GRM matters. A complaint box is available but not utilized. No information pack prepared and disseminated for sensitizing staff and trainees on GRM and ICC related matters. Government's Aaple Sarkar is an online grievance portal.</li> </ul>



	<ul style="list-style-type: none"> <li>• A notification on appointment of new ICC members was circulated. Formed with 5 members, representation from 1 woman member from an NGO. No specific frequency of ICC members meetings followed. No GBV cases reported amongst students to date. No emergency plan for accidents and GBV related protocols and plans are established.</li> <li>• Offers 11 technical and nontechnical trades. Total capacity of student is 392; current enrollment status: 289 students. General Category (including OBC)- 65%, ST- 10.7%, SC- 24.3%. ST trainees given priority as per state's Tribal Scheme including hostel facility. No separate mess facility for hostel provided, meals are prepared by students in their rooms. CCTV cameras are installed. No male relative allowed in hostel premises.</li> <li>• 5 PwD students studied in previous year. Five different typologies of PWDs are identified that are a part of the admission booklet (PWD 1, 2, 3, 4, 5) as per state policy. Common trades favoured by PWDs include Sewing Technology and Computer Operator and Programming Assistant. PWD students can opt for other trades by producing medical certificate on their suitability of getting trained in the said trade from local medical practitioner. No assistive teaching material utilized. No special trainer appointed.</li> <li>• No dedicated communication and outreach plan. ITI collaborates with industry experts for demos and OJT. Receives CSR funds from industries of Ambernath industrial cluster and other industrial sponsors. CSR funds utilized for setting new labs, equipment and furniture, renovation of civil works, soft skills trainings, tuition and exam fee, scholarships to deserving candidates especially from BPL households. A total of 138 women students benefitted by the CSR funds. UNWomen Flight Project provided soft skills and self efficacy training under its women empowerment fund to 100 female staff; Rs 6000 stipend per year.</li> <li>• There are 38 sanctioned staff positions, 8 are vacant ( total 30 staff members, 77%- women staff, 33% male staff). Non teaching staff- 13, Teaching staff- 17. A staff training calendar is followed as per Government's Training Policy. Frequency of Staff training varies. Skill Trade related trainings are more frequently given especially if it's a new trade that is being introduced. Other soft skill and leadership trainings provided once in 2 years. The DGT conducts various trainings for staff under the Craftsmen Training Scheme.</li> <li>• Students are provided OTJ training opportunities with TATA Power etc. Almost 80% of their trained candidates get placed usually. Most candidates get placed in areas of Thane, Navi Mumbai, Wagde Industrial area, Dombivali, Ambernath etc.</li> </ul>
<b>Madhya Pradesh (19-20 December, 2024)</b>	

Office of the Director, Directorate of Skill Development- Bhopal, Madhya Pradesh	<ul style="list-style-type: none"> <li>• Presentation on overall view of the ITI ecosystem of MP including progress updates on ADB's Madhya Pradesh Skills Development Project. There are a total of 596 units across 10 ITI regions (Indore, Ujjain, Bhopal, Narmadapuram, Gwalior, Bhind, Jabalpur, Sagar, Rewa, Shadol) imparting 194 trades with a total strength of 12304 students. Total 285 ITIs of which 74 ITIs are under PPP model and 211 are government run. Of the government run set ups, there are 7 women exclusive ITIs.</li> <li>• Directorate is headed by the Director under whom is a Director ITOT, an Additional Director DSD and Regional Joint Directors for Bhopal, Rewa, Sagar, Ujjain, Balagha, Indore, Jabalpur and Gwalior. Under Additional Director DSD are Joint Director-1 and Joint Director (Finance). Other positions reporting to Joint Directors include- Deputy Director, Assistant Director (Technical) and Accounts Officer. Organizational structure of an ITI includes an Institute Managing Committee, Principal, Training Superintendent and Training officer. Rest includes teaching and non teaching roles.</li> <li>• One principal is allotted to monitor atleast 20-25 ITIs and carry out administrative responsibilities including verification of trainee records, admission and exam verification etc. Privately run ITIs are jointly monitored by Joint Director and principal through visits.</li> <li>• Directorate has a Global Skills Park Society in city campus Bhopal - an international skilling institute to provide trainees with training methods in world class machinery, equipment classroom facilities.</li> <li>• The land record for old building is still in name of labour department as it was previously named so. Civil works of this project is being carried out by the MP Housing and Infrastructure Development Board (MPHIDB). Parts of the old building will be demolished to create new labs and classrooms and will house mechanical, electrical and computer trades. All ITI related civil works are carried out either by the MPHID or the PWD. They are also responsible for attaining necessary documentation and permissions which is a responsibility of their contract.</li> <li>• Directorate has given a supervising charge to MPHID that they have to monitor construction and give clarifications to any queries raised by the Directorate. PWD and Bhopal Development Authority have separate monitoring portals. MPHID can make similar provision on request as it doesn't have any online portal facility. Under ADB project similar provision was made possible with MPHID through additional provision in the MoU. Directorate presently do not have any MoU with PWD.</li> <li>• PWD is revenue generating self sustainable organization. In comparison, MPHIDB is a self running system in need for projects. The GoMP generally diverts some projects to MPHIDB and some towards PWD. The PWD has separate divisions for traditional works, contemporary works and futuristic works, based on which they monitor their projects division wise.</li> <li>• Assessment and feedback on quality of construction projects is approved by Maulana Azad National Institute of Technology. In other states it can be approved by national labour institute. In case of demolition; PWD prepares</li> </ul>
Joint Secretary	
Additional Director	
Principal –ITI	
Lead Civil Construction, Procurement	
Empanelment Expert and Executive Engineers from PIU	
Other Departmental Staff	
Social and Environment Safeguards Expert	
Site visits and discussions with :	
Principal, Training Superintendent, Teaching Staff (including Training and Placement Officer) and Students of Government Divisional Industrial Training Institute, Govindpura Industrial Area-Bhopal and Government ITI at Mandideep - Goharganj, Raisen District	
Trainer, UNNATI (Infosys sponsored program)	

	<p>and executes its own plans. No requirement of any independent DPR consultant. Consultative design processes were undertaken for finalization of structural requirements of the 10 ITIs under the ADB project. In their case, adopting each city's unique cultural essence in construction and design was tried along with modular structure.</p> <ul style="list-style-type: none"> <li>• Grievance Redressal Mechanism: Each ITI has to nominate one safeguard officer under the ADB project. A complaint box is to be a mandatory feature. The details on GRM and committee members names have to be displayed on the board near reception.</li> <li>• In ITIs outside of ADB's intervention, GRM is through approaching training officer as first point of contact and then the Principal. Most complaints are resolved within 7-8 days. In general, students do not set their complaints as their duration is limited for 1 year; however, they do set complaints orally on WASH matters (i.e. water supply in toilets) or approach CM helpline online for stipend delays which are usually resolved within 15 days. 95% of total complaints are on scholarships and stipend matters.</li> <li>• In rare occasions complaints come around trainer's misconduct (not being cooperative). One such complaint was registered 3 years back for ITI in Mandideep and an enquiry was taken formally to resolve the matter. Public disclosure reporting is expected for such cases for which external enquiries are kept.</li> <li>• Course Content is driven by NCVET and DGT. The National Instructional Media Institute-Chennai is responsible for printing trade theory manuals as per each sector's NSQF level of requirement. Some new courses have been introduced including smart city agriculture, operating drones, green jobs etc but the response in admission and placement is still low. For such new courses, the Directorate sometimes advertises for guest faculty hiring based on requirement of that trade which is a position for 11 months duration.</li> <li>• Women don't take conventional trades like fitter etc or are introvert. Number of women seats have gradually increased in past 5 years now. Most women applicants pursue COPA. Better Built environment (including CCTV, separate toilets, safety, women hostels etc) will be useful for attracting more women to ITIs.</li> <li>• Scholarship and Apprentice Assistance related schemes and other relevant state sponsored welfare schemes are applicable to state's youth including Mukhya Mantri Sikho Kamao Yojana. The youth will receive OTJ and stipend monthly. It prepares youth for industry related skills through training in newest industrial technology and processes. The applicant receives post completion certificate from Madhya Pradesh State Skills Development and Employment Generation Board in partnership with SCVT. Prime Minister Internship Scheme is also applicable in the state. It is a pilot initiative to provide internships in industry's top companies on basis of their average CSR expenditure in past 3 years. Duration of internship is for 12 months; of which first half of the internship will be conducted in real time industrial environment. Monthly assistance of Rs 5000 is provided through DBT.</li> </ul>
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	<ul style="list-style-type: none"> <li>• Job fairs (Rozgaar Melas) are also organized to provide requisite information on industries to aspiring candidates. The ITIs participate in Pradhan Mantri National Apprenticeship Mela to encourage students in apprenticeship training. The Mela has representation from 1000 plus companies and 500 plus trades. The Mela has on-the-spot interviews, assessment and apprenticeship training offers for designated and optional trades.</li> <li>• Under ADB project, about 1728 training officers were trained. Directorate's safeguards expert has received at least 2-3 different trainings on environment, social and gender safeguards.</li> <li>• Principal can make use of the trainee fee that is deposited into the account of the IMC for capacity building training and other facilities like buying of PPE kits, napkins, medical facility and branding etc for respective ITI. Sometimes directors provide additional budget for branding and promotion purposes.</li> <li>• Placement Ecosystem- No formal placement ecosystem existed 10 years back. Now the Directorate has formalized this role as a nominated position in 2013-14. A training officer of an ITI is given additional charge of being a Training and Placement Officer. There is no specific directorate guidelines for this post yet. The TPO's job is to visit nearby industries for market linkages. The TPO is allowed to travel inter-zones to establish links with industries far and wide in districts. The TPO can have their own cell within ITI to arrive at skill development analysis in their area.</li> <li>• There is no formal system of monitoring of the placed candidates. Some TPOs like in Govindpura do cold calling on the industries to understand the status of placed candidates based on the database shared with them. Directorate's experience is that some candidates are not very aspiring; and they feel homesick often. Social norms prevail that candidates are not used to go outside their own town for jobs, so they want to be placed locally. Recommended the need for an alumni network portal where members can be monitored. Each alumna must be incentivized to be a part of this network in some way including linkages with job opportunities and for building better aspirations.</li> <li>• The Directorate has an MoU with UNWomen for soft skills and self efficacy training for women trainees. Partnership with Wadhwani Foundation whereby training officers are taught what to tell trainees on employability skills including how to prepare CVs when applying for jobs. Partnership with Unnati Foundation and Infosys for grooming stunts for jobs.</li> <li>• Little knowledge and awareness about government schemes amongst trainees. Last mile connectivity amongst students and their safety especially women trainees is a concern due to inadequate public transport, poor road conditions connecting peri-urban areas to the ITIs, and no provision of canteen for staff and students. Dedicated and safe bus routes, hostel facilities, mess will be helpful for bringing more youth especially females to ITIs.</li> </ul>
Param Foundation	<ul style="list-style-type: none"> <li>• A section 8 company (not for profit) formed by IIT Alumni, and established in Jharkhand and Madhya Pradesh with strong focus on benefitting tribal communities, SC and OBC.</li> </ul>

Chief Project Officer	<ul style="list-style-type: none"> <li>• Successfully running nursing course for trainees, is expected to add 4 more new trades.</li> <li>• Foundation is running some ITIs in partnership with the government through 5 SPVs with focus on intake of tribal students. Rs 5800 fee structure for all per annum, of which full fee refund made for SC and ST candidates through DBT. Additionally a stipend of Rs 230 provided to SC and ST candidates monthly. 20% reservation to ST candidate seats.</li> </ul>
<b>Mizoram (2-3 Feb 2025)</b>	
<p>Labour Employment, Skill Development and Entrepreneurship Department</p> <p>Director and Department Staff</p> <p>Site visits and discussions with IIT Aizwal</p> <p>Discussions with Principal, Staff and Trainees</p>	<ul style="list-style-type: none"> <li>• Discussions around the department's organizational structure and duties, and barriers and opportunities in ITI ecosystem for a state which is under schedule 6 and predominantly tribal in nature. Three functional government ITIs cater to 11 districts of the state with the seating capacity of 696 seats and with an enrollment of 447 trainees presently.</li> <li>• Certain trades like surveyor, draftsman (civil), baker and confectioner, cosmetology, sewing technology, stenographer etc . more market relevant. The Mizoram state policy on skill and entrepreneurship development also recognizes entertainment/music, packaging and handicraft, automobiles etc as critical growth sectors for high hiring potential.</li> <li>• Departmental discussions and consultations with ITI trainees recommend reviewing existing NCVET certified trades and discontinue some obsolete ones where there are no takers. Suggest inclusion of trades affiliated with Mizoram State Council for Technical Education with focus on multi-skill syllabus including trades like horticulture, food processing and music curriculum courses which is a popular business choice for many north eastern youth as music tutors running music training studios and micro food enterprises.</li> <li>• Shortage of trained staff is one of the main factors affecting intake of trainees vs its total seat capacity as desired trades can't be offered. There is a provision for offering 24 trades in the three government ITIs under CTS. However, due to shortage of course instructors only 5-6 trades are being offered to trainees in two ITIs that are in remote districts. In 2021, Mizoram's instructor dashboard suggested that of 52 sanctioned posts only 7 could be filled. Presently, the department is seeking to fill vacancies for at least 14 vacant instructors sanctioned posts.</li> <li>• State sponsored quality skill development, placement, employment and entrepreneurial interventions are available for tribal youth include initiatives like the Mizoram's flagship program of Bana Kaih (Handholding) Scheme to mainstream tribal youth especially women in employment and entrepreneurship and the Scheme on Skill Development for Mizoram Building and Other Construction Workers Welfare Board for short term training courses for construction workers. However, the staff and students have very little understanding of all such welfare schemes available to them.</li> <li>• Knowledge and practice on GRM and ICC is not robust as there is no formal approach to it. No registered are maintained. No incidence of GBV reported in any of the three ITIs. At the state department level a citizen's charter is established for taking care of all grievances reaching the department. No dedicated outreach and stakeholder plans are being followed. Industrial linkages are limited with only a few prominent industries like Maruti having live MoUs with the department.</li> </ul>

	<ul style="list-style-type: none"> <li>As per tracer study for Mizoram, skewed gender distribution of graduating students from the three government it is with 68.27% male students in comparison to 31.73% for female students. Mobility options with dedicated transport routes and adequate hostel facilities were seen to be important criteria for boosting the intake of trainees especially women trainees hailing from remote areas and villages.</li> </ul>
<b>Jharkhand (4-7 Feb, 2025)</b>	
<p>Project Management Unit Officers</p> <p>Chief Training Officer</p> <p>Site visits of ITIs in Gumla, Ranchi and Khunti</p> <p>Government IIT-Khunti (Karra)</p> <p>Principal, Staff and Students</p> <p>Women IIT-Khunti (Arenda, Tuttoli)</p> <p>Principal, Staff including training Officer, and Students</p> <p>Government IIT-Gumla (Tuntidih Road)</p> <p>Consultations with staff and 18 trainees (1 girl, 17 boys; 11 ST, 1 SC, 6 OBC)</p> <p>Women IIT –Gumla (Tuntidih Road)</p> <p>Government (Model) IIT –Ranchi</p> <p>Consultations with Principal, teachers and 56 trainees (16 girls, 40 boys)</p>	<ul style="list-style-type: none"> <li>Jharkhand falls under schedule 5<sup>th</sup> of the Constitution. There are 16 ITIs catering to the LWE areas of the state. The ITI in Karra-Khunti which falls under LWE affected districts area is newly established. Only one girl is enrolled in the ITI in the current batch.</li> <li>The state has a range of central and state sponsored schemes for benefiting the tribal youth especially catering to the LWE affected districts. This includes Saksham Kaushal Vikas Yojana; a component of Mukhyamantri Sarthi Yojana for providing skill training, jobs and placement support to the state's youth. The Ministry of Rural Development has a Placement Linked Skill Development Scheme (Roshni) for tribal youth hailing from 27 most critical LWE affected districts for educational, economic and social development support.</li> <li>Selection of instructors is via Jharkhand Training Officers competitive examination as a standard procedure followed by the State Staff Selection Commission. State policies for reservations prevail to benefit and mainstream trainers from socially weak backgrounds i.e. SC, ST, OBC, EWS and PwD candidates, however, there is a dearth of trained human resources especially in and around remote locations and for ITIs situated in LWE affected areas. As a result, all trades (both traditional and modern) can't be offered in government ITIs; leading to below seat capacity enrollments. Jharkhand Reservations of Vacancies in Posts and Services (Amendment) Bill of 2023 allows for horizontal reservation with 5% quota for dependents of Jharkhand Andolankaris.</li> <li>Women trainees from LWE areas and other districts are slowly taking interest in trades like electronics, fitter, wireman and plumber for securing jobs in railways.</li> <li>In LWE affected areas, poor connectivity to the internet prevails. Government does outreach campaigning during time of admission through temporary admission kiosks in their premise. However, information is passed on to prospective female trainees passively via male members of their family or neighborhood. Information on schemes, ITI admissions and placement job openings etc. is mostly shared in public and cultural spaces like chowks and cyber cafes are mostly the hubs for information sharing and gathering on skill development and placement opportunities that are mostly frequented by the men than women as men enjoy better better mobility and freedom of movement.</li> <li>GRM and ICC systems are not yet formalized and are mostly dealt informally. Mukhya Mantri Jan Samvad Portal is a state intervention with helpline number for lodging complaints including any POSH related concerns. However, consultations with trainees especially female students suggest poor knowledge on matters related GRM, ICC and other youth oriented welfare schemes.</li> <li>Provisions like residential arrangements (hostels) are either absent or have inadequate services. No centralized provisions for food mess, canteens and</li> </ul>

	<p>maintenance of toilets. There is no dedicated means of transport for trainees and last mile connectivity with safety concerns exist, discouraging many females to participate actively in their training schedules.</p> <ul style="list-style-type: none"> <li>• An IT PMU- Admission was established in Ranchi model ITI catering to the entire state under the Directorate of Employment and Training. The cell's dashboard captures all state wide data on admissions and placements .</li> <li>• New courses like AI, Solar Technician and drone technology etc are required to be introduced in the state with some interest expressed by both the students in Ranchi and the staff.</li> </ul>
<b>Delhi (10 Feb)</b>	
<p>Government ITI-Pusa Road Principal Staff Consultations with 24 trainees (4 girls and 20 boys)</p>	<ul style="list-style-type: none"> <li>• The Directorate of Technical Training and Education has established 19 ITIs with 12072 seats of which 13 are Co-ed ITIs and 6 are women ITIs. 61 courses/trades are offered in the Delhi ITI ecosystem. Minimum eligible age for entrant to the ITI courses is 14 years with no upper limit for applying. T</li> <li>• he ITI Pusa has secured near 100% enrolment strength (1032 out of 1036 seats filled). Reservation of seats priorities Delhi domicile residents with 90% seats allotted to them and 10% for other residents. 24 trades are being offered in ITI Pusa. Introduction of new courses are being considered including drone technology and AI.</li> <li>• The institutional arrangement of a typical ITI has a principal heading the organisation and supported by the Vice Principals. Training and non teaching staff reports to this structure including group instructor (craft instructor reports to the group instructor) and non teaching staff includes section officers, account officers, store superintended etc.</li> <li>• Both traditional and modern trades are being offered including new age courses aligned to Industry 4.0 including smartphone hardware, air conditioner, solar technician- electrical, mechanic electric vehicle etc. The solar technician course is supplemented with support from PM-Surya Ghar-Muft Bijli Yojana for 5 days skill training and OJT by empanelled vendor focused on rooftop solar PV (Installation and Maintenance)</li> <li>• Placement percentage has been increasing gradually overtime which is monitored centrally. Placement employment data includes jobs, apprenticeship and self employment. Placement percentage in 2024 was at 87.30%.</li> <li>• The ITI Pusa has no functional hostel and was closed 15 years back due to building's structural concerns. There is no dedicated bus service, although the ITI helps students to procure monthly public bus pass.</li> <li>• A proposal for reconstruction of the ITI Pusa by demolishing existing structure has been submitted to DGT for consideration as the present building has structural issues. No additional land will be required. Facilities including hostels for both girls and boys and a recreational open space are proposed features of this proposed expansion. The ITI is yet to procure a copy of their land records from the Directorate of Training and Technical Training.</li> <li>• Industrial linkages through MoUs and CSR funding are thriving; with industries like Maruti, Daikin, Siemens, TATA Power etc. Both OJT and dual system of training (DST) are being offered to trainees. In DST a trainee spends 6 months of learning in ITI and 6 months in the industry under the ITI MoUs with industries.</li> <li>• Women trainees study free of cost to encourage their participation. 30% seats are reserved for them, but as a trend 20% of seats are generally filled</li> </ul>

	<p>by them. Other than some traditional trades, electrical, fitter and welder trades are also getting popular amongst female trainees.</p> <ul style="list-style-type: none"> <li>• ITI is working with Quest Alliance an NGO that provides soft skill training support for better placement outcomes. Self Defence trainings are also provided by the Delhi Police.</li> <li>• GRM and ICC arrangements like complaint box are provided but no such incidence has been reported. The complaint box is not utilised. Most complaints are around water and toilet related facilities and their maintenance which are reported verbally and resolved informally. No standardised approach followed for providing GRM and ICC related gender sensitisation trainings to the staff and trainees.</li> </ul>
<b>West Bengal (January 20 – 21, 2025)</b>	
CSTARI, Kolkata	<ul style="list-style-type: none"> <li>• CSTARI is responsible for developing the curriculum through its curriculum development wing. CTS runs across all ITIs. Apprenticeship training scheme is running across industries. Flexi mou scheme running in industries. Certification done by DGT. Sorry term courses with students can choose in final year of ITIs.</li> <li>• CSTARI also has a Training wing and a foundation course for Indian skill development services (ISDS).</li> <li>• Trainers are trained in NSTIs. These are mostly technical people. Training is largely handled in house through faculty or great lectures.</li> <li>• Curriculum development is based on research. 168 trades have to be revised. All ITIs and industries are invited to give feedback. Industry needs are taken into account. Feedback is sought through the website. Sometimes even suppliers. For each trade, they have an expert group. After that there is a trade committee meeting with all stakeholders including disabled.</li> <li>• The syllabus was last updated 3 years ago and the next updation will be in 2028. The current round of updation is expected to be completed by May. New courses are added as per demand. NCVET usually approves syllabus and new courses. DGT is for affiliation. DGET gives inputs for suggestions of new courses.</li> <li>• Industry feedback sought as part of the course updation.</li> <li>• NIMI develops the course content after the syllabus is set up. They make the course content in 12 different languages and use the Anuvadini software. They do not have the syllabus in braille yet.</li> <li>• HR management and legal aspects are covered in the course material. There are sections on gender sensitisation, POSH etc. as part of the employability skills course which is a foundational course.</li> <li>• Getting quality trainers at the current salary is a challenge. There are staffing shortages.</li> <li>• Industry also does not give substantive feedback and engages. Most big companies have their own HR and training wings and small companies don't have the bandwidth to do that. In either case, engagement with industry is low.</li> <li>• Ground level implementation of the curriculum is weak</li> <li>• There is also a shortage of hostel facilities and executive classrooms in terms of infrastructure</li> </ul>



NSTI (Women's), Kolkata	<ul style="list-style-type: none"> <li>• The NSTI has 4 CTS and 3 CITS courses. This NSTI was started for instructor training. It currently offers courses in COPA (computer operator and programming assistant), cosmetology, fashion design and technology and AI programming assistant. These are 1 year-long courses. 265 capacity seats. 241 students are currently admitted.</li> <li>• They offer dual training with industry experience. This experience is given under the supervision of a trade in-charge. The hostel capacity is 120. CITS and CTS are part of the eligibility requirement for instructors.</li> <li>• Industry tie up and training focus will help.</li> <li>• Some space crunch in infrastructure.</li> <li>• Grievance redressal - training related grievances are received on the portal. Internal grievances for hostel etc. Are handled at the NSTI level</li> </ul>
<p>PWD, Social Sector, West Bengal</p> <p>Chief Engineer</p> <p>Executive Engineer, South 24 parganas division, Social Sector</p>	<ul style="list-style-type: none"> <li>• PWD does the civil works for state government ITIs</li> <li>• For Repair and maintenance, the local authority i.e. principal of the ITI writes to PWD. PWD engineers visit the site, inspect and prepare estimate. Principal gets approval for this estimate. After the e-tendering process work order is issued.</li> <li>• For new construction, approval comes from higher authority. The Department places requisition in the SOP format for new construction work. After site visit, the plan is made and placed before department. Central government has guidelines for this.</li> <li>• Tendering can be done to any contractor. There is no system of empanelment.</li> <li>• The responsibility for obtaining permissions and clearances if of the authority i.e. the ITI in this case.</li> <li>• Monitoring of works is done through visits by junior engineers. Contract documents and work order are sent to labour department so that commissioner can check.</li> <li>• Monitoring reports - samiksha portal.</li> <li>• Safety measures are not significant due to small scale.</li> <li>• The Portal is maintained by finance department. The documents are uploaded there. Administrative approval comes. Then tender process. Then contract</li> <li>• For monitoring, site visits are done by the Executive Engineer. Supervision and billing is done by the Junior Engineer helped by Assistant Engineer.</li> </ul>
<p>Government ITI, Kalyani</p> <p>Principal</p>	<ul style="list-style-type: none"> <li>• This is one of the oldest ITIs and has been operational since 1958. There is a great requirement for improved infrastructure.</li> <li>• 521 trainees in 2024. 406 are already registered. 249 in second year. Sanctioned capacity is 1425. They maintain data on vulnerability - ST, SC, OBC, Physically disabled. There are some students with disability in COPA but not in machinery or heavy trade. They are counselled to take a suitable trade.</li> <li>• Complaint box was observed, which is opened every Wednesday and grievances noted into the register.</li> <li>• ICC has been constituted but it's functioning is not clear.</li> </ul>

	<ul style="list-style-type: none"> <li>• Every year by 15th April, Institute Development Plan is prepared and submitted. This is approved by the Principal Secretary. Then proposal etc. Only emergency matters are approved apart from the IDP.</li> <li>• Hostel facilities are available for around 50 students. Others commute by local train. Timing is 10.30 am to 5 pm. There are evening batches up to 8 pm.</li> <li>• Admission category (reservation) - 3% for ST. If not filled then SC. 3% for disabled students. 20% female trainees</li> <li>• There are mostly BPL students.</li> <li>• 80% attendance is mandatory. Attendance is taken manually.</li> <li>• There is a placement cell. Rozgar Sabha portal is also used on which employers also register. Trainees are registered for job fairs.</li> <li>• However, there are many drop outs from jobs. In particular, trainees drop out due requirement requirement on family farms. Also, many students find blue collar jobs difficult as they expect a white collar type work environment.</li> </ul>
Aamdanga ITI  Principal	<ul style="list-style-type: none"> <li>• This was earlier a Government ITI established in 2012. It was taken over in 2016 by Vivekanand group of institutions. Through e-tendering. All staff from Vivekanand group.</li> <li>• Reporting process - nodal ITI in each district. They check attendance, class report. The DM office, DNO are also involved. 3-5 ITIs under one nodal.</li> <li>• Civil works - Same process as government ITI. Report to nodal ITI. Small works they do themselves.</li> <li>• Cleaning, electricity cost etc. is borne by the private entity.</li> <li>• There are 15 Staff - all private and full time. Including Principal. Vivekanand has their own HR processes.</li> <li>• 450 students in total.</li> <li>• Location - near Kolkata. Placement and monitoring are advantages of being near an urban centre.</li> <li>• There is no hostel facility and students come from nearby areas.</li> <li>• There are staff quarters.</li> <li>• Classes from 10.30 to 5.30 pm. Students get lunch from home (no mess facility).</li> <li>• Railway station is close by.</li> <li>• The premises occupy an area of 2.72 acres.</li> <li>• The land is owned by government.</li> <li>• This is a 12 year contract which can be extended by 4 years.</li> <li>• Placements - centralised process. Students guided better, screened for placement in private. Send to their innovation cell also.</li> <li>• The decision of which trades to offer is done after a skill gap analysis which is done district wise. Then area classroom etc planned according to that.</li> <li>• Concessionaire agreement - 5 courses - fitter, electrician, welder, electromechanical and surveyor.</li> <li>• Scvtwb.in - total admission reservation. Admission counselling.</li> <li>• Word of mouth marketing.</li> <li>• Grievance portal for Vivekanand. In person grievances at the ITI.</li> <li>• 20% management seats. Fees 55000 for two years.</li> </ul>

<p>Barasat-1 Government ITI, Duttapur</p> <p>Principal</p>	<ul style="list-style-type: none"> <li>• The private partner for this ITI is also the Vivekanand group of institutions.</li> <li>• 400 students. High ratio of female students. They offer COPA. High in grading parameters. 5 courses offered -</li> <li>• Most children are from nearby areas. Railway line - Duttapur station is nearby.</li> <li>• 15 Instructors and 3 non teaching staff.</li> <li>• Building handed over in 2016. This was an old building. Total area - 1.65 acres. Building area is 0.7 acres on two floors.</li> <li>• Uniforms are bought by students. College provides the coloured T shirts.</li> <li>• There is complaint / grievance system</li> </ul>

## ANNEXURE VI: Questionnaires used for FGDs and Stakeholder Interviews

### ENVIRONMENTAL ASPECTS: CORE PRINCIPLES 1, 2, 3

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ITI Upgradation\_CorePrinciples1,2,3

#### ITI Upgradation\_CorePrinciples1,2,3

Name of the Institute, Department or Agency  
Add Institute or Department and Place name

Location of the Institute  
Geo Point:

latitude (x,y °)

longitude (x,y °)

altitude (m)

accuracy (m)



Level of the Institute Department or agency  
National, Local etc.

- ☐ National - MSDE  
☐ National - agencies other than MSDE  
☐ Regional  
☐ State  
☐ ITI

Respondent

- ☐ Officer in charge of Regulatory aspects  
☐ Head of the institution  
☐ Teacher or instructor  
☐ Student  
☐ A General Staff member  
☐ Others

Contact details of the Respondent (if ok) for contacting again if required

<https://k7.kobotoolbox.org/#/forms/aHYy3oQTQnWQzpYNDfuhH89/landing>

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ITI Upgradation\_CorePrinciples1,2,3

Date of Response  
Date of interview

yyyy-mm-dd

Views on who will manage planning, designing, implementation of ITI upgradation

- ☐ Each ITI will manage through PWD  
☐ Each ITI will manage through Private or contractors  
☐ SPV  
☐ Hub ITI  
☐ Not Aware

Earlier Experience with Infrastructure Devt responsibilities under Industry participation

- ☐ No such experience  
☐ Govt developed facilities  
☐ No substantial infrastructure was developed  
☐ Industry developed additional Infrastructure  
☐ ITI developed the facilities through contractors and offered to Industry  
☐ ITI developed the facilities through PWD and offered to Industry

Quality of Infrastructure and facilities you  
have seen in ITIs of the State

Satisfactory Moderately Satisfactory Not Satisfactory

Classrooms

☐

☐

☐

Workshop

☐

☐

☐

Water Supply

☐

☐

☐

Sanitation (Toilets)

☐

☐

☐

Sewerage Management

☐

☐

☐

Drainage (also for cleaning or waste  
water)

☐

☐

☐

Health & Safety

☐

☐

☐

Rest areas for Staff, Students

☐

☐

☐

#### Core Principle 1: Environmental Management

Core Principle 1: Environmental Management

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

- ☐ Applicable  
☐ Not Applicable

<https://k7.kobotoolbox.org/#/forms/aHYy3oQTQnWQzpYNDfuhH89/landing>

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**1.1 Bank program procedures are backed by an adequate legal framework and regulatory authority to guide environmental and social impact assessments at the programmatic level.**

- ☐ Regulatory Environment Exists & is clear
- ☐ Do not exist
- ☐ Not Aware

**1.2. Incorporate recognized elements of environmental assessment good practice, including:**

- ☐ Yes for all investments.
- ☐ Yes for very large investments only
- ☐ No
- ☐ Not Aware

**1.2 (a) Early screening of potential effects**

- ☐ Screening Mechanism for investment type and typology of investment exist for all investments
- ☐ Screening Mechanism do not exist for small investments
- ☐ Investments identified based on Audit of existing facilities
- ☐ Investments identified without an Audit
- ☐ Aware of Screening in earlier Projects
- ☐ Not Aware of Screening done during earlier Projects
- ☐ Has Capacity to screen
- ☐ No Capacity to Screen, need training
- ☐ No Capacity to Screen, need specified personnel support to screen
- ☐ Not Aware

**1.2 (c) Explicit assessment of potentially induced cumulative, and transboundary impacts.**

- ☐ No Assessment of cumulative transboundary impacts
- ☐ Assessment of Tranboundary, cumulative impacts done
- ☐ Not aware

**1.2 (d) Identification of measures to mitigate environmental impacts that cannot be avoided or minimized.**

- ☐ Procedure to include mitigation measures do not exist
- ☐ Procedures exist
- ☐ Not Aware of such procedures
- ☐ There exist institutional memory of ESMF, EMF, ESMP in earlier Projects or Programs
- ☐ Earlier EMF, EMP were only used for respective Projects or Program not for others
- ☐ Not Aware

**1.2 (e) Clear articulation of institutional responsibilities and resources to support the implementation of plans**

- ☐ There are key focal points identified & continuing from earlier Projects or Programs
- ☐ Such responsibilities do not exist
- ☐ Costs are not allotted or mitigation
- ☐ Costs are allocated for mitigation
- ☐ Not Aware

**Notes or observations on Core Principle 1**

**Photograph on Core Principle 3**

[Click here to upload file. \(< 10MB\)](#)

## Core Principle 2 – Natural Habitats and Physical Cultural Resources

**Core Principle 2 – Natural Habitats and Physical Cultural Resources**

*Environmental management procedures and processes are designed to avoid, minimize, and mitigate adverse effects on natural habitats and physical cultural resources resulting from the program.*

- ☐ Applicable
- ☐ Not applicable

**2 (a) Includes appropriate measures for early identification and screening of potentially important biodiversity and cultural resource areas**

- ☐ Explicit Screening for Biodiversity exist for all investments
- ☐ Explicit Screening for Biodiversity exist for only very large investments
- ☐ Not aware of biodiversity screening
- ☐ Screening for cultural resources exist for all investment
- ☐ Screening for cultural resources exist only if facility is near Nationally recognised monuments
- ☐ Not aware of any screening for PCR
- ☐ Adverse Impacts on biodiversity due to operations observed (Dust, gas emissions, noise, vibration, waste, waste water, chemicals)
- ☐ Some Impacts on biodiversity due to operations observed (some among Dust, gas emissions, noise, vibration, waste, waste water, chemicals)
- ☐ No impacts on biodiversity due to operations
- ☐ Adverse Impacts on PCR due to operations observed (Dust, gas emissions, noise, vibration, waste, waste water, chemicals)
- ☐ Some Impacts on PCR due to operations observed (some among Dust, gas emissions, noise, vibration, waste, waste water, chemicals)
- ☐ No impacts on PCR due to operations
- ☐ Not Aware of the need to screen

2 (b) Supports and promotes the conservation, maintenance, and rehabilitation of natural habitats; avoids significant conversion or degradation of critical natural habitats or else includes measures to mitigate or offset impacts

- ☐ No specific consideration on Natural Habitats usually
- ☐ Considers Natural Habitats (Protected areas) that are covered by regulatory requirements
- ☐ There is inhouse capacity to develop & ensure mitigation measures for impacts to habitats
- ☐ Capacity to ensure mitigation measures for impacts to PCR can be developed through training
- ☐ No capacity, need specialised support
- ☐ Not Aware

2 (c) Takes into account potential adverse impacts on physical cultural property and as warranted, provides adequate measures to avoid, minimize, or mitigate such effects

- ☐ Only clearance required for activities near important monuments
- ☐ Ensures mitigation against impacts to all PCR using EMP
- ☐ No mitigation measures followed on PCR for Projects
- ☐ There is inhouse capacity to develop & ensure mitigation measures for impacts to PCR
- ☐ Capacity to ensure mitigation measures for impacts to PCR can be developed through training
- ☐ No capacity, need specialised support
- ☐ Not Aware

Notes or observations on Core Principle 2

Photograph on Core Principle 2

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## Core Principle - 3 Public and Worker Safety

### Core Principle 3: Public and Worker Safety

Ensure adequate measures to protect public and worker safety against the potential risks of (a) construction 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

- ☐ Applicable
- ☐ Not applicable

3 (a) Promotes OHS, CHS through the safe design, construction, and O&M of physical, or in carrying out activities that may be dependent on such safety measures, inspections, or remedial works incorporated

- ☐ Construction Plan, Design considers H&S explicitly
- ☐ O&M considers H&S
- ☐ Workshops activities - appropriate PPE
- ☐ Workshops activities - appropriate floor, roofs
- ☐ Workshops & class - follows all L&FS (exits & Access, Extinguishers, materials, training)
- ☐ Workshops & class - do not follow all L&FS, but some (exits & Access, Extinguishers, materials, training)
- ☐ Workshops & Class - do not follow any or minimal L&FS
- ☐ Inspection on L&FS
- ☐ Emergency Response agreed, displayed
- ☐ Emergency Response Training provided to all
- ☐ Trade specific OHS in curriculum
- ☐ Trade specific OHS in Apprenticeship
- ☐ General OHS in curriculum
- ☐ Guidance - EMP with H&S exists and used
- ☐ EMP with H&S exists but not used well
- ☐ SOP and Guidance on OHS in workshop exist and followed
- ☐ SOP and Guidance on OHS in workshop exist but not followed well
- ☐ No specific uniformity in posters or messages
- ☐ Uniform OHS posters

3 (b) Promotes the use of the recognized good practice in the management, storage, transport, and disposal of hazardous materials generated through program construction or operations; promotes the use of IPM practices to manage or reduce pests or disease vectors; and provides training for workers involved in the production, procurement, storage, transport, use, and disposal of hazardous chemicals in accordance with international guidelines and conventions

- ☐ Guidance on Fuels, chemical, Haz material (ash), batteries exist and followed for construction
- ☐ Guidance exists but not followed for construction
- ☐ Guidance on Fuels, chemical, Haz material (ash), batteries exist and followed for operations (labs, workshops)
- ☐ Guidance on Fuels, chemical, Haz material (ash), batteries exist but not followed for Operations
- ☐ Pests observed & managed using chemicals
- ☐ Pests observed and managed using traditional methods
- ☐ Pests not managed
- ☐ Pests not observed
- ☐ Staff & students trained on hazmat and Pesticides
- ☐ Staff and students ot trained on Hazmat, Pesticides
- ☐ No guidance exist on Hazmat, Pests
- ☐ Focused digital awareness methods exist
- ☐ Focused digital awareness methods do not exist
- ☐ Some haz waste in campus well segregated at source, stored, sent to disposal facilities
- ☐ All haz waste not well managed
- ☐ Permits are taken and conditions followed for hazmat
- ☐ Not Aware of most of these requirements

3 (c) Includes measures to avoid, minimize, or mitigate community, individual, and worker risks when program activities are located within areas prone to natural hazards such as floods, hurricanes, earthquakes, or other severe weather or climate events.

- ☐ Plans for Campus facilities considers disaster proneness
- ☐ Training to respond to Emergencies and disasters (ERP) are provided annually or more frequently
- ☐ Emergency Response Plans prepared, displayed & followed
- ☐ Not Aware

Notes or observations on Core Principle 3

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Photograph on Core Principle 3

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Overall: Is there any learning or experience or comment that the Respondent want to Share

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## Questionnaire and Checklist – Social

### Checklists Used for Discussions with Stakeholders for ESSA

#### 1. Officials in Government Institutions

Name of the Organization/Department:

Name of Officer:

Designation of Officer:

Date and Place:

Question	Document/s Required
<b>Institutional Arrangement</b> (State Department/Directorate Level and ITI Level) <ul style="list-style-type: none"> <li>• Current institutional arrangement for overall implementation and in particular for E&amp;S management (social risk management) Any cell looking into social inclusion and gender equality matters</li> <li>• Any focal person recruited/assigned for these matters</li> <li>• How many staff responsible for social risk management and their mandate</li> </ul>	(State Department/Directorate Level and Individual ITI Level) Share organogram, if possible. Mandate of staff and their ToR Contact of any personnel in-charge of social/HR/Environment
<ul style="list-style-type: none"> <li>• <b>Land Requirement – State Department</b> Is there sufficient land available for development and/or upgradation of ITIs or regional skill centers etc?</li> <li>• If not, what is the approx. quantum of additional land likely to be required?</li> <li>• What is the current system of identification and procurement of land (government, private acquisition, direct purchase, donation) for new construction or upgradation of ITIs? Is there any policy which governs this?</li> <li>• Is there a policy on how to deal with encroachers or squatters on the land which may be required for development and /or upgradation of ITIs?</li> <li>• Who usually prepares the DPRs? Any consultative process being undertaken during its preparation?</li> </ul> <p><b>Land Requirement – Individual ITI</b></p> <ul style="list-style-type: none"> <li>• Are you planning to acquire more land for any kind of upgradation? Please specify the kind of upgradation</li> <li>• If yes, who is owning this land (privately owned, government owned)?</li> <li>• Is there any pending court case/litigation of any kind for this ITI including its land?</li> </ul>	<ul style="list-style-type: none"> <li>- Copy of any existing government policy, notification on land procurement process adopted by the Department.</li> <li>- Details of each infrastructure development proposed under the program, quantum of available land, additional land needed, and process of procuring the land. [Tabular form]</li> </ul>



<ul style="list-style-type: none"> <li>• Which government department will be responsible for construction and minor repairs of your institute? What kind of process will it entail?</li> </ul>	
<p><b>Employees – State Department</b></p> <ul style="list-style-type: none"> <li>• At the department level, do you have any committed HR policy?</li> <li>• What government service rules are followed for department employees for both permanent and contractual employees?</li> <li>• Do you require the ITIs to have an HR policy? Is this approach for HR policy different for government run and private run ITIs?</li> </ul> <p><b>Employees- Individual ITI</b></p> <ul style="list-style-type: none"> <li>• Is there any specific HR policy/standard practice/government norms that the ITIs are required to have?</li> <li>• Please specify number of permanent and contractual staff (at gender disaggregated level) in your organization.</li> <li>• For your staff, what are the government norms and contract clauses currently with respect to aspects such as occupational, health and safety, employee conditions and their welfare including insurance policy?</li> <li>• Are these terms of services and clauses different for permanent and contractual employees? Please specify these differences</li> </ul>	<ul style="list-style-type: none"> <li>- Copy of Employee Contract (permanent, contractual)</li> <li>- Database on number of permanent vs contractual employees (gender disaggregated level)</li> <li>- Existing HR Policy and practices (government run vs private run ITIs- seek difference)</li> <li>- Copy of the HR policy applicable to the department and the ITIs</li> </ul>
<p><b>LABOUR – State Department</b></p> <ul style="list-style-type: none"> <li>• Who undertakes the construction of government run ITIs?</li> <li>• How is labour law compliance monitored during construction? At what frequency? Please elaborate the process.</li> <li>• How is the safety of labour working on ITI related contracts ensured? Is this outsourced to the contractor?</li> <li>• How privately run ITIs ensure and monitor compliances with labour laws during construction?</li> <li>• Is there any standard ICT enabled portal for real time monitoring of such compliances?</li> <li>• Is there any focal person appointed by your organization to monitor and report on labour compliances being followed?</li> </ul> <p><b>LABOUR – ITI</b></p> <ul style="list-style-type: none"> <li>• Who undertakes the construction and minor repairs of your organization? Is it undertaken by any government department (like PWD, housing board etc.) or outsourced to the contractor?</li> </ul>	<ul style="list-style-type: none"> <li>-</li> </ul>

<ul style="list-style-type: none"> <li>• Who is responsible for ensuring and monitoring safety of labour and compliances related to labour laws (including minimum wages etc.) during these civil works? Is the ITI shouldering this responsibility?</li> <li>• What is the frequency of monitoring and reporting of such compliances? Do you participate in these processes?</li> </ul>	
<p><b>Grievance Redressal Mechanism (GRM) – State Department</b></p> <ul style="list-style-type: none"> <li>• What government norms are followed by the department for Grievance Redressal Mechanism?</li> <li>• Does the Department have a GRM established on such norms? Please elaborate the process.</li> <li>• Is there any other state level interventions set up for GRM (helpline number, CM portal etc.)</li> <li>• Is there a nodal officer for grievance redressal at both department and ITIs level?</li> <li>• What kind of grievances are generally received from the trainees and ITIs? Is the data on grievance received by the department monitored and reported?</li> <li>• Is there any GRM register maintained at the department level and resolved cases of the department publically disclosed?</li> </ul> <p><b>Grievance Redressal Mechanism (GRM) – ITI Level</b></p> <ul style="list-style-type: none"> <li>• Does the ITI have a GRM?</li> <li>• How many modes can an aggrieved person use to register grievances / complaints? E.g. phone, email, portal, SMS, helpline number etc.</li> <li>• Are all the modes functioning?</li> <li>• Are there established procedures for responding to grievances received?</li> <li>• Specify types and nature of grievances received by the Department/ ITI.</li> </ul> <p><b>Monitoring and Reporting</b></p> <ul style="list-style-type: none"> <li>• Is the data on grievances received at the ITI level monitored and reported?</li> <li>• Are the records of grievances publicly available?</li> <li>• Is there any protocol for documentation of complaints?</li> <li>• Is there any procedure for sharing reports of grievances and complaints from the ITIs with the line departments/ministerial level?</li> </ul>	<ul style="list-style-type: none"> <li>- Manual/SOPs on GRM</li> <li>- Current staff capacity to manage GRM</li> <li>- GRM records for last one year (no. of complaints received and closed, type of complaints, cases escalated and resolved etc)</li> <li>- Any notification on ICC and its functioning</li> <li>- Any sensitization resource material prepared and utilized in the unit</li> <li>- Display board information</li> <li>- Any emergency plan and protocol notices</li> <li>-Any other relevant report on grievance management</li> <li>- - Annual Reports (for Public Disclosure)</li> </ul>
<p><b>POSH Compliance and Response to Gender Based Violence - State Department and ITI</b></p> <ul style="list-style-type: none"> <li>• Do you have any provision for ICC in the department/individual ITI?</li> </ul>	<ul style="list-style-type: none"> <li>- Department's Sexual Harassment at the Workplace</li> </ul>

<ul style="list-style-type: none"> <li>• If yes, how many members are appointed for ICC?</li> <li>• Do you have any representation of a member from any NGO or third partner organization in the committee's composition?</li> <li>• How is the staff sensitized on its functioning?</li> <li>• Presence of other sexual harassment prevention measures in the department and individual ITIs (e.g., awareness training and sensitization, etc.) as per the Sexual Harassment Act?</li> <li>• What are the different routes established for filling Complaints :  ( Complaint Box, Online, Offline etc.)</li> </ul> <p><b>Monitoring and Reporting</b></p> <ul style="list-style-type: none"> <li>• Have there been any cases of Gender Based Violence reported and resolved by the department/individual ITI in the last 1-3 years? Please provide details. Were these incidences disclosed and published in public domain?</li> <li>• What is the frequency of monitoring and reporting such episodes?</li> <li>• Are there any accident, GBV related emergency protocols and plan followed by the Department / ITI?</li> <li>• Is POSH compliance by private partners monitored or reported?</li> </ul>	<p>Policy</p> <ul style="list-style-type: none"> <li>- ITI's notification on Formation of ICC</li> <li>- Notification of Internal Complaints Committee</li> </ul> <p>Details of awareness trainings, sensitization activities for sexual harassment at the workplace which have been conducted in the last year</p> <p>Understand the nature of GBV incidences etc and any published reports and disclosures</p> <p>Collaborations undertaken by the ITIs on raising awareness and outreach activities (good touch bad touch, lectures, talks by a medical personnel etc.)</p>
<p><b>Stakeholder Engagement and Information Dissemination- State Department</b></p> <ul style="list-style-type: none"> <li>• What mechanisms are in place to provide and disseminate information on available training programs and infrastructure facilities to the potential applicants?</li> <li>• Are there any Communication/ IEC/PR staff and/or cell within the Department? Please provide details</li> <li>• Is there any dedicated communication plan used by the Department?</li> <li>• Is there any special activity to increase placements with the industries (Job Fairs- Rozgar Melas etc.)</li> <li>• <b>Stakeholder Engagement and Information Dissemination- ITI Levels</b> there any dedicated communication plan used by your organization?</li> <li>• What are the themes covered in your outreach and communication activities especially for boosting admissions and placements?</li> <li>• Any mechanism to assess whether the shared information has been received, understood?</li> <li>• What differentiated approaches or initiatives do you use to engage with vulnerable and disadvantaged groups especially female aspirants?</li> <li>• Do you have any forums, groups or events for public interface and interactions with stakeholders?</li> </ul>	<ul style="list-style-type: none"> <li>• Manual/SOPs on IEC</li> <li>• Any report to monitor effectiveness of IEC activities, if any</li> <li>• Annual Action Plans/ Calendar on IEC activities</li> <li>• Any IEC Collateral made by the department/ITI</li> <li>• Proceedings from Outreach events</li> <li>• Participation Records</li> </ul>

<ul style="list-style-type: none"> <li>• At what frequency are such platforms used? (Open Forums, Career and Diversity Fairs, Talks with Industry Experts and Partnership Events with Industries, Incubation Centre Efforts, On-spot registrations, information kiosks, hackathon, students festivals, job fairs etc)Is data on participation in such events maintained and reported?</li> <li>• Is the outreach and communication approach different for government run vs private run ITIs?</li> <li>• Do you have social media presence?</li> </ul>	
<p><b>Course Curriculum Development Pre-Admission Support and Admission Criteria</b></p> <ul style="list-style-type: none"> <li>• What is the mechanism for pre-admission support including admission counseling?</li> <li>• What is the mechanism for admission and selection of candidates? (merit/ any other) in government vs private owned ITIs?</li> <li>• Is there any information/counseling/ study support provided to students who may require entrance exam preparation for admission?</li> <li>• How is inclusion of candidates including women and other disadvantaged groups is ensured in pre-admission support and admission process?</li> <li>• How is the course curriculum/syllabus determined? <ul style="list-style-type: none"> <li>▪ Individual ITI has freedom in determining?</li> <li>▪ Any Consortium/Council?</li> <li>▪ Any Industry Representation?</li> </ul> </li> <li>• How frequently is the curriculum revised? How is industry demand taken into account?</li> <li>• Who governs the accreditation of these courses- regulatory body?</li> <li>• Difference in the mechanism for curriculum development for government and private owned ITIs?</li> <li>• How is the curriculum updated to introduce emerging themes in learning for bettering placements and industrial demand?</li> </ul>	<p>Sample of course material</p> <p>Any notifications, letter of correspondence on pre-admission support</p> <p>Any government order/notification on entrance exams, merit based announcements</p> <p>Any GO/notification on special criteria for women and other disadvantaged groups</p>
<p><b>a. Selection and Admission</b></p> <ul style="list-style-type: none"> <li>• What is the process by which students are selected?</li> <li>• Who is responsible for their selection? How is equal opportunity and non-discrimination in selection of students ensured?</li> <li>• What is the total strength of students in your unit? Please provide data based on: <ul style="list-style-type: none"> <li>• Women</li> <li>• SC/ST</li> </ul> </li> </ul>	<p>Departmental and ITI level Data base on students seat capacity and enrolled numbers for each inclusion category</p>

<ul style="list-style-type: none"> <li>• OBC</li> <li>• PWDs</li> <li>• Transgender</li> </ul> <p>Do you capture students data on gender disaggregated level? How often do you capture and report this data? (Frequency)</p> <ul style="list-style-type: none"> <li>• Subsidies or any special training programs initiated for BPL, ST/SC, women, persons with disabilities and other vulnerable groups?</li> </ul> <p><b>Questions on Women's Inclusion – Students</b></p> <ul style="list-style-type: none"> <li>• Any specific challenges faced by women students during admission?</li> <li>• Are there any mobility, accessibility, safety and course content related issues faced by women students?</li> <li>• Any special preference for kind of courses and industry sectors that women students prefer?</li> <li>• Is there any specific state level welfare schemes for safeguarding the interests of female students?</li> </ul> <p><b>Questions on ST Inclusion – Students</b></p> <ul style="list-style-type: none"> <li>• Any specific challenges faced by ST students during admission, course attainment and placements?</li> <li>• Are there any mobility, accessibility, safety related issues faced by ST students? Where do they generally come from? (Geographical belt)</li> <li>• Any special preference for kind of courses and industry sectors that ST students prefer with respect to their socio-cultural set ups?</li> <li>• Is there any specific state level welfare schemes for safeguarding the interests of ST students especially those residing in LWE affected districts?</li> <li>• Where do they generally get placed? (Industrial Linkages?)</li> </ul> <p><b>Questions on PWD Inclusion – Students</b></p> <ul style="list-style-type: none"> <li>• Provisions for barrier free universal access for women and PWDs (CCTV for women's safety, separate and sufficient toilets for men and women, ramps, textured tiles, accessibility features in toilets etc)</li> <li>• Provision for any PWD and/or women exclusive courses/classes to meet special needs? Provision of special resource persons (staff) to cater to special needs of the students</li> <li>• Provision for course curriculum designed for PWDs and use of assistive technologies (Braille, sign language assisted courses etc).</li> </ul>	
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<p><b>Gender Equality and Social Inclusion – Staff Capacity Building – Department Level</b></p> <ul style="list-style-type: none"> <li>• Does your department follow any Capacity building Training plan and Calender?</li> <li>• What is the frequency of trainings provided to the ITI staff on an average?</li> </ul> <p><b>Staff Capacity Building – ITI</b></p> <ul style="list-style-type: none"> <li>• What is the total strength of your staff?</li> <li>• What is the process of staff selection and recruitment (entrance exam, interview etc).</li> <li>• Is there any affirmative recruitment policy for the staff? Is there any practice and policy for recruiting women staff on priority for women and tribal exclusive ITIs?</li> <li>• How often is the staff trained and in what areas? What is the frequency of such trainings and its content?</li> <li>• Do you have a dedicated staff training calendar including training for new courses, leadership etc?</li> </ul> <p><b>Staffing and Capacity Building- Women</b></p> <ul style="list-style-type: none"> <li>• What is the representation of women in staffing within the department/ITIs? (percentage to total)</li> <li>• How many women are employed in technical, administrative roles and support roles? (Percentage to total)</li> <li>• Is there any special state/departmental recruitment policy or practice for recruiting women staff in the department/unit?</li> <li>• Is there any special national/state/departmental policy or practice on capacity building and training ensuring participation of women staff?</li> <li>• Is there any special need/request of women staff when going for such trainings?</li> </ul> <p><b>Staffing and Capacity Building- SC/ST</b></p> <ul style="list-style-type: none"> <li>• What is the representation of SC/ST in staffing within the department/unit (percentage to total)</li> <li>• How many SC/ST are employed in technical, administrative roles and support roles? (Percentage to total)</li> <li>• Is there any special state/departmental recruitment policy or practice for recruiting SC/ST staff in the department/unit?</li> </ul> <p><b>Staffing and Capacity Building- PWDs</b></p> <ul style="list-style-type: none"> <li>• What is the representation of persons with disabilities (PwD) in staffing within the department/unit (percentage to total)</li> <li>• Is there any specific state/department recruitment policy or practice catering to a certain type of PWDs?</li> </ul>	<ul style="list-style-type: none"> <li>- Total no. of Department's workforce disaggregated by gender, ST, SC, BPL, PwD (Get in a tabular format)</li> <li>- Copy of Staff Training Calendar and provisions for professional development</li> <li>- Notification on subsidies and/or special provisions for vulnerable groups</li> <li>- Examples of assistive technology and course curriculum, material for PWDs</li> <li>- Training Calendar and content</li> </ul>
<p><b>Monitoring and Placement Support</b></p>	<p>Dashboard statistics</p>

<ul style="list-style-type: none"> <li>• What is the monitoring mechanism for knowing real time class progression and quality of instruction? (CCTV, inspections etc?)</li> <li>• Are there any payments tied to number of students enrolled and graduated?</li> <li>• Is there any dashboard on all students and staff ? Is there any provision for collecting and reporting this data at GDD level?</li> <li>• Mechanism of placement? (Placement cell and support)</li> <li>• Do you maintain placement data on GDD level? How many female vs male students got placed last year?</li> <li>• Do you provide post placement monitoring support? For how long?</li> <li>• Are there any specific challenges faced and special provisions provided to women, SC/ST and PWD students during placement?</li> <li>• Any placement support (industry linkages, alumni network, paid internship, counseling and mentoring etc.</li> </ul>	<p>Placement Cell Function</p> <p>Any Notifications on monitoring provisions</p> <p>Success stories on placement outcomes, placement provisions</p>
<p><b>Policies</b></p> <ul style="list-style-type: none"> <li>• Any relevant Act and Bye Laws, policies, vision, mission, rules, and procedures applicable to skill development.</li> <li>• Any reservation policies of the Department for participation in training programs?</li> <li>• Any special affirmative action and policies for women and other disadvantaged groups (scholarships commitment, minimum intake during admission, fee waivers etc)</li> <li>• Policy/ Government Order on mainstreaming PWDs</li> <li>• Details of any previous externally aided projects supported by the Department</li> </ul>	<ul style="list-style-type: none"> <li>- Citizen Charter of Department</li> <li>- Copies of Manuals, Acts, Byelaws, etc. relevant to skills development</li> <li>- Social Management Framework, Social Management Plan, etc. from any externally aided projects supported by the Department</li> </ul>

## ANNEXURE VII: Assessment of Environmental and Social Systems against ESSA Core Principles

**Table 10: Environmental Aspects: Core Principle 1: Environmental Management**

System Assessment	Capacity Assessment	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> <p><b>Key Planning Elements</b></p> <p><i>1.1 Bank program procedures are backed by an adequate legal framework and regulatory authority to guide environmental and social impact assessments at the programmatic level, 1.2. Incorporate recognized elements of environmental and social assessment good practice, including the following: 1.2 (a) Early screening of potential effects 1.2 (b) Consideration of strategic, technical, and site alternatives (including the 'no-action alternative) 1.2 (c) Explicit assessment of potentially induced cumulative, and transboundary impacts, 1.2 (d) Identification of measures to mitigate environmental or social impacts that cannot be otherwise avoided or minimized, 1.2 (e) Clear articulation of institutional responsibilities and resources to support the implementation of plans</i></p>			
<p><b>Construction Works:</b></p> <ul style="list-style-type: none"> <li>EIA Notification 2006 and its amendments suggest EIAs to be carried out for Environmental Clearance for building construction ≥20000 sqm and &lt;1,50,000 sqm. of built-up area, or Area development ≥ 50 ha and or built-up area ≥1,50,000 sqm. EIA is also required for activities in CRZ areas as per CRZ Notification 2016, for CRZ clearance. Hence, except in case of large campus development or Building Construction Projects (which are not envisaged in the Program as activities will be confined within existing campuses usually with many other buildings), and activities prohibited in CRZ zones, there exist no mechanism to screen, identify alternatives, identify cumulative transboundary impacts, mitigate,</li> </ul>	<p><b>Construction Works:</b></p> <ul style="list-style-type: none"> <li>Staff in Program Agencies include including Principals, Instructors, Foremen/Supervisors and other administrative staff. Many have training in Engineering, though specific capacities in the Environment or Health and Safety usually are not available.</li> <li>Civil works are carried out by Government Agencies mandated to carry out the construction works. This includes the Public Works Department (PWD), at Central and State levels. There are various tiers of engineering staff in PWD – Chief Engineer, Superintending Engineers, Executive Engineers, Junior Engineers and Assistant Engineers. (In some states nomenclature of tiers changes- for example Assistant Executive Engineers instead of Junior Engineers). Most engineering staff are either polytechnic or</li> </ul>	<p><b>Construction Works Systems</b></p> <ol style="list-style-type: none"> <li><i>Absence of Systems: to screen, avoid, assess the Environmental risks and impacts (including transboundary and cumulative), identify alternatives, mitigation measures, management measures, monitoring mechanism, for Proposed Program activities</i></li> <li><i>Exclusion of High-Risk activities: Exclusion criteria to exclude High Risk interventions</i></li> <li><i>Environmental Health &amp; Safety Audit: Audit to find non-compliances and EHS issues in existing buildings / campuses</i></li> <li><i>For all activities:</i> <ul style="list-style-type: none"> <li>Considerations to enhance environmental performance, sustainability and climate impacts</li> </ul> </li> <li><i>System (tools, formats) to Supervise, Report</i></li> </ol>	<p><b>Construction Works:</b></p> <ul style="list-style-type: none"> <li><i>Prepare and follow Systems to screen, avoid, assess the Environmental risks and impacts, include these in Bid Documents, implement, mitigate, manage, monitor Program activities</i></li> <li>Develop and use Environmental Guidance to guide Design &amp; EIAs including (i) Exclusion criteria to exclude high risk activities, (ii) Audit of Existing campus/facilities, (iii) screening format, guidance to identify alternatives, mitigation, management measures and institutional responsibilities, (iii) Design criteria to make up the Guidance Gaps at State level; (iii) Tools for Environmental Management Cells or Units to monitor and report on Environmental aspects, quantity and quality of wastes, climate resilience, worker records, and OHS, CHS during Construction &amp; O&amp;M), (iv) exclusive OHS /</li> </ul>



System Assessment	Capacity Assessment	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>			
<p>manage or allot institutional responsibilities for environmental considerations.</p> <ul style="list-style-type: none"> <li>There is adequate regulatory backup in the Country for most construction related safety and environmental aspects, and the system requires getting Consent to Establish and Operate for large infrastructure. National Building Codes and State Building Byelaws, Town planning bye laws, Fire &amp; Safety regulations, guidance to ensure resource efficiency; etc. exists. MOEFCC, States, PCBs, and NGT have formulated siting criteria, directions to prevent pollution of waterbodies, manage wastes, discharge/reuse of treated sewage, use environmentally acceptable materials etc. However, some legacy non compliances exist in existing campuses (for example: noncompliance to siting criteria, building rules, Fire Safety)</li> <li>Central or State PWD or other government bodies get the permits and clearances and are mandated to manage safety, and labour risks and impacts of construction works. Executive Engineers at the District Level are usually in charge of construction and upgradation as</li> </ul>	<p>Engineering Course certified and experienced in public works including building construction, roads, area development, water and sanitation, electrification etc. PWD staff have multiple parallel responsibilities of design, estimation, permits, tendering, arranging works, contractor management, supervision of construction, repair of various government buildings in the zones / divisions allotted to them.</p> <ul style="list-style-type: none"> <li>There is no specific involvement of ITI staff in construction work supervision or monitoring; even though they provide the requirements for construction upgradation or repair and contribute to preparing designs and estimates.</li> </ul> <p><b>Teaching - Learning:</b></p> <ul style="list-style-type: none"> <li>Curriculum mandates following generic environmental requirements, however capacities and awareness to screen, assess manage risks and impacts at National/State/ITI levels is not found among the existing staff</li> </ul>	<ul style="list-style-type: none"> <li>Absence of MIS and tools / records to daily review, monitor, and enforce Pollution management, O&amp;M of assets, OHS/CHS Incident Reporting during works</li> </ul> <p><b>Capacities</b></p> <ul style="list-style-type: none"> <li>Need capacities to promote environmental sustainability and best practices through planning &amp; design &amp; for including requirements for wholistic improvement in the Campus in the Institute Development Plans</li> <li>Need improved focus on Environmental upkeep and maintenance; and better water, sanitation, SWM, energy efficiency</li> <li>Need improved Institutional capacity and training at various levels, especially at ITI, PWD and other institutions and levels to manage and enhance Environmental &amp; Safety effects</li> </ul> <p><b>Teaching – Learning:</b></p> <ul style="list-style-type: none"> <li>Absence of a focused unit / cell in EHS</li> <li>Gaps in Focused OHS training among trainees and trainers, and safety culture</li> <li>No provision or use of PPEs and overall improvement needed in lighting, sanitation, housekeeping and safety, waste and hazardous material management, environmental management EHS in ITIs, NSTIs</li> </ul>	<p>CHS guidance (including Incident Reporting) for all activities</p> <ul style="list-style-type: none"> <li><i>Constituting</i> an Environmental and Safety Management Cell at the National Level with experts and focal points at all other levels including State, and Hub &amp; Spoke Consortium and ITI levels to ensure permits, plan, design, assess impacts, manage, monitor, data management and reporting</li> <li>Training &amp; Capacity building of technical experts/Design teams, engineers, all Environmental Management Units/Cells at various levels on environmental management using systems to screen, assess, mitigate, manage environmental impacts, enhancing environmental effects through best practices, and risk management</li> <li>Sharing of learnings between Program agencies</li> </ul> <p><b>Teaching – Learning:</b></p> <ul style="list-style-type: none"> <li>Develop a Safety – First Cell in EHS</li> <li>Ensure Focused OHS training among trainees and trainers, and safety culture; OHS certification</li> <li>Ensure provision and use of appropriate PPEs</li> <li>Ensure overall improvement in lighting, sanitation, housekeeping and safety, waste and hazardous material management,</li> </ul>

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
<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>expected under the Program. Project Implementation Unit or Wing of PWDs handle large construction or specialized works. Bid documents, Format for Work Order and SOPs of PWD include the need to follow certain regulations and safety guidance.</p> <p><b>Teaching – Learning:</b></p> <ul style="list-style-type: none"> <li>Program agencies do not specifically have systems for Environmental Management in ITI Operations except safety guidance in the curriculum</li> </ul>		<ul style="list-style-type: none"> <li>Trade wise gaps on EHS in teaching learning material</li> </ul>	<p>environmental management EHS in ITIs, NSTIs</p> <ul style="list-style-type: none"> <li>Include trade wise EHS in teaching learning material</li> <li>Capacity building on EHS for students and Instructors</li> </ul>

**Table 11: Environmental Aspects: Core Principle 2: Natural Habitats and Physical Cultural Resources**

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
<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><i>Key Planning Elements</i></p> <p><i>2 (a) Includes appropriate measures for early identification and screening of potentially important biodiversity and cultural resource areas</i></p>			
<p><b>Construction and O&amp;M Activities:</b></p> <ul style="list-style-type: none"> <li>At the National /State ITI or program level or at PWDs, there is no guidance to screen, exclude sensitive areas except existing regulations on Protected areas, and archeologically recognized monuments.</li> <li>There is no screening sheet from earlier programs (STRIVE was a PforR with very</li> </ul>	<p><b>Construction and O&amp;M Activities:</b></p> <ul style="list-style-type: none"> <li>Staff in Program Agencies include including Principals, Instructors, Foremen/Supervisors and other administrative staff. Many have training in Engineering, though specific capacities on Environment or Biodiversity or Cultural Resources usually are not available.</li> </ul>	<p><b>Construction and O&amp;M Activities:</b></p> <p><u>Systems</u></p> <ul style="list-style-type: none"> <li>Lack of availability of Exclusion criteria &amp; screening format to exclude high risk activities and identify sensitive habitats and cultural resources</li> </ul> <p><u>Capacity</u></p>	<p><b>Construction and O&amp;M Activities:</b></p> <ul style="list-style-type: none"> <li>Exclusion criteria, inclusion of leads on biodiversity, habitats and cultural resources in Audit form, design guidance to avoid high impacts and risks on Natural Habitats and Physical Cultural resources shall be prepared as part of Environmental Guidance Manual for the Program and used</li> </ul>

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
<p>minor construction, No Screening sheet was used under EMF of VTIP and no institutional memory on screening) including parameters on biodiversity and cultural resource areas</p> <p><b>Teaching - Learning:</b></p> <ul style="list-style-type: none"> <li>During Teaching Learning there are elements that might impact natural habitats or cultural resources. This includes possible impacts due to poor handling of fuels, materials, noise, dust on neighboring or on-the site resources or felling / impact on trees etc. There exists no mechanism at Program agencies (except regulations &amp; good practice guidance at National / State levels) to anticipate impacts or screen, such impacts</li> </ul>	<ul style="list-style-type: none"> <li>Civil works are carried out by Government Agencies mandated to carry out the construction works. This includes the Public Works Department (PWD), at Central and State levels. There are various tiers of engineering staff in PWD, however their specific expertise in Biodiversity or Cultural Resources is minimal. They do follow permit requirements, but capacity to identify such impacts are non-existent</li> <li>There is no specific involvement of ITI staff in construction work supervision or monitoring. The records on building permits etc. are maintained by administrative staff. However, beyond the permit/clearance requirements if brought out / altered by Local bodies or other agencies, their capacities to identify impacts on biodiversity or cultural resources is minimal</li> </ul> <p><b>Teaching - Learning:</b></p> <p>Curriculum mandates following generic environmental management. However, capacities to screen impacts and risks of teaching Learning on is not available</p>	<ul style="list-style-type: none"> <li>Absence of experts at all levels to ensure proper screening on Biodiversity, natural habitats or Cultural resources</li> </ul> <p><b>Teaching - Learning</b></p> <p>Systems:</p> <p>Absence of systems to screen impacts of teaching learning activities on habitats and cultural properties</p> <p>Absence of allotments to minimize and manage wastewater, waste, noise and other risks to biodiversity and cultural resources</p> <p><b>Capacities:</b></p> <p>Lack of awareness among instructors and other staff on impacts of day-to-day activities on biodiversity or cultural resources</p>	<ul style="list-style-type: none"> <li>Ensure designated &amp; capacitated engineers or hired experts for supervising environmental aspects and screening at all levels</li> <li>Build capacities by providing hands on training and sharing of learnings between States/ITIs/proposed Hubs &amp; Spokes on proper screening using screening tool</li> </ul> <p><b>Teaching - Learning</b></p> <ul style="list-style-type: none"> <li>Develop and use tools to screen and anticipate impacts &amp; risks and include in IDPs</li> </ul>
<p><i>2 (b) Supports and promotes the conservation, maintenance, and rehabilitation of natural habitats; avoids the significant conversion or degradation of critical natural habitats and if avoiding the significant conversion of natural habitats is not technically feasible, includes measures to mitigate or offset impacts or program activities.</i></p>			
<p><b>Construction and O&amp;M Activities:</b></p> <ul style="list-style-type: none"> <li>Regulatory requirements ensure avoidance of significant adverse impacts on natural habitats with respect to siting and disposal of wastes and wastewater.</li> </ul>	<p><b>Construction and O&amp;M Activities:</b></p> <ul style="list-style-type: none"> <li>No capacity at Program Agencies, or PWD to guide on planning and design of best environmentally sensitive designs. There are examples of other MDB</li> </ul>	<p><b>Construction and O&amp;M Activities:</b></p> <p>Systems</p> <ul style="list-style-type: none"> <li>Absence of guidance to avoid mitigate manage impacts and risks on natural habitats in line with regulations</li> </ul>	<p><b>Construction and O&amp;M Activities:</b></p> <ul style="list-style-type: none"> <li>Need to develop guidance to avoid mitigate manage impacts and risks on natural habitats</li> </ul>

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
<p>Locating activities in Forest, Protected areas are excluded by national regulations. Permits are required for locating activities near critical Natural habitats. National/State level EIA clearance is required for activities in CRZ</p> <ul style="list-style-type: none"> <li>However, there are no existing regulations for unprotected natural (such as local lakes, wetlands, sacred groves etc)</li> <li>Permission from most Local Bodies for construction need fire safety and adherence to building rules, and other key permits, clearances to be in place before initiating the works</li> <li>No specific design guidance at Program agency level for avoiding all impacts on natural habitats including legacy nonissues. This aspect is not seen covered in Annual IDPs</li> </ul> <p><b>Teaching – Learning</b></p> <p>ITI teaching – learning may generate waste and other pollution that may overshoot the site boundaries (such as fuel, wastewater, fire risks etc) depending on individual ITI location and activities. However, there are no systems to focus during teaching – learning on conservation, maintenance, and rehabilitation of natural habitats; or to avoids the significant conversion or degradation or offsetting impacts on critical natural habitats</p>	<p>assisted projects, where principles of screening and mitigation hierarchy was followed, and capacities were in place</p> <ul style="list-style-type: none"> <li>None of the Projects/Programs follows or are mandated to follow national building certifications on environmentally appropriate designs</li> <li>Overall, there is opportunity to improve awareness on applicable regulations</li> </ul> <p><b>Teaching – Learning</b></p> <p>No capacities at any level to understand impacts due to teaching learning, explain impacts to students or conserve natural habitats</p>	<p>Capacity</p> <ul style="list-style-type: none"> <li>Lack of awareness on all applicable regulations</li> <li>Absence of capacitated experts at all levels to get clearances on time</li> </ul> <p><b>Teaching - Learning:</b></p> <ul style="list-style-type: none"> <li>Improve curriculum and Teaching Learning material with focus on sensitive environments</li> <li>Training to Staff and Students</li> </ul>	<ul style="list-style-type: none"> <li>Substantial Risk activities shall be those that might have an impact on habitats and need EA, Moderate Risk activities shall be managed using generic EMP that shall include impacts on sensitive components, Low risk activities (mostly purchase, conferences, training) shall include all sustainability principles and regulatory clearances/guidance to avoid impacts and document them while reporting.</li> <li>ToR for Impact Assessment, Trainings, PMCs, Consultants etc to include focus on supporting and promoting the conservation, maintenance, and rehabilitation of natural habitats; especially in case of any works in / near rivers, lakes, ponds, or any other sensitive areas, including cumulative and transboundary impacts guidance on design adopting appropriate technology and good practices to minimize impacts</li> <li>Ensure designated trained engineers for EIA implementation at various levels; plan &amp; ensure necessary infrastructure to manage wastes and prevent risks and impacts on physical cultural resources</li> <li>Build capacities by creating awareness on all required clearances, permits etc; and providing hands on training and sharing of learnings on Screening, Audit &amp; EMPs</li> </ul> <p><b>Teaching Learning</b></p>

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
			<ul style="list-style-type: none"> <li>Awareness materials &amp; focused teaching &amp; Training for staff and students</li> </ul>
<i>2 (c) Takes into account potential adverse impacts on physical cultural property and as warranted, provides adequate measures to avoid, minimize, or mitigate such effects</i>			
<p><b>Construction and O&amp;M Activities:</b></p> <ul style="list-style-type: none"> <li>There are National and State level laws and regulations for the regulation of activities in the proximity of protected monuments and management of chance finds of archeological, historical value. However, there are no existing regulations for unprotected cultural properties (other than those are Nationally / State Protected archeological resources or monuments).</li> <li>Program activities will be in existing campuses; some in old culturally important properties or areas and may be carrying legacy non-compliances.</li> </ul> <p><b>Teaching - Learning:</b></p> <ul style="list-style-type: none"> <li>Infrastructure to avoid minimizing impacts and monitoring reporting &amp; planning to well manage impacts on cultural properties do not exist. This aspect is not seen covered in Annual IDPs</li> </ul>	<p><b>Construction and O&amp;M Activities:</b></p> <ul style="list-style-type: none"> <li>There are no designated or hired experts at any level currently to review, ensure measures to avoid, minimize, mitigate impacts on cultural resources</li> <li>There is no capacity to get timely clearances, permits, ensure design or implementation of EIA/EMPs with enhancement measures.</li> <li>Overall, there is opportunity to improve awareness on applicable regulations and to protect cultural resources</li> </ul> <p><b>Teaching - Learning:</b></p> <ul style="list-style-type: none"> <li>No capacities at any level to understand impacts of teaching learning, explain impacts to students or conserve cultural properties</li> </ul>	<p><b>Construction and O&amp;M: Systems</b></p> <ul style="list-style-type: none"> <li>Experts at all levels to ensure timely permits and its renewals; ensure and implement enhancement measures for all recognized, or unrecognized resources in Environmental Assessments or EMPs</li> </ul> <p><b>Capacity</b></p> <ul style="list-style-type: none"> <li>Absence of capacitated experts at all levels to monitor</li> <li>Lack of awareness on all applicable regulations</li> </ul> <p><b>Teaching - Learning:</b></p> <ul style="list-style-type: none"> <li>Poor capacities and systems to manage waste, wastewater, pollution management generated during teaching learning</li> <li>Absence of curriculum and Teaching Learning material with focus on sustainable work, housekeeping, waste (solid, liquid) and other pollution management practices for sensitive environments</li> <li>Training to Staff and Students</li> </ul>	<p><b>Construction and O&amp;M Activities: Systems</b></p> <ul style="list-style-type: none"> <li>Need to develop guidance to avoid mitigate manage impacts and risks on cultural resources and chance finds; Substantial Risk activities shall be those that might have an impact on Physical Cultural Resources and need EA, Moderate Risk activities shall be managed using generic EMP that shall include impacts on sensitive components, Low risk activities (mostly purchase, conferences, training) shall include all sustainability principles and regulatory clearances/guidance to avoid impacts and document them while reporting.</li> </ul> <p><b>Capacity</b></p> <ul style="list-style-type: none"> <li>ToR for EIA and consultant hiring to include experts on potential adverse impacts on physical cultural property and provide adequate measures to avoid, minimize, or mitigate such effects on cultural resources</li> <li>Ensure designated trained engineers for EIA implementation at various levels; plan &amp; ensure necessary infrastructure to manage wastes and prevent risks and impacts on physical cultural resources</li> </ul>

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
			<ul style="list-style-type: none"> <li>Build capacities by providing training and sharing of learnings on management of works with effects on cultural resources</li> </ul>

**Table 12: Environmental Aspects: Core Principle 3: Public and Worker Safety**

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
<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> <p><b>Key Planning Elements:</b></p> <p><i>3 (a) Promotes community, individual, and worker safety through the safe design, construction, and O&amp;M of physical, or in carrying out activities that may be dependent on such safety measures, inspections, or remedial works incorporated as needed.</i></p>			
<p><b>Construction and O&amp;M Activities:</b></p> <p>Building and other Construction Workers Act, and other health and safety regulations are applicable to all works. Currently, the government is in the process of adopting Health and Safety Codes throughout the country, though they have not yet been finalized.</p> <p>Currently works are carried out by PWD at Central or State or Government agencies mandated to do such works on behalf of ITIs. Their SOPs/Work Orders/Tender / Contract Docs stipulate the need to follow “Building &amp; Other Construction Workers Acts” and other H&amp;S provisions. EMPs are neither prepared, nor incorporated in Bid documents, or applicable for works. In case of Private ITIs such works are usually carried out by private contractors and such requirements are usually not applicable</p>	<p><b>Construction and O&amp;M Activities:</b></p> <p>There is no dedicated OHS, CHS expert at any of the implementation agencies. There is little awareness among the implementing agencies of good practices.</p> <p>There exist no expertise or capacity at any level to provide training on OHS, CHS, Incident management, and reporting; and guiding consultants, contractors, sub-contractors, on incorporation of project specific OHS, CHS considerations in Bid documents and Design, and to supervise its implementation</p> <p>Most contractors do not have trained OHS/CHS personnel.</p> <p><b>Teaching Learning:</b></p> <p>NO specific capacities on OHS at any level Modern advanced contents on OHS are not taught at ITIs or national institutions</p>	<p><b>Construction and O&amp;M Activities:</b></p> <p><b>System</b></p> <p>Absence of systems to ensure safety in design, construction, O&amp;M</p> <p>High OHS risk activities such as works in dilapidated buildings/structures, works in water bodies, sewers, STPs etc. need to be screened, assessed for hazards and mitigation measures including work permit systems made part of OHS Plan, as a separate plan or a part of EMP</p> <p><b>Capacity</b></p> <p>Dedicated OHS, CHS expertise is important at National, State levels to suggest safe designs and Corrective Actions for all program activities. Capacities to guide, monitor and report on work safety need improvement</p>	<p><b>Construction and O&amp;M Activities:</b></p> <p><b>System</b></p> <ul style="list-style-type: none"> <li>Design &amp; EIA ToRs to be specific on OHS, CHS aspects</li> <li>OHS, CHS (covering safety and pollution) guidelines (specific to work type) and institutional, insurance, regulatory requirements should be included in all bid documents for all works before the start of works</li> <li>Awareness on OHS, CHS to all stakeholders as part of Program Training / Capacity Building activities</li> <li>Avoidance, mitigation, management measures shall be considered in EMP as of higher OHS and CHS risks, and avoidance, mitigation and management measures built in as part of Design, OHS, CHS Plan.</li> </ul>

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
<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>			
<p>There is no formalized mechanism (including from earlier Projects/Programs) to ensure OHS / CHS aspects in any work – by private or public agencies in design, planning, O&amp;M.</p> <p><b>Teaching - Learning</b></p> <p>Certain generic safety considerations for all trades and specific considerations are ensured through curriculum for core trades. Teaching learning is however not effective on OHS and CHS.</p> <p>PPEs are not supplied or used by instructors or learners even in institutions developed and managed under MDB assisted programs. In some cases, old worn-out PPEs were seen in lockers. First Aid boxes and safety trainings are observed insufficient in most cases; Fire extinguishers are not appropriate to the trades, locations; and mostly neither used, nor license renewed. Most students are staff not trained on Fire safety</p> <p>NO standard awareness material is seen displayed except in certain tool rooms and facilities run through superior industries</p>	<p>Students' capacities on H&amp;S not commensurate with industry levels</p> <p>Incident recording (mostly indicative incidents) or Corrective plans are not prepared or followed</p>	<p><b>Teaching – Learning</b></p> <p>Absence of Teaching learning materials with updated trade wise safety contents</p> <p>Absence of capacities to train on OHS &amp; coordinate OHS implementation in teaching - learning</p>	<ul style="list-style-type: none"> <li>Works involving hazardous materials, Lead based paints, Asbestos, or purchase and Use of banned pesticides/Insecticides shall be excluded</li> </ul> <p><b>Capacities:</b></p> <ul style="list-style-type: none"> <li>Ensure experts at State to oversee and report on all program activities</li> </ul> <p><b>Teaching Learning</b></p> <p>45. Dedicated Safety-First Cell on OHS CHS to coordinate teaching learning and raise the bar for all ITI skilled students and staff</p> <ul style="list-style-type: none"> <li>Learning exchange between States/Institutions</li> <li>High quality International OHS certification for Trainers and support modalities for students seeking certification</li> <li>Ensure supply and use of appropriate PPEs, Defibrillators, Fire safety, standard OHS awareness material, first aid boxes etc.</li> <li>Retrofit required infrastructure and good practices to improve legacy issues in storage, management of fuels, batteries wastes, asbestos, chemicals etc.</li> <li>Training to all students and staff on Fire Safety and First Aid</li> </ul>

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
<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> <p><i>3 (b) Promotes the use of the recognized good practice in the production, management, storage, transport, and disposal of hazardous materials generated through program construction or operations; promotes the use of IPM practices to manage or reduce pests or disease vectors; and provides training for workers involved in the production, procurement, storage, transport, use, and disposal of hazardous chemicals in accordance with international guidelines and conventions.</i></p>			
<p><b>Construction and O&amp;M Activities:</b></p> <p>There are National regulations on Solid Waste, Hazardous Wastes, Biomedical Wastes, Construction and demolition wastes, Plastics, Chemicals, Batteries, etc. Certain pesticides, insecticides, are also banned for use in India. SWM micro composing / other technology-based units, Hazardous wastes, E-waste and C&amp;D waste management facilities exist in some Program cities</p> <p>Program EIAs shall assess any hazardous / other wastes, chemicals or materials generated from the project. Any hazardous material must be disposed of as per the Hazardous Waste Management Rules 2016. This is also applicable to sludge from existing STPs /ETPs if found hazardous due to any contaminant</p> <p><b>Teaching Learning:</b></p> <p>Toxic materials, hazardous wastes and chemicals, and cleaning cotton waste are seen in small quantities in workshops. These are usually reused and recirculated. However, small final quantities remain for want of disposal. Spillage and poor</p>	<p><b>Construction and O&amp;M Activities:</b></p> <p>Currently in most ITIs, waste is not managed well. It is seen all around the campus, in mixed fashion.</p> <p>Construction works are not managed well with respect to waste or pollutants; specifically, fuels, asbestos etc.</p> <p>Awareness of regulatory requirements and best practices are minimal. Awareness that Hazardous waste management from construction and demolition (asbestos, sharps (glass, tools)), sludge, as also wastewater or back wash from water filtration, etc., need proper management is minimal, and institutional capacities at all levels are required to be upgraded to guide, co-ordinate with local bodies/other agencies.</p> <p><b>Teaching Learning:</b></p> <p>Capacities for management of hazardous materials or wastes even though in small quantities is minimal</p> <p>No specific training or awareness to instructors or students on hazardous material management</p>	<p><b>Construction and O&amp;M Activities:</b></p> <p><b>System</b></p> <p>No exclusion criteria to exclude hazardous materials, including asbestos and pesticides</p> <p>No EMP to manage wastes, esp, hazardous wastes and chemicals</p> <p><b>Capacities</b></p> <p>Lack of awareness and capacity on regulatory requirements on waste management (all wastes including sludge, solar panels, hazardous wastes etc.) and reuse</p> <p>Absence of institutional capacity to guide and monitor waste management during construction and O&amp;M</p> <p><b>Teaching Learning:</b></p> <p>Systems to monitor &amp; manage hazardous materials and wastes</p> <p>Proper and safe Storage facilities are absent</p> <p>Capacities to manage hazardous wastes and materials especially in workshops are absent</p> <p>Training on hazardous wastes and material handling is important</p>	<p><b>Construction and O&amp;M Activities:</b></p> <p><u>System</u></p> <ul style="list-style-type: none"> <li>• Develop and use exclusion criteria to exclude hazardous materials and works, monitor products/byproducts for hazardous constituents and ensure disposal following HWM Rules 2016</li> <li>• DPR &amp; EIA ToRs, Bid documents, Reporting Tools (all to be made part of Environmental Guidance Manual) to be updated with requirements on waste management, material management and safe storage (such as fuel, chemicals) and record keeping under the program. Works involving hazardous materials, Lead based paints, Asbestos, or purchase and Use of banned pesticides/Insecticides shall be excluded from the Program</li> <li>• Proper infrastructure and facilities to manage hazardous material and wastes, including Fire safety provisions</li> </ul> <p><b>Teaching - Learning</b></p> <ul style="list-style-type: none"> <li>• Capacity Building at the state level to guide and monitor waste management under the program</li> </ul>



System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
<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>			
placement and management of such materials are notable in most workshops. Waste, scrap, e-wastes and hazardous materials including fuels are channelized through Government machinery. However, storage mechanism is not safe and housekeeping not followed in most places.			<ul style="list-style-type: none"> <li>• Training and awareness to officials on the regulatory environment for managing wastes and wastewater.</li> </ul>
<i>3 (c) Includes measures to avoid, minimize, or mitigate community, individual, and worker risks when program activities are located within areas prone to natural hazards such as floods, hurricanes, earthquakes, or other severe weather or climate events.</i>			
<p>Guidelines are available for siting, planning, Design for cyclone/hazard-prone areas - suggested by NDMA, Authorities at State Level, Local Bodies etc; including the following considerations: Eg: Plinth above high flood level, erosion control measures, minimal use of glass &amp; type of materials used, solar passive architecture/lighting in certain areas, ventilation specifics to ensure climate responsiveness, positioning of panels etc.).</p> <p>The National Building Code 2016 includes several codes concerning fire safety, earthquake resistance, cyclone resistance, and construction.</p> <p>No special screening for climate risks</p>	<p>There is no institutional responsibility to coordinate with various agencies/departments and ensure the sustainable, smart design and to avoid, minimize, mitigate, community, individual, or worker risks in hazard-prone areas or during climatic events.</p> <p>The awareness/capacities of institutions involved are limited at all levels. Also, there is no institutional arrangement to monitor safe work site closure and safety of workers, communities, or students during emergencies or climatic events.</p>	<p><b>System</b></p> <p>Climate screening mechanism absent</p> <p>Design &amp; EIA ToRs lacks Climate mitigation, adaptation considerations, including warning and emergency response</p> <p>The works in hazard-prone areas shall follow National specifications to ensure structural safety.</p> <p>Site planning guidelines need strengthening with Climate Responsive Criteria.</p> <p>Absence of comprehensive Guidelines / SOPs for site planning and work practices (separate) including for hazard-prone areas</p> <p>Absence of protocols to ensure safe work closure or guidance on the safety of workers, students, communities, in case of emergencies/disaster events.</p> <p><b>Capacity</b></p>	<ul style="list-style-type: none"> <li>• Prepare climate screening and risk mitigation mechanism</li> <li>• Update Design &amp; EIA ToRs with Climate mitigation, adaptation considerations; including warning and emergency response.</li> <li>• Design of infrastructure shall follow comprehensive Guidelines / SOPs for site planning and work practices (separate) including for hazard-prone areas. This should be made a Bid condition</li> <li>• Generic EMPs for all type of works (part of Environmental Guidance Manual) to include protocols to ensure safe work closure or guidance on the safety of workers, communities, in case of emergencies/disaster events.</li> <li>• Designate institutional responsibility to coordinate with various agencies/departments, monitor and</li> </ul>

System Assessment	Capacity Assessment	List of Identified Gaps	Recommendations
<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>Absence of institutional responsibility to coordinate with various agencies/department's, monitor and ensure sustainable, smart planning, and avoid, minimize, mitigate, community, individual, or worker risks in hazard-prone areas or during climatic events.</p> <p>Absence of awareness/training to all agencies, students and stakeholders on safe practices and emergency response.</p>	<p>ensure sustainable, smart planning, and avoid, minimize, mitigate the student community, individual, or worker risks in hazard-prone areas or during climatic events.</p> <ul style="list-style-type: none"> <li>• Provide awareness/training to all agencies and stakeholders on safe practices and emergency response</li> </ul>

**Table 13: Summary of Environmental Assessment for Core Principles 1, 2, 3**

Summary of Assessment, List of Identified Gaps	Recommendations
<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>Applicable</p> <ul style="list-style-type: none"> <li>• Absence of procedures, and processes at the National, State, Institutional level to screen &amp; avoid, minimize, mitigate, adverse impacts, or promote informed decision-making except in case of large building construction or area development activities.</li> <li>• Absence of mechanism to ensure quality and sustainability of facilities created</li> <li>• Absence of tools/formats to review, monitor, and enforce Pollution management, O&amp;M of assets</li> </ul>	<ul style="list-style-type: none"> <li>• Include mechanisms to ensure sustainable infrastructure &amp; facilities and operations and maintenance during design</li> <li>• Develop and follow a system to exclude high risk activities in line with Banks P for R Policy, Audit existing legacy issues and risks, and screening for all construction activities</li> <li>• Develop and follow mechanism to (i) assess, mitigate, manage, and monitor environmental risks and impacts; including impacts on associated facilities and cumulative impacts where applicable in case of substantial risk activities if any; (ii) use EMP for moderate risk activities in line with national regulations, and (iii) ensure regulatory requirements in Bid Documents in case of low risk activities</li> <li>• Program to prepare Environmental Guidance with standards, tools to be used strictly in Design and Environmental Assessment, and monitoring/supervision of all Program activities - including better effects of energy efficiency and greening activities.</li> <li>• Ensure EMP is included in bid documents, implemented, monitored and reported as part of QPR or semi-annual reports</li> </ul>

Summary of Assessment, List of Identified Gaps	Recommendations
<ul style="list-style-type: none"> <li>Absence of institutional capacity to manage environmental effects &amp; disseminate program information</li> <li>Lack of guidance, training, and capacity building of implementing agencies to identify, mitigate and manage risks and impacts</li> </ul>	<ul style="list-style-type: none"> <li>Mid Term and End term Audit</li> <li>Constitute a dedicated Environmental Management Cell – Center for Health, Safety and Environment to co-ordinate Program Environmental Management at all levels</li> </ul>
<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>	
<ul style="list-style-type: none"> <li>Absence of screening mechanism/tools to avoid risks to Natural Habitats and Physical and Cultural Resources. Though proposed activities are within available land, it is essential to screen the proposed activities for:               <ol style="list-style-type: none"> <li>locations near cultural heritage buildings/ premises,</li> <li>location of infrastructure and treated sewage and sludge discharge or disposal points viz a viz the climate impacts,</li> <li>location of critical habitats viz a viz disposal of treated sewage would lead to avoidance of environmental impacts and long-term sustainability,</li> <li>location of water supply sources treated sewage and sludge disposal areas (even during climate emergencies)</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Develop and use exclusion criteria to exclude high-risk activities near Natural Resource areas, Cultural Heritage areas (including for activities considered as prior results)</li> <li>Follow regulatory requirements &amp; monitor</li> <li>Ensure environmentally sensitive design &amp; mitigation measures for all risks and impacts</li> <li>Prepare and update the list of regulatory clearances required for various program activities</li> <li>Prepare Guidelines to be included in Environmental Guidance</li> </ul>
<ul style="list-style-type: none"> <li>Absence of responsibilities at various levels to ensure screening and avoidance of risks and impacts</li> </ul>	<ul style="list-style-type: none"> <li>Develop dedicated capacities for screening, and exclusion, before initiating any Program implementation works (new/upgradation)</li> <li>Environment Management Cell including ITI staff or designated persons, overseeing the works to be provided thorough on-job and dedicated training on the regulatory requirements of works/activities in sensitive areas, cultural areas, mitigation, monitoring, reporting</li> </ul>
<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"> <li>Lack of tools to manage OHS / CHS during implementation from pollution effects of works &amp; O&amp;M (wastes, sewage, sludge), facilities, use of / encountering Hazardous Materials like Asbestos &amp; banned insecticides, pesticides, Fire/Disaster Risks</li> <li>Need for improved focus on OHS, CHS during Teaching Learning</li> <li>Absence of infrastructure to safe keep hazardous materials</li> </ul>	<ul style="list-style-type: none"> <li>Prepare and follow Environmental Guidance Manual</li> <li>Improve design of workshops ensuring safekeeping of wastes and materials</li> <li>Ensure that EMPs are prepared covering all regulatory requirements, pollution, OHS, CHS risks, disaster risk management</li> <li>Use standard EMP for other activities, updated as site-specific ones, by the contractors at the start of works</li> <li>Study on EHS in curriculum- Trade wise improved teaching learning material on new / advances in OHS</li> <li></li> </ul>

<b><i>Summary of Assessment, List of Identified Gaps</i></b>	<b><i>Recommendations</i></b>
<ul style="list-style-type: none"> <li>• Absence of an institutional mechanism to guide on OCHS, safety/hazards, chemicals wastes/pollution, and to avoid, minimize, mitigate risks and monitor; and to incorporate good practices on EHS in Teaching – Learning Environment.</li> <li>• Lack of capacities at all stakeholder agencies on OHS, CHS, and the applicable Codes, regulations</li> <li>• Lack of training in emergency response and disaster management</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure institutional mechanism (have dedicated personnel with suitable capacities – certified OHS professionals) at all levels including Contractors - to guide on safety, and pollution and ensure its implementation and monitoring.</li> <li>• Construction supervision including design review to ensure it follows environmental guidance, and OHS</li> <li>• Capacity building of all stakeholder agencies on OHS, CHS, regulations, Pollution management, and monitoring these</li> <li>• Stakeholders and workers training on OHS, CHS, orientation on Disaster Management, emergency response</li> <li>• Safety Cell on OHS to coordinate OHS trainings, certification of instructors &amp; students in response to market demands</li> </ul>

# ANNEXURE VIII: Detailed Actions of Safety-First Cells at various applicable Institutional Levels

**Table 14: Proposed Detailed Actions on EHS for Compliance during Construction/Upgradation and Teaching - Learning**

Proposed Activities to Improve OHS in Teaching Learning	Year 1	Year 2	Year 3	Year 4	Year 5
Constitute Safety-First Cells at all applicable levels (National, State Hub and Spoke (HSIC) Levels) through an Office Order and SOPs; to ensure EHS in ITI Teaching Learning including accreditation of Trainers, Trainings to be provided on EHS, provision & use off PPEs and Awareness Material	<ul style="list-style-type: none"> <li>Approval to Safety-First Cells at various levels with qualified and experienced staff, and Scope of Work.</li> <li>Gap analysis of trade specific EHS curriculum compared to good international industry practices/ guidelines / manual and revise / upgrade the trade specific EHS (including that for new green jobs) curriculum and teaching material by CSTARI and NIMI with approvals from DGET.</li> </ul> <p><i>(Responsibility: MSDE jointly with applicable agencies such as DGET, CSTARI, NIMI)</i></p>	<ul style="list-style-type: none"> <li>Preparation of the teaching/ training, modules and training schedule for each Trade / Stream including new age Green Jobs, monitoring reporting schema, plan for awareness material &amp; selection of PPEs), Develop Visual interactive EHS module.</li> <li>Develop their institutional action plan for next 20 years &amp; detailed plan for next 4 years (program period)</li> </ul> <p><i>(Responsibility: MSDE &amp; PMU Safety First Cells)</i></p>	<ul style="list-style-type: none"> <li>Mid Term report on Impact Evaluation of Safety-First Cell and its activities</li> </ul> <p><i>(Responsibility: MSDE &amp; Safety-First Cells)</i></p>	Nil	<ul style="list-style-type: none"> <li>End Term report on Impact Evaluation of activities of the Safety Cells</li> </ul> <p><i>(Responsibility: MSDE &amp; Safety-First Cells)</i></p>
		<ul style="list-style-type: none"> <li>Ensure appropriate PPEs for students and Staff @ 1:1 &amp; standard Awareness Materials in 50 percent of H&amp;Ss identified</li> </ul> <p><i>(Responsibility: MSDE &amp; Safety-First Cells)</i></p>	<ul style="list-style-type: none"> <li>Ensure appropriate PPEs for students and Staff @ 1:1 &amp; standard EHS Awareness Materials for remaining H&amp;Ss</li> </ul> <p><i>(Responsibility: MSDE &amp; Safety-First Cells)</i></p>	<ul style="list-style-type: none"> <li>Ensure appropriate PPEs for students and Staff @ 1:1 &amp; standard EHS Awareness Materials for remaining H&amp;Ss</li> </ul> <p><i>(Responsibility: MSDE &amp; Safety-First Cells)</i></p>	<ul style="list-style-type: none"> <li>Ensure appropriate PPEs for students and Staff @ 1:1 &amp; standard EHS Awareness Materials for remaining H&amp;Ss to reach 100 percent coverage</li> </ul> <p><i>(Responsibility: MSDE &amp; Safety-First Cells)</i></p>
	<ul style="list-style-type: none"> <li>Orientation Training for instructors &amp; nodal officials (at all</li> </ul>	<ul style="list-style-type: none"> <li>Dedicated Third Party Training on EHS and safety culture for Trainers (ToT)</li> </ul>	<ul style="list-style-type: none"> <li>Dedicated Third Party Training on EHS and safety culture for</li> </ul>	<ul style="list-style-type: none"> <li>Dedicated Third Party Training on EHS and safety culture for</li> </ul>	

Proposed Activities to Improve OHS in Teaching Learning	Year 1	Year 2	Year 3	Year 4	Year 5
	MSDE institutions, sample Hubs and Spokes) on OHS <i>(Responsibility: MSDE, DGET, CSTARI/ NIMI)</i>	<i>(Responsibility: MSDE &amp; Safety-First Cells)</i>	remaining Trainers (ToT) <i>(Responsibility: MSDE &amp; Safety-First Cells)</i>	remaining Trainers (ToT) <i>(Responsibility: MSDE &amp; Safety-First Cells)</i>	
		<ul style="list-style-type: none"> <li>Ensure International OHS Certification for designated OHS Instructors</li> </ul> <i>(Responsibility: MSDE &amp; Safety-First Cells)</i>		<ul style="list-style-type: none"> <li>Ensure International OHS Certification for remaining designated OHS Instructors</li> </ul> <i>(Responsibility: MSDE &amp; Safety-First Cells)</i>	
<b>Total resources use and efficiency (TRUE) campuses</b>	<ul style="list-style-type: none"> <li>Establishment TRUE committees at Hub and Spoke consortium (HSIC) and Preparation of SOP for implementing TRUE at all ITIs</li> </ul>	<ul style="list-style-type: none"> <li>30% of the ITIs to implement the TRUE SOP</li> </ul>	<ul style="list-style-type: none"> <li>60% of the ITIs to implement the TRUE SOP</li> </ul>	<ul style="list-style-type: none"> <li>100% of the ITIs to implement the TRUE SOP</li> </ul>	
	<p>Minimum values: Safety First Cells approved and constituted, 50 trainees on Orientation training, 30% of total H&amp;S under the Program (as on verification date) for PPE and Standard awareness materials</p> <p>50% Hub and Spokes establish TRUE committees, SOP Prepared at Central level</p>	<p>Minimum values: 50% instructors certified, 50% designated trainers undertaking ToT, 60% of total H&amp;S under the Program (as on verification date) for PPE and Standard EHS awareness materials Minimum 15% ITIs under the Program implement TRUE SOP</p>	<p>Minimum value: 50% of remaining designated trainers undertaking ToT, 90% of total H&amp;S under the Program (as on verification date) for PPE and Standard EHS awareness materials Minimum 45% ITIs under the Program implement TRUE SOP</p>	<p>Minimum value: 100% designated trainers undertaking ToT, 100% of total H&amp;S under the Program (as on verification date) for PPE and Standard EHS awareness materials All ITIs under the Program implements TRUE SOP</p>	

## **ANNEXURE IX: P for R Exclusions from the Bank's P for R Guidance Manual**

Exclusions. Under the Policy, activities that are “judged to be likely to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people are not eligible for financing and are excluded from the Program.” More specifically, PforR financing should not be used to support programs, or activities within programs, that in the Bank’s opinion involve the following:

- Significant conversion or degradation of critical natural habitats or critical cultural heritage sites;
- Air, water, or soil contamination leading to significant adverse impacts on the health or safety of individuals, communities, or ecosystems;
- Workplace conditions that expose workers to significant risks to health and personal safety;
- Land acquisition and/or resettlement of a scale or nature that will have significant adverse impacts on affected people, or the use of forced evictions;
- Large-scale changes in land use or access to land and/or natural resources;
- Adverse E&S impacts covering large geographical areas, including transboundary impacts, or global impacts such as greenhouse gas (GHG) emissions;
- Significant cumulative, induced, or indirect impacts;
- Activities that involve the use of forced or child labor;
- Marginalization of, discrimination against, or conflict within or among, social (including ethnic and racial) groups; or
- Activities that would (a) have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation; (b) cause relocation of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities from land and natural resources that are subject to traditional ownership or under customary use or occupation; or (c) have significant impacts on Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities’ cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected communities.

This exclusion principle applies to Program activities that meet these criteria, regardless of the borrower’s capacity to manage such effects. In the PforR context, the concept of exclusion means that an activity is not included in the identified program of expenditures.

In addition, an activity is not included if it requires the completion of a non-eligible activity to achieve its contribution to the PDO or any specific DLI.