

THE WORLD BANK

ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT (ESSA)

FOR THE

STRENGTHENING TEACHING-LEARNING AND RESULTS FOR STATES (STARS)

Project ID: P166868

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List of Acronyms

ACM	Asbestos Containment Materials
BITE	Block Institutes of Teacher Education
BRC	Block Resource Centre
BRCC	Block Resource Centre Coordinator
CRC	Cluster Resource Coordinator
DIET	District Institute of Education and Training
DEO	District Education Officer
DPC	District Project Coordinator
EA	Environmental Assessment
ECE	Early Childhood Education
EMF	Environmental Management Framework
EMF-SS	Environmental Management Framework under Samagra Shiksha Framework
ESSA	Environmental and Social Systems Assessment
E&S	Environmental and Social
FGD	Focus group discussion
GRS	Grievance Redress Service
MHRD	Ministry of Human Resource Development
NDMA	National Disaster Mitigation Authority, Government of India
IPF	Investment Project Financing
PWD	Public Works Department
PAP	Program Action Plan
PAPs	Project affected Peoples
PCRs	Physical Cultural Resources
PforR	Program for Results
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
SCERT	State Council for Educational Research and Training
SMC	School Management Committee
SDMC	State Disaster Management Authority
SIS	State Implementation Society
SS	Samagra Shiksha
SSA	Sarva Shiksha Abhiyan
STARS	Strengthening Teaching-Learning and Results for States
TA	Technical Assistance
TLM	Teaching Learning Material Kits
ToR	Terms of Reference
VOC	Volatile Organic Compounds

EXECUTIVE SUMMARY

Introduction

1. This Environmental and Social Systems Assessment (ESSA) has been prepared by a World Bank team for the proposed **Strengthening Teaching-Learning and Results for States (STARS)**, which will be supported by the Bank's Program for Results (PforR) financing instrument. In accordance with the requirements of the Bank Policy Program-for-Results Financing (PforR Policy), PforRs rely on country-level systems for the management of environmental and social effects.¹
2. World Bank staff prepared this ESSA to: (i) identify the Program's environmental and social effects, (ii) assess the legal and policy framework for environmental and social management, including a review of relevant legislation, rules, procedures, and institutional responsibilities that are being used by the Program; (iii) assess the capacity to implement requirements under the system; and (iv) recommend specific actions to address gaps in the program's system and implementation capacity. Through this process, the ESSA Team assessed the extent to which the Program's environmental and social management systems are consistent with six core environmental and social principles (hereafter Core Principles) contained in the PforR Policy and corresponding Key Planning Elements.

This ESSA report is organized into the following five sections:

- I. **Introduction:** This includes a description of the ESSA's purpose and objections summarizes the methodology used for the ESSA.
- II. **Program Description and Potential Environmental and Social Effects:** This section describes the program and its context, including the program's scope, the Program Development Objective (PDO), and key results areas. The ESSA describes the actions that the program will support and the environmental and social effects that such actions are likely to produce.
- III. **Assessment of Environmental and Social Management Capacity:** This section includes a summary 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. A more in-depth description of the program's environmental and social management systems and implementation capacity are included in Annex 2.
- IV. **Consultations and Disclosure:** This section describes the key formal and informal consultations undertaken as part of the ESSA process, important input and recommendations received, and disclosure
- V. **Recommended Actions:** This section lists the actions that the ESSA Team recommends to be undertaken to address the system and capacity gaps and shortcomings identified in Section III, which are grouped into two categories: (a) those that have been mainstreamed into program design and (b) those that are to be included in the Program Action Plan (PAP).

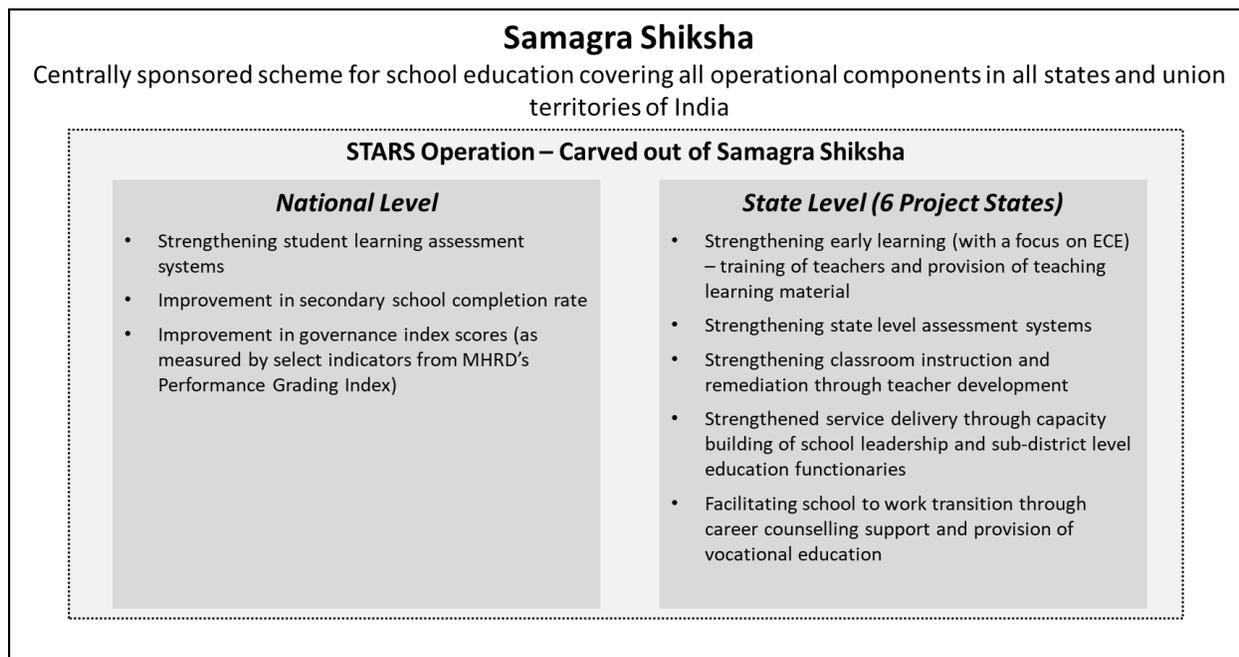
¹ "Effects" is used throughout this document to refer collectively to benefits, impacts, and risks. The term "benefits" refers to positive consequences and the term "impacts" refers to adverse or negative consequences of actions taken. Risk is used to denote the potential for loss or damage of something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

Program Description and Potential Environmental and Social Effects

Program Description

3. The Government of India through its centrally sponsored schemes for school education – *Sarva Shiksha Abhiyan (SSA)* and *Rashtriya Madhyamik Shiksha Abhiyan (RMSA)* has considerably improved access to elementary and secondary education over the last decade. Around 300 million children between the ages of six and seventeen now attend 1.5 million government, government aided, and private schools in the 36 states and Union Territories that make up India’s federal system. The government’s recent decision to merge SSA, RMSA, and teacher education into one integrated scheme (**Samagra Shiksha**) is a step towards creating a seamless K-12 system with a focus on enhancing learning at every level. Samagra Shiksha builds on the spirit of cooperative, competitive federalism in India and provides greater flexibility to states for school education planning and budgeting, with a view to supporting interventions and innovations that align with the local context and are focused on improving education outcomes. The scheme is being implemented by MHRD through a single State Implementation Society (SIS) at the state level. The central focus of this single management structure is to facilitate clear development objectives and results by using evidence-based decentralized planning at the district level, adopting a whole school approach, strengthening both vertical and horizontal accountability, and creating opportunities for peer learning. This is a national program covering all the 29 states and 7 Union Territories of India.
4. The Bank is currently working with the Government of India on a program titled **Strengthening Teaching-Learning and Results for States (STARS) which will support the Government’s larger school education program, the centrally sponsored scheme of Samagra Shiksha**. The proposed support under STARS is in the form of a hybrid operation that uses two lending instruments: (a) a program component using the Program for Results (PforR) instrument, and (a) a technical assistance (TA) component using the Investment Project Financing (IPF) instrument.
5. The Bank PforR program under STARS will be moving away from a sector wide approach of supporting the entire centrally sponsored scheme of *Samagra Shiksha*, towards supporting strategically identified components of *Samagra Shiksha* - the government’s school education program. The scope of STARS will be to carve out areas of support from the Samagra Shiksha that would include (i) **at the national level**: providing support to strategically critical areas for meeting requirements of improving education outcomes like strengthening early childhood education, learning assessment systems and governance reform (ii) **at the state level**: strategically engage in 6 select states of India to bring to scale carefully chosen components and innovative approaches that would help meet the development objective of the program. This tiered approach will address challenges of *Learning States* that need more support to improve their reform initiatives (Madhya Pradesh, Maharashtra and Odisha) and share the success of the more progressive *Lighthouse States* (Himachal Pradesh, Kerala and Rajasthan) to scale up their reform initiatives and strengthen areas that need financing support.

Figure 1: Overview of Samagra Shiksha



6. **The PforR will facilitate major reforms at the state level through a set of disbursement-linked indicators (DLIs).** It is anticipated that the selected states would undertake significant initiatives to strengthen ECE as this is now a critical theme of the draft new National Education Policy. This focus is expected to drive the anticipated learning outcomes enhancement at grade 3. Further, support to the states will include improving completion of secondary level education, with more students expected to take the Grade 10 school leaving examination as a consequence. The largest portion of the PforR financing will be for decentralized management and enhanced state implementation capacity (this includes setting up of state-level nodal institutions for education management, development of education MIS and teacher management systems, and financial support toward salary costs of block- and cluster-level education staff) . A State Incentive Grant (SIG)² scorecard will be used to incentivize states to meet project outcomes with respect to (a) strengthening delivery of education services, and (b) progressing on two additional components of their choice based on state priorities.

Program Development Objective

7. **The Program Development Objective (PDO) of the operation is to improve the quality and governance of school education in selected states.**

The PDO-Level Indicators are:

- Percentage of students achieving minimum proficiency in grade 3 language in select states

² SIG Manual is under preparation and will be released to states with the specification regarding eligible expenditures/ exclusion list, in line with the PforR and ESSA principles.

- Secondary school completion rate in select states (weighted average based on grade 9 enrolment)
 - Improved governance in select states (as measured by select indicators from MHRD's Performance Grading Index)
8. The components and activities can be categorized under the following critical areas of support:
- (i) **Ensuring that all Children are off to a Good Start** and prepared and motivated to learn at school through addressing the issue of improved learning in the early years. STARS will support activities and initiatives that are compatible with the ECE service delivery models adopted by individual states. In particular, STARS will assist states to improve the quality of their foundational learning by providing support for: enhanced classroom layouts that are (a) child friendly, developmentally appropriate, and stimulating; (b) support children's learning through direct sensory encounters with their surroundings; (c) have a positive effect on interactions between teachers and students and (d) provide developmentally appropriate curricula supported by standardized Teaching-Learning Material (TLM) kits.
 - (ii) **Strengthening assessment and use of learning metrics to guide improvements in education performance:** Specifically, support will be provided to: (a) create an independent national center for assessment; (b) develop technical standards for national assessment exercises; (c) build capacity to develop high-quality test items aligned with competency-oriented learning standards; (d) build capacity to draw statistically sound samples and develop standardized procedures and operational manuals for test administration; and (e) build capacity to analyze and report on assessment results in technically robust and policy-relevant ways. Support will be provided for an external review of the Grades 10 and 12 examinations overseen by the Central Board for Secondary Education, with an eye to identifying and implementing reforms to make them more competency based.
 - (iii) **Building teacher's skills and motivation through effective professional development and enhancing classroom instructional processes:** The STARS operation will support states to develop alternative, ICT-enabled approaches (online and offline) to enhance teachers' access to subject matter-specific and pedagogical trainings. Peer learning by leveraging social media (and other IT-enabled) platforms would be supported and forums for face to-face interaction would be provided.
 - (iv) **Strengthening Implementation and Management Capacity at Decentralized Levels for Improved Governance:** STARS will focus primarily on strengthening governance systems for service delivery reform. One major shift will be the focus on the district as the unit of educational planning and management. The District Project Office (DPO) of Samagra Shiksha, which works in close collaboration with the SIS, on various administrative and managerial tasks. At the sub-district level, Block Education Offices (BEOs) that have administrative responsibility for the schools will be encouraged to work in close collaboration with Block Resource Centers (BRCs) and Cluster Resource Centers (CRCs) on academic support. Close coordination with the School Management Committees (SMCs), that have representation from the local authority (the local level elected government) will be strengthened for school management and implementation oversight. SMC will undertake community mobilization, prepare school development plans, identify out of school children and monitor students' and teachers' attendance.

(v) **Strengthening School-to-Work Transition:** As part of the GoI's efforts to universalize secondary education, there is recognition that students need to be provided with more varied options and guided approaches that are both vocational and academic in nature. STARS will thus support GoI efforts to encourage states to provide carefully targeted career counselling efforts at the secondary and senior secondary levels, with two critical components (both of which will have to be continually evaluated/refined): (a) career education in which students learn about the world of work and develop career management skills through classroom teaching and other activities (such as direct work experience), and (b) career advice on a one-to-one basis, either universally or on demand. A prerequisite for the latter, in particular, is a cadre of career guidance professionals experienced in labor market issues (as distinct from more general social/psychological counselling). Strong links between schools and local employers will help introduce students to the world of work.

9. **Program Financing:** The cost of the STARS operation is US\$3.35 billion, which will be financed by: (a) GoI financing of US\$1.79 billion; (b) states' contributions of US\$1.06 billion over the operation period; and (c) Bank financing of US\$500 million over a period of five years from the date of effectiveness. The Bank's financing comprises US\$475 million using the PforR instrument and a US\$25 million IPF TA component. The Bank's contribution through the PforR instrument will thus account for about 14 percent of the total relevant estimated expenditures. The expenditure under the program will be incurred both at the MHRD, GoI and the six selected states. The table below shows the overall Program expenditure composition by state and economic classification of expenditures.

STARS Framework of Expenditures (\$ million) for FY19-25								
Economic Expenditure Classification	Maharashtra	Rajasthan	Madhya Pradesh	Odisha	Kerala	Himachal Pradesh	MHRD	PforR Program
Early Years Education	-	-	-	0.15	3.78	1.15	-	5.08
Learning Assessment Systems	3.84	0.04	0.02	0.36	0.49	0.69	-	5.44
Teacher Education	249.25	218.08	232.54	317.57	50.74	85.43	-	1,153.61
Quality Intervention	378.56	580.29	620.99	133.30	35.42	109.74	-	1,958.31
Vocational Education and Training	26.76	38.89	31.47	20.95	-	55.36	-	173.44
National-Level Quality Intervention	-	-	-	-	-	-	50.00	50.00
Total	658.41	837.31	885.01	472.34	190.43	252.37	50.00	3,345.88

10. **The IPF TA component:** The national-level TA component helps build MHRD capacity by (a) establishing a PMU to strengthen their skills in financial management, planning, and Program coordination; (b) supporting MHRD to improve their Program design and pilots; and (c) supporting Monitoring and Evaluation (M&E), impact evaluation, and third-party assessments/validation of implementation activities and Program outcomes.

Social and Environmental Effects

11. Consistent with the requirements of the Bank PforR Policy, the proposed PforR operation does not support activities that pose high social or environmental risks. There will be no large-scale infrastructure activities, only minor refurbishment works within schools, all upgradations and refurbishment works will take place within the school premises. Broadly the activities supported under the Program such as strengthening early education; improving learning assessment systems; strengthening classroom instruction and remediation; improving teacher development and school leadership; facilitating school-to-work/higher education transition; and strengthening governance and decentralized management. Implementation of these activities are likely to provide environmental and social benefits such as (i) safe and comfortable learning environment (ii) enhanced awareness on EHS aspects in vocational training streams; (iii) Improved sanitation and hygiene; (iv) opportunities for energy and water conservation; (v) improved waste management practices (vi) and enhanced awareness of EHS aspects at the school level (SMCs, BRPs, CRPs and education officers)
12. The environmental health and safety risks have been analyzed as low- moderate level. The Samagra Shiksha Program (under the guiding framework) specifies that school buildings under the program must conform to national disaster management authority (NDMA) and guidelines on safety and includes a list of safety precautions for building materials and infrastructure in schools. There could be some risks and impacts relating to design of new classroom layouts under the school development plans which could involve (a) generation of dust and noise, (b) generation of wastes, (c) risk of poor building design, construction and management leading to restricted access to people with disabilities, (d) inadequate lighting and ventilation, inadequate/inappropriate water and sanitation facilities, (e) fire and electrical safety risks and (f) exposure (especially of pre-school children) to lead and volatile organic compounds (VOC) in building paint. The ESSA has looked into national laws and systems to address these environmental concerns (in Annex 2). These risks are manageable given the attributes of the environmental and social management policies and guidelines of GoI, the existing EMF and if the recommended PAP actions to strengthen the environmental and social implementation capacity is taken.
13. The social risks associated with the program activities identified under STARS are expected to be Moderate. The Program, which is subset of the Samagra Scheme (continuum education from pre-primary classes to higher secondary education) is expected to have positive impacts on inclusionary outcomes especially w.r.t to completion rates in secondary schools amongst students from vulnerable groups such as SC, ST and CWSN. To further enable this result area, the Program focuses on recommendations relating to: a) assessment of higher-order assets needs in aspirational districts across select states, b) leveraging the benefits of digital elements and technology equitably in middle schools and secondary schools, c) engagement and capacity building of sub-district level officials (BRPs, CRPs) to identify needs of SC/ST students and adolescent girls in rural areas especially in areas of vocational education, career counselling and other requirements to enable school-to-work transition; d) usage of behavior change and interactive communication models to spread awareness amongst stakeholders including mid-level professionals, teachers, principals, SMC members about the broader objectives of Samagra, ECE, school-to-work transition, school safety parameters, etc. and e) collaboration and exposure windows for higher secondary students from schedule V areas under other MHRD schemes such as Avishkar Yojana, etc.
14. As part of the delivery mechanism under Samagra, information asymmetries are expected in the short-term among mid-level officials BRPs, CRPs, BEOs, parents, teachers and communities regarding new interventions supported under STARS such as a) vocational training and ECE; (b) methods to address potential issues of exclusion emerging due to presence of vulnerable households especially in Schedule V areas i.e. areas with a high presence of SC/ST households; (c) inadequate capacity, training and

knowledge among School management committee members to undertake self-audits and management activities; (d) potential issues of on-campus safety for secondary, senior secondary schools and TEIs; (e) lack of rigorous beneficiary engagement mechanisms that inform students especially from EBBs, SFDs, LWEs and aspirational districts about vocational/occupational training; (f) lack of focused interventions to address the needs of adolescent girls and boys.

Assessment of Environmental and Social Management Systems and Implementation Capacity

15. The ESSA identified the potential risks, opportunities and analyzed the compatibility of the program with respect to the Core principles. The environmental and social management under the Program will be largely based on the Environmental Management Framework under Samagra Shiksha, and existing legal, regulatory, and institutional system in India and in Madhya Pradesh, Himachal Pradesh, Kerala, Maharashtra, Rajasthan and Odisha. Core Principle 1 and Core Principle 3 are applicable to the program to ensure that environment, health, public and worker safety is maintained through the provisions of the EMF-SS with any activities associated with the upgradation and renovation of schools. Core Principle 5 and 6 are applicable to the program, to effectively manage the risks of exclusion given the geographical spread across six states. Five of the six states i.e. Maharashtra, Madhya Pradesh, Himachal Pradesh, Odisha and Rajasthan supported under STARS have designated Schedule V Areas with varying presence of SC and ST communities. Overall, the ESSA recommends that the National Environmental and Social systems are acceptable for the Program implementation and adopting the PforR lending. The ESSA finds that there are adequate legal provisions to safeguard against adverse impacts of activities relating to the safety precautions for the existing school building design such as accessibility, lighting and ventilation, thermal comfort, water and sanitation facilities, fire and electrical safety, and disaster management.
16. The Ministry of Human Resource Development (MHRD) has more than 15 years of experience in working with the Bank on school education. Each of the school education projects included an 'Environmental Assessment / Management Framework' (EMF) developed and implemented by the MHRD. An Environmental Management Framework was prepared and utilized by the Ministry of Human Resources and Development (MHRD) under the RMSA program supported by the Bank (2012-2017). The EMF has been followed by the Ministry and state school education departments across the country as part of the Ministry of Human Resource Development operational manual. The EMF is integrated under the Samagra Shiksha Framework for Implementation and will continue to be operationalized by school education departments of participating states under the scheme for planning and design of schools and also in construction. The ESSA did uncover some constraints/gaps in some areas, as summarized below:
17. The key gaps uncovered by the ESSA are as follows:
 - (a) **Gap 1:** National and State level officials are familiar with the EMF (previously under RMSA) and national laws and systems, but there is limited awareness in the field education officials and SMCs that are now brought under Samagra Shiksha. (due to the large geographical spread and frequent changes in staffing at the local level).
 - (b) **Gap 2:** There is no focal point at national level under Samagra Shiksha specifically focusing on EHS aspects in a comprehensive manner.
 - (c) **Gap 3:** There is no screening checklist for early identification and screening for natural habitats and cultural resource areas.

- (d) **Gap 4: Though national laws and guidelines on school construction and safety are adequate**, there is limited awareness at the local level on construction safety, labor-student interface, disaster resistant construction and climate smart design due to frequent staffing changes at the local level.
- (e) **Gap 6:** Information asymmetries amongst marginalized and vulnerable groups especially relating to the new interventions planned under STARS and Samagra Shiksha – early childhood education and school-to-work transition.
- (f) **Gap 7:** Variations in capacity of SMC members across the states to manage construction and/or upgradation of learning spaces.
- (g) **Gap 8:** Variation in capacity of mid-level officials such as BRPs, CRPs and BEOs to identify and mitigate risks related to exclusion of students based on migration patterns, presence of vulnerable and marginalised groups and specific needs of CWSN students. Also, significant variation related to knowledge about usage of digital assets at schools and TEIs, school safety guidelines, National Disaster Management Act Guidelines, National Building Codes, etc, and other such useful guidelines integrated in the Samagra Framework.

Disclosure and Consultations

18. A public multi-stakeholder workshop with MHRD and state officials on this ESSA and the PforR was conducted on 4 and 5 September in New Delhi. Following incorporation of the feedback received from the workshop and other sources, the revised ESSA will be disclosed in-country and on the Bank's external website, prior to Board consideration.

Inputs to the Program Action Plan (PAP)

19. To address the institutional and capacity gaps identified through the ESSA process, the ESSA Team offers the following recommendations, which are Inputs to the PAP:
 - (a) **Institutionalization of environment and social functions in the management in STARS** by appointment of national Level Environmental and Social specialists in the project PMU. The EHS gaps uncovered can be addressed through building capacity on these issues, and appropriate monitoring. The environment specialist will institutionalize EHS in schools by ensuring implementation of the EMF for STARS and country systems such as NDMA guidelines, School Safety Guidelines, and National Building Code, and organize trainings for the SMCs and field level staff on these aspects.
 - (b) **Develop and adopt an awareness and communication strategy** to provide information about various E&S aspects integrated in the Samagra Scheme: i) ECE; ii) Vocational courses and career counselling facilities.
 - (c) **Roadmap/plan for aspirational districts:** (i) Undertake a need assessment to map variations in digital resources and capacity of TEIs; (ii) develop a plan/roadmap specifically for EBBs, special focus districts and aspirational districts.
20. Section (c) provides more detailed descriptions of the scope of these recommendations and provides indicative costs and timetables for implementation. If these are successfully implemented, the overall environmental and social management system for the program will have been considerably strengthened and set on a more sustainable path, as improvements in environmental and social management systems and capacity are likely to extend beyond the life of the Program.

Corporate commitments: Gender and Citizen Engagement (including Grievance Redressal Mechanism)

21. **Citizen Engagement and Grievance Redressal Mechanism:** STARS will leverage on the existing structure of School Management Committees (SMCs) formed at the school level to receive and redress complaints. SMCs are a recognized institution under the Right to Education Act (2009). Further, in participating states, capacities of district and sub-district-level officials will be strengthened to work closely with SMC members, especially women and mothers of school children in management of grievances at the cluster and block level. SMCs under STARS states will be encouraged to adopt in-school programs and after-school reading classes led by community volunteers which have proven to be successful in several other countries with similar learning levels. Under STARS, states with a high percentage of ST households (i.e. Madhya Pradesh, Odisha and Maharashtra) will work with SMCs and the district administration to consolidate and redress grievances related in civil works and community-led procurement, roll-out technological solutions that adapt to the level of understanding of the child and focus on resolving key issues faced by adolescent girls and boys.

I. INTRODUCTION

A. Environmental and Social Systems Assessment: Purpose and Objectives

1. This Environmental and Social Systems Assessment (ESSA) has been prepared by a World Bank ESSA Team for the proposed Strengthening Teaching Learning in States (STARS), which will be supported by the Bank's Program for Results (PforR) financing instrument. In accordance with the requirements of the Bank Policy Program-for-Results Financing (PforR Policy), PforRs rely on country-level systems for the management of environmental and social effects. The PforR Policy 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. Through the ESSA process, the Bank ESSA Team has developed recommendations to enhance environmental and social management within the program, which are included in the overall management action plan.
2. The main purposes of this ESSA is to: (i) identify the Program's environmental, health, safety, and social effects, (ii) assess the legal and policy framework for environmental and social management, including a review of relevant legislation, rules, procedures, and institutional responsibilities that are being used by the Program; (iii) assess the implementing institutional capacity and performance to date to manage potential adverse environmental and social issues; and (iv) recommend specific actions to address gaps in the program's environmental and social management system, including with regard to the policy and legal framework and implementation capacity
3. This ESSA assesses or considers the extent to which the Program's environmental and social management systems are adequate for and consistent with six core environmental and social principles contained in paragraph of Section III of the PforR Policy (hereafter, Core Principles), as may be applicable or relevant under PforR circumstances. An additional purpose of this ESSA is to inform decision making by the relevant authorities in the borrower country and to aid the Bank internal review and decision process associated with the STARS. The findings, conclusions and opinions expressed in this document are those of the Bank. The recommended actions that flow from this analysis have been discussed and agreed with Government of India counterparts.

B. ESSA Methodology

4. The Bank undertook the following actions as part of the assessment from May to September 2019 (a) a comprehensive review of government policies, legal frameworks (in Environment health and safety, disaster management, water and sanitation, waste management, noise, and cultural properties and previous assessments of India's environmental and social management systems (refer to Annex 2 for a detailed overview) (b) interviews and consultations were done with relevant experts and officials from MHRD and the State Departments of Education of Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Odisha and Rajasthan. The ESSA team also consulted community members and beneficiaries from Solan and Shimla in the state of Himachal Pradesh; Kollam and Thiruvananthapuram in the state of Kerala; Palghar and Mumbai in the state of Maharashtra; Bhubaneshwar, Dhenkanal and Khordha in the state of Odisha; Dausa and Jaipur in the state of Rajasthan (c) site supervisions were conducted at 25 schools and 2 teacher training institutes in the 5 states.
5. This report was prepared by World Bank staff and consultants through a combination of reviews of existing Program materials and available technical literature, interviews with government staff, and consultations with key stakeholders and experts. Findings of the assessment will be used in the formulation of an overall

Program Action Plan (PAP) with key measures to improve environmental and social management outcomes of the Program.

6. The ESSA review process seeks to describe and assess the systems for managing environmental and social effects of a proposed program. Between May to July 2019 the Bank drew on a wide range of data, sources, and inputs during the ESSA review process, including the following actions:
 - (a) **Assessment of the environmental and social effects of the program:** The ESSA Team assessed the potential for the program to cause adverse environmental and social effects, either due to its design and program components or due to gaps in Program systems. Such risks were assessed based on experience from other Bank supported projects in the sector, field study to selected schools in 5 states and review of relevant literature.
 - (b) **Comprehensive desk review of policies, legal framework, program documents, and other assessments of environmental and social management systems:** The review examined the set of national and state level policy and legal requirements related to environment and social management (Annex 2). The review examined key program policy documents – the Samagra Shiksha Abhiyan Framework for Implementation and the Right of Children to Free and Compulsory Education (RTE) Act, 2009, hereafter the RTE Act. The review also examined technical and supervision documents from previous and ongoing World Bank projects and programs in the sector, especially school education projects that were implemented by MHRD. The ESSA Team also reviewed previous assessments of relevant environmental and social management systems, including: Environmental Assessments and Environmental Management Framework documents of Elementary Education Project (Sarva Siksha Abhiyan III) (2014-2018) and Secondary Education Project (Rashtriya Madhyamik Siksha Abhiyan) (2012-2017).
 - (c) **Institutional analysis:** An institutional analysis was carried out to identify the roles, responsibilities, and structure of the relevant institutions responsible for implementing the STARS funded activities, including coordination between different entities at the national and state levels (refer Annex 2) The assessment of the capacity of key institutions to implement required environmental and social management actions was assessed. An important input for this assessment was an evaluation of these institutions’ previous track record in management of such risks in the context of previous Bank supported projects.
 - (d) **Consultations and Interviews:** Interviews and consultations were done with relevant experts and officials from MHRD and the State Departments of Education of Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Odisha and Rajasthan. The ESSA team also consulted community members and beneficiaries from Solan and Shimla in the state of Himachal Pradesh; Kollam and Thiruvananthapuram in the state of Kerala; Palghar and Mumbai in the state of Maharashtra; Bhubaneshwar, Dhenkanal and Khordha in the state of Odisha; Dausa and Jaipur in the state of Rajasthan. Interviews were held with Block and Cluster Resource Center Coordinators, school staff, School Management Committee (SMC) members, and in a few cases, with students.
 - (e) **Field Visits:** Visits were conducted at the following specific sites. At each site the study team interacted with the key stakeholders and recorded observations on the school assets and management.

Table 1: Summary of Visits and Consultations

Table 1: List of school visits during the ESSA				
No.	State	School	Location	Date
1	Hima ct	Govt. Girls Middle School	Sirinagar, Kandaghat, Solan	17 May 2019
2		Govt. Senior Sec. School	Manjhol, Kandaghat, Solan	17 May 2019

3		Govt. Middle School	Mayfield, Shimla, Shimla, Shimla	16 May 2019	
4		Govt. Model Center Primary School	Portmore, Shimla, Shimla	16 May 2019	
5	Kerala	Govt. High School	Ayyankoickal, Kollam	19 July 2019	
6		Govt. High School	Kottalkullangar, Kollam	NI	
7		Govt. Higher Secondary School	Kottalkullonger, Chavara, Kollam	19 July 2019	
8		Govt. Higher Secondary School	Ayyankoickal, Kollam	19 July 2019	
9		Govt. Upper Primary School	Attingal, Thiruvananthapuram	18 July 2019	
10		Govt. Vocational Higher Secondary School	Kottalkullangar	19 July 2019	
11		Maharashtra	KGBV	Gorthan, Jawhar, Palghar	NI
12			Oshiwara Municipal Urdu School	Jogeshwari, Andheri, Mumbai	31 May 2019
13	Prathiksha Nagar		URC 10, Mumbai	31 May 2019	
14	Worli Seaface Municipal School		Mumbai	31 May 2019	
15	ZP School		Kaman, Vasai, Palghar	NI	
16	ZP School		Sajjanpada, Chahade, Palghar	NI	
17	Odisha	Banamali Prasad Upper Primary School	Dhenkanal, Bhubaneswar	12 July 2019	
18		Panchayat Raj High School	Kanapura, Kamakhyanagar, Dhenkanal	16 July 2019	
19		Govt. Upper Primary School	Malipada, Kampur, Khordha	11 July 2019	
20	Rajasthan	Adarsh Govt. Senior Sec. School	Aabhaneri	07 June 2019	
21		Adarsh Govt. Senior Sec. School	Dhanawad, Dausa	07 June 2019	
22		Govt. Senior Sec. School	Gudliya, Dausa	07 June 2019	
23		Govt. Senior Sec. School	Bilwa, Jaipur	08 June 2019	
24		Govt. Senior Sec. School	Shri Ram ki Nangal, Sanganer, Jaipur	08 June 2019	
25		Govt. Senior Sec. School, Watika	Sanganer, Jaipur	08 June 2019	

II. PROGRAM DESCRIPTION AND POTENTIAL ENVIRONMENTAL AND SOCIAL EFFECTS

A. Program Context

7. Through the centrally sponsored schemes on school education, Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA), the government has considerably improved access to elementary and secondary education in India. While flagship schemes of the GOI in the elementary (SSA) and secondary education (RMSA) sectors have been instrumental in setting up the necessary structures and building the right foundations to increase school enrolment, retention equity and quality, its decision to merge all fragmented schemes on school education on elementary, secondary and teacher education into one integrated whole is most welcome step. Samagra Shiksha – this new integrated scheme, builds on the spirit of cooperative competitive federalism in India and provides greater flexibility to states for school education planning and budgeting; with a view to supporting interventions and innovations that align with the local context and are focused on improving educational outcomes.

B. The Government's Program

8. The Operation, which will be called the **Strengthening Teaching-Learning and Results For States (STARS)** has been sliced out of the Government's larger school education program, the Samagra Shiksha. The scheme reorganizes the existing parallel management structures of the SSA, RMSA and teacher education into a unified structure and administrative mechanism, pooling together existing and additional personnel at national and sub-national levels. The Integrated Scheme on School Education envisages the 'school' as a continuum from pre-school, primary, upper primary, secondary to Senior Secondary levels. The vision of the Scheme is to ensure inclusive and equitable quality education from pre-school to senior secondary stage in accordance with the Sustainable Development Goal (SDG) for Education. The major objectives of the Scheme are provision of quality education and enhancing learning outcomes of students; bridging social and gender gaps in school education; ensuring equity and inclusion at all levels of school education; ensuring minimum standards in schooling provisions; promoting vocationalisation of education; support states in implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009; and strengthening and up-gradating SCERTs/State Institutes of Education and DIET as nodal agencies for teacher training.

C. Bank Financed PforR Scope, Objectives, and Key Results Areas

9. The PforR component under STARS will support strategically identified components of Samagra Shiksha. This will include (a) providing support at the federal level to critical areas for improving education outcomes nationally, such as learning assessment systems and governance; and (b) strategically engaging in six states to foster innovative approaches that will help meet the development objectives of the operation, whether through improving existing reform initiatives or sharing successes and financing their expansion.

10. **At the national level**, the operation will support the MHRD in undertaking (i) improving student language proficiency in the early years (ii) improving overall completion rates (iii) strengthening student assessment systems (iv) institutional strengthening improved governance. At the State level, a set of reform initiatives that would holistically impact state education improvement have been selected for financing that include: Strengthening the Early Years: (Early Childhood Education); Improving Learning Assessment Systems; Strengthening Classroom Instruction and Remediation through Teacher Development and School Leadership; School to work/higher education transition; Governance and Decentralized Management for Improved Service Delivery.

11. The Bank financing of US\$500 million to the MHRD will be over a period of five years from the date of approval of the Operation. The proposed World Bank financing comprises of a US\$475 million assistance to the Program using the PforR instrument and a US\$25 million Technical Assistance (TA) component (“Project”) using the Investment Project Financing (IPF) instrument.
12. **The Program Development Objective (PDO) of the operation is to improve the quality and governance of school education in selected states.**

The PDO-Level Indicators are:

- Percentage of students achieving minimum proficiency in grade 3 language in select states
 - Secondary school completion rate in select states (weighted average based on grade 9 enrolment)
 - Improved governance in select states (as measured by select indicators from MHRD’s Performance Grading Index)
13. The **STARS Program has two results areas: a national component that supports efforts to improve overall monitoring and measurement activities in the Indian school education system and a state component with five sub-components.** The operation offers flexibility to the six states to choose from among the five sub-components on offer depending on their state-level context and needs. In addition, the operation only requires states to focus on implementing a core set of key activities in their chosen areas that they feel are critical for their state specific reform agenda.

Table 2: Results Areas

Results Area1: National Component	Results Area 2: State Component
1. Improving and tracking secondary school completion rates 2. Fostering reforms in governance and monitoring improvement in states’ governance scores through the SIGs 3. Strengthening learning assessment systems at the national level	1. Strengthening ECE 2. Improving learning assessment systems 3. Improving teacher performance and classroom practice 4. Strengthening the school-to-work/higher education transition 5. Strengthening governance and decentralized management

14. The project theory of change and DLIs were reviewed (refer to Annex 5). **DLI 2 Improvement in secondary completion rate in selected states and DLI 6 State level improved service delivery would relate directly to environment related actions under the Program** (i) implementing the EMF-SS and Guidelines on School Safety Policy as well as National Building Code; (ii) incorporation of EHS aspects in vocational training (iii) build capacity in schools (BRPs, CRPs, SMCs and civil engineers on the EMF-SS) (iii) screening for exclusionary activities under the program.

Table 3: Summary of Disbursement Linked Indicators
DLI 1. Increase in students achieving minimum proficiency in grade 3 language in select states
DLI 2. Improvement in secondary school completion rate in select states
DLI 3. Improvement in governance index scores in select states
DLI 4. Strengthened learning assessment systems
DLI 5. Partnerships developed to facilitate cross-learning between states
DLI 6. State-level improved service delivery

15. The table below shows the overall Program expenditure composition by state and economic classification of expenditures.

Economic Expenditure Classification	Maharashtra	Rajasthan	Madhya Pradesh	Odisha	Kerala	Himachal Pradesh	MHRD	PforR Program
Early Years Education	-	-	-	0.15	3.78	1.15	-	5.08
Learning Assessment Systems	3.84	0.04	0.02	0.36	0.49	0.69	-	5.44
Teacher Education	249.25	218.08	232.54	317.57	50.74	85.43	-	1,153.61
Quality Intervention	378.56	580.29	620.99	133.30	35.42	109.74	-	1,958.31
Vocational Education and Training	26.76	38.89	31.47	20.95	-	55.36	-	173.44
National-Level Quality Intervention	-	-	-	-	-	-	50.00	50.00
Total	658.41	837.31	885.01	472.34	190.43	252.37	50.00	3,345.88

D. Program Implementation Arrangements

16. Samagra Shiksha is governed at the Centre by a Governing Council chaired by the Minister of Human Resource Development, a Project Approval Board, and the Bureau of School Education. The Governing Council provides policy direction and facilitates center-state coordination, while the PAB, chaired by the Secretary, School Education and Literacy, MHRD, maintains full financial power to approve state plans, sanction budgets, and implement the program. The Bureau of School Education chaired by the Additional/Joint Secretary, School Education & Literacy, appraises, evaluates, finances, and supervises national, state, and district level planned interventions. Other national level bodies that comprise the administrative structure and provide technical and academic input at the national level are National Council of Educational Research and Training (NCERT), National Institute of Educational Planning and Administration (NIEPA), National Council for Teacher Education (NCTE), and Technical Support Group (TSG) of the MHRD. Samagra Shiksha reorganizes the existing parallel management structures of the SSA and RMSA into a unified structure and administrative mechanism, pooling together existing and additional personnel at national and sub-national levels.

17. **At the State level**, the scheme is implemented through the State Implementation Society (SIS) that is accountable to a Governing Council, headed by the Chief Minister/State Education Minister and an Executive Committee, chaired by the Chief Secretary/Commissioner/Education Secretary of the State/UT. Representation of Finance and Planning Departments on the Governing Council and Executive Committee resolves issues of coordination and convergence and facilitates better decision making. The SIS, through the State Project Office and State Project Director, establishes linkages with district and sub-district level structures, NGOs, state government, national bureau, and other concerned stakeholders, and is also responsible for effective monitoring and training and capacity building of personnel. Additionally, the SIS is underpinned by a high level of interdepartmental convergence including coordination with the Department of Finance, Public Works Department, Department of Science and Technology, Programs for Water and Sanitation, Department for Women and Child Development, and others. Other state level bodies that comprise the administrative structure and provide technical and academic input at the state level are State

Council of Educational Research and Training (SCERT), State Institute of Educational Management and Training (SIEMAT), and TSG of the SIS.

18. **At the District level**, the District Project Office is responsible for implementing and reviewing the progress of the program. Depending on the State, it is chaired by the District Collector/Magistrate/Chief Executive Officer of the Zilla Parishad. The District Project Office is headed by the District Education Officer (DEO) and comprises representatives from the district education departments, NGOs, as well as technical specialists. The DEO, who also performs the duties of the District Project Coordinator (DPC), is responsible for preparing Annual Work Plans and Budgets (AWP&B), liaising with the District Institute of Education and Training (DIET) to jointly oversee the function of the Block Resource Centres (BRCs) and Cluster Resource Centres (CRCs), monitoring progress and status of project implementation, and ensuring regular trainings of teachers/school heads, School Management Committee (SMCs)/School Management and Development Committee (SMDC) members, BRCs and CRCs.

19. **At the Block Level**, the administrative structure is headed by the Block Education Officer (BEO) who is responsible for facilitating the creation of a School Development Plan in coordination with the block/cluster resource persons, SMCs/SMDC, headmasters, teachers, etc. Additionally, the BEO is responsible for capacity building, academic supervision and onsite support to field level functionaries, and monitoring implementation at the grassroots level through close interaction with field level officers and providing information to the District Project Office. BRCs and CRCs provide academic support at the block and cluster levels, respectively and SMCs/SMDCs, comprising of members from the local authority, parents, and teachers, assist with school-level monitoring and implementation through community mobilization, preparing school development plans, conducting Social Audits, and monitoring students' and teachers' attendance.

20. The MHRD's Education Management Information System (EMIS), the Unified District Information System for Education Plus (UDISE+) and the National Achievements Surveys will be the primary data source for monitoring program outcomes. The MHRD's Performance Grading Index (PGI) will be used to track progress on key governance indicators in the states. The MHRD will be responsible for reporting on the Results Framework and DLIs. An Independent Verification Agency (IVA) will be commissioned by the MHRD to verify DLIs according to protocols. Joint Review Missions of the MHRD and the Bank will review project progress twice annually. These will be field visits and/or desk reviews. Additional interim reviews will be carried out as required.

E. Description of Program Activities and Identification of Environmental and Social Effects

21. This sub-section describes the activities to be implemented under each of the Results Areas followed by a discussion of the potential environmental and social effects that could arise from each activity. Overall, the ESSA finds that the National Environmental and Social systems are acceptable for the Program implementation and adoption of the PforR lending.

22. Findings of the ESSA also confirm the emphasis on equity and inclusionary approach to school education, and thus minimizing the risks of exclusion. Principles of equity and targeted interventions for adolescent girls and students from vulnerable groups are well-ingrained in the TRE, Samagra Shiksha Framework and the operations manual adopted by the Ministry and state school education departments. Upgradation and civil works supported under the operation will be restricted to government land and will be monitored through the E&S screening checklist. The screening process will be coordinated by the Social Specialist at the PMU and Samagra coordinators at the state-level. BRPs/CRPs will be responsible for information collection and actual screening of school sites. An Environmental Management Framework was prepared and utilized by the Ministry of Human Resources and Development (MHRD) under the RMSA program supported by the Bank (2012-2017). The EMF and has been followed by the Ministry and state school education departments across the country as part of the Ministry of Human Resource Development operational manual. The EMF is integrated under the Samagra Shiksha Framework for Implementation and will continue to be operationalized by school education departments of participating states under the scheme for planning and design of schools and also in construction. Overall, the proposed Program is expected to pose low- moderate environmental and moderate social risks.

Key environmental issues associated with the Program include:

23. Where refurbishment works may be implemented, there are risks of (a) generation of dust and noise, (b) generation of wastes, (c) risk of poor building design, construction and management leading to restricted access to People With Disabilities (PWD) (d) inadequate lighting and ventilation, inadequate/inappropriate water and sanitation facilities (e) fire and electrical safety risks. Designing resilient schools in areas that are prone to natural disasters should be done in conjunction with the School Management Committees and State Disaster management authorities. During the school operations, precaution should be taken to ensure that children are not exposed to high levels of lead, Volatile Organic Compounds (VOC). This is being addressed under the provisions of the EMF-SS. The EMF-SS and national building codes prescribe safety precautions for the existing school building design such as accessibility, lighting and ventilation, thermal comfort, water and sanitation facilities, fire and electrical safety, and disaster management. The Samagra Shiksha Program prescribes safety precautions for pre-schools, which addresses some issues in the existing school building design such as restricted access, inadequate lighting and ventilation, thermal discomfort, inadequate/inappropriate water and sanitation facilities, fire and electrical safety risks, disaster proneness.

24. Measures and procedures to prevent the spread of COVID-19 virus during the operation of schools will be directly provided by the Ministry of Health and Family Welfare to the Ministry of Human Resource Development. India follows WHO best practices. Information, signages, sanitizers and other equipment will be provided by the State Education Departments (there are funds under the cleanliness budgets that will be utilized, and MHRD is also providing additional funds). COVID awareness and steps taken to prevent the infection is already being disseminated through online platforms such as DIKSHA.

The key social effects of the program include:

- 1) information asymmetries among mid-level officials BRPs, CRPs, BEOs regarding the new interventions supported under STARS, methods to address potential issues of exclusion emerging due to presence of vulnerable households, migration patterns and lack of facilities for CWSN;
- (2) inadequate capacity, training and knowledge among SMC members to undertake self-audits and construction activities;
- (3) potential issues of safety arising due to increased labor-students interface during on-going construction on school campuses;
- (4) lack of rigorous beneficiary engagement mechanisms that inform students especially from EBBs, SFDs, LWEs and aspirational districts about vocational/occupational training;
- (5) lack of focused interventions to address the needs of adolescent girls and boys.

25. Further, The Program is expected to have positive impacts on inclusionary outcomes especially w.r.t to completion rates in secondary schools amongst students from vulnerable groups such as SC, ST and CWSN. To further enable this result area, the Program focuses on recommendations relating to: a) assessment of higher-order digital requirements in aspirational districts across select states, b) leveraging the benefits of digital elements and technology equitably in middle schools and secondary schools, c) engagement and capacity building of sub-district level officials (BRPs, CRPs) to identify needs of SC/ST students and adolescent girls in rural areas especially in areas of vocational education, career counselling and other requirements to enable school-to-work transition, d) usage of behavior change and interactive communication models to spread awareness amongst stakeholders including mid-level professionals, teachers, principals, SMC members about the broader objectives of Samagra, ECE, school-to-work transition, school safety parameters, etc. and e) collaboration and exposure windows for higher secondary students from schedule V areas under other MHRD schemes such as *Avishkar Yojana*, etc.

26. The key environment and social risks relate to results areas: 2.1: Strengthening Early Years Education: 2.3: Improving Teacher Performance and Classroom Practice; 2.4: Strengthening School-to-Work Transition. The Results Area 1 (National Component) will not result in any environment and social risks or impacts.

RA 2.1: Strengthening Early Years Education:

27. STARS will support activities and initiatives that are compatible with the ECE service delivery models adopted by individual states. The unifying focus will be on providing students in each state with learning opportunities that cater to their individual needs. In particular, STARS will assist states to improve the quality of their foundational learning by providing support for:

- In-service professional development opportunities for state, district, sub-district, and school-level education staff through also development and running e-learning platforms in response to COVID or similar shocks;
- Parental engagement strategies to enhance parents' awareness of the importance of ECE; and
- Administrative and academic monitoring tools/platforms to support implementation of activities, with a view to tracking progress and supporting continuous improvement at both at the school and system level.

28. Monitoring of states' progress in strengthening early years education will focus on the development of teacher training modules for ECE teachers and facilitators and the percentage of ECE teachers and

facilitators who receive training on these modules; the development of early reading and numeracy teacher training modules and the percentage of grades 1-2 teachers trained using these modules; and the development and dissemination of TLM for ECE and grades 1-2.

(a) Environmental Effects

- (1) **Benefits:** The activities described above are likely to yield the overarching environmental benefit of providing a safe and comfortable learning environment to children through improvements in learning environment and safe and adequate spaces, ventilation, basic water and sanitation services, etc. Under this results area, there are opportunities to enhance environmental benefits: (a) energy conservation if the building designs are energy efficient (b) water conservation if the building design and fixtures integrate water harvesting and efficiency (c) enhanced awareness on child safety, hygiene and sanitation if teacher training and parental outreach cover these issues (d) enhanced school facility management if environmental aspects are integrated into the administrative monitoring tools.
- (2) **Impacts:** The activities described above will cause the following impacts:
 - *Impacts on the Physical Sphere:* Refurbishment of additional pre-school classrooms on existing government school premises will have related impacts such as generation of dust and noise, generation of wastes.
 - *Impacts on the Built Environment:* Poor building design, construction and management leading to restricted access to People with Disabilities; Inadequate lighting and ventilation; Inadequate/inappropriate water and sanitation facilities; Fire and electrical safety risks.
- (3) **Risks:** Implementation of the above activities should not include exposure to (a) lead and Volatile Organic Compounds (VOC) through building paints and play materials, (b) asbestos fibers through cutting, drilling, etc., of old roofing sheets, pipes, which could be made of ACM and (c) exposure to smoke from cookstoves located in the Anganwadis.

(b) Social Effects

(1) Social Benefits:

- The overall result area is likely to bridge inequality in access to pre-primary education thus exposing students to early stimulation and early learning. This is likely to have a more prominent impact on students from marginalized groups since these households often miss out on the benefits of pre-primary education and early learning, thereby impacting learning outcomes at a later stage.
- The sex/gender ratio continues to be a cause of concern for the Government of India across states and inter-state variations in sex ratio continue. Parental engagement strategies accompanied with community sensitization is likely to deter tendencies of son preference amongst certain communities across participating states.
- The likely social benefits are likely to amplify by ensuring inclusion of indigenous, interactive, low-cost, easy-to-implement models such as sand-pit games and exercises to improve muscle growth in children. It also enables students to make sandcastles and weave simple stories around these activities. Such sand-pit games and exercises are easy to make and maintain and can be done through community participation.

Table 5: Sex ratios by states covered under STARS

State	Sex Ratio	Child Sex ratio
Kerala	1084	966
Himachal Pradesh	972	909
Maharashtra	929	894
Rajasthan	928	888
Madhya Pradesh	931	918
Odisha	979	941

Figure 3: Sandpit illustration



3. इस मिट्टी का एक ढेर बना लें, इसे फेंके मत।



6. अब इसमें बालू भर दें। इस कार्य में जितने लोग जुड़ सकते हैं उन्हें साथ लें, इससे अपनेपन की भावना उत्पन्न होगी।



4. अब पानी मिलाकर एक सपाट और उभरी हुई दिवार बना लें। ताकि अंदर की रेत बाहर न आ पाये।



7. इस बालू को क्यारी में अच्छी तरह फैला दें।

- Children with and without disabilities can gain access to the physical space, materials, and equipment.
- When needed, children are helped to gain access to and use materials in meaningful ways through adult scaffolding strategies.
- The teacher and assistants set up the classroom areas and materials in ways that can be accessible to all children, but they dynamically organize the physical space, equipment, and materials to intentionally encourage children's independence and social interactions.
- Identifying synergies with *Beti Bachao, Beti Padhao* campaign of the government to effectively engage with parents on the issue of providing an equitable learning environment for girl children at the household level.

- The State PMU may also choose to implement targeted communication strategies for gram panchayats located in the Schedule V Areas of the state. Since ECE is a new area to the traditional system of schooling in many parts of the country, effective communication with parents and the larger community will prove to be crucial.
- (2) **Social Impacts:** Since ECE is a relatively new result area, it is likely that the benefits of the identified activities trickle down to the marginalized pockets of the state in a phased manner. To mitigate this impact, states may want to strategically pilot some activities in aspirational districts or educationally backward blocks of the state.
- (3) **Social Risks:**

- Enhanced classroom layouts provide children with stimuli which is crucial to facilitate early learning. However, some of these layouts are often prescriptive, intricate and hence not easily replicable or scalable.
- To mitigate the risk of exclusion and variations in design across learning environments between urban and rural areas, emphasis on uniformity and quality standards of learning environments will be important. It will be useful for each state to identify five essential elements, durable in nature, linked to indigenous culture and/or local languages as appropriate that can be scaled-up across several districts within the state.
- Further, it will be important to build capacity of frontline professionals in aspirational districts to monitor these activities.

बालू की क्यारी



बच्चों के लिए बालू में खेलना मजे की बात तो है ही, इससे उनके विकास के बहुत से रास्ते भी खुल जाते हैं। साथ ही उनके छोटी बड़ी मांसपेशियों का खूब विकास होता है। इस बात से न घबराएं कि बच्चे गंदे हो जायेंगे, या बालू खा लेंगे या उन्हें चोट लग जायेगी। कोई बड़ा आस पास है तो ऐसी दुर्घटनाएँ बहुत कम होती हैं।

आजकल हम फुलवारियों में बालू की क्यारी बनाने को प्रोत्साहन दे रहे हैं।

Figure 3: Sand pit games and exercises

Results Area 2.2: – Improving Learning Assessment Systems: Description of Activities

29. All project states plan to use STARS funds to set up or strengthen state-level assessment cells that can design and manage state-level assessment surveys; build teacher capacities on competency-based assessment and continuous comprehensive evaluation; and manage state-level implementation of national assessment exercises. In each state, support will be provided in the following areas:
- Creation of an assessment cell/State Centre for Assessment, with the help of expert assessment agencies, to support the National Centre for Assessment;
 - Enhancement of teacher capacity to carry out and use data from Continuous Comprehensive Evaluation [CCE] and other classroom-based assessment activities, including in multi-grade/multi-level and other challenging classroom environments;
 - Creation of online item banks to support teachers' formative, diagnostic, and summative assessment activities by aligning them with key learning outcomes/competencies/benchmarks;
 - Development of a technology-enabled assessment platform that can allow teachers to create assessments (using online item bank) as well as manage, analyze, and use data from assessments; and
 - Improvement in the quality and utility of various assessments (e.g., NAS, SLAS, and examinations)
 - for identifying individuals or groups of students in need of learning enhancement activities, and
 - for measuring the effectiveness of those learning enhancement activities.

- vi. Support also will be provided to State Boards to carry out similar reviews and reforms of their examinations. All this work will be informed by a World Bank review of examination practices and reforms around the world as well as by the expertise and experience acquired by CBSE through its support for the capacity building of teachers and students undertaking the PISA 2021 test.
30. At the state level, the focus will be on the creation of state assessment cells; the development of teacher training modules on CCE and classroom assessment; the development of learning outcomes-based online item banks for use by teachers; and the training of teachers on CCE and classroom assessment.
 - (a) **Environmental Effects:** The activities supporting this results area are not expected to produce any environmental benefits, adverse impacts, or pose environmental risks.
 - (b) **Social Effects:** The activities supporting this result area are not expected to produce any social benefits, adverse impacts or lead to social risks.

Results Area 2.3 – Improving Teacher Performance and Classroom Practice:

31. Most project states have already begun using SLAS and NAS results to inform their teacher training needs. This feedback mechanism will be enhanced under the STARS project through investments in national and state-level capacities to assess learning. In addition, STARS will support a dedicated package of teacher development, school leadership, and learning enhancement activities in the project states to further enhance instruction and learning.
32. The STARS project will support states to develop alternative, ICT-enabled approaches (online and offline) to enhance teachers' access to subject matter-specific and pedagogical trainings. These training opportunities may be self-paced or provided at regular intervals by the State Council for Educational Research and Training (SCERT), District Institute of Education and Training (DIET), and/or Block Institutes of Teacher Education (BITE)/Block Resource Centers (BRC) and followed up with appropriate teacher assessments that can in turn inform future trainings.
 - Strengthen the training facilities at DIETs and BITEs/BRCs, including for the development of DIETs into centers for academic leadership and experiential learning.
 - Facilitate peer learning by leveraging social media (and other IT-enabled) platforms and developing forums for face to-face interaction
 - Reduce the amount of time that sub-district level education staff invest in administrative functions, thereby allowing BRCs and Cluster Resource Centers (CRCs)³ to play a more active role in need-based in-service training, onsite support, academic supervision, and mentorship of teachers (more details provided in Results Area 2.5 below); and
 - Promote Block Resource Centers (BRCs) that are teacher training bodies at the block level and Cluster Resource Centers (CRCs) that are onsite support institutions created to cater to 10-12 schools in a cluster are crucial in teacher capacity enhancement. STARS will introduce governance reforms to reduce the amount of time sub-district level education functionaries are investing in administrative functions, thereby allowing BRCs and CRCs to play a more active role in in need

³ BRCs are teacher training bodies at the block level and CRCs are onsite support institutions created to cater to grade 10-12 schools in a cluster; both are crucial in teacher capacity enhancement.

based in-service training, onsite support, academic supervision and mentorship of teachers. (More details provided in Results Area 2.5 below)

- Harness the potential of technology and its better utilization in the teaching-learning process inside classrooms by providing technical assistance to assess the digital competencies of teachers and teacher educators and develop operational guidelines to enhance the same. This will enable state governments to refine the professional development needs of teachers, as well as make investment decisions around ICT-enabled interventions.
33. Classroom Instruction and Learning Enhancement Programs: STARS will support state initiatives to improve the quality of classroom instruction; encourage non-state actor partnerships, where appropriate, particularly in the area of learning enhancement programs; and provide technical inputs for enhancing the quality of programs.
34. School Leadership: The School Leadership Development Program (SLDP) created by the National Institute for Education Planning and Administration (NIEPA) will be used to train a large pool of resource persons (master trainers). States will be encouraged to revive their State Institute of Education Management and Training (SIEMAT)/state nodal institute of education planning and management to provide in-service capacity building support to head teachers and school principals.
35. Using technology to improve teacher management and education: Technology portals like Ek Step and other open source portals and platforms will be used to create capabilities for delivering content, tracking use and supporting teachers collect, manage and use student learning data and support teachers in remedial exercises. Platform selection will be done in consultation with the MHRD and the states. Resources will be subject and matter specific and pedagogical training, content for class preparation and classroom use, curriculum and learning level aligned supplementary worksheets for students, and banks of formative assessment items. Digital platforms like DIKSHA with support ECE strengthening through creation of curated high quality ECE content and blended learning materials; parental orientation and outreach material, peer-to-peer learning of AWWs and pre-primary teachers.

(a) **Environmental Effects**

(1) **Benefits**: The activities described above are likely to yield the overarching environmental benefit of providing a safe and comfortable learning environment to teachers and other trainees through strengthening of DIETs, BITEs and BRCs, including safe and adequate spaces, ventilation, basic water and sanitation services, etc. Under this results area, there are opportunities to enhance environmental benefits such as: (a) energy conservation if the building designs are energy efficient (b) water conservation if the building design and fixtures integrate rainwater harvesting and efficiency (c) composting if hostels include waste management facilities.

(2) **Impacts**: The activities described above will cause the following impacts:

- *Impacts on the Physical Sphere*: Improvements of refurbishments of training facilities and hostels will have related impacts such as generation of dust, noise and wastes.
- *Impacts on the Built Environment*: Poor building design, construction and management leading to restricted access to People with Disabilities; Inadequate lighting and ventilation; Inadequate/inappropriate water and sanitation facilities;

Inadequate waste management; Fire and electrical safety risks; Disaster management; etc.

- *Impacts on Public and Worker Safety:* Risk of minor accidents in upgrading facilities.

- (3) **Risks:** Implementation of the above activities should not include toxic paints, and selection of easily cleaned building materials that do not support microbiological growth, are nontoxic, and nonallergenic, and do not include volatile organic compound (VOC)-emitting paints and sealants.

(b) **Social Effects**

The activities supporting this results area are expected to produce the social benefits and potential adverse impacts, and post the social risks, noted below, broken out by relevant socio-economic theme or issue area.

- (1) **Benefits:** ICT-enabled teacher training will make teacher trainees adept at tackling disruptive technologies that are shaping the lives and thought processes of students across age groups. The use of technology in special education helps break the barriers for people with disabilities and provide them with access to the most relevant educational programs. IT-enabled learning provides an opportunity to stimulate interest, provide relevance, support creativity, and create collaborative learning experiences for students as well as create inclusive learning platforms. However, it's important that teacher trainees are provided with an environment that enables them to access and get comfortable with modes of using technology. This is especially true for in-service teacher training.

To amplify the benefits of ICT-enabled teacher training, the following needs to be ensured:

- Teachers, Principals and mid-level professionals need to be provided with continuous professional development and in-service training with a strong component on technology and usage of digital tools.
- States supported under STARS can also create a pool of free-online resources, MOOCs and other TLM to be used in classrooms.
- Frontline professionals can be trained to observe usage of digital mediums of instruction during teaching-learning transactions.

- (2) **Impacts:** Strengthening of learning spaces in DIETs and other teacher training institutions (BITEs, PTECs, etc.) may lead to an increased interface between construction workers and teacher trainees. A substantial percentage of these trainees are women putting them at a risk of sexual harassment and gender-based violence. To mitigate impacts related to

campus safety, it is proposed that MHRD develop a set of guidelines minimizing labor-students' interface.

Additionally, preference should be given to constructing a boundary wall since a substantial number of TEIs across states lack boundary walls. Const-friendly alternatives such as fencing, plantation. etc. can also be considered.

(3) **Risks:**

- Campuses of DIET and other teacher-training institutions are spread over large acres of land. A substantial number of TEI campuses (PTEC, DIETs, BITEs) are in need of strengthening of learning spaces – both primary and higher order digital requirements.
- It will be hence important for states to prioritize a select set of TEIs to be supported under STARS to be supported for upgradation based on a robust need assessment exercise. It is also advised that at least a small percentage of these TEIs are from aspirational districts of the state and Educationally Backward blocks (EBBs.)
- Further, there is a high probability of encroachment and informal settlers on these campuses. To mitigate this risk, it is advised that TEIs supported under STARS prioritize construction/maintenance of boundary walls. Further, these TEIs need to monitor cases of encroachment through the E&S checklist attached in the Annex 4.

Results Area 2.4 – School to Work Transition: Description of Activities

36. **Strengthening School to Work/Higher Education Transition:** Vocational education and school to work transition is still at a nascent stage in India. STARS will undertake a modest approach and will address the following identified tasks:

37. ***Career Counselling initiatives:*** As part of the GOI's efforts to universalize secondary education, there is recognition that students need to be provided with more varied options and guided approaches to support them in secondary school, which would be both vocational and academic in nature. Very often, students opting for higher education move into the labor market without the relevant work-related skills

Often the rigidity in tertiary systems is inefficient and inequitable given the future of work¹. This is because the trade-offs between general and vocational education are changing in unpredictable ways, and most economies continue to need both. Technological progress and the demand for certain occupation-specific skills makes certain tertiary degrees obsolete. Vocational training continues to be a viable career path for many. In 2012, 63 percent of Dutch higher education students were attending vocational training. This share was more than 50 percent in Malaysia, and 31 percent in Kenya in 2013. Vocational training helps meet immediate demand for technical skills, enables faster education-to-work transitions for some, and alleviates pressures on the university system.

or the transversal soft skills that are important for success in the labor market, rendering them unemployable. STARS will encourage states to provide emphasis on carefully targeted career counselling efforts at the secondary and senior secondary levels with two critical components as defined by OECD: (i) career education in which students learn about the world of work and develop career management skills through classroom teaching, and through other activities such as work experience (ii) individual career advice on a one-to-one basis, providing specific advice on career

decisions; either pro-actively (mandatory interviews for all) or reactively (on demand). To meet this, there need to be a coherent career guidance professional experienced in labor market issues and separated from psychological counselling. Guidance personnel need to have an independent base to

underpin their objectivity and be able to call on a wide range of information and web-based material. Strong links between schools and local employers are very important means of introducing young students to the world of work. Guidance initiatives also need to be carefully evaluated.

38. *In-school vocational education with market relevance*: Clarifying and standardizing VET training and assessment systems, credit transfers and equivalence, and career counselling approaches are crucial so that there is effective coordination between the skills development and the school education sectors. While the Ministry of Skills Development and Entrepreneurship (MSDE) through its PPP body the National Skills Development Corporation (NSDC) has set up a strong cadre of employer led Sector Skills Councils (SSCs), there is very poor connection between the school education sector and the SSCs. STARS will encourage work benches/ multi skilling centers in schools that would be closely linked with the SSCs for ensuring that the trades being introduced in schools are relevant and connected to the labor market. Further, STARS will also ensure that there is effective and relevant training of the vocational education instructors and trainers to reduce the theoretical nature of TVET and enhancing its relevance to the labor market and employers. Building credible systems of evaluation, equivalence, institutional accreditation and apprenticeship will be supported.

(c) Environmental Effects

- (1) **Benefits:** The activities described above are likely to yield the overarching environmental benefit of providing a safe and comfortable learning environment to trainees through creation or augmentation of VET learning spaces including safe and adequate spaces, ventilation, basic water and sanitation services, etc. Under this result area, there are opportunities to enhance environmental benefits such as energy and water conservation if building designs are resource efficient. Introducing basic health and safety knowhow as part of the VET curriculum will also ensure that safety on the job learning is integrated into the learning.

Impacts: there are no impacts due to these activities.

- (2) **Risks:** Risk of occupational safety related accidents during VET facility operation

(d) Social Effects

- (1) **Benefits:** Completion rates in secondary schools have potential to improve and the difference is marginal between boys and girl students. Based on consultations with various stakeholders across the six states and focus-group discussions complemented with secondary research, the reasons for drop-outs were found to be vastly different for girls and boys at the secondary level. Boys tend to drop-out primarily due to endogenous factors such as temporary employment opportunities as migrant laborers, lack of interest in studies, alien curriculum, etc. whereas distance to higher secondary schools and perceptions of safety among community members are external factors that contribute to girls' dropping out of school after completing secondary education. In such a scenario, school-to-work transition and introduction of vocation education is crucial to cater to the needs of students who are out of school, out of education and out of work. The activities proposed under this result area will have a direct impact on inclusionary outcomes for boys from SC/ST communities. Further, given the low labor force participation rates for women in the country, early steps towards introducing adolescent girls to the world of work will help them transition from education to the labor force. The school-to-work transition component proposed under STARS aims to cater to students who drop-out of schools primarily due to socio-economic circumstances. It enables states to set-up

vocational training centers and institutions from the level of village clusters and blocks to sub-divisional/ district towns and metropolitan areas. To ensure that students remain in the mainstream education system set-up, existing school facilities will be used as far as possible for vocational education. The school-to-work transition component also lays emphasis on offering career counselling facilities to students that are differentiated by social requirements such as gender, geography and vulnerability of circumstances. These interventions explicitly address gender gaps that lead to boys dropping out after secondary education.

The benefits are likely to be amplified by ensuring the following:

- Introduction of job roles and occupational standards aligned to high-growth sectors that encourage girl students to actively opt for vocational education.
- It is important that a rapid need assessment is carried out to understand diverse set of inclinations amongst youngsters and introduce courses that are aligned to their interests as well as the needs of the labor market.
- This activities under this result area also needs to be backed with an awareness campaign and audio-visual messaging to change perceptions about vocational education amongst students, teachers, parents and communities.
- States may choose to prioritize schools located in schedule V areas and LWE districts.

(2) **Impacts:** Construction/upgradation activities in schools may lead to increased interface between construction workers and students. Since a considerable number of these students are girls, upgradation activities directly increase the risk of sexual harassment and gender-based violence. To mitigate impacts related to campus safety, it is proposed that MHRD develop a set of guidelines minimizing labor-students' interface.

(3) **Risks:** Information gaps regarding the courses offered amongst girls' and boys' students from rural areas/aspirational districts are a possibility.

Suggestions:

- Introduction of job roles and occupational standards that encourage girl students to actively opt for vocational education credits/courses.
- Awareness campaigns on social media and audio-visual messaging to change perceptions about vocational education amongst students, teachers, parents and communities.
- Provision of rigorous training to career counsellors and trainers to sensitize them towards the needs of students from marginalized groups and appropriate methods to hand-hold, counsel and guide them towards occupational education. This is especially crucial in left-wing extremist (LWEs), EBBs and SFDs.

Results Area 2.5 – Governance and Decentralized Management for Improved Service Delivery:
Description of Activities

39. *Governance and Decentralized Management for Improved Service Delivery:* Building on the India CPF, STARS will focus on enhancing state capability at decentralized levels for improved service delivery. This would largely help reduce government tasks, reorganize delivery, expand private initiatives, and create new partnerships for enhanced efficiency. The gains would be enormous: first, making education more relevant to local needs; second, democratically promoting people’s participation by empowering local authorities; and third, improving performance accountability. Key initiatives will include:
40. *Effective Teacher Management:* STARS will support states to enhance the transparency of their teacher management processes. This will include support for developing IT systems to maintain electronic teacher records and facilitate transparent recruitment and transfers of teachers. Support also will be provided for developing and deploying teacher performance evaluation standards.
41. *National Framework for Partnerships with Non-State Actors:* The Gol’s draft National Education Policy (NEP) (2019) proposes that a new State School Regulatory Authority (SSRA) be created in each state, which would develop a uniform regulatory framework for public and private schools.
42. *Partnering with Non-state Actors:* Partnerships with non-state actors are increasingly being adopted as reform initiatives by states, with the underlying premise that marrying the strengths of the public sector with the management approach of the private sector will lead to demonstrable results. Each state has been undertaking partnerships in its own way without an overall guiding framework or set of principles.

(a) Environmental Effects

The activities supporting this results area are not expected to produce any environmental benefits, adverse impacts, or pose environmental risks.

(b) Social Effects

The activities supported under this results area are not expected to have any associated social risks.

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

A. Introduction

43. This section assesses whether the program's environmental and social management systems are consistent with the core principles and key planning elements contained in the PforR Policy and whether the involved institutions have the requisite capacity to implement these systems' requirements. Both elements (e.g. program systems and capacity) are necessary towards ensuring that the environmental and social effects identified in Section II are effectively managed. Through both analyses, the ESSA team has identified gaps in both areas, which are addressed in Section (c): Inputs to the Program Action Plan.

44. *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."⁴ This ESSA has examined the adequacy of such capacity by considering, among other things, the following factors:

- (a) Adequacy of human resources (including in terms of training and experience), budget, and other implementation resources allocated to the institutions;
- (b) Adequacy of institutional organization and the division of labor among institutions;
- (c) Effectiveness of interagency coordination arrangements where multiple agencies or jurisdictions are involved; and
- (d) The degree to which the institutions can demonstrate prior experience in effectively managing environmental and social effects in the context in projects or programs of similar type and magnitude.

B. Core Principle 1 - Environmental and Social Management

45. As indicated below, and in greater detail in Annex 2, the assessment of program systems under this principle determined that standalone environmental assessment is not a statutory requirement under Gol, for the scale of refurbishment works envisaged under the program. The Samagra Shiksha program framework emphasizes environment friendly design, construction and operation. The Environmental Management Framework for Samagra Shiksha provides guidelines for environment friendly design, sustainability, construction and operation - these guidelines have been broadened to preschool and vocational education as well. This EMF also specifies institutional arrangements for environmental management. However, these are in the context of the Rashtriya Madhyamik Shiksha Abhiyan (RMSA) program of the MHRD and will be translated to the Samagra Shiksha structure.

46. In terms of program capacity, the main findings are that the implementing agency, the Ministry of Human Resource Development (MHRD), has more than 15 years of experience in working with the Bank on school education. Each of the school education projects included an 'Environmental

Assessment/Management Framework (EMF) which is developed and implemented by the MHRD. While the national and state level officials are familiar with the EMF for Secondary Schools, there is limited awareness in the field engineers, schools and SMCs due to geographical spread, and frequent staffing changes . The EMF-SS developed by MOHRD is adequate to address environmental safeguard issues associated with any school upgradations including water supply and sanitation)\. There is no focal point at the national, state or district levels on environment, health and safety (EHS) aspects.

Recommendations: Based on the gaps identified through the assessment, a set of recommendations was discussed with MHRD. These are not PAP actions but actions to strengthen existing environmental systems under the Program.

- a. Organize regular and periodic training programs for field engineers, BRPs, CRPs and SMCs on the provisions of the Environmental Management Framework relevant to STARS.
- b. Continue to apply the EMF SS to any small/medium scale construction/ upgrading of schools.
- c. Hire a national level environmental and social specialist to ensure integration of EHS aspects in STARS.

Table 6: Core Principle 1 - Environmental and Social Management

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.			
Key Planning Elements	System Assessment	Capacity Assessment	Recommendations
<p><u>Program procedures will:</u> 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.</p>	<p>As per the Environmental Impact Assessment Notification 2006 and Amendments, there is no requirement of environmental assessment for construction of educational institutions (and hostels) with built-up area less than 20,000 sq. m Statutory clearances are required in case of constructions in the proximity of critical natural habitats and physical cultural resources (discussed under Core Principle 2).</p> <p>The Samagra Shiksha Framework specifies that civil works under the program should be in accordance with the EMF-SS issued by MHRD. This Framework provides guidelines for environmentally sound school design, construction and operation. However, the Framework is limited to Secondary Schools and will be broadened to pre-school and vocational education.</p>	<p>The MHRD has more than 15 years of experience in working with the Bank on school education. Each of the school education projects included an ‘Environmental Assessment / Management Framework’ (EMF) developed and implemented by the MHRD. The most recent Secondary Education Project (Rashtriya Madhyamik Shiksha Abhiyan – RMSA) was rated ‘moderately satisfactory’ on environmental safeguards due to delay in updating the EMF.</p> <p>While the national and state level officials are familiar to some degree with the Environmental Management Framework for Secondary Schools, there is little awareness in the field engineers, schools and SMCs.</p>	<p>Organize regular and periodic training programs for field engineers, schools and SMCs on the provisions of the Environmental Management Framework relevant to Samagra Shiksha.</p> <p>Any small/medium scale construction (upgrading of schools can result in impacts related to air, dust generation, waste generation, occupational and community health and safety. These risks will be managed through application of the EMF-SS under Samagra Shiksha.</p>
<p>1.2. Incorporate recognized elements of environmental and</p>	<p>The EMF-SS does not specify a mechanism for screening for potential effects.</p>	<p>Not Applicable</p>	<p>MHRD will ensure screening of schools, and develop a screening</p>

<p>social assessment good practice, including the following: 1.2 (a) Early screening of potential effects</p>			<p>mechanism, A screening checklist provided in Annex 4 .</p>
<p>1.2 (b) Consideration of strategic, technical, and site alternatives (including the 'no-action' alternative)</p>	<p>The EMF-SS provides a set of criteria to guide site selection in order to avoid potential negative impacts. It does not specify any assessment procedures that cover consideration of alternatives or cumulative impacts.</p>	<p>Not Applicable</p>	
<p>1.2 (c) Explicit assessment of potentially induced, cumulative, and transboundary impacts</p>	<p>The EMF-SS provides a set of criteria to guide site selection in order to avoid potential negative impacts. It does not specify any assessment procedures that cover consideration of alternatives or cumulative impacts.</p>		
<p>1.2 (d) Identification of measures to mitigate environmental or social impacts that cannot be otherwise avoided or minimized</p>	<p>The Samagra Shiksha Framework specifies that school buildings under the program must be eco-friendly and conform to national standards and guidelines on safety. It also prescribes safety precautions for pre-schools. The EMF-SS provides guidelines that cover the following aspects: (a) sustainable school design (b) site selection and preservation (c) use of site features, site planning and landscape design (d) energy efficient building envelope (e) construction material (f) indoor air quality (g) lighting (h) ventilation (i) water (j) energy (k) solid waste (l) barrier free environment (m) safety (n) construction safety. Identification of mitigation measures relevant to occupational health and safety issues in vocational education is a gap area.</p>	<p>Environment, health and safety (EHS) issues are part of capacity building programs for teachers, BRCCs, CRCCs, and SMCs. However, civil engineers in the education department are not oriented to EHS issues on a regular basis.</p>	<p>Organize regular and periodic training programs for field engineers, schools and SMCs on the provisions of the Environmental Management Framework relevant to Samagra Shiksha.</p>

<p>1.2 (e) Clear articulation of institutional responsibilities and resources to support implementation of plans</p>	<p>The Samagra Shiksha Framework specifies institutional arrangements at the national, state, district, block and school levels. The EMF- SS specifies institutional arrangements for environmental management in the context of the Rashtriya Madhyamik Shiksha Abhiyan (RMSA) program of the MHRD.</p>	<p>There is no focal point at the national, state or district levels on environment, health and safety (EHS) aspects. Block and Cluster Resource Centre Coordinators (BRCCs and CRCCs) play a key role in monitoring school level EHS aspects. At the community level, the School Management Committee (SMC) plays a key role in monitoring.</p>	<p>A National level environment and social specialist should be hired under STARS to ensure integration of EHS aspects in Samagra Shiksha and place the previous institutional arrangements under RMSA.</p>
<p>1.2 (f) Responsiveness and accountability through stakeholder consultation, timely dissemination of program information, and through responsive grievance redress measures</p>	<p>The Samagra Shiksha Framework clearly states that issues of gender and social exclusion require careful monitoring. Under the Integrated Scheme, monitoring and accountability mechanisms would be evolved and strengthened at different levels.</p>	<p>While SMC members and mid-level professionals play a key role in monitoring of grievances and redressal of complaints at the school level, there are variations in their capacity to carry self-audits, manage grievances related to safety issues and ensure accountability in construction.</p>	<p>Rigorous and uniform training modules need to be rolled out by NCERT in coordination with SCERT to build capacity at the community level.</p>

C. Core Principle 2 – Natural Habitats and Physical Cultural Resources

47. Given the scope of the proposed Program's activities, the ESSA Team concludes that since the Program activities will be implemented on existing school premises it will not pose any risks to natural habitats and physical cultural resources (PCR). Hence, Core Principle 2 is not applicable. The proposed program investments would not result in any impact (direct or indirect) on natural habitats and physical and cultural resources.
48. In locations that are in close proximity to natural habitats and PCRs (for example, schools located near forest areas or close to the coastline), construction activities will be excluded. As indicated below, and in greater detail in Annex 2, the assessment of program systems under this principle determined that National and State level laws and regulations exist for regulation of activities in natural habitats, critical natural habitats, in proximity of protected monuments and for management of chance finds. The Environmental Management Framework for RMSA, now Samagra Shiksha did not include a screening mechanism for identifying impacts on natural habitats and physical cultural resources. Hence a screening checklist is provided in Annex 4 which MHRD will utilize before any school development interventions are implemented.

Recommendations: Based on the gaps identified through the assessment, a set of recommendations were discussed with MHRD. These are not PAP actions but actions to strengthen existing environmental systems under the Program.

- a. Include training on regulatory provisions relevant to school development activities in proximity of natural habitats and cultural heritage sites as part of regular and periodic training programs for SMCs and for civil engineers associated with the state departments of education.
- b. Exclude construction activities in the following areas, from the PforR program, in view of the high risk posed to natural habitats and cultural resources:
 - i. forest areas, notified wetland areas, protected areas such as national parks and wildlife sanctuaries, coastal regulation zones I and IV.
 - ii. areas within 100-meter radius of protected monuments.
- c. Undertake a screening (Annex 4) before any physical interventions are implemented (in line with the EMF-SS) to ensure that there are no direct or indirect impacts to sensitive environmental habitats, and cultural properties.

Table 7: Core Principle 2 – Natural Habitats and Physical Cultural Resources

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.			
Key Planning Elements	System Assessment	Capacity Assessment	Recommendations
2 (a) Includes appropriate measures for early identification and screening of potentially important biodiversity and cultural resource areas	The EMF-SS issued by MHRD does not specify measures for early identification and screening of biodiversity and cultural resource areas.	In the absence of a clear system for identification and screening, there is little awareness on the need to identify and screen potentially important biodiversity and cultural resource areas.	MHRD officials will follow the EMF-SS and ensure that the schools are screened for any potential impacts on sensitive environmental areas, for which any activity is excluded from the Program (refer Annex 4).
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.	National and State level laws and regulations exist for regulation of activities in natural habitats and critical natural habitats. These include: Forest Conservation Act 1980 that regulates use of forest land for non-forest purposes including construction of buildings; Wildlife (Protection) Act 1972 that prohibits activities that are harmful to protected species and areas; Eco-Sensitive Zone Notifications that regulate upgradation/ development activities in ecologically sensitive areas around existing protected areas; Wetland (Conservation and Management) Rules 2017 that regulate activities in notified wetland areas; Coastal Regulation Zone Notification 2019 that regulates construction activities in coastal areas; State Rules that regulate	The system of seeking statutory clearances for activities in critical natural habitats is functional. For example, in Madhya Pradesh between 2014 and 2019, 11 proposals for Forest Clearance for the purpose of school/hostel construction were submitted to the MoEFCC (including 7 proposals from the state tribal welfare department). Of these, 3 have been approved and the rest are under processing. There is limited awareness on the relevant provisions of the existing laws and regulations in the key stakeholders: civil engineers in the state departments of education, construction agencies, contractors, School Management Committees, etc.	Any Construction activities in the following areas will be excluded from the PforR program: forest areas, notified wetland areas, protected areas such as national parks and wildlife sanctuaries, coastal regulation zones I and IV. Interventions will only be carried out within the existing school premises. Include coverage on regulatory provisions relevant to development activities of learning spaces in proximity of natural habitats (for example in notified Eco-Sensitive Zones, in CRZ II and III, etc.) as part of regular and periodic training programs for SMCs and for civil engineers associated with the state departments of education.

	cutting of trees and provide for compensatory plantation.		
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.	National and State level laws and regulations exist for regulation of activities in proximity of protected monuments and for management of chance finds of archeological, historical value.	There is limited awareness on the relevant provisions of the existing laws and regulations in the key stakeholders: civil engineers in the state departments of education, construction agencies, contractors, School Management Committees, etc.	Interventions will only be carried out within the existing school premises. Include coverage on regulatory provisions relevant to school development activities in proximity of cultural heritage sites as part of regular and periodic training programs for SMCs and for civil engineers associated with the state departments of education.

D. Core Principle 3 – Public and Worker Safety

49. Given the scope of the proposed Program’s activities, the ESSA Team concludes that the Program is unlikely to have any major adverse on public and worker safety. However, there could be risks to communities, stemming largely from poor design, construction and operation practices such as generation of dust, wastes and noise.
50. As indicated below, and in greater detail in Annex 2, the assessment of program systems under this principle determined that the Samagra Shiksha Framework lays strong emphasis on environment, health and safety (EHS) aspects as well as hazard resistance and encourages the application of relevant national codes and guidelines and the use of the Environmental Management Framework for Samagra Shiksha.
51. In terms of program capacity, the one of the main findings is that more awareness can be built in the field engineers, schools and SMCs on the different aspects of the EMF-SS. Construction safety was highlighted as an issue of concern in all school level stakeholder consultations. Also, training programs for civil engineers on disaster resistant construction and on climate smart design are not organized regularly.

Recommendations: Based on the gaps identified through the assessment, a set of recommendations were discussed with MHRD. These are not PAP actions but actions to strengthen existing environmental systems under the Program.

- d. Organize regular and periodic training programs for SMCs and civil engineers associated with the state departments of education on environment, health and safety aspects of school environment (included in the EMF -SS) including disaster resistant and climate smart design, use of safe materials, resource conservation, waste management, fire safety etc.
- e. Integrate EHS aspects into vocational training courses to promote understanding of safety concerns on the job.

Table 8: Core Principle 3 – Public and Worker Safety

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.			
Key Planning Elements	System Assessment	Capacity Assessment	Recommendations
<p>3 (a) Promotes community, individual, and worker safety 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 as needed.</p>	<p>The Samagra Shiksha Framework specifies that environment, health and safety practices should be followed for design, planning, preparation and execution of improvements in school learning environment in accordance with: (a) EMF-SS issued by MHRD (b) National Building Code 2016 (c) School Safety Policy Guidelines February 2016 issued by NDMA. However, the ‘Environmental Management Framework for Secondary Schools’ does not cover issues related to pre-schools and vocational training – for example, safety issues with educational materials, occupational safety issues in vocational training, etc.</p> <p>The Code on Occupational Safety, Health and Working Conditions Bill 2019 is applicable to civil works works under the program. The states also include relevant safety provisions in the construction contract agreements (for example, Himachal Pradesh has a safety code and model rules on health</p>	<p>While the state level officials are familiar to some degree with the EMF-SS issued by MHRD, there is little awareness in the field engineers, schools and SMCs. Construction safety was highlighted as an issue of concern in all school level stakeholder consultations.</p> <p>Safety issues during operation and maintenance seem to be fairly well managed for some aspects while they need to be improved for others. The field study noted that on the positive side, the sampled schools had safe electrical fittings, were equipped with fire extinguishers, had water filtration systems and practiced safe storage of lab chemicals. However, some schools had safety issues such as incomplete boundary walls, use of firewood as fuel, etc.</p>	<p>Organize regular and periodic training programs for SMCs on environment, health and safety aspects of school improvement measures and management including disaster resistant and climate smart design, use of safe materials, resource conservation, waste management, etc</p> <p>Organize regular and periodic training programs for civil engineers associated with the state departments of education on environment, health and safety aspects of school learning environment e creation and management including disaster resistant and climate smart design, use of safe materials, resource conservation, waste management, etc.</p>

	and sanitary arrangements for workers).		
3 (b) Promotes the use of 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.	The following regulations concerning waste management apply to the program: Construction and Demolition Waste Management Rules 2016 and Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016. There is a likelihood of asbestos waste generation in civil works involving maintenance works of materials containing asbestos.	Experience from other projects and programs in the country (and in the program states) shows that there is limited awareness and capacity for the management of waste generated, and The most likely way it will create a risk in schools is when they are disturbed or damaged through maintenance, repair or construction activities. (e.g. drilling and fixing while undertaking maintenance or installation work)	These risks are covered under the EMF-SS and suitable mitigation measures outlined. Integrate EHS aspects into vocational training courses to promote understanding of safety concerns on the job including asbestos containing materials. Training to BRPs and CRPs should also cover managing asbestos on the school premises so they can brief on the location and condition of ACMs.
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.	The Samagra Shiksha Framework specifies that the civil works cost shall include design of buildings conforming with earthquake resilience, and, retro-fitting of existing building towards hazard resistance. The EMF-SS issued by MHRD includes a few guidelines for natural hazard prone areas (for example, construction above high flood level, erosion control measures, measures to reduce indoor heat levels). However, it does not provide a comprehensive set of guidelines for design, construction, operation and maintenance of schools in natural hazard prone areas.	As mentioned earlier, while there is comprehensive guidance on measures to be taken in natural hazard prone areas, awareness on these is limited at on-the-ground implementation level. Some initiatives for capacity building on disaster management have been undertaken in all the states – for example, awareness programs have been organized in schools in partnership with the State Disaster Management Agencies. However, there are important gaps – training programs for civil engineers on disaster resistant construction and	Include coverage on disaster resistant construction and climate smart design in regular and periodic training programs for civil engineers and SMCs and those associated with the state departments of education.

	<p>The National Building Code 2016 includes several codes concerning earthquake resistance, cyclone resistance, construction in hill areas, etc.</p> <p>The School Safety Policy Guidelines February 2016 issued by NDMA details procedures for preparation and implementation of school disaster management plans.</p> <p>The Guidelines on Safety and Security of Children 2014 issued by MHRD includes ensuring physically sound, all-weather buildings that are resistant to earthquakes, fire and are safe from floods.</p> <p>In addition, states also have regulations and standards for construction in natural hazard prone areas (for example, Hazard Safety Guidelines for Buildings in Himachal Pradesh).</p>	<p>on climate smart design are not organized regularly.</p>	
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E. Core Principle 4 – Land Acquisition

52. Given the scope of the proposed Program’s activities, the ESSA concludes that the Program is unlikely to have any adverse impacts or pose any risks caused by the acquisition or land or the restriction of use or access to land or natural resources, including the loss of income caused by such actions. No land acquisition or displacement of title holders or non-title holders will be undertaken under STARS. Upgradation and civil works will be restricted to government land and will be monitored through the E&S screening checklist. The screening process will be coordinated by the Social Specialist at the PMU and Samagra coordinators at the state-level. BRPs/CRPs will be responsible for information collection and actual screening of school sites.

This principle is therefore not applicable.

F. Core Principle 5 – Indigenous Peoples and Vulnerable Groups

53. Five of the six states i.e. Maharashtra, Madhya Pradesh, Himachal Pradesh, Odisha and Rajasthan supported under STARS have designated Schedule V Areas. Presence of SC and ST communities varies across states. Further, it needs to be noted that five of these states include a total of 26 aspirational districts out of the 117 districts identified by NITI Aayog. Four states supported under STARS, Maharashtra, MP, Odisha and Kerala have LWE areas identified by the Government of India. Interventions proposed under STARS will work towards minimizing social conflict and improving inclusionary outcomes through enhanced governance mechanisms and targeted interventions in these districts.
54. As indicated below, and in greater detail in Annex 2, the assessment of program systems under this principle determined that the Samagra Framework has a strong focus on addressing educational needs of children from marginalized and vulnerable communities. Bridging gender and social category gaps at all levels of school education is one of the major objectives of the Integrated Scheme. Consequently, the Integrated Scheme attempts to reach out to girls, and children belonging to SC, ST, Minority communities and transgender. The scheme has also given attention to urban deprived children, children affected by periodic migration, and children living in remote and scattered habitations. The Integrated Scheme also focuses on the identified Special Focus Districts (SFDs) on the basis of adverse performance on various indicators of enrolment, retention, and gender parity, as well as concentration of SC, ST and minority communities.
55. However, interventions under Samagra Scheme and supported under STARS such as early-childhood education, school-to-work transition are relatively new. Given existing intra-state variations across the states supported under STARS, it is likely that the benefits emerging from these interventions may be skewed especially during the initial roll-out phases.

In terms of the overall program capacity, the Samagra scheme lays out the following measures:

- Moving from an incentives and provisions-based approach to outcome-based approach targeting SC/ST and marginalized communities.
- Developing a deeper understanding on issues contributing to exclusion at the state and district level disadvantage and challenges faced by children from disadvantaged communities; including within the school space.
- Assessing and addressing the needs of different excluded and marginalized groups and communities through contextualized strategies.
- Encouraging innovative thinking and dialogues to identify holistic, multi-pronged and viable strategies to address issues of gender, equity and exclusion.

Table 9: Core Principle 5 - Indigenous Peoples and Vulnerable Groups

Core Principle 5: Due consideration is given to cultural appropriateness of, and equitable access to, program benefits, giving special attention to the rights and interests of indigenous peoples and the needs or concerns of vulnerable groups.			
Key Planning Elements	System Assessment	Capacity Assessment	Recommendations
<p>5. (a) Undertakes free, prior, and informed consultations if indigenous peoples are potentially affected (positively or negatively) to determine whether there is broad community support for the program.</p>	<p>1. The enactment of the RTE Act, 2009 requires addressing gender and social equity within a framework that is holistic and systemic.</p> <p>2. RTE Act opens the whole sphere of circumstances which come in the way of a child’s enrolment and participation in school, and his/her completion of the elementary stage. This necessitates an attempt at listing categories of children who might be covered under section 2(d) and (e) and spelling out possible strategies to prevent explicit and implicit discrimination in pursuing and completing elementary education.</p> <p>3. The Samagra Scheme envisages improvement quality of education, ensuring equity and inclusion at all levels of school education.</p> <p><i>The equity agenda of the Integrated Scheme would work towards:</i></p> <p>(i) Moving from an incentives and provisions-based approach to outcome based approach;</p> <p>(ii) Developing a deeper understanding on issues contributing to exclusion and</p>	<p>Officials at MHRD and state level officials are familiar with the requirements of the RTE and the focus under Samagra Scheme on equity and quality.</p> <p>However, there are two factors that lead to capacity gaps to effectively address inclusion-related concerns in service delivery under the Samagra Scheme:</p> <p>1. Provision of school education as a continuum from pre-school, primary, upper primary, secondary to Senior Secondary levels. The vision of the Scheme is to ensure inclusive and equitable quality education from pre-school to senior secondary stage. However, since integration is a new approach to service delivery, it may lead to capacity gaps given existing variations.</p> <p>2. New interventions such as ECE and school-to-work transition have a direct impact on learning outcomes. It will be important to build capacity of community bodies such as SMCs and mid-level administrative</p>	<p>Training of mid-level functionaries and SMCs on new interventions proposed under STARS.</p> <p>2. To avoid the risk of imbalanced selection of TEIs for upgradation, states need to undertake a mapping exercise. It is recommended that a select percentage of TEIs could be selected from aspirational districts/SFDs/EBBs.</p>

	disadvantage and challenges faced by children from disadvantaged communities including within the school space;	functionaries such as BRPs, BEOs and CRPs on these interventions with a special focus on roll-out in schedule V areas.	
5. (b) Ensures that indigenous peoples can participate in devising opportunities to benefit from exploitation of customary resources or indigenous knowledge, the latter (indigenous knowledge) to include the consent of the indigenous peoples.	<p>As acknowledged by the Samagra Shiksha Framework, the biggest problem faced by tribal children is that of language. Teaching materials and textbooks tend to be in a language the students do not understand; content of books and syllabi ignore the students' own knowledge and experience and focus only on the dominant language and culture. Not understanding the school language and therefore the course content, the children are unable to cope, end up repeating grades and eventually dropping out.</p> <p>Providing multilingual education is not a simple task. Even mother tongue education is challenged by problems like – not having a script, language not recognized as legitimate language, shortage of education material in the language, lack of appropriately trained teachers, resistance to schooling in the mother tongue by students, parents and teachers and several mother tongues represented in one class, it compounds the problem even further.</p>	<p>Various states such as Madhya Pradesh and Maharashtra have developed bridge language courses for students from tribal communities.</p> <p>Odisha has piloted various interventions in KBK districts which have a high presence of students from marginalized communities to address the needs of students from tribal communities.</p>	<p>1. Strengthening formation of youth clubs with active participation from both girls and boys.</p> <p>2. Building capacity and ownership of SMCs from Schedule V areas to a) encourage community-driven management of schools and b) bridge gaps in administrative delivery of education</p>
5. (c) Gives attention to groups vulnerable to hardship or disadvantage, including, as	The Samagra Scheme provides children's access to elementary schools through Transport and Escort facility to	The Samagra Scheme provides children's access to elementary schools through Transport and Escort	States supported under STARS may undertake a need assessment of

<p>relevant, the poor, the disabled, women and children, the elderly, or marginalized ethnic groups. If necessary, special measures are taken to promote equitable access to program benefits.</p>	<p>children in Classes I-VIII and for Children with Special Needs (CWSN). Children in remote habitations with sparse populations or in urban areas where availability of land is a problem or children belonging to extremely deprived groups or CWSN may not find access to schools. Such children may be provided support for transportation or escort facilities. This may be provided based on receipt/appraisal of district.</p>	<p>facility to children in Classes I-VIII and for Children with Special Needs (CWSN). Children in remote habitations with sparse populations or in urban areas where availability of land is a problem or children belonging to extremely deprived groups or CWSN may not find access to schools. Such children may be provided support for transportation or escort facilities. This may be provided based on receipt/appraisal of district.</p>	<p>CWSN friendly toilets especially in co-located schools.</p>
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G. Core Principle 6 - Social Conflict

56. Amongst the six states supported under STARS, four states supported under STARS, Maharashtra, MP, Odisha and Kerala have LWE areas identified by the Government of India. Interventions proposed under STARS will work towards minimizing social conflict and improving inclusionary outcomes through enhanced governance mechanisms and targeted interventions in these districts. Further, there is a significant geographical overlap between the LWE districts and Schedule V areas across the four states. Hence, the assessment applicable to core principle 5 (Indigenous Peoples and Vulnerable Groups) will also be applicable to core Principle 6.

Table 10: Core Principle 6 – Social Conflict

Core Principle 6: Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.		
Key Elements	System Requirements	Key Findings
Considers conflict risks, including distributional equity and cultural sensitivities	As explicitly mentioned in the Samagra Shiksha Framework, it shall be the endeavor to bring all Government and Government Aided schools from classes VI to XII, TEIs under the ambit of the scheme, subject to the availability of budgetary provision. Preference for various interventions will be given to Educationally Backward Blocks (EBBs), Left Wing Extremism (LWE) areas identified by MHA-Gol, SFDs (Special Focus Districts) and 115 aspirational districts and areas with concentration of SCs, STs, minorities and weaker sections. Further fifty percent of the physical targets for strengthening ICT in schools have to be identified from North Eastern States, LWE Districts, Island territories and other backward areas.	While as per requirements of the Samagra Scheme, state governments are likely to prioritize investments in LWE districts, it is also possible that capacity gaps persist, and last mile delivery of educational requirements remains an issue. However, interventions designed under STARS will actively work towards strengthening governance mechanisms in LWE areas, thus mitigating capacity gaps to a large extent in a time bound manner.

IV. DISCLOSURE AND CONSULTATION

A. Disclosure

57. This draft ESSA is being disclosed in-country and on the Bank external website to serve as the basis for discussion and receipt of formal comments. A stakeholder workshop on this ESSA took place on the 4th and 5th of September in New Delhi with MHRD and the States. Following incorporation of the feedback received from the workshop and other sources, the revised ESSA will be disclosed in-country and on the World Bank external website.

B. Stakeholder Consultations

58. Consultations with relevant institutions, program affected peoples, experts, and beneficiaries are essential in the proper planning and preparation of development projects and programs, to ensure effective identification and assessment of environmental and social effects, and to recommend measures to improve environmental and social management capacity. Stakeholder consultations were an integral part of the ESSA process and were carried out consistent with applicable World Bank principles.

59. This sub-section highlights important consultations conducted during the process, and the following sub-sections summarize major findings and recommendations received. Consultations and meetings with key relevant stakeholders at the national, state and local levels, particularly with those involved in environmental and social assessment and management as well as planning, implementation and monitoring of the program were conducted as follows:

National level consultations: 4-5 September, New Delhi. Consultation on draft ESSA and PAP actions with MHRD and the States

State level consultations:

The details of state level consultation are given below:

Table 11: State Level Consultations

State	Date	Location	Issues Discussed
Himachal Pradesh	16 May, 2019	Shimla	Overall School management and Operations Arrangements, Health and Safety, Adolescent Girls, Migration, BRPs/ CRPs and their functions, Coordination between Education, Tribal and Women and Child welfare Departments and other Organizations, Environment and Social aspects in Civil Works and Facility Management, Sensitizing SMCs and Civil Engineers, Swachh Vidyalaya, Environment and Social Management Framework, Awareness and outreach strategies, Vocational Training and Counselling, Grievance Redressal Mechanism, Environmental and Social Impacts of STARS, etc.
Maharashtra	30 May, 2019	Mumbai	
Rajasthan	06 Jun, 2019	Jaipur	
Odisha	11 Jul, 2019	Bhubaneswar	
Kerala	20 Jul, 2019	Thiruvananthapuram	

District level consultations:

The details of district level consultation are given below:

60. Issues discussed included: School management and Operational Arrangements, Buildings, Electricity, Water Sanitation, Kitchen and Store Room for Mid-Day Meal, Physical and Cultural Resources, Personal Hygiene, Solid Waste Management, Health and Safety, Adolescent Girls, Migration, Pest Control, ICT Labs, Anganwadi Colocation, School Management Committees (SMC)/ Village Education Committee (VEC), BRPs/ CRPs and their functions, Coordination between Education, Tribal and Women and Child welfare Departments and other Organizations, Environment and Social aspects in Civil Works and Facility Management, Grievance Redressal Mechanism, Vocational Training and Counselling, Future Requirements, Environmental and Social Impacts of STARS, etc

Table 12: District Level Consultation

State	District	Date	Location
Himachal Pradesh	Shimla	16 May 19	Mayfield
	Shimla	16 May 19	Portmore
	Solan	17 May 19	Sirinagar
	Solan	17 May 19	Manjhol
Maharashtra	Palghar	29 May 19	Palghar
	Palghar	29 May 19	Gorthan
	Mumbai	31 May 19	Worli
	Mumbai	31 May 19	Jogeshwari
Rajasthan	Dausa	07 Jun 19	Dhanawad
	Dausa	07 Jun 19	Abhaneri
	Jaipur	08 Jun 19	Beelva
	Jaipur	08 Jun 19	Vatika
Odisha	Bhubaneshwar	10 Jul 19	Bhubaneshwar
	Khorda	11 Jul 19	Malipada
	Dhenkanal	12 Jul 19	Dhenkanal
	Dhenkanal	12 Jul 19	Kanpura

Kerala	Thiruvananthapuram	18 Jul 19	Manacaud
	Thiruvananthapuram	18 Jul 19	Attingal
	Kollam	19 Jul 19	Ayyankoickal
	Kollam	19 Jul 19	Kothalkullangar

61. School level consultations: Consultations were held at 25 schools across five states. The key stakeholders consulted were the school teachers, other staff, School Management Committee members, students, Block and Cluster Resource Centre Coordinators, etc. The key environmental aspects discussed during the consultations included the current status and issues related to the school building, electricity, water and sanitation, solid waste management, pest management, etc. A summary of the consultations is provided in the following section.

Table 13: List of school level consultations held during the ESSA

No.	State	School	Location	Date
1	Himachal Pradesh	Govt. Girls Middle School	Sirinagar, Kandaghat, Solan	17 May 2019
2		Govt. Senior Sec. School	Manjhol, Kandaghat, Solan	17 May 2019
3		Govt. Middle School	Mayfield, Shimla, Shimla, Shimla	16 May 2019
4		Govt. Model Center Primary School	Portmore, Shimla, Shimla	16 May 2019
5	Kerala	Govt. High School	Ayyankoickal, Kollam	19 July 2019
6		Govt. High School	Kottalkullangar, Kollam	NI
7		Govt. Higher Secondary School	Kottalkullonger, Chavara, Kollam	19 July 2019
8		Govt. Higher Secondary School	Ayyankoickal, Kollam	19 July 2019
9		Govt. Upper Primary School	Attingal, Thiruvananthapuram	18 July 2019
10		Govt. Vocational Higher Secondary School	Kottalkullangar	19 July 2019
11	Maharashtra	KGBV	Gorthan, Jawhar, Palghar	NI
12		Oshiwara Municipal Urdu School	Jogeshwari, Andheri, Mumbai	31 May 2019
13		Prathiksha Nagar	URC 10, Mumbai	31 May 2019
14		Worli Seaface Municipal School	Mumbai	31 May 2019
15		ZP School	Kaman, Vasai, Palghar	NI
16		ZP School	Sajjanpada, Chahade, Palghar	NI
17	Odisha	Banamali Prasad Upper Primary School	Dhenkanal, Bhubaneswar	12 July 2019
18		Panchayat Raj High School	Kanapura, Kamakhyanagar, Dhenkanal	16 July 2019
19		Govt. Upper Primary School	Malipada, Kampur, Khordha	11 July 2019
20	Rajasthan	Adarsh Govt. Senior Sec. School	Aabhaneri	07 June 2019
21		Adarsh Govt. Senior Sec. School	Dhanawad, Dausa	07 June 2019
22		Govt. Senior Sec. School	Gudliya, Dausa	07 June 2019

23		Govt. Senior Sec. School	Bilwa, Jaipur	08 June 2019
24		Govt. Senior Sec. School	Shri Ram ki Nangal, Sanganer, Jaipur	08 June 2019
25		Govt. Senior Sec. School, Watika	Sanganer, Jaipur	08 June 2019

C. Summary of Consultations

62. The program team consulted with state and district level officials of the Department of Education in the states of Himachal Pradesh, Kerala, Maharashtra, Odisha and Rajasthan. The team also interacted with Block/Cluster Resource Centre Coordinators, school staff, teachers, SMC members, etc. The key points of discussion are summarized here.

(a) Assessment of relevant environmental and social management systems related to the PforR principles:

- The norms in the Samagra Shiksha Framework guide the implementation in the states. The states are working on providing access roads, boundary walls/fences, lighting, etc., to all schools.
- At the state level, there is familiarity with the 'Environmental Management Framework for Secondary Schools' referred to in the Samagra Shiksha Framework. However, there is little awareness at the district, block and school levels.
- It emerged during consultations that SMCs have been constituted across schools. There are some active SMC members who regularly visit the schools and participate in school activities. The PTA/ SMC meetings are held once a month on a regular basis. The SMC members are given one day training within the cluster. The training frequency is once a year. The SMC training is too general and a training manual for SMC training could not be found. SMCs have taken up civil construction activities where the estimates are within 10/15 Lakhs. No construction related technical training is given to them and the Engineer in charge assist these SMCs in technical matters.

(b) Assessment of the capacity and performance related to the environmental and social management procedures and processes relevant to The Program

- Integration of EHS aspects into civil works: There is no focal point at the state level on EHS aspects. Integration of EHS aspects (ventilation, safety, sanitation, etc.) into civil works is part of quality control and is through the involvement of qualified engineers as well as community representatives. Design and estimates for civil works are provided by the civil engineers in the education department for works undertaken by the SMCs. Larger works are handed over to government agencies such as Public Works Department. However, construction related safety issues were expressed as a concern.
- Monitoring of EHS aspects: Block and Cluster Resource Centre Coordinators (BRCCs and CRCCs) play a key role in monitoring school level EHS aspects – though largely limited to water and sanitation and hygiene practices. Each BRCC oversees schools in the entire block. Each CRCC oversees about 10-20 schools. At the community level, the School Management Committee (SMC) plays a key role in monitoring, including monitoring of civil works. The SMCs do not always undertake formal 'social audits'. However, they interact with schools on a regular basis and are aware of the status of civil works and issues. The SMCs participate in the preparation of annual school development plans.

- Capacity building on EHS aspects: EHS issues are part of capacity building programs for teachers, BRCCs, CRCCs, and SMCs. However, civil engineers in the education department are not oriented to EHS issues on a regular basis. Disaster management awareness programs are organized in schools in coordination with the State Disaster Management Agency.
- Review of job roles/occupational standards: With regard to vocational education, stakeholders suggested that local internship based vocational courses needs to be started as most of the jobs are in the informal sector. g For instance, salespersons in supermarkets. During discussions, gender-based occupational segregation was noted; for instance, “Beautician/ Tailoring for Girls – Electrician/ Mechanic for Boys” kind of mind set exists in the schools. As vocational training rolls-out, there will be a need to build capacity amongst trainers and career counsellors to negate gender-biases at the school level.
- Capacity of mid-level professionals: There is a substantial variation in the capacity of mid-level professionals who are, in a way, responsible for last-mile delivery of educational services. There is a need for a uniform training module to build capacity amongst frontline agents on risks of exclusion resulting either from migration patterns, presence of vulnerable households or lack of adequate learning spaces for CWSNs. Further, there is also a need to enhance capacity of BRPs, BEOs and CRPs on identifying higher-order digital elements needs and their usage especially at secondary and higher-secondary schools.
- Capacity building of SMCs and extension to higher-secondary classes: SMCs were envisioned under the RTE act and thus their functions are restricted till class 8. Under the Samagra Shiksha Framework, it will be crucial to a) include representation of SMC members from class 9-12 and b) build their capacity to monitor functioning of schools on aspects more prevalent in higher secondary classes such as issues of adolescent boys and girls, on-campus safety, well-stocked laboratories, etc.

Further consultations are planned with national and state level stakeholders to collect information as an input for the following activities: (a) development of an action plan to enhance environmental and social management capacity and performance of the PforR Program; and (b) development of performance monitoring and implementation support program. This Draft ESSA document will be the basis for these consultations and will be revised based on the inputs received, as necessary.

During the school level consultations, important input regarding the following aspects was received:

- (a) Learning spaces of schools: Boundary walls are present in most schools (19 of the 25 schools visited). However, the schools in Himachal Pradesh had incomplete boundary falls – with associated risks of falls from height due to the hilly terrain. Nearly all the schools (23 of the 25 schools) had adequate natural lighting and ventilation. Most schools have some greenery/trees on the campus (18 of the 25 schools) while others maintain potted plants (3 of the 25 schools). All schools have access to electricity (with 2 schools also using solar power). Most schools do not have electrical safety issues – there is no evidence of exposed wiring, unstable poles, etc. (exposed wiring was noted in only one school). There are no physical cultural resources such as monuments, artifacts, etc., within the school campuses.
- (b) School Water and Sanitation: Adequate number of toilets were observed in 10 of the 25 schools. In 7 other schools, separate toilets are available for girls, boys and teachers. Tthere is no information on the number of toilets in these schools. In one school, the toilets were inadequate and poorly

maintained. 16 of the 25 schools had water filters installed while 3 schools reported water quality problems. 5 schools supplied water directly from the piped water supply, tube well or tanker. Only one of the 25 schools had a rain water harvesting system.

- (c) Health and Safety Aspects: The fuel used for the preparation of the mid-day meal is LPG in 7 schools, firewood is used in 3 schools, biogas is used in 2 schools, while in 9 schools the meals are supplied from a centralized kitchen. Fire extinguishers were available in 16 of the 25 schools and training was provided to the staff on their use (9 schools did not have any fire-fighting equipment). First aid kits are available in all schools. 12 of the 25 schools undertake chemical pest control measures while in 12 other schools, this is undertaken by the local authority or the health department. All schools with lab facilities practice safe storage of chemicals in rooms with restricted access and adequate ventilation.
- (d) Waste Management: About half of the schools (13 out of 25) practice waste segregation. Only 4 schools visited practice on-campus composting and one school also has a biogas plant. Disposal of sanitary waste is done through electric incinerators in 6 schools, manual burning in 3 schools, disposal into pits in 3 schools, disposal into dustbins in 8 schools. There are no arrangements for sanitary waste disposal in 4 schools (in 3 of these schools, children carry the soiled sanitary pads back to their homes for disposal).
- (e) Potential increase in labor-students' interface: Preference should be given to constructing a boundary wall since a substantial number of TEIs across states lack boundary walls. Cost-friendly alternatives such as fencing, plantation. etc. can also be considered. Basic awareness-generation amongst students about their entitlements and safe spaces to report any harassment cases or concerns. Strengthening formation of youth clubs with active participation from both girls and boys.
- (f) Upgradation of TEIs/BRCs/CRCs may not take into consideration their geographic location: To avoid the risk of imbalanced selection of TEIs for upgradation, states need to undertake a mapping exercise. It is recommended that a select percentage of TEIs could be selected from aspirational districts/SFDs/EBBs. This includes mapping of higher-order elements needs such as digital assets, library books, etc. required to ensure functionality of classrooms in TEIs.
- (g) Introduction of job roles and occupational standards that encourage girl students to actively opt for vocational education credits/courses.

V. INPUTS TO THE PROGRAM ACTION PLAN

A. Introduction

63. This section summarizes the measures that the ESSA Team recommends be taken during Program implementation to address important gaps identified above between the Program system and the PforR core principles and key elements as well as to address any capacity shortcomings.
64. The ESSA concludes that the program has a low- moderate environmental risk and moderate social risk. The program risks on dealing with environment and social aspects are reasonably covered but will require efforts to address other gaps emerging as below:
65. As noted in Section III, the ESSA identified the following environmental management issues as needing additional action: (a) Gap/Issue Area 1: The EMF-SS does not specify measures for early identification and screening of biodiversity and cultural resource areas; (b) Gap/Issue Area 2: There is no focal point at the national, state or district levels on environment, health and safety (EHS) aspects concerning school education; (c) There is limited awareness on the relevant provisions of the existing environmental laws and regulations as well as on the EMF-SS in the key stakeholders at the local level.
66. During the preparation process for the PforR, the actions recommended below have been consulted through consultations with program counterparts. An environment and social specialist will be hired at the national level, and this action has been included in the Program Action Plan (PAP). The specialists will ensure that early screening is conducted for exclusionary activities with regards to all school development activities, and routine training activities are organised for BRPs, CRPs, SMCs and civil engineers on EMF-SS.
67. Based on the findings of the ESSA, the following actions have been recommended in the Program Action Plan (PAP) for management of social risks: (1) Develop and adopt awareness and communication strategy to a) provide information about various E&S aspects integrated in the Samagra Shiksha Scheme; b) Early Childhood Education and c) Vocational courses and career counselling facilities. (2) Roadmap/plan for Aspirational Districts (ADs) targeting schools in vulnerable areas.
68. If these actions are successfully implemented, the environmental and social management system for the program will have been considerably strengthened and set on a more sustainable path. Whereas these improvements will upgrade applicable national and state systems, the resulting benefits in terms of environmental and social sustainability will likely extend beyond the life of the Program. During implementation, the Bank will continue to consult with program counterparts and provide support to help resolve implementation issues. The Bank will also monitor PAP implementation as part of Program performance.

B. Recommendations to be Included in the PAP.

Recommendation 1: Hire national level environment (1) and social (1) persons, to ensure integration of environment, social, health and safety aspects in STARS.

Recommendation 2: Develop and adopt an awareness and communication strategy to:

- provide information about various E&S aspects integrated in the Samagra Scheme

- promote early-childhood education and how it impacts learning outcomes of a child.
- deliver vocational courses and career counselling facilities.

Recommendation 3: Roadmap/plan for aspirational districts: a) Undertake a need assessment to map variations in digital resources and capacity of TEIs; b) develop a plan/roadmap specifically for EBBs, special focus districts and aspirational districts.

The Table 6 below presents the actions that the ESSA Team recommends be included in the Program Action Plan (PAP)

Table 14: Recommended Actions for Program Action Plan

	Action	Timelines	Responsibility
1	Institutionalization of environment and social functions in the management in STARS by hiring of National Level Environment and Social specialists. (for implementation of ESSA actions, NDMA guidelines, School Safety Guidelines, National Building Code)	Within 12 months of project effectiveness	MHRD PMU
2	Develop and an adopt awareness and communication strategy to: <ol style="list-style-type: none"> i. provide information about various E&S aspects integrated in the Samagra Scheme ii. ECE iii. Vocational courses and career counselling facilities. iv. Completion indicator: MHRD to develop and disseminate at least 5 audio-visual clips) 	Within 36 months of project effectiveness	MHRD in consultation with states
3	Roadmap/plan for aspirational districts: Undertake a need assessment to map variations in digital resources and capacity of TEIs; b) develop a plan/roadmap specifically for EBBs, special focus districts and aspirational districts. (Completion indicator: Roadmap adopted by STARS states)	Within 40 months of project effectiveness	States in consultation with MHRD

Roles and Responsibilities of Environment Specialist in the PMU

The Environment Specialist under Samagra Shiksha STARS PMU will form part of the new institutional arrangements for STARS, and will replace RMSA.

- i. Supervise the overall environment health and safety compliance in STARS including the EMF-SS.
- ii. Ensure that the Core Principles for PforR operations, the Environment Management Framework under Samagra Shiksha (EMF-SS) and Government of India requirements under Environment Health and Safety for Schools (NDMA guidelines, Guidelines on Safety and Security of Children, School Safety Guidelines, and National building codes) are duly followed and implemented.
- iii. Ensure that 'Environmental Management Framework for Secondary Schools' is broadened to all ECE and Vocational Training institutes
- iv. Ensure exclusion of high-risk activities which are likely to have significant adverse impacts on the environment and/or affected people.
- v. Ensure that the screening checklist is duly filled out to ensure potentially important biodiversity and cultural resource are excluded.
- vi. Develop modules for integration of environment health and safety course curriculum into vocational training courses
- vii. Include training on regulatory provisions relevant to school development activities in proximity of natural habitats and cultural heritage sites as part of regular and periodic training programs for SMCs and for civil engineers associated with the state departments of education.
- viii. Organize regular and periodic training programs for school staff, SMCs and civil engineers associated with the state departments of education on the provisions of the Environmental Management Framework relevant to Samagra Shiksha, including (a) EHS aspects of school creation and management. This includes disaster resistant and climate smart design, use of safe materials, resource conservation, waste management, identification of asbestos containing materials and, (b) regulatory provisions relevant to school development activities in proximity of natural habitats and cultural heritage sites.
- ix. The Environment and Social Specialist will report to Project Director, Samagra Shiksha, MHRD (at the national level) will provide advisory support to the states through State Project Directors, and District Education Officer (head of District Project Office); specifically, to strengthen tighter coordination with aspirational districts. The Environment and Social specialists will jointly monitor progress and status of environment and social actions, ensuring regular trainings of members of the SMCs, SDMCs, BRCs and CRCs.

Roles and Responsibilities of Social Specialist in the PMU

- i. Review and strengthen the current safety guidelines (from MHRD whole school plans) for campuses to address issues of bullying, harassment, eve-teasing and creation of safe spaces to redress grievances and complaints for the entire Samagra Shiksha Scheme.
- ii. Strengthen capacity of BRPs and CRPs on monitoring of social aspects under Samagra Framework.
- iii. Include screening of informal settlers/squatters on sites
- iv. Ensure that the screening checklist is duly filled out to ensure that land acquisition has been excluded.
- v. Develop and roll-out the training for BRPs/CRPs to specifically include:
 - a. Safety guidelines/parameters at the school level
 - b. Regular usage of computer labs/digital TLM for learning
 - c. Building capacity of BRPs/CRPs to strengthen SMCs and improve linkages to community engagement. Training on National Disaster Management Guidelines: Odisha, Kerala and Maharashtra
- vi. The Environment and Social Specialist will report to Project Director, Samagra Shiksha, MHRD (at the national level) will provide advisory support to the states through State Project Directors, and District Education Officer (head of District Project Office); specifically to strengthen the tighter coordination with aspirational districts. The Environment and Social specialists will jointly monitor progress and status of environment and social actions, ensuring regular trainings of members of the School Management Committee (SMC)/School Management and Development Committee (SMDC), and BRCs and CRCs.

ANNEX 1: REFERENCES

- (i) Government of Himachal Pradesh, Department of Education, Directorate of Higher Education. 2012. *Revised Edition of the Himachal Pradesh Secondary Education Code 2012.* <http://educationhp.org/3116F16F-6FBA-4A2C-A686-7344E80B548F/CMS/Page/Education-Code>
- (ii) The National School Safety Policy Guidelines by National Disaster Management Authority <https://ndma.gov.in/images/guidelines/School-Safety-Policy.pdf>
- (iii) Environmental Management Framework – RMSA <http://documents.worldbank.org/curated/en/904221468267326922/pdf/E29400EA0P11840ManagementFramework.pdf>
- (iv) Environmental Management Framework- SSA <http://documents.worldbank.org/curated/en/162981468259768827/pdf/E43840V10P144400Box382082B00PUBLIC0.pdf>
- (v) MHRD Scheme for Vocationalisation of Higher Education https://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/job_roles.pdf
- (vi) WBG Environment Health and Safety Guidelines https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines

ANNEX 2: Description of Environmental and Social Management System & Capacity and Performance Assessment

A. Introduction

1. This section describes the existing environmental and social management system of the institutions applicable in the implementation of the proposed program. It provides an overview of the policy and legal framework and a profile of the roles and responsibilities of institutions involved in the environmental and social assessment and management.

2. The Governments of India and of the 6 participating states (Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Odisha, Rajasthan) have enacted a range of laws, regulations, and procedures relevant to managing the environmental and social effects of the proposed Program. From a legal, regulatory, and institutional perspective, the applicable environmental and social management systems are robust by design but have gaps in implementation owing to limited capacity (in terms of awareness, staff capacity, resource availability, etc.).

3. The key gap areas on the environmental management systems are: (a) the EMF for Secondary Schools does not specify measures for early identification and screening of biodiversity and cultural resource areas, (b) there is limited awareness in the field engineers, schools and SMCs on the provisions of the EMF and on the relevant provisions of the existing laws and regulations due to frequent staffing changes (c) there is no focal point at the national, state or district levels on EHS aspects.

4. Social gaps: The governance system under the broader Samagra Scheme of the government of India is new and includes new intervention areas such as early-childhood education and school-to-work transition.

The key social effects of the program include:

(1) information asymmetries among mid-level officials BRPs, CRPs, BEOs regarding the new interventions supported under STARS, methods to address potential issues of exclusion emerging due to presence of vulnerable households, migration patterns and lack of facilities for CWSN; (2) inadequate capacity, training and knowledge among SMC members to undertake self-audits and construction activities; (3) potential issues of safety arising due to increased labor-students interface during on-going construction on school campuses; (4) lack of rigorous beneficiary engagement mechanisms that inform students especially from EBBs, SFDs, LWEs and aspirational districts about vocational/occupational training; (5) lack of focused interventions to address the needs of adolescent girls and boys.

5. The following criteria were used to select the relevant legislation that best describes the country's system for managing the Program's effects:

- environmental and education policies;
- environmental and social protection laws; and
- laws, regulations, or guidelines in the education sector that provide relevant rules or norms for environmental and social management.

B. Environmental Management System

This section describes the environmental management system of the proposed program, and is organized as per the following sections:

- **Policy and Legal Framework:** This section provides an overview of relevant environment and education sector laws, policies, regulations, procedures and guidelines at the national and the state levels.
- **Institutional Framework:** This section describes the institutional arrangements in the implementing agency at various levels from national down to the school level. It also identifies the other relevant agencies at the national and state levels.

1. Policy and Legal Framework

6. Below is a review of selected policies, laws, and regulations under relevant for environmental management under the Program.

1. The Constitution of India

7. 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 fundamental right to life under Article 21 of the Constitution.

2. National Environment Policy of India

8. This policy aims at mainstreaming environmental concerns into all developmental activities. The objectives of the policy include: 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: conservation of existing environmental resources through regulatory reforms; emphasis on education, information, capacity building; inter-sectoral collaboration; etc.

3. Relevant Environmental and Education Sector Laws

Environmental Laws

The Environment (Protection) Act 1986: The objective of the Act is to provide for the protection and improvement of the environment. The regulations under the Act that are of relevance to the Program are the following (paras 10 to 13).

Environmental Impact Assessment Notification 2006 and Amendments: There is no specific requirement of environmental assessment for construction of educational institutions (and hostels) with built-up area less than 20,000 sq.m. The works to be supported under the program are expected to be much smaller than this (for example, the recommended plinth area of a 100 student capacity hostel for girls is about 20,800 sft or about 1,930 sq.m.). The following regulations apply to larger buildings.

- f. In case of educational institutions (and hostels) with built-up area \geq 20,000 sq.m. to < 1,50,000 sq.m., local bodies such as Municipalities, Development Authorities and District

Panchayats are required to ensure compliance with environmental conditions before granting occupation certificate/completion certificate. The environmental conditions cover the areas of topography and natural drainage; water conservation; waste management; energy; air quality and noise; green cover; top soil preservation and reuse; and, transport.

- g. In case of educational institutions (and hostels) with built-up area $\geq 1,50,000$ sq.m. and/or covering an area ≥ 50 ha, prior environmental clearance is required from the State Environmental Impact Assessment Authority (SEIAA). An Environment Assessment Report and public consultation are required.

Coastal Regulation Zone (CRZ) Notification 2019: This notification is of relevance to three of the program states with a coastline: Kerala, Maharashtra, Odisha. Construction activities are prohibited in the CRZ-I (Ecologically Sensitive Areas) and CRZ-IV (area covered between Low Tide Line and 12 Nautical Miles seaward). Clearance for projects/activities located in CRZ-I and CRZ-IV can only be given by the central Ministry of Environment, Forest and Climate Change (MOEFCC). The powers for clearances for CRZ-II (urban areas) and CRZ-III (rural areas) is with the state level Coastal Zone Management Authority (CZMA). Construction of schools is permitted in CRZ-II on the landward side of existing structures. Construction of schools is permitted in the No Development Zone of CRZ-III only on approval of the CZMA.

Eco Sensitive Zone Notifications: Areas around National Parks and Wildlife Sanctuaries are notified as ESZs for the purpose of regulating activities in the proximity of the protected areas. The activities that are regulated include felling of trees, erection of electrical cables, widening of roads, etc. The notifications are relevant in case of construction works in the notified ESZs: Himachal Pradesh (7 ESZs), Madhya Pradesh (18 ESZs), Maharashtra (20 ESZs), Odisha (7 ESZs) and Rajasthan (8 ESZs).

Waste Management Rules 2016:

- h. Construction and Demolition Waste Management Rules 2016: The generator of construction and demolition waste is responsible for collection, segregation, storage of construction and demolition waste generated as directed or notified by the local authority. In the context of the program, the generator, who is the Contractor for the civil work, needs to ensure that: there is no littering or deposition of construction and demolition waste so as to prevent obstruction to the traffic or public or drains; and that the waste is stored and disposed separately.
- i. Hazardous and other Wastes (Management and Transboundary Movement) Rules 2016: These rules set out the procedures to be followed for safe handling, storage, transport and disposal of hazardous waste. Persons working in the site need to be provided with appropriate training, equipment and information necessary to ensure their safety. Such waste needs to be disposed in a secure landfill at the Common Hazardous Waste Treatment and Storage and Disposal facility. This is applicable to any activity generating hazardous wastes in the program – such as civil works involving demolition of existing structures containing asbestos roofs or pipes to make way for new construction.
- j. Solid Waste management Rules 2016: Every waste generator is responsible for segregation and storage of biodegradable, degradable and hazardous wastes and handling them over to authorized waste collectors as per the directions of the local authorities. This is applicable to all educational institutions supported under the program.

- k. E-Waste (Management) Rules 2016: Educational institutions that are bulk consumers of electrical and electronic equipment are required to ensure that e-waste generated by them is channelized through authorized collection centers or service providers to authorized dismantlers or recyclers, relevant records are maintained and annual returns are filed to the State Pollution Control Board.

The Noise Pollution (Regulation and Control) Rules 2000: This Act regulates and controls noise producing and generating sources in order to maintain ambient air quality standards in respect of noise. Sound emitting construction equipment is not to be used or operated during night times in residential areas and silence zones. It is applicable for construction, demolition and renovation of educational infrastructure and to equipment such as diesel generators.

Notification for use of fly ash 2003 and subsequent amendments: As per this notification, fly ash needs to be used in construction works located within 300 km of coal or lignite based thermal power stations (for example, fly ash bricks).

Water (Prevention and Control of Pollution) Act 1972: This Act provides for prevention, control and abatement of water pollution and the maintenance or restoration of the wholesomeness of water. It is applicable to the discharge of sullage, sewerage and drainage of water from educational institutions.

Air (Prevention and Control of Pollution) Act 1981: This Act provides for the prevention, control and abatement of air pollution. It is applicable to educational institutions during construction and renovation of infrastructure.

Food Safety and Standards Act 2006: This Act requires all food business operators to be registered/licensed and follow basic hygiene and safety requirements. It is relevant to all educational institutions and hostels with food services.

Insecticides Act 1968: This Act governs the use of registered insecticides and non-use of banned insecticides. It is relevant to all educational institutions and hostels that undertake pest control operations.

Forest (Conservation) Act 1980: This Act requires prior approval of the Central Government for use of any forest land for non-forest purposes including construction of buildings. In Left Wing Extremism (LWE) affected districts, general approval is accorded for diversion of up to 40 ha of forest land for the creation of critical public utility infrastructure including schools. This Act is relevant in case of construction activity on land that is designated as 'forest land' and/or is in 'protected areas'. It is especially relevant in the case of Himachal Pradesh where all vacant land is treated as forest land for which forest clearance is required.

Wild Life (Protection) Act 1972: This Act prohibits destruction, exploitation or removal of any wildlife and provides for protection to listed species of flora and fauna. It is relevant in case of construction activity on land that is designated as 'protected area' for wildlife conservation.

Wetland (Conservation and Management) Rules 2017: This Act empowers the state governments to constitute State Wetland Authorities and notify wetlands for conservation. The rules prohibit activities such as encroachment of wetlands, setting up of industries, storage or disposal of hazardous substances and construction and demolition waste, solid waste dumping, discharge of untreated wastes and effluents, etc., in wetlands.

The Ancient Monuments and Archaeological Sites and Remains Act 2010: This Act prohibits construction in a radius of 100 m from a protected monument and regulates construction in a radius of >100 m to 300 m from a protected monument. Permission of the National Monuments Authority needs to be taken in case of repair/ renovation in the prohibited area or construction/ reconstruction/ repair/ renovation in the regulated area. It is applicable in case of infrastructure development works in proximity of ancient monuments and archeological sites and remains.

Code on Occupational Safety, Health and Working Conditions Bill 2019: This code on occupational safety, health and working conditions applies to all establishments with 10 or more workers and includes building and construction workers. It is applicable to all infrastructure works supported under the program.

Central Pollution Control Board Guidelines for handling, treatment and disposal of covid-19 waste generated during the treatment, diagnosis quarantine of Covid-19 patients (March 2020)

Education Sector Laws:

The Right to Education Act 2009: This Act lays down the norms and standards for elementary schools. It specifies the norms and standards for schools including: all weather building, barrier-free access, separate toilets for boys and girls, safe and adequate drinking water facility, kitchen for mid-day meal cooking, playground, boundary wall or fencing, etc.

State Specific Environment and Education Sector Laws:

Theme	Relevant State Laws	Key Provisions
Land use	<ul style="list-style-type: none"> • Himachal Pradesh Town and Country Planning Act 1977 • Kerala Town and Planning Act 2016 • Madhya Pradesh Nagar Tatha Gram Nivesh Adhinyam 1973 • Maharashtra Regional and Town Planning Act 1966 • Orissa Development Authorities Act 1982 • Rajasthan Land Revenue (conversion of agricultural land into non-agricultural purposes in rural areas) Rules 2007 and Rajasthan Urban Areas (Permission for use of Agricultural Land for Non-agricultural Purposes and Allotment) Rules 2012 	These Acts regulate the development of land, conversion of land use and construction of buildings.
Ground water	<ul style="list-style-type: none"> • Himachal Pradesh Ground Water (Regulation and Control of Development and Management) Act 2005 • Kerala Groundwater (Control and Regulation) Act 2002 • Maharashtra Groundwater (Development and Management) Act 2009 • Orissa Ground Water (Regulation, Development and Management) Act 2011 	These Acts empower the State Ground Water Authority to notify areas for regulation of ground water extraction. The sinking of wells in notified areas requires permission from the Ground Water Authority. Other provisions include provision for safety of wells and for construction of recharge

		structures and rain water harvesting systems in buildings above a specified plinth area.
Trees	<ul style="list-style-type: none"> • Himachal Pradesh Private Forest Rules 1969 • The Kerala Forest Produce Transit Rules 1975 and Kerala Restriction on Cutting and Destruction of Valuable Trees Rules 1974 • Madhya Pradesh Vrikshon Ka Parirakshan (Nagriya Kshetra) Niyam 2002 • Maharashtra Felling of Trees (Regulation) Act 1964 and Guidelines for Tree Felling and Transit Permission 2017 • The Orissa Timber and other Forest Produce Transit Rules 1980 • Rajasthan Tenancy Act 1955 and Rajasthan Forest (Produce Transit) Rules 1957 	These rules require the permission of the Forest Department for felling of trees (except for specified exempted list of species). A No Objection is given by the Forest Department after satisfactory site inspection.
Physical cultural resources	<ul style="list-style-type: none"> • Himachal Pradesh Ancient and Historical Monuments and Archaeological Sites and Remains Act 1976 • Kerala Ancient Monuments and Archaeological Sites and Remains Act 1968 • Madhya Pradesh Ancient Monuments and Archaeological Sites and Remains Act 1964 • Maharashtra Ancient Monuments and Archaeological Sites and Remains Act 1960 • Orissa Ancient Monuments Preservation Act 1956 • Rajasthan Monuments, Archaeological Sites and Antiquities Act 1961 	These Acts regulate construction in the vicinity of a protected monument and details procedures for handling chance finds of archeological value.

4. Relevant Environmental and Education Sector Policies

Environmental Policies

National Policy on Safety, Health and Environment at Work Place 2009: The policy provides an action program that includes enforcement, national standards, compliance, awareness, occupational safety and health development. It emphasizes that awareness generation on occupational safety needs to be done by suitably incorporating teaching inputs on safety, health and environment at work place in schools, technical and vocational courses. This is especially relevant to the vocational education component under the program.

National Policy on Disaster Management 2009: The policy focuses on prevention, mitigation, preparedness and response. It describes the institutional and financial arrangements, capacity development, knowledge management, etc.

National Disaster Management Guidelines – School Safety Policy 2016: This policy issued by the National Disaster management Authority details the various activities that need to be undertaken at the state, district and local levels for school safety including planning, preparation of school disaster management plans, implementation of safety actions (structural and non-structural measures), capacity building of stakeholders,

monitoring of risk, etc. It also details the roles and responsibilities of the various stakeholders to ensure school safety at national, state and local levels.

Education Sector Policies

Samagra Shiksha Integrated Scheme for School Education Framework for Implementation: The framework recommends the preparation of a master plan and base document for the school infrastructure along with its phase-wise development. It specifies that the National Building Code 2016 should be a reference for all States and UTs for design and planning of schools. It also stresses on compliance with the Guidelines on School Safety Policy 2016 and with the Harmonized Guidelines and Space Standards for Barrier Free Built Environment for Persons with Disability and Elderly Persons 2016. Most importantly, the framework specifies that “while planning and design of schools and also in construction, it should be ensured that measures to strengthen the environment, health and safety practices are included in accordance with the guidelines contained in EMF-SS issued by MHRD and School Safety Policy Guidelines February 2016 issued by NDMA”.

The framework emphasizes that the provision of proper classrooms, adequate and functional toilets and drinking water facility is mandatory. It specifies that all school buildings constructed under the scheme will have provision of rain water harvesting system. The framework also recommends inclusion of renewable energy options for electrification of schools including requirements for SCERTs and DIETs have also been specified in the framework.

The framework specifies that the civil works cost shall include: (a) construction of school building conforming to RTE norms (b) eco-friendly construction of all school buildings (c) design of buildings as per NBC 2016, confirming with earthquake resilience and basic fire safety, and in compliance with NDMA guidelines on school safety (d) adaptation of existing building environment to conform to RTE norms (e) retro-fitting of existing building towards hazard resistance (f) reconstruction of dilapidated school buildings which are beyond major repairs and declared unsafe by the competent engineers (g) reconstruction of dysfunctional toilets and safe drinking water facilities (h) interventions required to be undertaken under Swachh Vidyalaya. The framework further lists detailed norms for infrastructure development and maintenance. The scheme also provides for annual maintenance and repair of existing school building, toilets and other facilities for upkeep and maintenance and to be used for promoting Swachh Bharat Campaign.

The framework details the Swachh Vidyalaya (Clean Schools) Initiative which focuses on construction and maintenance of toilets for boys and girls in government schools. The framework prescribes that a minimum of 10% of the composite school grant should be used for activities related to Swachhta Action Plan (primarily operation and maintenance of water and sanitation facilities). A Swachhta Action Plan (SAP) or Cleanliness Action Plan based on credible analysis of the existing situation, gap assessment and prioritization of interventions is to be prepared. The self-assessment format of the Swachh Vidyalaya Puraskar (SVP) or Clean School Award is recommended for the purpose.

The framework provides for vocationalisation of school education through the introduction of vocational courses from classes 9 to 12. The selection of vocational courses is to be based on an assessment of skill needs and mapping of local job opportunities. The framework lists 17 trades that have been approved for vocationalisation of secondary education for girls to avoid gender stereotyping. These are: agriculture, apparel made-ups and home furnishings, automobile, beauty & wellness, BFSI, construction, electronics, healthcare, IT & ITeS, logistics, media/entertainment, multi-skill, physical education and sports, retail, security, telecom, travel and tourism, gems and jewelry designing. The curriculum will comprise modules on vocational skills and employability skills. The skills modules include ‘green skills’.

The framework prescribes safety precautions for pre-schools covering the following aspects: safe location and boundary wall, adequate space, non-sharp furniture and toys, non-toxic paints on paly materials, protective caps for electric outlets, safe storage of detergents and flammable materials, procedures for dealing with emergencies, facilities for children with special needs.

Environmental Management Framework for Secondary Schools: This framework document, first drafted in 2011, provides guidelines for safe and sustainable school buildings. The guidelines cover the following aspects: (a) sustainable school design (b) site selection and preservation (c) use of site features, site planning and landscape design (d) energy efficient building envelope (e) construction material (f) indoor air quality (g) lighting (h) ventilation (i) water (j) energy (k) solid waste (l) barrier free environment (m) safety (n) construction safety (o) administration during operation phase. The EMF also describes the institutional arrangements for its implementation. These arrangements include: (i) environmental experts are to be part of the Technical Support Group that will guide the Project Approval Board regarding appraisal and decisions pertaining to environment, health and safety issues in the programme (ii) designated official in the Department of School Education and Literacy to coordinate on all issues related to environmental safeguards pertaining to the programme (iii) an environment expert is to be appointed by the State Project Office to coordinate with district and sub-district organizations and help in preparing plans and bids that integrate environment, health and safety requirements. The EMF also describes the monitoring and evaluation arrangements which include an audit of its implementation.

5. Regulations, Procedures, and Guidelines

Environmental Regulations, Procedures, and Guidelines

National Building Code 2016 and relevant standards of the Bureau of Indian Standards (BIS): The BIS codes that are relevant to the program activities are: IS 1893 (criteria for earthquake resistant design of structure), IS 4326 (practice for earthquake resistant design and construction of building), IS 13828 (guidelines for improving earthquake resistance of low strength masonry buildings), IS 13920 (ductile detailing of reinforced concrete structure subject to seismic forces), IS 456 (structural design of buildings), IS 14435 (code of practice of fire safety in educational institutions), IS 2440 (guide for day light of building), IS 4963 (recommendation of building and facilities for physically handicapped), IS 7662 (recommendation on orientation of buildings), IS 8827 (recommendation for basic requirements of school buildings). In addition, there is the IS 15498 (guidelines for improving the cyclonic resistance of low rise houses and other buildings/structures), IS 14458 (guidelines for retaining wall for hill areas), IS 14680 (guidelines for landslide control) and IS 14804 (guidelines for siting, design and selection of materials for residential buildings in hilly areas).

Energy Conservation Building Code 2017: This code provides minimum requirements for the energy-efficient design and construction of buildings. The code is applicable to buildings or building complexes that have a connected load of 100 kW or greater or a contract demand of 120 kVA or greater. Buildings with 1000 sq. m. or more of conditioned area are likely to fall under the mentioned load conditions. It is highly unlikely that the school buildings supported under the program would meet this criteria.

Guidelines for Management of Sanitary Waste 2018: These guidelines issued by the Central Pollution Control Board (CPCB) provide waste management options for disposal of sanitary napkins in schools, hostels, etc. The range of disposal options include: low-cost locally made incinerators for pads with high cellulose content without super absorbent polymers; electric incinerators for bulk amount of napkin waste; deep burial for compostable sanitary pads; pit burning for cotton cloth.

Indian Standard Safety Requirements for Toys IS 9873: The part 1 of this Standard specifies the safety aspects related to mechanical and physical properties; the part 2 specifies flammability requirements; the part 3 specifies maximum acceptable levels for migration of the elements antimony, arsenic, barium, cadmium, chromium, lead, mercury, selenium and phthalates from toys.

Regulation on Lead contents in Household and Decorative Paints Rules, 2016: These are certain rules to regulate the manufacture, trade, use, import and export of lead contents in household and decorative paints which the Central Government proposes to make in exercise of its powers under the Environment (Protection) Act, 1986. The Rules prohibit manufacture, trade, import and export of household and decorative paints hereinafter referred to as product containing metallic lead exceeding 90 parts per million.

Harmonized Guidelines and Space Standards for Barrier Free Built Environment for Persons with Disability and Elderly Persons 2016: These guidelines issued by the Ministry of Urban Development specify universal design elements within building premises, signage, level changes, access to toilet facilities, fire evacuation needs, etc. The guidelines also include an 'access audit checklist'.

Education Sector Regulations, Procedures, and Guidelines

Guidelines on Safety and Security of Children 2014: These guidelines issued by the Department of School Education and Literacy, MHRD cover the preventive institutional mechanisms and procedures that should be put in place in the schooling system along with the relief and redressal strategies in case of any safety and security incidents. The aspects covered by the guidelines include: (a) location of new schools away from hazardous locations such as highways, unmanned railway crossings, water bodies, etc. (b) provision of boundary wall or fencing with plantation (c) ensuring safety of approach road (d) physically sound, all-weather buildings that are resistant to earthquakes, fire and are safe from floods, and are free from inflammable and toxic materials (e) provision of drinking water and clean toilets with waste disposal (f) separate kitchen shed (g) fire safety (h) emergency exits (i) electrical safety (j) restriction on access to construction sites on school campuses (k) adequate ventilation (l) safe fittings. The guidelines emphasize the preparation of School Disaster Management Plans, teacher training, monitoring by School Management Committees (SMC) and by the state. The guidelines do not cover climate change and extreme weather-related hazards. They also do not specify safety measures relevant to hazardous wastes.

Guidelines on Food Safety and Hygiene for School Level Kitchens 2015: These guidelines issued by the Department of School Education and Literacy, MHRD focus on inter alia the safety aspects of food storage, preparation, waste disposal, personal hygiene, fire safety. The guidelines also cover pest management – pesticides are generally not to be used, but when unavoidable, prescribed safety practices must be followed. The guidelines, however, do not prohibit the use of any hazardous pesticide. The guidelines also do not prohibit the use of fuel wood for cooking – but encourage the use of smokeless stoves and ventilation.

Standard Operating Procedures (SOPs) – Sustaining Water, Sanitation and Hygiene in Schools: These SOPs issued by the Department of School Education and Literacy, MHRD cover the following aspects: safe handling of drinking water, sanitation and hygiene, food hygiene, waste management, menstrual health management, roles and responsibilities of parents and community, operation and maintenance (daily, monthly seasonal, annual).

State Specific Environment and Education Sector Regulations, Procedures, and Guidelines:

1. Regulations, Procedures and Guidelines Specific to the State of Himachal Pradesh:

- a. Himachal Pradesh Secondary Education Code 2012: The Code covers the following aspects relevant to environmental management: school location; responsibilities of the head of the institution regarding maintenance; specifications for size and facilities; norms for dismantling of old and unsafe buildings; monitoring of construction; building repairs; school disaster management plan.
- b. Environment, Health and Safety Norms for Schools: The state has norms for schools regarding location, design, materials, construction practices, disaster mitigation, etc. The state has also notified guidelines to schools on facility management that emphasize cleanliness, hygiene and safety.
- c. State Specific Guidelines and Model Design for Schools 2016: The State Project Office SSA, RMSA commissioned a field study and development of guidelines by the National Institute of Technology, Hamirpur. The guidelines document good and bad construction practice and provide a list of standard construction codes that need to be adhered to.
- d. Hazards Safety Guidelines for Buildings in Himachal Pradesh: These guidelines issued by the Public Works Department cover structural safety for various building types, worker safety measures, earthquake safe construction, etc. The guidelines also include safety checklists on use of Personal Protective Equipment (PPE), scaffolding, electrical safety, etc.
- e. The civil works contract clauses of the PWD include a Safety Code for construction, and model rules for health and sanitary arrangements for workers.
- f. Disaster Management Plan 2015 of the Public Works Department (PWD): This plan covers preparedness, prevention and mitigation for earth quakes, landslides, flash floods, cloud bursts, etc. The document includes an assessment of capacity in the PWD for disaster management and details the plan for capacity building. It details the Standard Operating Procedure for the PWD before, during and after a disaster.

Regulations, Procedures and Guidelines Specific to the State of Kerala:

Regulations, Procedures and Guidelines Specific to the State of Madhya Pradesh:

- l. The state has its own norms, based on the National Building Code, for the construction of different types of schools. From time to time, guidelines covering school safety, health, and other environmental aspects are released to district authorities. Separate guidelines have been issued for electrical safety, kitchen and fire safety to all schools.
- m. The Madhya Pradesh State Disaster Management Plan includes 'safe schools' as a key component. This covers (a) inclusion of Disaster Risk Reduction in relevant sections of the school curriculum (b) preparation and institutionalization of disaster management plans of schools (c) ensuring safe construction and retrofitting of schools. It states that in 2017 there has been total achievement of (a) and (b) and significant achievement of (c). It identifies the School Education Department as one of the key departments for capacity building on disaster management. The Plan also provides a Standard Operating Procedure (SOP) for the Department of Education covering preparedness, mitigation, response, relief, rehabilitation.

Regulations, Procedures and Guidelines Specific to the State of Maharashtra:

- n. The classroom construction is as per the norms of the National Building Code. These integrate the relevant India Standards for environment conservation, health, safety and disaster risk mitigation. The State follows the guidelines issued by GoI regarding safety in schools.

Regulations, Procedures and Guidelines Specific to the State of Odisha:

- o. The state has its own norms for schools regarding location, design, materials and construction practices for environment conservation, health, safety and disaster risk mitigation. The safety norms include provision of boundary walls, adequate lighting and barrier free access to CWSN. While designing/constructing the school buildings, all efforts are made to make building seismic resistant.
- p. The Code of the Odisha Public Works Department has integrated various environmental aspects in design and construction, including the following: horticulture/landscaping works on completion of construction work; sanitary, water supply and electrical installations in public buildings; safety management including building and structural safety, electrical safety, public and worker safety, safety features for water supply and sanitation works, fire safety; proper disposal of solid waste which includes construction or demolition waste management; etc.

Regulations, Procedures and Guidelines Specific to the State of Rajasthan:

- q. The state has safety and security norms for schools (i.e., access road to the school, boundary wall, adequate lighting) and follows BIS specifications for planning, design, and construction of school buildings. The state also follows the guidelines prescribed by MHRD on environment, health, and safety aspects of civil works; disaster preparedness; energy use; and, school ground management. These guidelines, norms, and standard operating procedures have also been compiled into a booklet and disseminated.

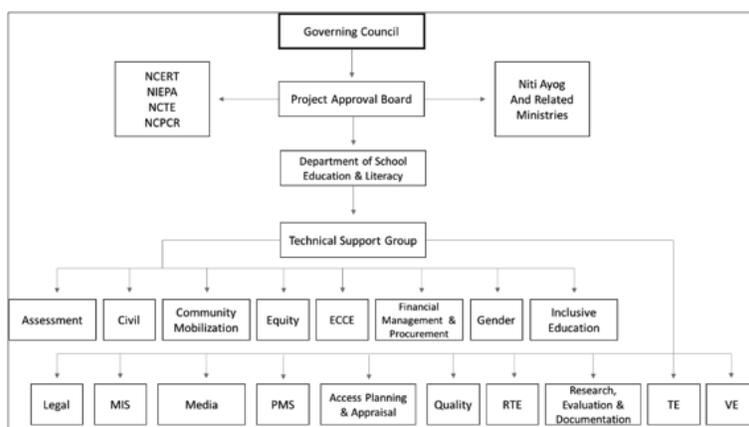
2. **Institutional Framework**

The following are the institutions involved in environmental management of the effects of the program, with a description of their background, mandate, and overall organization. The capacity of each is assessed in the following sub-section.

1. **Implementing Agency – National and State Level Arrangements**

Management Structure at the National Level: The Ministry of Human Resource Development (MHRD), Government of India is the implementing agency for the program. The existing management structures of the Sarva Siksha Abhiyan (SSA) and Rashtriya Madhyamik Siksha Abhiyan (RMSA) will be reorganized into a unified structure and administrative mechanism, pooling together existing and additional personnel at national and sub-national levels. Samagra Shiksha is governed at the Centre by a Governing Council chaired by the Minister of Human Resource Development, a Project Approval Board, and the Bureau of School Education. The Governing Council provides policy direction and facilitates centre-state coordination, while the PAB, chaired by the Secretary, School Education and Literacy, MHRD, maintains full financial power to approve state plans, sanction budgets, and implement the programme. The Bureau of School Education chaired by the Additional/Joint Secretary, School Education & Literacy, appraises, evaluates, finances, and supervises national, state, and district level planned interventions. Other national level bodies that comprise

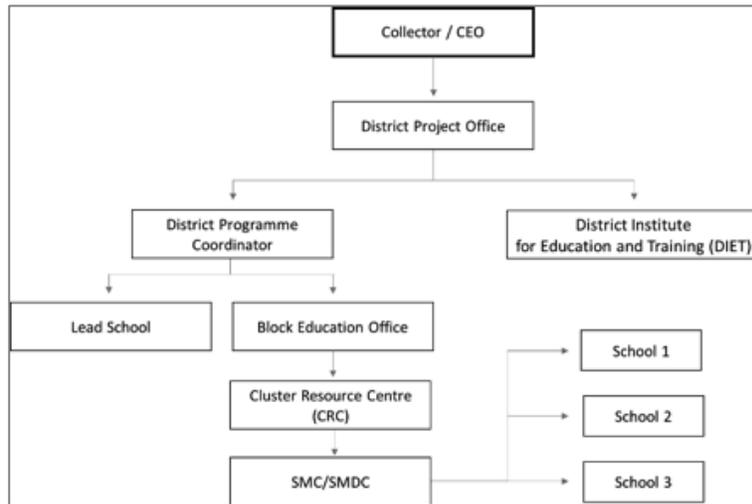
the administrative structure and provide technical and academic input at the national level are National Council of Educational Research and Training (NCERT), National Institute of Educational Planning and Administration (NIEPA), National Council for Teacher Education (NCTE), and Technical Support Group (TSG) of the MHRD. The figure below depicts the management structure at the national level.



Management Structure at the State Level: At the State level, Samagra Siksha is implemented through the State Implementation Society (SIS) that is accountable to a Governing Council, headed by the Chief Minister/State Education Minister and an Executive Committee, chaired by the Chief Secretary/Commissioner/Education Secretary of the State. Representation of Finance and Planning Departments on the Governing Council and Executive Committee resolves issues of coordination and convergence and facilitates better decision making. The SIS, through the State Project Office and State Project Director, establishes linkages with district and sub-district level structures, NGOs, state government, national bureau, and other concerned stakeholders, and is also responsible for effective monitoring and training and capacity building of personnel. Additionally, the SIS is underpinned by a high level of interdepartmental convergence including coordination with the Department of Finance, Public Works Department, Department of Science and Technology, Programmes for Water and Sanitation, Department for Women and Child Development, and others. Other state level bodies that comprise the administrative structure and provide technical and academic input at the state level are State Council of Educational Research and Training (SCERT), State Institute of Educational Management and Training (SIEMAT), and TSG of the SIS. The figure below depicts the management structure at the state level.



District Level Arrangements: At the district level, the District Project Office is responsible for implementing and reviewing the progress of the program. Depending on the State, it is chaired by the District Collector/Magistrate/Chief Executive Officer of the Zilla Parishad. The District Project Office is headed by the District Education Officer (DEO) and comprises representatives from the district education departments, NGOs, as well as technical specialists. The DEO, who also performs the duties of the District Project Coordinator (DPC), is responsible for preparing Annual Work Plans and Budgets (AWP&B), liaising with the District Institute of Education and Training (DIET) to jointly oversee the function of the Block Resource Centres (BRCs) and Cluster Resource Centres (CRCs), monitoring progress and status of project implementation, and ensuring regular trainings of teachers/school heads, School Management Committee (SMCs)/School Management and Development Committee (SMDC) members, BRCs and CRCs. The figure below depicts the management structure at the district and block levels.



Block Level Arrangements: At the Block Level, the administrative structure is headed by the Block Education Officer (BEO) who is responsible for facilitating the creation of a School Development Plan in coordination with the block/cluster resource persons, SMCs/SMDC, headmasters, teachers, etc. Additionally, the BEO is responsible for capacity building, academic supervision and onsite support to field level functionaries, and monitoring implementation at the grassroots level through close interaction with field level officers and providing information to the District Project Office. BRCs and CRCs provide academic support at the block and cluster levels, respectively.

School Level Arrangements: SMCs/SMDCs, comprising of members from the local authority, parents, and teachers, assist with school-level monitoring and implementation through community mobilization, preparing school development plans, conducting Social Audits, and monitoring students' and teachers' attendance.

2. Other Relevant Agencies at the National Level

Ministry of Environment Forests and Climate Change (MoEFCC), Government of India: The MOEFCC is the nodal agency in the administrative structure of the Central Government for the planning, promotion, co-ordination and overseeing the implementation of India's environmental and forestry policies and programs. The primary concerns of the Ministry are implementation of policies and programs relating to conservation of the country's natural resources including its lakes and rivers, its biodiversity, forests and wildlife, ensuring the welfare of animals, and the prevention and abatement of pollution.

Central Pollution Control Board (CPCB): The CPCB is a statutory organization that provides technical services to the MoEFCC on the provisions of the Environment (Protection) Act, 1986. The principal functions of the CPCB, as spelt out in the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981, are: (i) to promote cleanliness of streams and wells by prevention, control and abatement of water pollution, and (ii) to improve the quality of air and to prevent, control or abate air pollution. CPCB provides standards for the control of air, water and noise pollution.

Bureau of Indian Standards (BIS): BIS is the National Standard Body of India established for the development of standardization, marking and quality certification of goods. It has produced large number of national standards, which are of direct relevance to construction activities and educational institutions. These include standards for civil engineering design and construction, building materials, electrical and electronic equipment, food safety, water quality, environmental management, occupational health and safety, earth quake resistant design and construction, cyclone resistant structure, etc. The BIS has compiled the relevant standards and guidelines into the National Building Code 2016, which is a national instrument providing guidelines for regulating the building construction activities across the country. It serves as a Model Code for adoption by all agencies involved in building construction works including Public Works Departments, other government construction departments, local bodies or private construction agencies. It mainly contains administrative regulations, development control rules and general building requirements, as well as stipulations regarding building materials, structural design and construction, plumbing services, fire safety requirements, landscaping, etc.

Central Public Works Department (CPWD): This is the central agency for execution of public works with expertise in architecture, engineering, project management and experience in building construction and maintenance. The CPWD zones in all state capitals are headed by Chief Engineers. The CPWD Works Manual 2019 includes 'Green Building and Sustainability Measures'.

National Disaster Management Authority (NDMA): The NDMA is the apex body mandated to lay down the policies, plans and guidelines for Disaster Management to ensure timely and effective response to disasters. The NDMA has issued Guidelines on School Safety Policy 2016. Under the National School Safety Project (2011-2013) the NDMA has trained master trainers and engineers from the State Departments of Education of 22 states (including the 3 program states of Himachal Pradesh, Maharashtra and Rajasthan) on school safety.

3. Other Relevant Agencies at the State Level

State Construction Agencies: The civil works such as construction of school buildings in some of the states are generally handed over to public sector construction agencies which then execute the works by tendering out to contractors. For example, in Himachal Pradesh, all secondary school level works are executed by public sector construction agencies such as the State Industrial Development Corporation (HPSIDC), the Himachal Urban Development Authority (HIMUDA) and the Public Works Department (PWD).

State Pollution Control Boards (SPCBs): The SPCBs are the apex bodies responsible for pollution control in the states through the enforcement of various environmental legislations such as: Water Act 1974, Air Act 1981, Water Cess Act 1977, Hazardous Waste Rules 2008, Municipal Solid-Waste Rules 2000, EIA notifications under Environment (Protection) Act 1986, etc.

State Disaster Management Authority (SDMA): The SDMAs of the participating states are responsible for policy development, planning, capacity building, etc., on disaster management.

State Forest Departments (SFDs): The SFDs of the participating states are responsible for scrutiny of proposals received for forest land diversion and forwarding them with relevant recommendations to the MOEFCC for consideration. Permission for felling of trees for any construction activity and associated plantation requirements are also provided by the SFDs.

C. Environmental Management Capacity

This sub-section summarizes the ESSA team's evaluation of the capacity of the institutions to implement the Program's environmental management system. Metrics and other information on institutional capacity, such as staff, budget, and human resources (in terms of number and skills), etc. are listed for each. The effectiveness of inter-agency coordination arrangements and previous performance in environmental management in the context of similar projects and programs is also discussed.

1. Capacity of MHRD for Environmental Management

Description of Institutional Capacity of MHRD in Environmental Management: The MHRD has budget, staff, training, etc.

Inter-agency Coordination Arrangements on Environmental Management: Some of the key channels of coordination between MHRD and State Departments of Education on environmental management aspects are listed below.

Unified District Information on School Education (UDISE+): This is an online management information system for monitoring school performance. The data capture formats cover several environment, health and safety aspects including: status of school building and boundary wall; availability of functional toilets, hand washing facility and incinerator for disposal of sanitary waste; source and quality of drinking water; rain water harvesting; availability of electricity including renewable energy; waste collection facility; kitchen garden; school safety including preparation of school disaster management plan, structural and non-structural safety audits, provision of fire extinguishes, training on safety aspects, etc. However, the UDISE+ dashboard limits reports to only some of these aspects.

Previous Performance of MHRD in Environmental Management: The MHRD has more than 15 years of experience in working with the Bank on school education. Each of the school education projects included an 'Environmental Assessment / Management Framework' (EMF) developed and implemented by the MHRD. Details on the previous performance of the most recent of these projects are presented below.

Elementary Education Project (Sarva Siksha Abhiyan III) (2014-2018).

- i. *Design of the EMF*: A Limited Environment Assessment and Management Framework was developed by MHRD in December 2013. The environmental management measures identified include: adoption of existing manuals and guidelines on civil works; ensuring adequate number of staff for design and execution of civil works; capacity building of School Management Committee members on monitoring of civil works; budget allocation for operation and maintenance; development of state level procedures and guidelines on water quality, drainage, hygiene, etc.; training of state and district level staff; replication and dissemination of good practices.
- ii. *Implementation of the EMF*: The Bank's Implementation Completion and Results Report (ICRR) notes that "the move towards clean, safe, and hygienic physical environs in schools has been particularly notable in the last few years of the program's implementation. Strengthening of policies, guidance documents, procedures and follow-up, particularly at the MHRD level are manifestations of the increased attention to green and clean schools, which was promulgated through the EMF prepared

for SSA III in December 2013". Some of the key interventions noted in the ICRR are: (a) integration of basic environment, health and safety elements in the program's Planning and Appraisal Manual (b) launching of School Safety Program including sensitization on disaster preparedness (c) provision of ramps, railings and toilets for physically challenged children (d) monitoring of parameters related to civil works, drinking water, toilets and maintenance.

- r. Secondary Education Project (Rashtriya Madhyamik Siksha Abhiyan) (2012-2017).
- i. *Design of the EMF*: An Environment Management Framework was developed for the project by MHRD in October 2011.
- ii. *Implementation of the EMF*: The Bank's Implementation Completion and Results Report (ICRR) notes that there was significant delay in updating the environmental assessment document which led to a 'moderately unsatisfactory' rating on environmental management. At later stages of the project, the rating was upgraded to 'moderately satisfactory' as the pending update was completed and the Environmental Management Framework was finalized. The Bank's assessment of safeguards concluded that there were no issues raised during project implementation regarding deviation from the agreed safeguard policies for the project.

2. Capacity of State Departments of Education for Environmental Management

1. Description of Institutional Capacity of the State Departments of Education in Environmental Management:

a. Himachal Pradesh:

- i. There is a separate civil works unit under *Samagra Shiksha* at the State level. At the secondary school level, all works are executed by public sector construction agencies such as the State Industrial Development Corporation (HPSIDC), the Himachal Urban Development Authority (HIMUDA) and the Public Works Department (PWD). At the elementary school level, all the works up to INR 10 lakh are executed through community participation with technical inputs by the in-house engineering cell, while public sector construction agencies are engaged for works costing more than INR 10 lakh.
- ii. The current staff position in the in-house engineering cell is presented below.

<i>State Level</i>				<i>District Level</i>				<i>Block Level</i>			
<i>Sanctioned strength</i>		<i>Available strength</i>		<i>Sanctioned strength</i>		<i>Available strength</i>		<i>Sanctioned strength</i>		<i>Available strength</i>	
<i>Post</i>	<i>No.</i>	<i>Post</i>	<i>No.</i>	<i>Post</i>	<i>No.</i>	<i>Post</i>	<i>No.</i>	<i>Post</i>	<i>No.</i>	<i>Post</i>	<i>No.</i>
AE	1	AE	0	AE	12	AE	2	JE	72	JE	70
JE	2	JE	1	D/Man	12	D/Man	11				

- iii. The State Council of Educational Research and Training (SCERT) has developed a manual on disaster risk management and has trained at least one teacher from each school. The manual has been distributed to all schools.

b. Kerala:

- c. Madhya Pradesh: There is a separate civil works wing for SSA headed by a Chief Engineer. Executive Engineers, along with a team of Assistant Engineers and Sub Engineers, provide monitoring support to all districts across the state. The construction works are undertaken by the SMCs and monitored by the civil works wing.
- d. Maharashtra: For civil works a separate structure for implementation of Samagra Shiksha is exists in the state. Engineers are appointed on deputation or on contract basis at state level, district and block levels for implementation of civil works under Samagra Shiksha. The civil works are carried out through the concerned School Management Committee under the guidance and supervision of assigned Junior Engineers supervised by Executive Engineers. The staff for Samagra Shiksha was planned to be in place by April 2019.
- e. Odisha: There is a separate civil works unit under *Samagra Shiksha* at the State level. At the elementary level, all the works up to INR 10 lakh are being executed through active community participation with an in-house engineering cell provides technical inputs. Works costing more than INR 10 lakh, public sector construction corporations are being engaged.
- f. Rajasthan: Under the state's SSA, there is a civil works unit comprised of engineers. All civil works are delegated to the SDMC, and execution is under the technical supervision of the SSA engineers.

Inter-agency Coordination Arrangements on Environmental Management:

- s. Coordination between State, District and Block Education Offices: All aspects of school facilities and learning environments are generally reviewed at State, District and Block level meetings. The State Project Directors conduct monthly review meetings with District Project Officers. Environmental management aspects are not specifically discussed as part of the agenda but may be reviewed as part of the review of construction works and facilities. For example, in Himachal Pradesh the first state level review meeting of Samagra Shiksha (June 2019) included a discussion on coordination with the State Government Energy Development Agency (HIMURJA) for installation of solar panels in schools.

Coordination between SDEs and SDMAs:

- t. Coordination between SDEs and SMCs: In Himachal Pradesh, a study of the Department of Education pointed out that there is a lack of clear communication between the schools and the SMCs concerning learning facility requirements of the school. The study notes that the SMCs role is largely limited to identifying learning environment needs and making requisitions to the Department of Education for provision of facilities. Utilizing resources available with the community for providing the required facilities was not being fully explored. In Maharashtra, School Management Committee Meetings are held every quarter for review of any requirements of the school. In Odisha, SMCs regularly conduct social audit of schools and report back on availability and quality of learning spaces. These inputs are collated and referred to while developing the annual work plan and budget. In Rajasthan, the SDMCs conduct regular social audits to report on the availability or lack of basic amenities and fundamental needs of the schools. In Madhya Pradesh, the SMCs conduct social audits

to identify gaps and prepare school plans. The SMCs have also been trained to monitor civil works.

Previous Performance of State Departments of Education in Environmental Management:

Himachal Pradesh:

- u. The state is yet to undertake any civil works under Samagra Siksha. Therefore, the EMF of RMSA has not been used for Samagra Siksha works so far (as recommended by the Samagra Siksha Framework).
- v. Between 2014 and 2019, 13 proposals for Forest Clearance for the purpose of school/hostel construction were submitted to the MoEFCC (including 1 proposal from the School Education Department). Of these, 4 have been approved and the rest are under processing.

Kerala:

- w. The Green Protocol is a set of measures focused on reduction of waste and promotion of reusables in public events. It is an initiative of the Local Self Government Department under the Suchita Mission. Nodal Officers have been identified in the SSA State Office and in SIEMAT for implementation of the Green Protocol in the activities/events of the Department of Education.
- x. Under SSA Biodiversity Gardens were established in 2000 schools.
- y. Under SSA, rain water harvesting pits were constructed in all schools.

Madhya Pradesh:

- z. The RMSA EMF is followed for secondary and senior secondary schools.
- aa. Shala Darpan, the online dashboard of the Department of Education captures reports on field inspections to schools by an identified set of experts. The inspections focus on a standard set of criteria and there is follow-up on any identified issues. The criteria include the following relevant to environmental management: functional toilets for boys and girls, availability of electricity, availability of safe drinking water, provision of hand washing facility, etc.
- bb. Between 2014 and 2019, 11 proposals for Forest Clearance for the purpose of school/hostel construction were submitted to the MoEFCC (including 7 proposals from the Tribal Welfare Department). Of these, 3 have been approved and the rest are under processing.

Maharashtra:

- cc. New schools are planned, designed and constructed as per the EMF. For example, for strengthening of schools, the plans are developed as per the availability of land in the school premises for the construction without disturbing the playground.
- dd. The state has carried out a Preliminary Structural Audit of all Local Body Schools and identified that 3313 schools require urgent repairs.

- ee. Between 2014 and 2019, 8 proposals for Forest Clearance and 1 proposal for Wildlife Clearance for the purpose of school/hostel construction were submitted to the MoEFCC (most of these were from private schools). All of these are under processing.

Odisha:

- ff. The state is yet to undertake any civil works under *Samagra Shiksha*. Therefore, guidelines of Environment Management Framework are yet to be adopted for Samagra Siksha works so far (as recommended by the Samagra Siksha Framework).
- gg. Between 2014 and 2019, 3 proposals for Forest Clearance for the purpose of school/hostel construction were submitted to the MoEFCC (including 1 from a District Education Office). All of these are under processing.

D. Social Management System

Analysis of centrally sponsored schemes in the education sector to identify management of social and inclusion issues.

Overview: With the formulation of National Policy on Education, 1986 India initiated a wide range of programs for achieving the goal of Universalization of Elementary Education (UEE). These efforts were intensified in the 1980s and 1990s through several schematic and program interventions, such as Operation Black Board (OBB), Shiksha Karmi Project (SKP), Andhra Pradesh Primary Education Project (APPEP), Bihar Education Project (BEP), U.P. Basic Education Project (UPBEP), Mahila Samakhya (MS), Lok Jumbish Project (LJP), District Primary Education Programme (DPEP) and the Sarva Shiksha Abhiyan (SSA) – the flagship Centrally Sponsored Scheme in partnership with State Governments for UEE across the country. This was further strengthened with the passage of the Right of Children to Free and Compulsory Education (RTE) Act, 2009 which gave a legal mandate to provide free and compulsory elementary education to every child in the age group of 6-14 years. States and UTs were supported in the implementation of the RTE Act, 2009 through SSA. The norms of the Scheme were aligned with the provisions of the Act with effect from September 2010.

Sarva Shiksha Abhiyaan: Universalization of elementary education is a constitutional mandate in India as per the Right to Education Act (RTE, 2009). The Sarva Shiksha Abhiyaan, launched in November 2000, an umbrella Programme, supported and built primary and elementary education projects. The program aimed to ensure five years of primary education for all children in the age group of 6-14 years by 2007 and eight years of schooling by 2010. SSA evolved from the recommendations of the state education minister's conference held in October 1998 to pursue universal elementary education (UEE) in a mission mode. The assistance under the SSA programme involved a sharing arrangement between the central and the state governments, on an 85:15 basis during the Ninth Plan, at 75:25 during the Tenth Plan and 50:50 thereafter. The programme, being a centrally sponsored scheme, covered the entire country except the state of Goa with a special focus on educational needs of girls, scheduled castes and scheduled tribes and other children in difficult circumstances. The goals of SSA were rooted in the concept of access and equity: (i) all children in schools, education guarantee centre, alternate school, back to school camp by 2005 (revised up to 2007); (ii) bridge all gender and social category gaps at the primary stage by 2007 and at elementary education level by 2010; (iii) universal retention by 2010; and (iv) focus on elementary education of satisfactory quality with emphasis on education for life. Most importantly, the SSA approach focused on community ownership and the village education plans proposed in construction with panchayati raj institutions (PRIs) formed the basis of district elementary education plans (DEEPs). The implementation of SSA since its inception made significant achievements in the field of education. Special emphasis was laid to ensure inclusion of all out-of-school

children in the field of education. The focus was consistently on improving the existing learning spaces of regular schools as well as on alternate strategies for mainstreaming children who were left out of the schooling process due to various reasons. As a result, the number of out-of-school children declined from 320 lakh in 2001 to 95 lakhs as on October 2005.

Rashtriya Madhyamik Shiksha Abhiyaan: With the advent of RMSA in March 2009 the government made the following promises to achieve universal secondary education:

- Ensure that all secondary schools have physical facilities, staff and supplies according to prescribed standards through financial support in case of government/local body and government-aided schools, and appropriate regulatory mechanism in case of other schools.
- Improve access to secondary schooling to all young persons' according to norms—through proximate location (say, secondary schools within 5 km, and higher secondary schools within 7–10 km)/efficient and safe transport arrangements/residential facilities, depending on local circumstances, including open schooling. However, in hilly and difficult areas, these norms can be relaxed. Preferably residential schools may be set up in such areas.
- Ensure that no child is deprived of secondary education of satisfactory quality due to gender, socio-economic, disability and other barriers.
- Improve quality of secondary education resulting in enhanced intellectual, social and cultural learning.
- Ensure that all students pursuing secondary education receive education of good quality.

Samagra Shiksha Abhiyaan: Given the shift in the approach to development of school education from input-based to outcome based central sector interventions as envisaged in the document entitled, India: Three-Year Action Agenda, 2017/18 to 2019/20 (NITI Aayog, 2017)², a 'paradigm shift' is envisaged in the approach to central sector spending on school education. The Integrated Scheme on School Education (Samagra Shiksha Abhiyaan) envisages the 'school' as a continuum from pre-school, primary, upper primary, secondary to Senior Secondary levels. The vision of the Scheme is to ensure inclusive and equitable quality education from pre-school to senior secondary stage in accordance with the Sustainable Development Goal (SDG) for Education. The major objectives of the Scheme are provision of quality education and enhancing learning outcomes of students; Bridging Social and Gender Gaps in School Education; Ensuring equity and inclusion at all levels of school education; Ensuring minimum standards in schooling provisions; Promoting vocationalization of education; Support States in implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009; and Strengthening and up-gradation of SCERTs/State Institutes of Education and DIET as a nodal agencies for teacher training. The main outcomes of the Scheme are envisaged as Universal Access, Equity and Quality, promoting Vocationalization of Education and strengthening of Teacher Education Institutions (TEIs).

As is evident, goals of equity and inclusion are enshrined in the visions and objectives of the SSA, RMSA and Samagra schemes. The Samagra Shiksha Abhiyaan aims to operationalize equity through adopting an integrated approach to education. The Scheme would, therefore, attempt to provide, as far as possible, an integrated/composite school system from pre- school to higher secondary level.

ANNEX 3: Public Consultations - ADDITIONAL BACKGROUND

The project carried out visits to states and collected data from schools utilizing a questionnaire. The team has conducted several FGDs at the state headquarters as well as at schools. The number of participants at these meetings/ FGDs is given below:

S. No.	Name of State	State level Meeting	District/ Block Level	DIET	School 1	School 2	School 3
1	Himachal Pradesh	10		19	12	9	10
2	Maharashtra	24	22		18	14	27
3	Rajasthan	18		12	23	19	15
4	Odisha	22	21	9	12	7	15
5	Kerala	11	13	8	13	19	8

Focus Group Discussion Questionnaire

Strengthening Teaching-Learning and Results for States -

Checklist for Field Verification and Focus Group Discussions

Section 1: For Field Observation and FGDs

A. Participants' Details

Name of School/ Organization/ Department/ Other:
 Village/ Town:
 Block:
 District:
 State:
 Location where FGD is conducted:
 Date and Time:

Names of Participants of the FGD: (Please take a few photos of FGD)

S.No.	Name	Gender	Designation/ Profession	Organization & Address	Contact	Details
			Signature			

(Mobile & Email ID)

B. Infrastructure and Operational Arrangements

Building Description: Type Building:

- Roof: RCC, Tiled, GI Sheets, Asbestos Sheets, Mud, Thatched, etc.
- Wall: Stone, Brick, Cement Blocks, Mud, etc.
- Floor: Ceramic Tiles, Stones Slabs, Cement Concrete, Mud, etc.
- Boundary Wall: Type of Wall/ Type of Fencing, Gate with lock, Just Gate

Electricity

- Electricity Connection: Available/ Not Available
- If not available, what are the other arrangements?
- Is the school having any Solar Panels? Yes/No
- If Yes, How many? What is the capacity?
- Are they in working condition?
- If No, what are the reasons?

Water Sanitation

- Toilets (Female Teachers, Male Teachers, Girl Students, Boy Students)
- Piped Water Supply (Continuous, Intermittent, etc.)
- Hand Pump (Functioning/ Not-Functioning). If not functioning since when?
- Water Supply through Tanker: If Yes, frequency
- Water storage arrangements: Overhead tank/ Ground level Tank/ Other – Capacity
- Drinking Water Arrangement: Describe
- Is there any Rainwater Harvesting arrangement: Yes/No
- If yes, is it in a state of functioning? If No, describe.

Personal Hygiene

- Are there any arrangements for disposal of sanitary pads? Yes/No
- What are they? Disposal in pits/ Incinerators/ Other: Please describe.
- Are these arrangements functioning? Please describe
- Is the incinerator in working condition?
- What is the power source for incinerator?

Solid Waste Management

- What are the arrangements for Solid Waste Management? Please describe
- Are there any compost pits/ Vermi compost pits in school? Yes/ No. Please describe.
- If, Yes, are they functioning? Please describe

Health and Safety

- Does the school conduct any vaccination camps for the students in the school? Yes/ No.
- If Yes, for what kind of vaccinations?
- Who does these vaccinations?
- Are there any fire safety arrangement sin the school? Yes/ No.
- If yes, what are they? Please describe
- Is there anyone trained to use this equipment?
- What is the cooking fuel sued in the school for Mid Day Meal?
- What is the condition of the kitchen? Please describe.
- When any construction or repair work is going on in school, how do you ensure that the labourers will not have any contact with the students? Please describe.
- If this is a residential school (in particular for tribals), what are the measures in place for safety of students, in particular girl students? Please list.
- Are there any measures taken for safety of adolescent girls? Yes/ No.
- If yes, what are they?
- What are life skills courses can contribute to their safety? Please describe
- What life skill courses can contribute to their employment? Please describe

Migration

- Are there any migration of students for work? Yes/ No

- If Yes, what are the reasons?
- Are there any measures in place for stopping this migration? What are they?
- What kind of career counselling can stop migration of students?

Pest Control

- What are the Pest Control measures adopted by the school? Please describe.
- Are they using DDT?
- Are they using Bleaching Powder to clean toilets and sanitize dirty areas?
- Where do they store the laboratory chemicals?
- Do these storage rooms have ventilation?
- Is the access to these storage rooms controlled?

ICT Lab

- Is there an ICT laboratory in the school? Yes/ No
- If Yes, how many computers are there?
- Is this lab kept locked out of reach of students? Yes/ No
- If no, are these computers accessible to the students?
- How often students use these?

Anganwadi Colocation

- Is Anganwadi colocated in this School? Yes/ No.
- If, Yes, describe the arrangements made for Anganwadi.
- What are the measures in place for safety of Anganwadi kids?

SMCs

- Are the SMCs aware of their role? Please probe.
- Who sensitized the SMCs? Please describe
- Have the SMCs heard of EMF? Yes/ No. Please probe.
- Is there a copy of this EMF in the school? Yes/ No
- Is the Civil Engineer aware of the EMF? Yes/ No
- Does the civil engineer have a copy? Yes/ no
- What kind of communication material did the SMCs receive from Education/ Tribal/ Women and Child Departments?
- As per SMCs, what is the best form of communication to create awareness about Samagra Siksha Abhiyan?

Grievance Redressal Mechanism

- How the grievances are redressed?
- Who redresses the grievances?
- Can you cite a latest grievance which was redressed to the satisfaction of the aggrieved?
- What type of grievance was this?
- Can you cite a latest grievance which wasn't redressed to the satisfaction of the aggrieved?
- What type of grievance was this?
- What did the aggrieved do in this case?
- Did anyone with a grievance approach court? Please describe

Future Requirements

- Is there any requirement for expansion or augmenting the infrastructure/ facilities in this school? What are they?

Section 2 – Questions for Discussion with Education, Tribal and Women and Child welfare Departments and Other Organisations

A. Environment and Social Aspects in Civil Works:

- What is the structure for implementation of civil works under the Samagra Siksha Abhiyan in the state? Is there a civil works unit under the state Samagra Siksha Abhiyan or is a separate engineering department/ corporation involved? Are smaller civil works delegated to local bodies like the GP?
- Have Sarva Shiksha Abhiyaan and RMSA sub-departments effectively merged at the state level? Has the budget allotted for infrastructure/ civil works from the central ministry merged?
- Does the state have its own norms for schools (pre-primary, primary, secondary and senior secondary) regarding location, design, materials and construction practices for environment conservation, health, safety and disaster risk mitigation? If yes, please collect details. If no, which norms does the state follow?
- Does the state have safety and security norms from an infrastructure perspective? (i.e. access road to the school, boundary wall, adequate lighting, etc.)
- Does the SMC/ VEC conduct regular social audits to report on availability or lack of basic infrastructure such as furniture, library material, lab equipment, etc.?
- Is the Tribal department/ W&CD department engaged in hostel construction in Schedule V areas?
- Is the state thinking about a rationalizing strategy for number of schools? Is there a roadmap?
- How is compliance with the above norms facilitated/ ensured (is there any capacity building, monitoring, etc.)?
- What are the key concerns/issues relating to environment, health and safety aspects of civil works under Samagra Siksha Abhiyan in the state? How does the state address these concerns?
- Are there any innovations/ examples of environment friendly design and construction practices for school buildings in the state?

B. Sensitizing SMCs and Civil Engineers

- What is the role of the School Management Committee (SMC) in ensuring integration of environment, health and safety aspects in civil works? How does the state prepare the SMC for this role?
- Who sensitizes and builds the capacity SMCs?
- How do the Education, Tribal and Women and Child Departments communicate with the SMCs?
- Who does the sensitization of Civil Engineers on environmental and social issues?
- What are the arrangements for coordination between Education, Tribal and Women and Child Departments? How do they coordinate?
- What is the role of BRPs and CRPs? Please describe
- How do the BRPs and CRPs create awareness among beneficiaries?
- Have the Education, Tribal and Women and Child Departments undertaken any Capacity Enhancement Needs Assessment of the teachers and other staff? Yes/No. Describe.
- If Yes, how these assessments are used?

C. Environment and Social Aspects in Facility Management:

- Does the state have its own guidelines for schools (pre-primary, primary, secondary and senior secondary) on energy use (electricity, cooking fuel, renewable energy, etc.), health and safety aspects, disaster preparedness, school ground management (greenery, rain water harvesting, etc.)? If yes, please collect details. If no, which guidelines does the state follow? Are there any innovations/ examples in these areas in the state?

- How is the O&M of school buildings managed? How many sanitation workers on an average are assigned to one school? Are these workers government employed or outsourced?

D. Swachh Vidyalaya:

- What is the state level coverage in terms of water supply and separate toilets for girls and boys in schools?
- What are the key concerns/ issues relating to water supply, sanitation and waste management under Samagra Siksha Abhiyan in the state (for example, water quality, water availability, disposal of sanitary pads, etc.)? How does the state address these concerns?
- Are there any innovations/ good practice examples on water supply, sanitation and waste management under Samagra Siksha Abhiyan in the state?

E. Environment Management Framework:

- The Samagra Siksha Framework mentions that the planning, design and construction of schools should be in accordance with the guidelines in the 'Environment Management Framework (EMF) for Secondary Schools' issued by MHRD. Is the state familiar with this EMF? How is it being applied? Are there any challenges in its application to activities under Samagra Siksha Abhiyan? How can its application be strengthened?

F. Awareness and outreach strategies:

- What are the awareness and outreach strategies adopted by the school education department? What kind of material is used? Who prepares this? how often this is updated? Do you use any ICT tools/ social media/ mobile based apps?
- Is the material used for dissemination printed or in audio-visual format?
- Does the department converge with Tribal department/ W&CD to improve outreach to students from vulnerable communities/ first generation school-goers?
- What are the initiatives undertaken by the state to prevent drop-outs especially at the secondary school level?
- Are there any innovative models of engagements with private agencies/ utilizing CSR funding to improve retention levels in secondary schools?
- How the specific arrangements made, if any, for Girl students and tribal students, be communicated to the beneficiaries?
- What are the communications arrangements to let the beneficiaries know various advantages of vocational courses introduced?
- How does the departments of education, tribal and women and child development disseminate and promote good practices?

G. Grievance Redressal Mechanism

- Existing grievance redressal mechanisms at the school level, block level and state level.
- At the village level, what are the formal and informal mechanisms through which gram panchayat representatives get involved with school activities/resolve complaints, etc.?
- How this GRM is made known/ popular among the beneficiaries?
- Is there any possibility of one making complaint without revealing their identity? Please describe how?
- Are there any instance of any one going to courts to redress their grievances?

Name of the FGD Moderator:

Name of the Documenter:

Key Comments Received Consultation on draft ESSA (4-5 September 2019)

Comment By	Comment	Response
Rajnish Kumar, Director MHRD	The recommendation on building capacity of BRPs, CRPs and BEOs on E&S aspects integrated in the Samagra Shiksha Framework is important but cannot be included in the PAP.	Thanks. It will be included in the Environment and Social Activity Plan and will be monitored during implementation.
Maneesh Garg, Joint Secretary, MHRD	The recommendation on integrating EHS guidelines in vocational training is important.	Thanks. It will be included in the Environment and Social Activity Plan and will be monitored during implementation.
Ms. Changsan, Joint Secretary MHRD	The roadmap for aspirational districts, EBBs, SFDs cannot be restricted to three states. All states need to develop such a roadmap.	Many thanks. The Bank team will be happy to work with the states in developing the roadmap for aspirational districts and schedule V areas.
Irene Cynthia, State Project Director, Madhya Pradesh	Madhya Pradesh has worked on developing bridge courses to enable learning of students from tribal households.	Thanks for the information. We look forward to working with Madhya Pradesh on systemic interventions targeting Schedule V areas during implementation.
Mr. Poonia, State Project Director, Odisha	Odisha has a special focus on KBK plus districts and will develop the roadmap for aspirational districts under STARS.	Many thanks. We look forward to working with Odisha on systemic interventions targeting Schedule V areas during implementation.

Observations from Field Visits, and Suggestions from Stakeholders:

Environment

1. In general, all schools have kitchens. Some of the schools do not cook food in the kitchens, as these kitchen are not designed properly; they are too narrow and do not have proper ventilation, etc.

Generally, the cooking is done outside the kitchen. While in general the schools have LPG for cooking fuel, some schools are still using firewood collected from the neighborhood. Some schools buy firewood. Some of the schools have improved ovens for cooking food. Some of the schools have store rooms. Though some schools have store rooms, proper storage arrangements such as racks are not available.

2. Some schools report pests in the schools such as rodents (rats) and insects (ants). Sometimes, these schools use bleaching powder, DDT, etc. to tackle the issue of pests.
3. Almost all the schools have latrines built. But the maintenance of these is weak for reasons of a) lack of staff and b) lack of financial resources. These latrines are connected to either leach pits or septic tanks. Most schools are yet to face the problem of emptying these pits/ tanks, a) as they are recently built, b) the usage is limited and c) these pits/ tanks are large. In general the cleaning of these latrines is done with locally available phenols/ acids and other such material.
4. Few schools have sanitary napkin dispensing and disposal arrangements. In some of the places, the local health worker or anganwadi worker distributes the napkins. The disposal arrangements in the school range from simple pits to manual burning. Only a few schools have electric incinerators.
5. Many schools have RO filters for drinking water. There are no arrangements for checking the TDS levels of this RO water. Awareness levels about the NGT advice on the use of RO Filters is low.
6. Some schools do have asbestos sheet roofing. Awareness levels about the ill effects of asbestos are low. There are schools with Corrugated GI Sheet Roofing as well.
7. Some schools are fitted with solar panels. Some schools have excellent gardens and tree cover.
8. Awareness levels about labour/ migrant labour issues involved in construction within the schools or in the surroundings are low.
9. Some schools which do not have compound walls/ fencing, are vandalized by the miscreants.

Social

1. Every school has an SMC. There are some active SMC members who regularly visit the schools and participate in school activities. The PTA/ SMC meetings are held once a month on a regular basis. The SMC members are given one day training within the cluster. The training frequency is once a year. The SMC training is too general and a training manual for SMC training could not be found. SMCs have taken up civil construction activities where the estimates are within 10/15 Lakhs. No construction related technical training is given to them and the Engineer in charge assist these SMCs in technical matters.
2. It is noted that the enrolment in almost all visited schools is increasing. In many of these schools the girls outnumber boys. It is also noted that, in general, girls outperform boys. As per teachers, the parents who can afford the fees, prefer private schools for reasons a) discipline, b) infrastructure and c) learning environment. They add that parents actively follow and track the progress of their wards admitted into the private schools for "Vale for Money".

3. It appears “Government Schools for Girls – Private Schools for Boys” is the mind-set of the parents. Discussions reveal that the parents are not interested in investing in girls as the girls will go out of the family after marriage.
4. Some well-to-do parents are not enrolling their wards into local government schools, as their servant maids’ children study in those government schools. As per the teachers, when they approach these parents during enrolment campaigns, they say “How can we send our children to the same school where our maid’s children are studying?”.
5. With regard to vocational education, the teachers suggest that, as most of the jobs are in the informal sector, local internship based vocational courses needs to be started. For example sales persons in supermarkets. During discussions it is noted that “Beautician/ Tailoring for Girls – Electrician/ Mechanic for Boys” kind of mind set exists in the schools. All agree that girls can take up any vocational course and perform well. The discussions suggest that the girls need to be given training in self-confidence and self-reliance along with on-going training in self-defence.
6. The residential schools have several safety and security arrangements for girl students. These include compound walls, security guards/ watchmen, CC cameras, live-in wardens, fixed visiting hours, etc. One key suggestion made for the safety of girl students in residential schools, is that they be allowed to speak to their mothers frequently.
7. Most schools with Children With Special Needs have teachers trained to suit their requirements. These schools also arrange for medical check-up and doctors certification of these students and also assist them in getting various scholarships. In Odisha, there are volunteers appointed by government to support the differently abled students at school and at home.
8. Informal mechanisms for Grievance Redressal do exist in all the schools. Formal grievance committees and documentation of the grievances wasn’t found. Odisha has a centralized toll free number for grievance redressal for students, teachers as well as community members.
9. In Rajasthan, when children migrate, they can be enrolled in the local government schools at the migrated location. After returning from migration, they can continue at the school they were attending earlier.
10. In western Rajasthan, the girl dropout rate is higher, due to lack of transportation facilities. In Odisha, the SDMIS, an Adhar based student database with 60 parameters, has provisions to track students even after dropping out.
11. During the discussion, the education authorities report that they are not sure of the continuity of any program or implementation of a plan for reasons such as a) continued finance, b) change of key officers, c) change in political regime, etc.
12. Schools are unable to pay power charges for a) lack of finances and b) the power tariff used is commercial; in most cases it is the local government bodies, such as municipality and gram panchayat, that pay the power charges.
13. Some of the parents have a mindset of, Government Schools for Girls – Private Schools for Boys, Sciences for Boys – Arts for Girls, Beautician courses for Girls – IT courses for Boys, Tailoring for Girls – Mechanic for Boys, etc.

14. In general, the parents are reluctant to invest on girls, as they say the girls will go to their in-laws after marriage. Realization that another girl would move into theirs when the son gets married needs to dawn upon these.
15. The present capacity to identify and manage E&S issues at school level is too limited, as there are no Environmental and Social Specialists/ Experts at the national/ state level.

Some Recommended Actions

- Conduct Capacity Enhancement Needs Assessment (CENA) of SMCs
- Awareness generation for SMCs, based on CENA
- Posting Female Teachers in Girls/ Co-Ed Schools for
- Stop using firewood for cooking at schools
- Some schools cook food outside the kitchen; change this to cooking food inside the kitchen; modify kitchen design suitably in size and layout
- Provide racks for storage of food materials in kitchen
- Prevent Insects/ pests in kitchen/ school
- Make availability Sanitary Napkins and provide for their proper disposal
- Toilet waste disposal in an appropriate manner– usage of Leach pit or proper Septic Tank where there is no sewerage system
- Avoiding usage of DDT for spraying in school premises
- Avoid usage of cleaning of latrines with acids/ Phenol
- Use of RO filters with measurement of TDS of filter water
- Maintaining Grievance Redressal Registers in schools

Figure 1: Photos from Stakeholder Consultations In States



Discussion at Palgarh, Maharashtra



State level Meeting at MPSP office, Mumbai



Meeting at DPD office, Dhenkanal, Odisha



Discussion at Worli Sea Face School, Mumbai



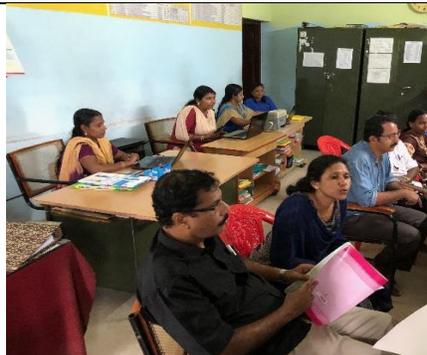
Discussion at Abhaneri, Rajasthan



Discussion at BRC Baswa, Dausa, Rajasthan



Discussion at Duasa, Rajasthan



Meeting at BRC, Kollam, Kerala

ANNEX 4: Screening Checklist for Schools

[The is a sample checklist. A similar checklist for monitoring will be adapted by MHRD during the first year of implementation]

A. Environmental Screening

Part a: General Information

1. Location of the sub-project	
• Name of Sub-Project	
• Name of the State	
• District	
• Block	
• Village	
2. Implementing Agency Details (sub-project level)	
• Name of the Department/Agency	
• Name of the designated contact person	
• Designation	
• Contact Number	
• E-mail Id	

Part b: Environment Screening

Question	Yes	No	Details
1. Is the sub-project located in whole or part within a radius of 1 km from any of the following environmentally sensitive areas?			
a. Biosphere Reserve			If yes, mention name and distance.
b. National Park			If yes, mention name and distance.
c. Wildlife/Bird Sanctuary			If yes, mention name and distance.
d. Game Reserve			If yes, mention name and distance.
e. Tiger Reserve/Elephant Reserve			If yes, mention name and distance.
f. Wetland			If yes, mention name and distance.
g. Natural Lake			If yes, mention name and distance.
h. Swamps/Mudflats			If yes, mention name and distance.
i. World Heritage Sites			If yes, mention name and distance.
j. Archaeological monuments/sites (under ASI's central/state list)			If yes, mention name and distance.
k. Reservoirs/Dams			If yes, mention name and distance.
2. Is the sub-project located in whole or part within a radius of 500 m from the following features?			

a. Reserved/Protected Forest			If yes, mention name and distance
b. Migratory Route of Wild Animals/Birds			If yes, mention name and distance
c. Area with threatened/rare/ endangered fauna (outside protected areas)			If yes, mention name and distance
d. Area with threatened/rare/ endangered flora (outside protected areas)			If yes, mention name and distance
e. Habitat of migratory birds (outside protected areas)			If yes, mention name and distance
f. Historic Places (not listed under ASI – central or state list)			If yes, mention name and distance
g. Regionally Important Religious Places			If yes, mention name and distance
h. Public Water Supply Areas from Rivers/Surface Water Bodies/ Ground Water Sources			If yes, mention name and distance
3. Information related to sub-project impacts:			
Will the construction, operation or decommissioning of this sub-project cause changes to or have impacts on the following?			
1. Land Use			If yes, give full details.
2. Water			If yes, give full details.
3. Air			If yes, give full details.
Will the construction, operation or decommissioning of this sub-project produce, cause or release any of the following?			
4. Solid waste			If yes, give full details.
5. Noise/ vibration/ light/ heat energy/ electromagnetic radiation			If yes, give full details.
6. Accidents			If yes, give full details.
Other			
7. Are there any areas around the project location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the sub-project?			If yes, give full details.
8. Any other impacts?			If yes, give full details.

B. Social Screening

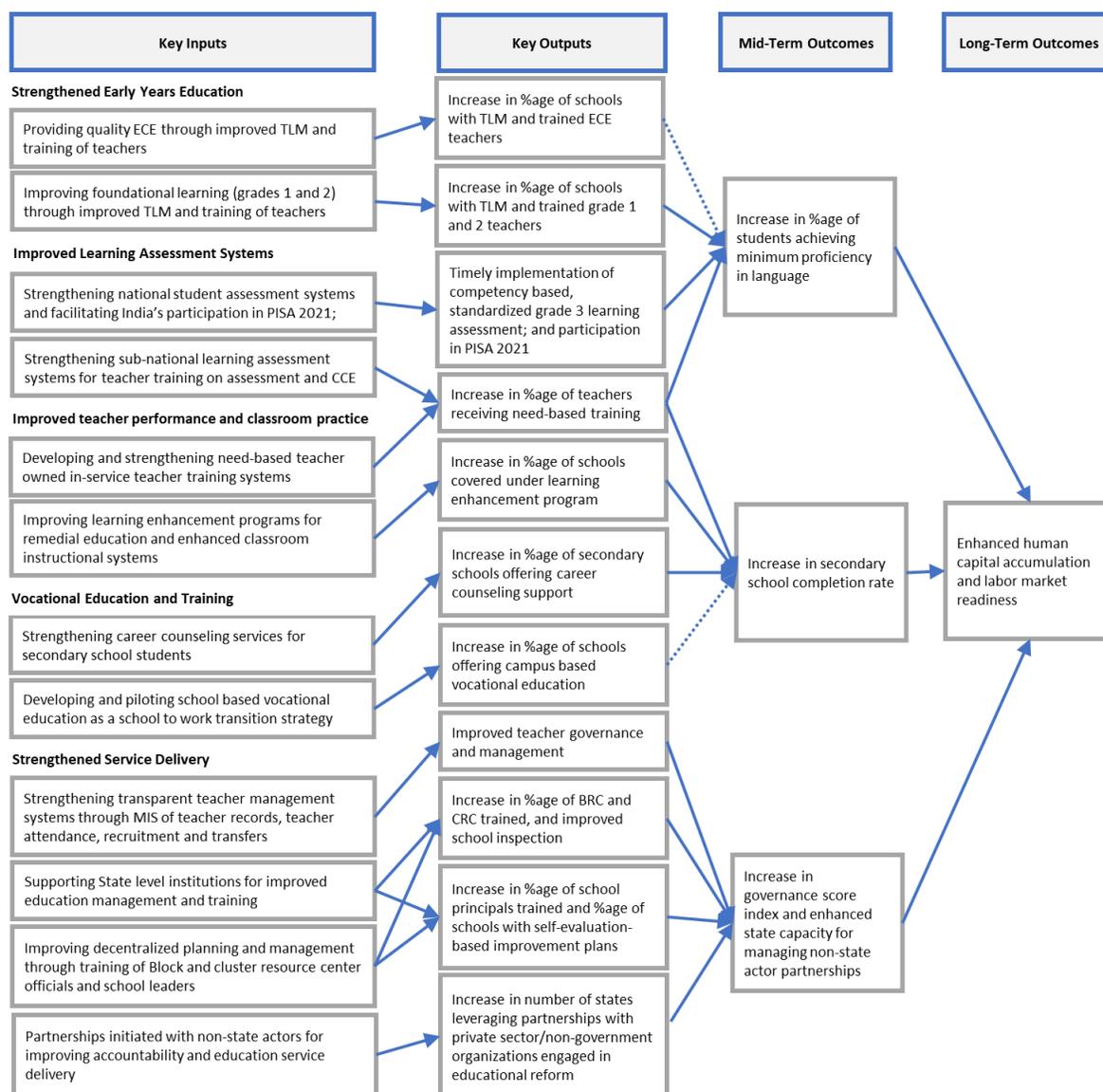
Part a: Social Impacts Information

- 1. Land Requirement for the sub-project: No Land is required for the sub-project, as this is repair and renovation activity.**
- 2. Other Information:**

S No	Items	Remarks
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1.	Are there any CPRs in the school compound that will get affected?	If yes, give full details.
2.	Are there any places of worship in the school compound that will get affected?	If yes, give full details.
3.	What are the alternative arrangements for conducting classes during repair and renovations?	If yes, give full details.
4.	Will labour camps be required to be set up for this repair and renovation works?	If yes, give full details.
5.	Will any migrant labour be required for this repair and renovation works?	If yes, give full details.
6.	Are there separate entry and exit arrangements for labour without coming into contact with students?	If yes, give full details.
7.	Is the SMC trained on the ESMF requirements to take up and monitor the repair and renovation works?	If yes, give full details.
8.	Are the SMC members willing to participate in this activity?	If yes, give full details.
9.	Who are the Faculty and SMC members coordinating this repair and renovation activity to ensure no adverse impacts on the students?	If yes, give full details.
10	Are BRPs monitoring usage of digital assets such as computer labs at the school level?	If yes, give full details.

Annex 5: Theory of Change and Selection of DLIs



- i. **Strengthening Early Years Education:** There are persistently low levels of learning in the early grades that result in substantial numbers of children moving to upper grades without acquiring even the basics of reading and writing. Inadequate ECE programs yield poor basic cognitive and language competencies in the early years, which influence subsequent learning levels. Strengthening early years education constitutes the first Results Area of STARS. The State Incentive Grants (SIGs) (DLI 6) will motivate ECE provision with financial incentives. DLI 1 is expected to be a direct outcome of a robust ECE program.
- ii. **Learning Assessment Systems:** Although India has a national learning assessment program, there is a need to enhance the validity and credibility of the results. Moreover, since India has not fully participated in an international learning assessment, it is difficult to evaluate the learning outcomes of the education system in a comparative sense. India's participation in PISA 2021 will be a major step forward in this respect, and thus it has been included in the second Results Area and is being incentivized through DLI 4.

- iii. **Teacher performance and classroom practice:** Improving learning outcomes depends on quality classroom instruction and a prepared teaching workforce. Thus, the third Results Area will support teacher development and school leadership activities in the selected states, along with a strong school remediation program based on the use of instructional technology and innovative mechanisms to enhance classroom instruction and learning. This is being supported through the DLI matrix in two ways: DLI 3 (improving governance index scores) ensures that teacher management systems and teacher presence will be fostered under STARS, with the latter's attendance and deployment being monitored. Further, the SIGs under DLI 6 will financially incentivize states to see that teachers are provided with need-based training to understand the requirements of adolescent boys from vulnerable groups, especially through transparent online portals providing a menu of training modules. Learning enhancement programs and remedial programs to improve student outcomes will also be supported. DLI 6 will also finance establishment of online teaching medium, web conferencing tools, developing oonlike study materials, introducing tablet-based learning and realigning with the digital driven world of education.
- iv. **Secondary Education:** For many children, secondary education is the stage when they leave school and enter the workforce. Further, **adolescent girls are identified as a primary beneficiary under the proposed STARS operation.** Much of women's participation in the labor force is concentrated in subsistence agriculture, unpaid family work, and informal work. Interventions are needed to expand young women's options early on, create value, and generate income through early exposure to vocational training, career counselling, mentoring, and handholding through adolescence. Targeted human capital investments at early stages for adolescent girls could also result in higher female wage employment in high-growth sectors as well as self-employment. Empirical evidence suggests that interventions designed to strengthen young women's educational and employment outcomes are likely to be most effective by including elements addressing both social and economic empowerment.
- v. Research indicates that whether students can complete secondary schooling is affected by a complex set of factors on the supply and demand sides. Supply-side factors include availability of and distance to secondary schools, availability of adequate infrastructure (girls' toilets, for instance) and human resources (subject teachers, for instance). Demand-side factors include ability to cope with secondary level academic work, level of interest in studies, financial security, and so on. Secondary school completion rates in STARS states range from 87 percent in Kerala to 62 percent in Madhya Pradesh. The available administrative data indicates a slight downward trend in secondary school completion in some selected states between 2014-15 to 2016-17. In Madhya Pradesh, the completion rate dropped from 67 percent in 2014-15 to 62 percent in 2016-17; in Rajasthan, it went from 89 percent to 78 percent during the same time period. Part of this downward trend can be attributed to efforts to improve the accuracy of administrative data. Under STARS, each state is expected to not only stabilize the downward trend of secondary school completion rates but also improve their completion rate by at least 2 percentage points over the project period. States will be incentivized to achieve larger improvements in grade 10 completion beyond the 2-percentage point increase as indicated by the scalable nature of the corresponding DLI. The target represents a significant increase in the absolute number of students across STARS states completing grade 10 over the project period. The operation will also track progress in completion rate by gender in all selected states.
- vi. **Governance:** Most importantly, STARS focuses on better and expanded decentralized frontline delivery channels (operationalized through DLIs 3 and 6), without which improved education outcomes will be difficult to achieve.