INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

ENVIRONMENT AND SOCIAL SYSTEMS ASSESSMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF

US$250 MILLION EQUIVALENT

TO

INDIA

FOR THE

SUPPORTING ANDHRA’S LEARNING TRANSFORMATION PROGRAM

P173978

(Draft Disclosed: February 2021, Final Disclosed: April 2021)
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<tr>
<td>APEWIDC</td>
<td>A.P. Education &amp; Welfare Infrastructure Development Corporation</td>
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<tr>
<td>BaLA</td>
<td>Building as Learning Aid</td>
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<tr>
<td>BRC</td>
<td>Block Resource Centre</td>
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<tr>
<td>BRCC</td>
<td>Block Resource Centre Coordinator</td>
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<tr>
<td>EMF</td>
<td>Environmental Management Framework</td>
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<tr>
<td>E&amp;S</td>
<td>Environmental and Social</td>
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<td>FGD</td>
<td>Focus group discussion</td>
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<td>GIS</td>
<td>Geographic Information System</td>
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<td>GRS</td>
<td>Grievance Redress Service</td>
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<tr>
<td>MHRD</td>
<td>Ministry of Human Resource Development</td>
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<tr>
<td>NDMA</td>
<td>National Disaster Mitigation Authority, Government of India</td>
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<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
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<td>IDIs</td>
<td>In-depth interviews</td>
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<td>IPF</td>
<td>Investment Project Financing</td>
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<tr>
<td>ITDA</td>
<td>Integrated Tribal Development Agency</td>
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<tr>
<td>PWD</td>
<td>Public Works Department</td>
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<td>PAP</td>
<td>Program Action Plan</td>
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<td>PCR</td>
<td>Physical Cultural Resources</td>
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<td>RMSA</td>
<td>Rashtriya Madhyamik Shiksha Abhiyan</td>
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<tr>
<td>SS</td>
<td>Samagra Shiksha</td>
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<tr>
<td>SSA</td>
<td>Sarva Shiksha Abhiyan</td>
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<td>SSU</td>
<td>Sustainable Schools Unit</td>
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<tr>
<td>TA</td>
<td>Technical Assistance</td>
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<tr>
<td>ToR</td>
<td>Terms of Reference</td>
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<td>APP</td>
<td>Annual Procurement Plan</td>
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<td>AWP&amp;Bs</td>
<td>Annual Work Plans and Budgets</td>
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<tr>
<td>CDP</td>
<td>Community Driven Procurement</td>
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<tr>
<td>CFMS</td>
<td>Comprehensive Financial Management System</td>
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<tr>
<td>CMIE</td>
<td>Centre for Monitoring Indian Economy</td>
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<tr>
<td>CRCC</td>
<td>Cluster Resource Center Coordinators</td>
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<tr>
<td>CSO</td>
<td>Civil Society Organizations</td>
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<tr>
<td>CwSN</td>
<td>Children with Special Needs</td>
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<tr>
<td>DIET</td>
<td>District Institutes of Education Training</td>
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<td>DIKSHA</td>
<td>Digital Infrastructure for Knowledge Sharing</td>
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<td>DLI</td>
<td>Disbursement Linked Indicators</td>
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<tr>
<td>DoSE</td>
<td>Department of School Education</td>
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<tr>
<td>DoWCDSC</td>
<td>Department of Women, Children, Disabled and Senior Citizens</td>
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<tr>
<td>DRM</td>
<td>Disaster Risk Management</td>
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<tr>
<td>ECE</td>
<td>Early Childhood Education</td>
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<tr>
<td>EMIS</td>
<td>Education Management Information System</td>
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<td>ESSA</td>
<td>Environmental and Social Systems Assessment</td>
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<tr>
<td>FD</td>
<td>Finance Department</td>
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<tr>
<td>FM&amp;P</td>
<td>Financial Management &amp; Procurement</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GER</td>
<td>Gross Enrolment Ratios</td>
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<tr>
<td>GO</td>
<td>Government Orders</td>
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<tr>
<td>GoAP</td>
<td>Government of Andhra Pradesh</td>
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<tr>
<td>GSDP</td>
<td>Gross State Domestic Product</td>
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<td>GST</td>
<td>Good and Services Tax</td>
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<td>i-BaLA</td>
<td>Inclusive Building as Learning Aid</td>
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<td>IE</td>
<td>Inclusive Education</td>
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<td>IPF</td>
<td>Investment Project Financing</td>
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<td>ISM</td>
<td>Implementation Support Missions</td>
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<td>KGBV</td>
<td>Kasturba Gandhi Balika Vidyalayas</td>
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<tr>
<td>LMS</td>
<td>Learning Management System</td>
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<td>MEO</td>
<td>Mandal Education Officers</td>
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<td>NAS</td>
<td>National Achievement Survey</td>
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<td>NEP</td>
<td>New Education Policy</td>
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<tr>
<td>NGC</td>
<td>National Green Corp</td>
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<tr>
<td>OCHS</td>
<td>Occupational and Community Health and Safety</td>
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<td>PAL</td>
<td>Personalized Adaptive Learning</td>
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<td>PC</td>
<td>Parent Committees</td>
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<td>PE</td>
<td>Procurement Entities</td>
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<td>PforR</td>
<td>Program for Results</td>
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<td>PPSSD</td>
<td>Project Procurement Strategy for Development</td>
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<td>RTE</td>
<td>Right to Education</td>
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<td>SAC</td>
<td>SCERT Assessment Cell</td>
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<td>SC</td>
<td>Scheduled Caste</td>
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<td>SCERT</td>
<td>State Council for Education Research and Training</td>
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<td>SDU</td>
<td>Sustainable Development Unit</td>
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<tr>
<td>SFR</td>
<td>State Financial Rules</td>
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<td>SIEMAT</td>
<td>State Institute of Education Management and Training</td>
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<td>SIS</td>
<td>State Implementation Society</td>
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<td>SLAS</td>
<td>State Learning Achievement Surveys</td>
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<td>SRGBV</td>
<td>School-related gender-based violence</td>
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<td>SSU</td>
<td>Sustainable Schools Unit</td>
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<td>ST</td>
<td>Scheduled Tribe</td>
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<tr>
<td>TLM</td>
<td>Teaching Tribe</td>
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Environmental and Social Systems Assessment 2021 (P173978)
Supporting Andhra’s Learning Transformation SALT (P173978)

ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT

EXECUTIVE SUMMARY

Introduction

1. An Environmental and Social Systems Assessment (ESSA) was conducted by the World Bank E&S team for the proposed SALT (P173978) program supported by a Program-for-Results (PforR) financing instrument of the World Bank. Following the requirements of the World Bank PforR Policy, these rely on country-level systems for the management of environmental and social effects.

2. ESSA has been prepared 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.

3. This ESSA Report is organized into seven Chapters providing an Introduction to the Program, Purpose, Objectives of ESSA, Description of Environmental and Social Characteristics of the Program Region, Potential Environmental and Social Effects (Result Area Wise), Assessment of Environmental and Social Management Systems and Implementation Capacity based on PforR Policy of the Bank and its Core Principles; Environmental and Social Inputs to the Program Action Plan, and Details on Consultation and Disclosure.

Program Development Objective

4. The PDO is ‘to improve learning outcomes, quality of teaching practices and school management in basic education’. The program will use three key results indicators to track the achievement of the PDO.

5. SALT seeks to enhance the quality and management of foundational learning, elementary and secondary education in Andhra Pradesh by (i) Strengthened Foundational Learning; (ii) Improved Quality of Teacher-Student Interactions; and (iii) Strengthened Institutional Capacity and Community Engagement for Service Delivery.

Program Description and Potential Environmental and Social Effects

6. Program activities will span various districts of Andhra Pradesh, including urban and rural areas. Studies and consultations for environmental and social aspects of ESSA take into account the two distinct geographies of the state which shows distinct settlement patterns, environmental aspects, inter-district variations, social disparities, culture, industrial growth, and development stages; namely; (a) Coastal Andhra with its deltas, plains (including Andhra Plains) along the east coast, as well as hilly forested parts of the Eastern Ghats; and (b) Rayalaseema; the southwestern plateau regions.

7. The program will focus on the following Result Areas.

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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” refer to adverse or negative consequences of actions taken. Risk is used to denote the potential for loss or damage of something of environmental and social value. Risk is typically expressed in terms of probability and severity of consequences occurring in the future.
Program Financing

8. The SALT program accounts for about 7.8 percent of the overall government program, and 77 percent of the SALT program will be financed through counterpart funding. A high share of counterpart financing is expected to play a positive role in ensuring the sustainability of initiatives undertaken under the program. The overall sustainability of operations is further enhanced by the fact that over the past three years the state’s school education budget has been growing at about 7 percent per annum. Additionally, at least 34 percent of funds under the SALT program are expected to be utilized for school-level facility upgradation (Nadu Nedu). This non-recurring expenditure is expected to conclude in the first three years of the program, and this would gradually start freeing up more funds for sustaining the interventions being initiated under the SALT program.

Environmental and Social Systems Assessment

ESSA methodology

9. The ESSA was primarily a desk-based exercise with virtual interactions and consultations, due to the impacts of COVID-19 and travel restrictions. ESSA included a review of the ongoing Nadu Nedu program works, and borrower’s systems including policies, guidelines, regulations, standards, procedures, and systems and capacities for E&S management were compared against the core principles and key planning elements to identify gaps that could affect Program performance. All districts of AP were covered (both coastal Andhra and Rayalaseema regions) utilizing the possibility of virtual platforms. The ESSA team also ensured consultations were evenly spread across the hierarchy by consulting headmasters of schools, Parent Committee members, Assistant Engineers, Executive Engineers, and Superintending Engineer, Cluster Resource Centre Coordinators, Block Resource Centre Coordinators, Sub-District Education Officers, District Education Officers and Special Officers appointed for Tribal Welfare, residential facilities for adolescent girls and early-childhood education (ECE). Because of the COVID-19 situation, all the interviews and consultations were conducted through online video conferencing or telephonically. The Bank team reviewed the capacity of existing systems at the state, district, sub-district, and school levels to plan and implement effective measures for environmental and social management of the Program and determine if any measures will be required to strengthen it to manage risks and enhance benefits.

10. In preparing the ESSA, a review of available secondary data and literature was carried out, including extensive references to UDISE datasets (2018-2019), a representative sample of social audit reports across 5 districts, in-depth interviews, and semi-structured focus group discussions with about 25 officials across constituent agencies and integrated tribal agency (ITDA) blocks. The ESSA specifically delved into systems and institutional capacities (planning, implementation, monitoring) for a) environmental and social due diligence of the proposed interventions across the state; b) regulations and monitoring; and incorporation of screening for potential risks, alternative analysis, multi-

Table A: Result Areas of SALT Program

<table>
<thead>
<tr>
<th>Program Financing</th>
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<tr>
<td>The SALT program accounts for about 7.8 percent of the overall government program, and 77 percent of the SALT program will be financed through counterpart funding. A high share of counterpart financing is expected to play a positive role in ensuring the sustainability of initiatives undertaken under the program. The overall sustainability of operations is further enhanced by the fact that over the past three years the state’s school education budget has been growing at about 7 percent per annum. Additionally, at least 34 percent of funds under the SALT program are expected to be utilized for school-level facility upgradation (Nadu Nedu). This non-recurring expenditure is expected to conclude in the first three years of the program, and this would gradually start freeing up more funds for sustaining the interventions being initiated under the SALT program.</td>
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Environmental and Social Systems Assessment 2021 (P173978)
particulate matter, and air quality. The Program aims to ensure that environmental and social benefits are achieved.

11. The screening and assessment considered aspects such as (i) the likely environmental effects and risks, (ii) the state/sector context, (iii) institutional capacities and performance in earlier projects/programs, and (iv) political and reputational risks; it assessed the overall risk rating for environmental aspects as ‘moderate’. Minor civil works will be supported under the program including co-locating of Anganwadis in existing school premises and small-scale construction or repair/modifications, water and sanitation facilities including toilets, electricity, compound walls, providing universal access. COVID-19 response actions include school sanitization, purchase, and use of masks and sanitizers. Considering the minor purchase of goods and localized minor construction works and cleaning activities in existing school premises, monitored by the local communities, the risks are expected to be limited in impact and are expected to be away from sensitive areas (as they would be in existing school premises). It reflects that the Program will support long-term environmental benefits in these areas and does not anticipate any adverse risks on the environment including diversion of forest land, or risks to natural habitats.

Social and Environmental Effects

12. 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, only minor refurbishment works within school campuses. The activities to be supported by the Program are likely to provide environmental and social benefits such as (i) Safe and comfortable learning environment (ii) enhanced awareness on EHS aspects in vocational streams; (iii) Improved sanitation and hygiene; (iv) Opportunities for energy and water conservation; (v) improved waste management practices.

13. The GoAP is undertaking the Nadu Nedu scheme aimed at improving school facilities, supported through specialized government departments and School Monitoring Committees (with community participation) following common standards for civil works, specifications for furniture and water and sanitation facilities, and School Level Disaster Management Guidelines. Available guidance include a) design standards/specifications with consideration on universal access, b) disaster management guidelines focusing on training and capacity for a coordinated response while not discussing disaster resilient features suited for specific geographies. There exist no guidelines for screening and exclusion of activities of high risks, pollution management, or occupational and community health and safety or monitoring environmental and safety aspects.

14. Diagnosis of school level needs, procurement, payment for services, and monitoring of works are being managed at the community level by the PCs. This highlights the high degree of community involvement in school-level planning and management essential for the long-term sustainability of facilities created. Design and implementation are carried out with the help of seven state agencies: the Panchayati Raj Engineering Department, Samagra Siksha Society, APWEIDC, Municipal and Public Health Engineering Department, Tribal Welfare Engineering Department, Rural Water Supply and Sanitation Department, and Housing Department which provide good engineering support. It is important to improve capacities for environmental management during all stages to create a safe and useable environment. Involvement of communities and specialized agencies (different agencies in different regions) in the design and implementation supports addressing these risks provided there is ample guidance and awareness. We need to streamline/bring such guidance and capacities into the program not only for the implementation period but also to ensure sustainable and safe operations; especially in different regional contexts (such as coastal areas). Awareness and training needs of students, workers, and communities on environmental aspects, and actions to ensure responsibilities for environmental aspects, and improve the monitoring capacity of agencies/communities are detailed out in the ESSA. ESSA also includes a list of ineligible activities, excludes the same under the program, and outlines the steps (action plan) to be followed by the borrower to mitigate potential adverse risks and impacts. Guidance on
COVID-19 response-related actions was ascertained during project preparation and made available early on to be followed for any COVID-19 response's prior results.  

15. The key social risks and impacts of the program include the following: (i) low transition, completion rates and relatively lower learning outcomes for students from vulnerable communities/ITDA blocks of the state; (ii) low capacity of PCs in ITDA blocks to undertake civil works and regular social monitoring/audits; (iii) isolated instances of occupational health and safety hazards experienced by laborers on construction sites; (iv) risks of early marriage amongst adolescent girls, especially in tribal/rural areas of the state; (v) barriers to transition from elementary to secondary grades for both girls and boys due to the on-going adverse impacts of COVID-19; (vi) low awareness levels amongst parents/communities in tribal and rural blocks of the state; (vii) lack of clear two-way information flows/communication pathways for sustained beneficiary/citizen engagement; (viii) intra-state variations in capacities of last-mile delivery officials, i.e. BRPs/CRPs, particularly in ITDA blocks and (ix) risks related to on-campus harassment and instances on gender-based violence. The ESSA does not identify any risks related to Land Acquisition and Resettlement at this stage. Enhancement of learning environments proposed under the Program will be restricted to existing school facilities. Further, any new up-gradation/refurbishments will be screened for informal settlers/structures or ongoing land-related disputes.

16. The key environment risks and impacts of the Program include: (i) pollution risks in school campus and nearby areas (including natural habitats) due to lack of attention to (a) noise, dust and disposal of construction and demolition wastes and scraps (b) poor management of liquid wastes from WASH facilities and mid-day-meal kitchens solid waste from schools (including food waste, packaging wastes, plastics, sanitary napkins and masks), (c) mixing up of hazardous and e-wastes from schools from electrical and digital hardware (also associated with use of digital EMIS proposed to be developed under IPF component) with general waste and health concerns of burning these, (d) choice of materials and technology while upgrading facilities (such as high water or energy use fixtures, reliance on fire wood for cooking even after being provided with LPG, universal access, materials used in physical learning kits, and masks, sanitizers and other cleaning products); (ii) Occupational and Community Health and Safety (OCHS) risks including temporary inconvenience and disruption to school activities during minor construction and repairs, health and safety issues of workers, communities, teachers, visitors and students due to poor site housekeeping, work management and worker/workspace - student interactions, and risks due to hygiene practices post reopening of schools; (iii) Disaster and emergency related risks including fire, electric safety and climate risks, lack of preparedness, capacities and arrangements for emergency response and worker and work safety in different geographic/climatic conditions (heat wave, cyclone and flooding during specific seasons). These risks can be managed by developing capacities to screen, review, implement and monitor environmental and safety aspects and following regulations, permit requirements, and guidelines, and increasing the awareness and capacities on environment and disaster response.

Assessment of Environmental and Social Management Systems and Implementation Capacity

17. This section provides a summary assessment of whether the program’s environmental and social management systems are adequate for and consistent with the core principles and key planning elements contained in the PforR Policy, as relevant to the Program. It also assesses whether the involved institutions have the requisite capacity to implement these systems’ requirements.

18. The environmental and social management under the Program will be largely based on the existing legal, regulatory, and institutional system in India and Andhra Pradesh

19. The applicable environmental and social management systems are generally adequate to address underlying environmental and social risks, and noteworthy strengths are (i) existing national guidelines on school safety (ii) national building codes. ESSA has identified Gaps in the existing system to manage environmental effects; which could be managed through certain opportunities for improvement.

Key Findings from Assessment of Borrowers Capacity and Systems

20. The program supports essential repairs, construction of toilets, compound walls, furniture, painting, electrification, drinking water supply, and provision of green chalkboards in all government-owned schools (with
existing school campuses) across AP irrespective of urban/rural (including tribal blocks) differentials. All works follow the same standard specifications and design finalized at the State level with flexibility to ensure special structural safety taking care of additional requirements in coastal areas, where climate risks are high. Plans for works are finalized by PC, school leadership, and site engineer as per the requirements and characteristics of each campus. In each area, existing government departments with a strong presence and local implementation experience are appointed as facilitating agencies (for example Tribal Welfare Department with strong experience working in and understanding the needs of Tribal areas).

21. Key Findings from Assessment of Borrowers Capacity and Systems: The ESSA has identified key gaps and opportunities for strengthening the existing operational systems and capacities for managing E&S risks and enhancing the program benefits. Result Area wise key benefits and risks include:

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Risks</th>
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<tbody>
<tr>
<td>RA 1</td>
<td>RA 1</td>
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<tr>
<td>• Provision of TLM and Support to Teacher Development</td>
<td>• Works / impacts in sensitive areas</td>
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<tr>
<td>• Upgradation of WASH Facilities and Overall School Facilities Improvement</td>
<td>• Packaging Wastes</td>
</tr>
<tr>
<td>• Focus on pre-preparatory classes in IRDA blocks to benefit SC/ST students</td>
<td>• Worker &amp; Community Health and Safety during works, minor pollution due to waste water and construction wastes, Student worker/workspace interactions</td>
</tr>
<tr>
<td>RA 2</td>
<td>RA 2</td>
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<tr>
<td>• Teacher Professional Development</td>
<td>• Isolated instances of informal settlers and/or land-related aspects.</td>
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<tr>
<td>• Repair and refurbishment CwSN Centers</td>
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<td>• Specialized cell for Inclusive Education at the SCERT to address needs of CwSN</td>
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<tr>
<td>RA 3</td>
<td>RA 3</td>
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<tr>
<td>• Professional development of teachers, decentralized education functionaries on skills including Gender equity, Inclusion, Disaster Risk Management</td>
<td>• Minor risks of increased waste / wastewater, including plastics from Training activities; e-waste from EMIS development &amp; use (IPF)</td>
</tr>
<tr>
<td>• Support to results-oriented Annual Work Plans and Budgets; ensures overall sustainability and capacity improvement</td>
<td>• Worker &amp; Community Health and Safety; Pollution during works/wastes, waste water (while upgrading CwSN centers)</td>
</tr>
<tr>
<td>• Social Audit Tools and EMIS</td>
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</table>

22. From a social perspective, the assessment revealed that to meet the core principles on land acquisition and involuntary resettlement, the screening will be required to identify any potential adverse social impacts. This is currently lacking. The screening requirement for land acquisition will be embedded as a parameter in the current social audit monitoring system. The DoSE and the SIS for Samagra Shiksha provide the institutional mechanism for school education program implementation along with detailed roles and responsibilities for district-level officials (DEOs, SDEOs) and sub-district-level officials (BRCCs, CRCCs, CRPs). Through the Nadu Nedu scheme, PCs are regularly involved in the planning, management, and monitoring of civil works across the state. The DoSE regularly follows the process of social audits to create transparency, participation, and accountability of the program implementation at the school level. The DoSE also has a clear focus on social inclusion and the differentiated needs of SC, ST, and CwSN students. To enable ease of learning, the department has made textbooks available in their mother tongue to students from tribal communities. The DoSE through Divyang Bhavans (centers for disabled students) attempts to provide educational opportunities in an inclusive environment free from discrimination. From a policy perspective, the Right to Education (RTE) Act, 2009 further addresses gender and social equity within a framework that is holistic and systemic. Additionally, the DoSE has a special focus to improve enrolment, transition, completion rates, and learning outcomes for the 66 tribal/ITDA blocks in the state.

23. From the environmental perspective, the most relevant ESSA core principles for this program (and for overall sustainability) are environmental management, and public and worker safety. Program activities are implemented within existing school campuses or CwSN resource centers throughout the state. The assessment revealed that no...
guidance or framework for environmental management is in use for the Nadu Nedu initiative which follows a community contracting format with PCs arranging the works through local masons or workers, following the specifications for materials and standard designs developed at State Level. There are no capacities or mechanisms to (i) screen and exclude activities near sensitive habitats or archeologically important areas (including chance-find procedures), or banned materials such as asbestos or insecticides, (ii) manage pollution due to materials or wastes from construction or operation of facilities created, (ii) guide and manage the work activities, health, and safety of workers, communities, and students. Also, to render the ongoing transformation sustainable it is important to enhance the overall environmental effects of the program by focusing on ‘whole school’ waste management, resource efficiency, greening, safety, and universal access following the ‘Haritha Pathasala’ (Green School) concept, which will transform the schools into a nature lab where students (including CwSNs) can experience and own the sustainability concepts ‘hands-on’ all days, including the no-bag day advocated by NEP, 2020. The following Table A summarizes the gaps identified in terms of each Core Principle and proposed actions.

Table A: Identified E&S Gaps and Recommendations

<table>
<thead>
<tr>
<th>List of Identified Gaps</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>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.</strong></td>
<td></td>
</tr>
</tbody>
</table>
| • Absence of mechanism to (i) screen and avoid, assess or manage risks and impacts at program level, (ii) guidance or schedule for consents, permit accrual from various agencies, (iii) Measures to mitigate environmental or social impacts that cannot be otherwise avoided or minimized. | • Prepare and use screening and exclusion criteria, and ECOpS/SOPs covering risks and impacts including safety issues, and pollution due to construction and operations.
  • Integrate the activities of existing Eco-clubs – National Green Corps - to ensure overall sustainability and green practices.
  • Improved school management shall be measured by a standardized tool that includes indicators on environmental sustainability.
  • Develop mobile apps/tools for Stakeholders, Parent Committees/school headteacher to report on maintenance requirements in schools. |
| • Absence of tools/formats at different levels to review, monitor, and enforce EHS, School Safety, O&M of assets. | • Piloting bala sabhas initially in Tribal Areas for information dissemination and feedbacks.
  • Establishing a GRM also to report on EHS.
  • Training on GRM to school, parent committees. |
| • Absence of mechanism to inform and get feedback from communities around the schools regarding ongoing/ proposed works and activities. | • Constitute E&S Cell named Sustainable Schools Unit in SIS to co-ordinate and manage E&S aspects develop tools, guidance, provide training, monitor.
  • Designate nodal E&S officers at District, Block, School / PC levels. |
| **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.** | • Develop and use exclusion criteria to exclude high-risk activities near Natural Resource areas, Cultural Heritage areas, and to avoid using hazardous materials like asbestos in works.
  • Prepare and update the list of regulatory clearances required for various program activities near sensitive areas. |
### List of Identified Gaps

<table>
<thead>
<tr>
<th>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.</th>
</tr>
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<tbody>
<tr>
<td>c) Location of critical habitats viz a viz disposal of treated effluents from soak pit etc. would lead to avoidance of such impacts and long-term sustainability</td>
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<table>
<thead>
<tr>
<th>Recommendations</th>
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<tbody>
<tr>
<td>• SSU and designated Nodal Environmental persons at various levels to screen/exclude projects affecting sensitive habitats and cultural resources</td>
</tr>
<tr>
<td>• Parent Committee and engineers overseeing the works to be trained on the regulatory requirements of works/activities in sensitive areas, mitigation measures, and monitoring and reporting needs</td>
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<tr>
<td>• Training on screening, monitoring activities in natural/cultural areas</td>
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<tr>
<th>Core Principle 4: Avoid or minimize the land acquisition and related adverse impacts: Avoid or minimize displacement, and assist the affected people in improving, or at the minimum restoring, their livelihoods and living standards.</th>
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<tr>
<td>• While for the title holders under the Land Acquisition act provides for adequate provisions, however, the act does not cover provisions for encroachers and squatters on government land.</td>
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<tr>
<th>The key recommendations to fill gaps are:</th>
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<tbody>
<tr>
<td>• E&amp;S screening mechanism is to be instituted during the planning phase of any new construction under the program to identify any adverse social risks and impact.</td>
</tr>
<tr>
<td>List of Identified Gaps</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------</td>
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<tr>
<td>• Though both land acquisition and/or resettlement is not anticipated, but in rare case, if any need arises, World Bank’s ESF policy, particularly ESSS on land acquisition and resettlement will be followed and due process to be instituted in consultation with World Bank task team.</td>
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<tr>
<td>• While the land donation is a common practice, there is need to ensure that it is done on voluntary basis and these are no coercion for doing so, and the process of donation shall be institutionalized through gift deed.</td>
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<tr>
<td>• The screening requirement for land acquisition will be embedded as a parameter in the current social audit monitoring system. The PCs along with the grassroots engineer will be responsible for screening and reporting of land-related issues. The screening process will be undertaken before the commencement of civil works under the Nadu Nedu Scheme phase 2 and phase 3.</td>
</tr>
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</table>

**Core Principle 5:** Give due consideration to the cultural appropriateness of, and equitable access to, Program benefits, giving special attention to the rights and interests of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities, and to the needs or concerns of vulnerable groups

- The 66 ITDA blocks in the state have poor transition rates from elementary to secondary grades and poor learning outcomes amongst students from SC/ST communities.  
  Targeted approaches/roadmap to improve learning outcomes in Integrated Tribal Development Blocks (ITDA)/aspirational districts:  
  At the policy level, the state has a clear focus on improving retention, transition, and completion rates for SC/ST students, particularly from aspirational districts.  
  To translate this and achieve results on the ground, the ESSA recommends:  
  1. Development of a roadmap to monitor learning outcomes and transition rates (elementary to secondary grades) in ITDA blocks.  
  2. Development of a Grievance Redressal Mechanism (GRM) to resolve grievances, queries and complaints related to on-site management of civil works and overall school management.

- As acknowledged by the Samagra Shiksha Framework, the biggest problem faced by tribal children and first-generational school-goers is that of language.  
- The National Education Policy (NEP, 2020) scheme aims to and provide for an equitable and inclusive system of education, due to local geographical terrain and socio-economic condition.  
  To achieve this objective through the SALT Program, will require special effort in community mobilization and garnering larger community support.

**Core Principle 6:** Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

- There are no social conflict-affected areas in the state.  
  And, in any case, the program interventions do not exacerbate any social conflicts as it supports the school education system in Andhra Pradesh leading to overall learning outcomes. Also, exclusion of any groups in terms of caste, religion, and/or geography by the program activities is not expected.  
  No relevant recommendations.

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

24. The government’s program is marching ahead with activities to bring in positive changes much needed in the schools. However, the absence of a dedicated unit to focus on environmental and social considerations in program
design and implementation is noteworthy. While the existing program incorporates considerations for using durable materials and standard designs for civil construction in their program operations there exist ample opportunities to suitably factor in environmental considerations in program planning, implementation, operation maintenance stages. Prior program screening and planning to avoid and/or mitigate impacts arising out of its operations is essential. Incorporating environmental enhancement opportunities in program design involving students, schools, and PCs. The program has not so far organized any training programs for the staff on environment-related aspects. It is essential to incorporate a separate unit or department at the State level on Sustainable Development to bring environmental considerations into practice. It is proposed to have a Sustainable Schools Unit (SSU) – an E&S Cell at State Level with adequate capacities and tools to manage environmental and social aspects under the program and to guide overall improvement. There shall be Nodal Officers for E&S management at District and School levels.

25. It is required to follow exclusion criteria and on-site screening to avoid impacts on critical habitats and cultural resources. This is to be undertaken by the proposed unit/department at the earliest. For all school-level programs of the government, comprehensive program planning based on rapid, phasing, contingency plan, and emergency response mechanism to support activities in case of unforeseen circumstances are essential.

26. **Screening and Exclusion of High-Risk Activities:** It is proposed to screen the project activities in each campus and exclude those which will entail higher risks. The following activities will be excluded from the program because of the high environmental risk:

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<tbody>
<tr>
<td>1) New Construction, Demolition, Repair/up-gradation activities and discharge of wastewater/ wastes from proposed facilities within the following areas given the high risk posed to natural habitats and cultural resources:</td>
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<tr>
<td>a. areas within 300m radius of Nation/State protected monuments (including 100m from the limit of the protected area – which is the prohibited area, and 200m Regulated area from the boundary or protected area or as declared by the Government)</td>
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<tr>
<td>b. notified wetlands/water bodies, protected/forest areas, areas such as national parks and wildlife sanctuaries, coastal regulation zones I and IV</td>
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<tr>
<td>2) Construction of new buildings or facilities of more than two storey in height</td>
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<tr>
<td>3) Purchase or construction/demolition using Asbestos-containing materials, and purchase and use of banned Insecticides</td>
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27. The projects include a ‘Green Gift Box’ a package to schools to ensure overall environmental sustainability in all interventions, which would ensure ‘whole school environment improvement’, through its four components: (i) Safe, hygienic, and Climate Efficient MDM facilities, (ii) Conservation through greening the campus, (iii) Resource Efficient and Accessible WASH facilities and repair activities, (iv) Resource Efficiency through whole school waste management. Integrate the activities of the National Green Corps (Eco-clubs) to ensure overall sustainability and green practices – by involving them in creating tree cover, supporting in recycling wastewater and wastes, and conduct safety audits and awareness drives.

28. It is recommended to introduce regular supervision and monitoring mechanisms. Social Audit to report on EHS aspects and following of screening matrix and guidance. There shall be an appropriate work-close-out procedure, covering all aspects for the sustainability of activities related to the project.

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3 Refer The Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, 2010(10 of 2010) on grant of permission within Regulated area: “If the competent authority, after grant of the permission under sub-section (4) and during the carrying out of the repair or renovation work or re-construction of building or construction referred to in that sub-section, is of the opinion (on the basis of material in his possession or otherwise) that such repair or renovation work or re-construction of building or construction is likely to have an adverse impact on the preservation, safety, security or access to the monument considerably, it may refer the same to the Authority for its recommendations and if so recommended, withdraw the permission granted under subsection (4) if so required”

4 “Every building exceeding two storeys in height shall be constructed of fire resisting material throughout” - as applicable to educational buildings as per Andhra Pradesh Building Bye Laws. This exclusion is applied here considering that the works are under community contracting. Repairs which are part of Nadu Nedu program are allowed beyond two storeys with fire resistant materials.
29. Improved school management shall be measured by a standardized tool that includes indicators on environmental sustainability. School performance evaluation tool (digital) (EMIS) shall incorporate monitoring of E&S aspects and O&M of assets created as well.

Table B: Recommended Action for Program Action Plan

<table>
<thead>
<tr>
<th>Action Description</th>
<th>Source</th>
<th>Responsibility</th>
<th>Timing</th>
<th>Completion Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment of Sustainable Schools Unit (SSU) at the SIS for Samagra Shiksha for E&amp;S Management</td>
<td>Environmental and Social Systems</td>
<td>DoSE, GoAP</td>
<td>Due Date</td>
<td>3 Months of Effectiveness</td>
</tr>
<tr>
<td>School based E&amp;S recommendations included in School Performance Evaluation tool</td>
<td>Environmental and Social Systems</td>
<td>DoSE, GoAP</td>
<td>Due Date</td>
<td>31-Mar-2022</td>
</tr>
<tr>
<td>Establishment of a web-based Grievance Redressal/Feedback Mechanism</td>
<td>Environmental and Social Systems</td>
<td>DoSE, GoAP</td>
<td>Due Date</td>
<td>Before Effectiveness</td>
</tr>
<tr>
<td>Development of a strategy to improve learning outcomes in the 66 ITDA blocks of AP. The strategy will be developed in coordination with the Department of Tribal Welfare.</td>
<td>Environmental and Social Systems</td>
<td>DoSE, GoAP</td>
<td>Due Date</td>
<td>31-Mar-2022</td>
</tr>
</tbody>
</table>

Disclosure and Consultations

30. The team undertook consultations at the state, and district, schools (during the development of the instrument) with PCs, relevant stakeholders, and government institutions. The draft ESSA and its executive summary translated to local language: Telugu have been disclosed on DoSE website (see: https://schooledu.ap.gov.in/Doc21/Draft_ESSA_SALT.pdf) on February 18, 2021, to enable its wider reading before consultations (held during February 23 - 25, and March 2021). Final ESSA was also disclosed in-country and on the World Bank’s external website during appraisal in April 2021, after incorporating comments and suggestions.

Way Forward

31. The Program will ensure adequate resources are provided for timely and effective implementation of environmental and social measures and the key recommendations are made a part of the Program Action Plan.
INTRODUCTION TO THE PROGRAM

1.1 Country and State Context

1. India’s Gross Domestic Product (GDP) growth has slowed in the past three years, and the COVID-19 outbreak is expected to have a significant impact. Growth has moderated from an average of 7.4 percent during FY15/16-FY18/19 to an estimated 4.2 percent in FY19/20. Although India has made remarkable progress in reducing absolute poverty, the COVID-19 outbreak has reversed the course of poverty reduction. Between 2011-12 and 2017, India’s poverty rate is estimated to have declined from 22.5 percent to values ranging from 8.1 to 11.3 percent.

2. Andhra Pradesh (AP) is one of the faster-growing states in the country. However, poverty, illiteracy, and malnutrition remain a concern. In 2014, Andhra Pradesh was bifurcated into two states – Andhra Pradesh and Telangana. Hyderabad, the former capital of Andhra Pradesh, with most of the existing public institutions and revenue base, became the capital of Telangana. As a result, Andhra Pradesh has had to rebuild its public institutions. Many of the state institutions continue to have limited capacity. It is the seventh-largest state in India by area, has a population of 49 million, and a per capita income (current prices) of US$2,260. The state has a Gross State Domestic Product at current prices (2019-20) of about US$130 billion. In 2018, the state adopted a Multidimensional Poverty Index (MPI) that estimated the headcount of poverty in the state at 21 percent. Andhra Pradesh had a literacy rate of 68 percent and a sex ratio of 992 females per 1,000 males. About 35 percent of children (0 to 59-month-old) are stunted. Scheduled Caste (SC) and Scheduled Tribes (ST) share in the state population is 16 percent and 7 percent respectively.

1.2 Sectoral and Institutional Context

3. The state’s public-school education system serves 3.9 million children (49.5 percent of overall enrollment) with around 44,500 schools and 190,000 teachers. The elementary and secondary Gross Enrolment Ratios are 86 and 82 percent respectively. Primary to upper primary and upper primary to secondary transition rates are 97 and 96 percent respectively. Most of the students in government schools are girls who, as well as the students belonging to Scheduled Castes and Scheduled Tribes (SC & ST), together constitute more than 70 percent of the student strength.

4. Poor school infrastructure and facilities, and a limited focus on foundational learning (Kindergarten to Grade 2; Age 3 to 8) have hurt enrolment in public schools and student learning levels. About 33,500 public schools only provide primary education (Grades 1 to 5). A network of more than 50,000 Anganwadis is responsible for providing three years of Early Childhood Education (ECE). The absence of quality ECE, the limited pedagogical connection between ECE services offered at Anganwadis and the early grades, and the limited availability of Teaching Learning Material (TLM) to support a play-based pedagogy are key issues. Limited experience in the area of measuring children’s developmental outcomes at the ECE stage limits the use of data/evidence for decision-making related to teacher professional development. As of 2018-19, the percentage of schools with functional girls’ and boys’ toilets and functional drinking water facilities was 61 percent, 55 percent, and 74 percent respectively. Most classrooms needed major repairs and many lacked furniture for students. Further, despite being connected to the electricity grid, most schools did not have electrical fixtures (lights and fans). The lack of an appropriate learning environment has been leading to a gradual emptying of public schools.

5. In line with the New Education Policy (NEP) 2020, the state has taken concrete steps to establish a greater pedagogical continuum between the ECE offered by Anganwadis and the early grade education offered in public primary schools. To address deficiencies in school-level essential facilities, the government has initiated the Mana Badi – Nadu Nedu (in Telugu meaning ‘Our School – Then and Now’; hereinafter Nadu Nedu) initiative. Under the program, Parent Committees (PCs) have been empowered to carry out assessments of infrastructure/facilities and identify gaps that need to be addressed. A community contracting model is being used to carry out the required development works. Standardized designs and specifications have been developed at the State level; civil engineers have been engaged to oversee technical aspects, and an Information and Communication Technology (ICT) enabled system has been set up for Geographic Information System (GIS)-enabled monitoring. Under Phase I of Nadu Nedu,

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5 Socio-Economic Survey of Andhra Pradesh, Department of Planning, Government of Andhra Pradesh
6 Anganwadis are early childhood care and development centers operated under the Integrated Child Development Services (ICDS) scheme of the Government of India. Amongst other key childcare services, these centers provide early childhood education.
7 UDISE Plus (2018-19)
work has been initiated across 15,715 schools.

6. Limited opportunities for need-based teacher professional development and peer-to-peer learning are constraining the state’s ability to transition from curriculum to competency-based teaching-learning. AP faces several key challenges in education service delivery, which are exacerbated by weak institutional capacity as a result of the bifurcation of the state in 2014. State Council of Educational Research and Training (SCERT), District Institutes of Education and Training (DIETs), and State Institute of Educational Management and Training (SIEMAT) continue to lack the capacity and experience essential for delivering the required professional development and remedial education programs, and state and school-level assessments. Lack of an Education Management Information System (EMIS) and limited capacity building support for decentralized education functionaries and school leaders have restricted their focus to administrative responsibilities.

7. The state has a varied climate and frequently deals with various climate-induced disasters. In AP, humid to semi-humid conditions prevail in the coastal areas, and arid to semi-arid situations are prevalent in the interior parts (particularly Rayalaseema). While coastal districts experience mild summers and winters, temperatures in the interior districts can vary from 10 degrees to 47 degrees Celsius. Inter-district variation for annual rainfall ranges from 300 mm in the Rayalaseema region to 1,000 mm in the coastal areas. The Rayalaseema region is especially susceptible to heatwaves and droughts. Districts like Visakhapatnam, East Godavari, West Godavari, and Krishna have high exposure to floods and cyclones. There are years when the state has experienced the simultaneous occurrence of droughts in interior districts and floods in coastal districts. In the past century, the state has experienced more than 103 cyclones, of which 31 were severe. Scientific predictions suggest that both the frequency and severity of cyclones will go up due to climate change.

8. Andhra Pradesh faces several key challenges in education service delivery, which are exacerbated by weak institutional capacity as a result of the bifurcation of the state in 2014. Till recently, there was a limited focus on ECE, which meant that children were not receiving the right start. Teachers have not yet been able to transition from curriculum to competency-based teaching-learning. This is due, in part, to poor institutional capacity to facilitate high-quality professional development opportunities for both teachers and school leaders. Children at all levels lack access to structured remedial education programs and properly equipped learning environments, which will be key factors for educational success in the wake of the COVID-19 pandemic. To respond to the challenges posed by the pandemic, the state has activated various high-tech and low-tech channels for facilitating home-based learning. Going forward, enhancing the quality and depth of the content available across these channels would need to be a focus area.

9. Within the larger school education program of the state and the budget that supports the same, the use of the Program for Results (PforR) instrument for the SALT program will provide a results orientation by linking funding to key educational outcomes. In doing so, the instrument will provide the state, and the decentralized education institutions the flexibility to design, deploy, and iterate initiatives in line with the local context. A PforR operation would further strengthen the use of country systems for program management, implementation, and monitoring. The key results expected under the operation will be delivered at the school and district levels and will be technically supported and/or led by the SCERT and SIEMAT. These institutions will be responsible for the teacher and school leader professional development, state, and school-level assessment, and remedial education initiatives envisioned under SALT. Therefore, the SALT program will leverage the PforR instrument to incentivize the performance of these institutions. The Disbursement Linked Indicators (DLIs) will help operationalize this arrangement of results-based financing. The PforR operation will be supported by a ‘Capacity Building Component’ (under Investment Project Financing (IPF) financing instruments) that will be leveraged to engage technical experts/organizations that can provide capacity building and implementation support for these institutions. In doing so, it will reduce the risks associated with ‘Institutional Capacity for Implementation and Sustainability’. It will also be leveraged to set up the state’s EMIS, providing for a more systematic channel for the collection, collation, flow, and analysis of data for policy formulation, program iteration, and results tracking.

8 IPF applies World Bank’s Environmental and Social Framework (ESF)
1.3 Government Program

10. The overall program of the Government of AP (GoAP) comprises Samagra Shiksha\(^9\), multiple state-level initiatives, and support to government-aided schools. The state budget (state-level initiatives) primarily funds teacher salaries (including grants to government-aided schools), and supplementary expenditure to enhance the student entitlements and student meal programs funded under Samagra Shiksha. Funding for most of the initiatives associated with quality improvement/enhancement is covered under Samagra Shiksha. This includes investments towards strengthening foundational learning, teacher and school leader professional development, learning enhancement programs, assessment systems’ strengthening, and development of teacher education institutions. It also provides funds to meet administrative expenses (primarily salaries), provision of vocational education, and salaries of teacher educators.

11. About 80 percent of the education budget is being used to support teacher salaries, and about 14 percent of it is being used to fund school meals, scholarships, student entitlements, administrative expenses, and regular school operation expenditure. This limits the funding available for investments in initiatives directed at improving the quality of education. Also, most schools in the state lack basic facilities and infrastructure and need major repairs. There is little funding available for the same. To address these deficiencies, the government has envisioned the SALT program for transforming government schools into vibrant and competitive institutions. The program has been defined to focus on foundational learning, improving facilities, teacher professional development, assessment systems strengthening, remedial education, and school leadership development. It places a heavy emphasis on support to students from marginalized groups by focusing on Children with Special Needs (CwSN), ST students, and girls. The program covers all 44,500 government-managed schools in the state, all state and district level nodal educational institutions (SCERT, SAC, SIEMAT, and DIETs), decentralized education management functionaries such as Mandal Education Officers (MEOs), Cluster Resource Centre Coordinators (CRCCs) and School Leaders), and the 190,000 teachers.

1.4 Bank Financed PforR Scope, Objectives, and Key Results Areas

12. The overall program of the Government of AP (GoAP) comprises multiple schemes and initiatives of the state, and Samagra Shiksha – the centrally sponsored scheme for school education. The SALT program focuses on the ones that directly impact student’s education outcomes. While the state budget accounts for most of the expenditure, it mostly covers teacher salaries; school construction, repair and maintenance; and provision of student entitlements. Samagra Shiksha provides most of the funding for quality enhancement initiatives. While this funding can sustain initiatives, it is not enough for the development and rollout of large-scale transformational programs. The SALT program seeks to address this gap by focusing on three results areas.

1.5 Program Financing

13. The SALT program accounts for about 7.8 percent of the overall government program, and 77 percent of the SALT program will be financed through counterpart funding. A high share of counterpart financing is expected to play a positive role in ensuring the sustainability of initiatives undertaken under the program. The overall sustainability of operations is further enhanced by the fact that over the past three years the state’s school education budget has been growing at about 7 percent per annum. Additionally, at least 34 percent of funds under the SALT program are expected to be utilized for school-level facility upgradation (Nadu Nedu). This non-recurring expenditure is expected to conclude in the first three years of the program, and this would gradually start freeing up more funds for sustaining the interventions being initiated under the SALT program.

1.6 Program Development Objective(s)

14. The PDO is ‘to improve learning outcomes, quality of teaching practices and school management in basic education’ in AP. The program will use three key results indicators to track the achievement of the PDO.

\(^9\)Centrally sponsored scheme on school education that supports K-12 education, teacher training institutions and mid-day meal; funded under a 60:40 sharing ratio between the Government of India and the Government of Andhra Pradesh. It subsumes the three Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE).
15. SALT seeks to enhance the quality and management of foundational learning, elementary and secondary education in Andhra Pradesh by (i) strengthening the quality of foundational learning; (ii) improving the quality of student-teacher interactions; and (iii) strengthening institutional capacity for service delivery.

1.7 PDO Level Results Indicators

1.7.1 Results Area 1 (RA-1) – Strengthened Foundational Learning

(i) Development and provision of short-term training course to Anganwadi workers and early grade schoolteachers.

(ii) Provision of standardized training and learning materials across Anganwadis and early grade classrooms.

(iii) Provision of teacher training and training and learning materials to tribal schools.

(iv) Design and implementation of behavior change and communication strategy in tribal blocks to promote enrolment of children in preschool education and their continuous school education thereafter.

(v) Infrastructure repairs and facilities upgradation in schools.

1.7.2 Results Area 2 (RA-2) – Improved Quality of Teaching-Learning Interactions

(i) Development and implementation of a model of need-based teacher professional development, school-based learning, and peer-to-peer learning for teachers.

(ii) Support SCERT and DIETs for providing in-service teacher training opportunities.

(iii) Support for courses on planning and management of remote learning, technology, and digital pedagogical skills for teachers.

(iv) Repair and refurbishment of Children with Special Needs (CwSN) resource centers and provision of aids, appliances, and kits to support center, home, and school-based education for children with special needs.

(v) Establishment of a specialized cell for inclusive education at the SCERT to promote the provision of need-based teacher training and guidebooks to address educational requirements of children with special needs.

(vi) Strengthening of the use of classroom assessments as tools for ongoing student remediation and competency-based learning.

(vii) Strengthening system-level assessments as tools for informing education policy and practice across the state.

(viii) Piloting of a technology-enabled personalized adaptive learning system in residential schools to provide customized remedial learning to children.

(ix) Sensitization and training of teachers to support them in the identification of gender stereotypes in classroom interactions and addressing learning gaps experienced by girls due to the COVID-19 pandemic.

1.7.3 Results Area 3 (RA-3) – Strengthened Institutional Capacity and Community Engagement for Service Delivery

(i) Development and implementation of a social audit tool to enable greater community engagement in school operations and performance.

(ii) Training and capacity building of school leaders and education functionaries in leadership skills and disaster risk management.

(iii) Support for state and district level educational institutions to develop results-oriented annual work plans and budgets.

(iv) Establishment of village-level inter-departmental committees in select tribal blocks to monitor instances
of early marriages, drop-outs and physical and/or sexual harassment of girls.

(v) Support for mitigating school-related gender-based violence, including through training of teachers, administrators and Parent Committees; creation of web portal for reporting of grievances; and creation of a holistic identification, response, and redressal system.

1.8 Expenditure Framework

16. The SALT program accounts for about 7.8 percent of the overall government program, and 77 percent of it will be financed through counterpart funding. A high share of counterpart financing will help ensure the sustainability of initiatives. The overall sustainability will be further enhanced by the fact that over the past three years, the state’s school education budget has been growing at about 7 percent per annum. Additionally, at least 34 percent of funds under the SALT program are expected to be utilized for school-level facility upgradation. This non-recurring expenditure is expected to conclude in the first three years of the program, and this would gradually free up more funds for sustaining the interventions being initiated under the program.

Table 1: Expenditure Framework and Program Financing

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount (US$Million)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Government Program (Including SALT Program)</td>
<td>12,824</td>
<td></td>
</tr>
<tr>
<td>Of which, State Budget (Including Nadu Nedu initiative)</td>
<td>11,478</td>
<td>89.5 percent</td>
</tr>
<tr>
<td>Of which, Samagra Shiksha</td>
<td>1,346</td>
<td>10.5 percent</td>
</tr>
<tr>
<td>SALT Program</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Counterpart Funding</td>
<td>770</td>
<td>77 percent</td>
</tr>
<tr>
<td>Of which, State Budget (Nadu Nedu 10 initiative only)</td>
<td>340</td>
<td></td>
</tr>
<tr>
<td>Of which, Samagra Shiksha11</td>
<td>430</td>
<td></td>
</tr>
<tr>
<td>International Bank for Reconstruction and Development (IBRD)</td>
<td>230</td>
<td>23 percent</td>
</tr>
<tr>
<td>IPF ‘Capacity Building’ Component Supporting SALT Program</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

1.9 Disbursement Linked Indicators

17. The SALT Program uses the Program for Results (PforR) instrument with a supporting Investment Project Financing (IPF) ‘Capacity Building’ Component. Under the PforR instrument, funds will be disbursed on the achievement of specific results, measured by DLIs summarized below. The IPF component will disburse against expenditure. The results to be delivered under the same have not been included in the DLIs. Apart from the three PDO indicators, results from nine intermediate outcome indicators have been included as DLI indicators. These have been selected based on the extent to which they signal the implementation of critical actions or realization of key output, and the perceived need to introduce a strong financial incentive to deliver the same. The choice of each DLI and the DLI values for each year are based on (a) the signaling role of the indicator (that is, the extent to which it signals the implementation of critical action, output, or outcome in the results chain); (b) the perceived need to introduce a strong financial incentive to deliver the activity, output, or outcome; (c) practical aspects of verifying achievement; and (d) GoI capacity to achieve the DLI during the implementation period.

18. The following are the Disbursement Linked Indicators (DLIs) for the program:

Table 2: Proposed DLIs for SALT Program

<table>
<thead>
<tr>
<th>#</th>
<th>Disbursement Linked Indicator</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Decrease in the percentage of Grade 4 students below grade-level proficiency in Mathematics</td>
<td>US$19,500,000</td>
</tr>
<tr>
<td>2</td>
<td>Improved teaching practices measured according to a standardized classroom observation tool</td>
<td>US$20,750,000</td>
</tr>
<tr>
<td>3</td>
<td>Improved school management as measured by a standardized tool</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Learning environment enhanced with major repairs, essential facilities, furniture, and electrical fixtures</td>
<td>US$107,500,000</td>
</tr>
<tr>
<td>5</td>
<td>Improved teacher capacity to support early grade education and preparatory schooling</td>
<td>US$15,000,000</td>
</tr>
<tr>
<td>6</td>
<td>Improved coverage under need based in-service training reported to be of satisfactory quality</td>
<td>US$20,000,000</td>
</tr>
</tbody>
</table>

10 Only non-recurring head of expenditure
11 Excluding teacher salaries, student entitlements, mid-day meals, greenfield infrastructure and vocational education
1.10 Alignment between the overall government program and the PforR program

**Table 3: Alignment of Government Program with the PforR Program**

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Government program</th>
<th>PforR Program</th>
<th>Reasons for non-alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>To transform government schools into vibrant and competitive institutions</td>
<td>To enhance the quality and management of foundational learning, elementary and secondary education in Andhra Pradesh</td>
<td>The objective of the PforR program provides greater outcome orientation and facilitates measurability of results</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>Ongoing</td>
<td>Sep 2021 to Sep 2026</td>
<td>The PforR program is directed at making structural and strategic changes in key results areas. These will be sustained by the overall government program.</td>
</tr>
<tr>
<td><strong>Geographic coverage</strong></td>
<td>Entire state – all government-managed and private-aided schools</td>
<td>Entire state – all government-managed schools</td>
<td>The PforR Program will support the government-managed schools while the government program also supports private-aided schools.</td>
</tr>
<tr>
<td><strong>Results areas</strong></td>
<td><strong>RA-1</strong>: Foundational Learning (including ECE and school facilities); <strong>RA-2</strong>: Improved Quality of Teaching-Learning Interactions (teacher professional development, capacity building of teacher education institutions, remedial education, and learning assessment); <strong>RA-3</strong>: Strengthened institutional capacity and community engagement for service delivery (school leadership development, community-led management of schools, institutional capacity); <strong>RA-4</strong>: Universal access to elementary and secondary education (school construction, mid-day meal, student entitlements, and salaries); and <strong>RA-5</strong>: Vocational Education</td>
<td><strong>RA-1</strong>: Foundational Learning (including ECE and school facilities); <strong>RA-2</strong>: Improved Quality of Teaching-Learning Interactions (teacher professional development, capacity building of teacher education institutions, remedial education, and learning assessment); and <strong>RA-3</strong>: Strengthened institutional capacity for service delivery (school leadership development, community-led management of schools, institutional capacity)</td>
<td>The PforR Program will cover RA-1 to 3, as they directly impact the quality of education being imparted in schools; are underfinanced and are supported by institutions with weak capacity. The PforR Program excludes RA-4, as there is currently enough provision of school buildings and teachers. Multiple initiatives in the area of mid-day meals, student entitlements (textbooks and uniforms), scholarships/stipends, etc. are already in place. The PforR program excludes RA-5 as students’ demand for vocational education is low. It is not a priority area for the state. Pilot initiatives would be required to develop a scale model.</td>
</tr>
<tr>
<td><strong>Overall Financing</strong></td>
<td>US$ 12.5 billion</td>
<td>US$ 1.27 billion</td>
<td></td>
</tr>
</tbody>
</table>
1.11 Program Implementation Arrangements

19. The program will be implemented by the Department of School Education (DoSE), GoAP through its constituent agencies. The State Implementation Society (SIS) for *Samagra Shiksha* 12 will be the nodal implementation agency for the program. It will be responsible for overall program management and coordination. In particular, the *Nadu Nedu* scheme will be implemented by the SIS through PCs and the A.P. Education & Welfare Infrastructure Development Corporation (APEWIDC). It will be supported by several other ‘facilitating agencies’ that will not spend any funds or procure any goods/services under the program. These ‘facilitating agencies’ are only providing advisory and/or supervisory support in the area of civil engineering and/or civil works. On the other hand, interventions aimed at improving the quality of teaching and learning will be directly implemented by implementation agencies such as the SCERT, the SIEMAT, as well as the DIETs (district level bodies). At the sub-district level, program activities will be coordinated by education functionaries (MEOs and CRCCs).

20. The *Nadu Nedu* scheme which is aimed at improving school facilities will be implemented through an innovative model that comprises a decentralized component along with centralized procurement at the state level. At the decentralized level, PCs will be involved in the planning, management, and monitoring of work to ensure a high-quality service in all activities is maintained. At the state level centralized procurement for items such as furniture, cupboards, green chalkboards, white writing boards, sanitary ware, fans, and tube lights and painting work will be implemented by the APEWIDC. While the parent committees and APEWIDC will be the implementation agencies of the *Nadu Nedu* scheme, seven additional government departments including the Panchayat Raj Engineering Department, A.P. Education & Welfare Infrastructure Development Corporation (APEWIDC), Municipal & Public, Health Engineering Department, Tribal welfare Engineering Department, Rural Water Supply and Sanitation, Housing Department will be engaged as facilitating agencies. Each of these has been allocated Mandals (different regions where they have a prominent engagement profile) to monitor the execution, quality, and progress of the works in their jurisdiction and no money will flow through these facilitation agencies.

![Figure 1: Institutional Responsibility for SALT Program](image)

21. Complimenting the up-gradation work, all activities aimed at directly improving the quality of teaching and learning will be implemented through the SCERT, SIEMAT, and the DIETs. The SCERT along with its network of DIETs in each district will execute all activities related to RA-2 including teacher professional development. Additionally, the

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12 Memo No. ESE 01/12/2/Prog.I/Al/2018 Dated:10.05.2018 Sub: School Education - Integration of Centrally Sponsored Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (CSSTE) into one Single State Implementation Society (SIS) at the State Level - Permission accorded to register a society as Andhra Pradesh Samagra Shiksha Abhiyan, Amaravati under Societies Registration Act, 2001- Orders - Issued. AP Samagra Siksha Abhiyan will be the integration of SSA RMSA Schemes. Permitted to integrate Centrally Sponsored Schemes of SSA, RMSA and Teacher Education into Single State Implementation Society (SIS) and register a new society in the name of “Andhra Pradesh Samagra Shiksha Abhiyan” Objectives of AP Samagra Siksha Abhiyan (APSSA)
state assessment cell at the SCERT will implement the activities on assessment reforms with support from designated assessment experts at each DIET. The SIEMAT will executive all activities related to Result Area 3 including the school leadership development programs, development of an EMIS, facilitation of school performance evaluations, and training of front-line administrators. The Result Area 1 on foundational learning will be implemented by the DoSE in a strategic convergence with the Department of Women, Children, Disabled and Senior Citizens (DoWCDSC). While, the development of an integrated package of ECE services including the curriculum, teaching and learning materials, and teacher training modules and guidebooks will be executed by the SCERT, the DoWCDSC will act as a facilitation agency. It will provide access to the Anganwadis, the Anganwadi workers, and the supervisors for the roll-out of all activities, and monitoring support.

1.12 Description of Program Activities and Identification of Environmental and Social Effects

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

1.12.1 Key social issues associated with the Program

23. From a social systems perspective, the process of planning and execution of construction activities involves the community in planning and implementation through Parents’ Committees. Though the process of planning for school infrastructure has been a well laid out process through the Nadu Nedu Program, however, the current process does not specify a mechanism for systematic screening of E&S risks and impacts, particularly social risks related to a) labor management and OHS issues, b) SEA/SH risks and SRGBV monitoring and c) capacity of representatives of Parent Committees to monitor and evaluate school management needs.

24. The key social risks and impacts of the Program are likely to include (i) low transition and completion rates for students from vulnerable communities/ITDA blocks of the state; (ii) low capacity of Parents Committees in ITDA blocks to undertake civil works and regular social audits; (iii) occupational health and safety hazards experienced by laborers on construction sites; (iv) risks of early marriage and consequent drop-out from secondary schools amongst adolescent girls, especially in tribal/rural areas of the state; (v) barriers to transition from elementary to secondary grades for both girls and boys due to the on-going adverse impacts of COVID-19; (vi) low awareness levels amongst parents/communities in tribal and rural blocks of the state; (vii) lack of clear two-way information flows/communication pathways for sustained beneficiary/citizen engagement; (viii) intra-state variations in capacities of last-mile delivery officials, i.e. BRPs/CRPs, particularly in ITDA blocks and (ix) risks related to on-campus harassment and isolated instances on gender-based violence.

25. The DoSE and SIS for Samagra Shiksha follow a range of consultations with various stakeholders, including monitoring of learning outcomes through the social audit process. Through this, it guides and ensures the responsibility and accountability of different stakeholders. The Samagra Shiksha Framework also proposes to undertake community mobilization and close involvement of community members in school education to foster a ‘bottom-up approach’ not only for effective planning and implementation of interventions but also for effective monitoring, evaluation, and ownership of the government programs by Parents’ Committees. The proposed SALT program further plans to strengthen this under Results Area 3 through (1) development of the state’s EMIS to facilitate the digital transformation of management and monitoring functions of the system; (2) Nodal state and district level educational institutions will be empowered to develop results-oriented AWP& Bs; (3) stakeholder involvement from different sections; (4) enhancing accountability through stakeholder empowerment; and (4) establishment/strengthening of village-level inter-departmental committees in select ITDA blocks to monitor instances of early marriages, drop-outs, and physical and/or sexual harassment experienced by adolescent girls.
26. The DoSE follows the process of the social audit to create transparency, participation, and accountability in the program implementation at the school level, which is clearly articulated in the Samagra Shiksha framework. Social audit is carried out by the Parents’ Committees with the participation of other stakeholders including PRI members, local authority, members of SMC/SDMC, etc. at least once a year.

27. For Grievance Redress Management, the Government of Andhra Pradesh under the RTE act has authorized local authorities including Gram Panchayat, CRC, Taluk Panchayat, and District Project Coordinator Office in rural areas and Ward Office, CRC, Municipal Office, and Administrative Office in urban areas. However, currently, a clear system that specifies the time duration for disposal of grievances and escalation authority is found to be missing.

1.12.2 Key environmental issues associated with the Program

28. Program activities will span various districts of AP, including urban and rural areas. Studies and consultations for environmental aspects of ESSA take into account the two distinct geographies of the state which shows distinct settlement patterns, environmental aspects, culture, industrial growth, and development stages; namely; (a) Coastal Andhra with its deltas, plains (including Andhra Plains) along the east coast, as well as hilly forested parts of the Eastern Ghats; and (b) Rayalaseema; the southwestern plateau regions. The program supports essential repairs, construction of toilets, compound walls, furniture, painting, electrification, drinking water supply, and provision of green chalkboards in all government-owned schools (with existing school campuses) across AP irrespective of urban/ rural (including tribal blocks) differentials. All works follow the same standard specifications and design finalized at the State level with flexibility to ensure special structural safety taking care of additional requirements in coastal areas, where climate risks are high. Plans for works are finalized by PC, school leadership, and site engineer as per the requirements and characteristics of each campus. In each area, existing government departments with a strong presence and local implementation experience are appointed as facilitating agencies (for example Tribal Welfare Department with strong experience working in and understanding the needs of Tribal areas).

29. The screening and assessment considered aspects such as (i) the likely environmental effects and risks, (ii) the state/sector context, (iii) institutional capacities and performance in earlier projects/programs, and (iv) political and reputational risks; it assessed the overall risk rating for environmental aspects as ‘moderate’. Minor civil works will be supported under the program including small-scale construction or repair/modifications, water and sanitation facilities including toilets, electricity, compound walls, providing universal access. COVID-19 response actions include school sanitation, purchase, and use of masks and sanitizers. Considering the minor purchase of goods and localized minor construction works and cleaning activities in existing school premises, monitored by the local communities, the risks are expected to be limited in impact and are expected to be away from sensitive areas (as they would be in existing school premises). It reflects that the Program will support long-term environmental benefits in these areas and does not anticipate any adverse risks on the environment including diversion of forest land, or risks to natural habitats.

30. The GoAP is undertaking the Nadu Nedu scheme aimed at improving school facilities, supported through specialized government departments (Facilitating Agencies) and Parent Committees (community participation) following common standards for civil works, specifications for furniture and water and sanitation facilities, and School Level Disaster Management Guidelines. Guidelines and monitoring are limited to a) design standards/specifications with consideration on universal access, b) disaster management guidelines focusing on training and capacity for a coordinated response while not discussing disaster resilient features suited for specific geographies. There exist no guidelines for screening and exclusion of activities of high risks, pollution management, or occupational and community health and safety or monitoring environmental and safety aspects. Review of existing guidelines point out the need to upgrade the capacities to address the risk of pollution and safety including (i) better indoor/outdoor spaces, improved illumination, and universal access, which would take ahead the concept of Building as Learning Aide (BaLA); (ii) sustainable water, sanitation services (for students, teachers, and visitors) and management of waste / waste water from these facilities (including masks, sanitizers, general waste associated with COVID-19 response activities); (iii) Occupational and Community Health and Safety (OCHS-for workers, communities, teachers, visitors and students), (iv) choice of fuel used for mid-day-meal (MDM) program and storage facilities, (vii) materials used in physical learning kits, masks and sanitizers / other cleaning products (proposed for COVID-19 response), (viii) structural safety in different geographic /climatic conditions, fire/emergency/disaster management capacities; and
(ix) capacities to implement and monitor environmental and safety aspects and including regulations, permit requirements and guidelines at all levels.

31. **Diagnosis of school level needs, procurement, payment for services, and monitoring of works are being managed at the community level by the PCs.** This highlights the high degree of community involvement in school-level planning and management essential for the long-term sustainability of facilities created. Design and implementation are carried out with the help of APWEIDC and seven state agencies: the Panchayati Raj Engineering Department, Municipal and Public Health Engineering Department, Tribal Welfare Engineering Department, Rural Water Supply and Sanitation Department, and Housing Department which provide good engineering support; and procurement is carried out by PCs who also monitors. It is important to improve capacities for environmental management during all stages to create a safe and useable environment. Involvement of communities and specialized agencies (different agencies in different regions) in the design and implementation supports addressing these risks provided there is ample guidance and awareness. It is required to streamline/bring such guidance and capacities into the program not only for the implementation period but also to ensure sustainable and safe operations; especially in different regional contexts (such as coastal areas). Awareness and training needs of students, workers, and communities on environmental aspects, and actions to ensure responsibilities for environmental aspects, and improve the monitoring capacity of agencies/communities are detailed out in the ESSA. ESSA also includes a list of ineligible activities, which shall be excluded under the program, and outlines the steps (action plan) to be followed by the borrower to mitigate potential adverse risks and impacts. Guidance on COVID-19 response-related actions was ascertained during project preparation and made available early on to be followed for any COVID-19 response’s prior results.

32. **Overall, the environmental impacts are likely to be site-specific/localized and can be mitigated with improved capacities for proper planning/design of environmental measures, adoption of good standards, and best practices for construction and operation, and maintenance of facilities.** (i) pollution risks in school campus and nearby areas (including natural habitats) due to lack of attention to (a) noise, dust and disposal of construction and demolition wastes and scraps (b) poor management of liquid wastes from WASH facilities and mid-day-meal kitchens solid waste from schools (including food waste, packaging wastes, plastics, sanitary napkins and masks), (c) mixing up of hazardous and e-wastes from schools from electrical and digital hardware (also associated with use of digital EMIS proposed to be developed under IPF component) with general waste and health concerns of burning these, (d) choice of materials and technology while upgrading facilities (such as high water or energy use fixtures, reliance on fire wood for cooking even after being provided with LPG, universal access, materials used in physical learning kits, and masks, sanitizers and other cleaning products); (ii) Occupational and Community Health and Safety (OCHS) risks including temporary inconvenience and disruption to school activities during minor construction and repairs, health and safety issues of workers, communities, teachers, visitors and students due to poor site housekeeping, work management and worker/workspace - student interactions, and risks due to hygiene practices post reopening of schools; (iii) Disaster and emergency related risks including fire, electric safety and climate risks, lack of preparedness, capacities and arrangements for emergency response and worker and work safety in different geographic/climatic conditions (heat wave, cyclone and flooding during specific seasons). These risks can be managed by developing capacities to screen, review, implement and monitor environmental and safety aspects and following regulations, permit requirements, and guidelines, and increasing the awareness and capacities on environment and disaster response.

33. **These risks can be managed by developing capacities to screen, review, implement and monitor environmental and safety aspects and following regulations, permit requirements, and guidelines at all levels.**

### 1.13 The organization of ESSA Report

34. **This report is the ESSA for SALT Program and discusses the assessment of E&S systems and capacities for the Program.** The report is organized into seven Chapters; as follows:

- **Chapter 1: Introduction to the Program:** presenting the overall program context and the details of the Governments program this program would support scope, and result areas of the Bank-financed P4R, the program implementation arrangements, and identification of E&S effects of program activities,

- **Chapter 2: Purpose and Objectives of ESSA** introduces the ESSA and its methodology,
• Chapter 3: *Environmental and Social Characteristics of the Program Region* provides an overview of the Environmental and Social characteristics of the region where program activities will be implemented and set the background for E&S analysis,

• Chapter 4: *Potential Environmental and Social Effects discusses Result Area (RA) wise Environmental Effects* (Benefits, Risks, and Opportunities to manage these),

• Chapter 5: *Assessment of Environmental and Social Management Systems and Implementation Capacity* discusses the guidance on E&S management in the P for R policy of the Bank, and discusses the systems, regulatory aspects, gaps, and proposed actions bridge the gaps through a systematic description pf E&S effects to be considered as part of each of the ESSA 6 core principles namely; Environmental and Social Management, Natural Habitats, and Physical Cultural Resources, Public and Worker Safety, Land Acquisition, Indigenous Peoples and Vulnerable Groups; and Social Conflict. It presents an assessment of the adequacy and consistency of the program’s environmental and social management systems and related implementation capacity against the Core Principles and Key Planning Elements,

• Chapter 6: presents the *Environmental and Social Inputs to the Program Action Plan* for mitigating impacts risks and enhancing environmental & social benefits and overall E&S management. This section lists the actions that the ESSA Team recommends be undertaken to addressing the system and capacity gaps and shortcomings identified in Section 5, 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,

• Chapter 7: is on *Consultation and Disclosure* and describes the key formal and informal consultations undertaken as part of the ESSA process, important input and recommendations received, and how and when the ESSA was disclosed.
2 PURPOSE AND OBJECTIVES OF ESSA

2.1 Introduction to ESSA

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

36. The ESSA (i) identifies the Program’s environmental, health, safety, and social effects, (ii) assesses the legal and policy framework for environmental and social management, including a review of relevant legislation, rules, procedures, and institutional responsibilities that are being used by the Program; (iii) assesses the implementing institutional capacity and performance to manage potential adverse environmental and social issues; and (iv) recommends specific actions to address gaps in the program’s environmental and social management system, and in the policy and legal framework and implementation capacity.

37. ESSA guides on actions to ensure environmental and social management within the program at all levels. The ESSA also informs decision making by the relevant authorities in the borrower country and aids the Bank’s internal review and decision process associated with the program. The ESSA has been prepared in close coordination with the GoAP. The findings, conclusions, and opinions expressed in this document are those of the World Bank. The recommended actions that flow from this analysis have been discussed and agreed upon with the Government of India counterparts and will be legally binding.

2.2 ESSA Methodology

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

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

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

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

- **Subtask 1.1: Understanding the ongoing Program**

41. The World Bank team undertook a comprehensive review of program documents and other available details to understand the ongoing program and the extent and nature of various activities involved. In preparing the ESSA, a review of available secondary data was carried out, including extensive references to UDISE datasets (2018-2019), and a representative sample of social audit reports across 5 districts. Reports from GoAP and SIS on program implementation, past studies, and newspaper/media reports were also reviewed. The team also held detailed discussions with the representatives of the GoAP, SIS, and various Government Departments, and other stakeholders involved in the program to understand the ongoing program and its activities. In-depth interviews and semi-structured focus group discussions were held with about 25 officials across constituent agencies.

- **Subtask 1.2: Review of locational aspects and sensitivities of the ongoing and proposed program (including site sensitivities, community/stakeholder related sensitivities)**
42. The team reviewed the program activities *viz a viz* the locational characteristics to understand the differentials in risk profiles in varied geographies of AP, through a comprehensive review of available documents/literature, social audit reports, virtual site visits (videos of works going on; key infrastructure provided and their use), discussions with school authorities, PCs and communities. The locations were chosen to ensure diversity in the stage of project implementation, local culture, regional considerations, and terrain. For discussions on the ongoing program and its risk management, to ensure sufficient spread of sample; all of the 13 districts were covered through large group consultations utilizing the possibility of virtual platforms. Further, focused discussions on specific subjects like MDM program and CRCs were conducted among the functionaries in Chittoor, Kadapa, Kurnool, Vishakhapatnam, Nellore, and Krishna districts. The ESSA team also ensured consultations were evenly spread across the hierarchy by consulting headmasters of schools, Parent Committee members, Assistant Engineers, Executive Engineers, and Superintending Engineer. Because of Covid 19 situation, all the interviews and consultations were conducted through online video conferencing or telephonically.

43. A careful stakeholder mapping was carried out to ensure that all relevant stakeholders are covered in the consultation process. Virtual discussions and virtual ‘site reviews’ were undertaken during October – November 2020. Other stakeholders including state government functionaries, vendors, distribution agencies, consumers were also consulted. Specifically, interviews and consultations were conducted with relevant experts and officials from key departments, and Institutions including the DoSE, APEWIDC, Panchayat Raj Rural Development Department, sample Local Bodies (Municipalities and Panchayats), and tribal welfare department. Discussions were also held with District offices of regulators including the Pollution Control board and service providers like the Water Supply and Sanitation Department. During these consultations, the respondents shared how they are involved in the program, their role, impacts and risks, and the suggestions to address risks and gaps.

44. The task team had detailed semi-structured questionnaire based discussions with departments/ officials who manage the programs in regions with different climatic conditions especially considering the restrictions for travel and real consultations, the team prepared detailed checklists or questionnaires which are available in Annexure-VII.

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

46. A study of similar programs and assessments of other ongoing programs and Bank projects in the sector involving school infrastructure up-gradation, training and services, and consultancies were carried out to understand the risks and benefits associated with such programs and activities.

**Task 2: Review of Regulatory Aspects**

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

47. The World Bank undertook a comprehensive literature review of existing policies, regulations, standards at the National, State, Local level applicable to overall environmental management and various program activities. A review of project documents, ESSA, and supervision documents of previous and ongoing World Bank projects and programs in the sector, school education projects implemented in AP were also conducted. The Bank also reviewed the existing

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

14 In coastal areas, disasters like cyclone and floods and rusting of metal parts could be an issue.
policy/Environmental Management Frameworks (EMFs) of other national-level school education projects for understanding the frameworks used to manage environmental aspects in similar programs. This includes 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), which were used earlier for SSA and RMSA.

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

48. The Bank team discussed with various departments involved, schools and school authorities, parent committees, and regulatory agencies to understand the compliance to regulations ad policies that support better environmental effects. The Bank discussed the procedures followed for taking permits/consents for managing waste/wastewater, labor, and various activities in all regions. The Bank also discussed virtually and reviewed available videos and photographs of works with the schools and parent committees on the levels of wastes, pollution, and safety aspects related to ongoing programs. The Bank also discussed if any of the existing policy frameworks were adopted for the Nadu Nedu program.

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

49. Mechanisms to address the gaps in regulatory compliance were formulated to address the gaps identified as part of the above subtasks.

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

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

50. Through the above tasks, the Bank team reviewed the risks and benefits associated with various program activities, to the Core Principles of ESSA. The team also assessed the magnitude and likelihood of risks and benefits associated with this program which will be implemented in multiple geographical locations of AP. The ESSA team held several meetings with Nadu Nedu staff, including program departments in charge of implementing the initiatives; the contracts, and the procurement department (to understand the responsibilities for environmental and social considerations in the contracts with vendors. This was essential to understand their perceptions about the benefits and risks of these programs. The details of stakeholders consulted are available in Annexure VI.

**Assessment of Environmental and Social Benefits**

51. The task team assessed the environmental benefits due to Nadu Nedu. The following were the components of the analysis:

- Environmental benefits (larger) of each program intervention (such as maintenance and repairs to buildings, provision of WASH facilities, etc.) in terms of improving the services/facilities at schools, energy / other resource savings, climate change, increased environmental awareness, and other environmental performance (including lesser pollution, better health of students, attendance rates),

- Understanding the considerations by Nadu Nedu for better management of activities and processes during the project life cycle, which would ensure that the surrounding environment is not stressed, but benefitted in turn,

- The extent of inclusion of areas of environmental and cultural importance under various programs, like rural and environmentally fragile areas.

**Assessment of Environmental and Social Risks**

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

- Types of environmental risks experienced during the project cycle as reported by various reports and studies, beneficiaries (students, parents, nearby communities), officials, and as observed during virtual site visits and discussions,
- Risks anticipated during the project cycle (and during upscaling); especially related to environmental and social management, natural habitats and heritage, environmental health and safety of workers, students, teachers, and visitors to schools, including risks during special occasions and disasters,

- Appropriateness of the efforts and considerations by Nadu Nedu to ensure environmental risk management during project design and implementation,

- Guidelines and standards developed by Nadu Nedu and vendors for environmental risk management and the extent of its coverage and suitability.

o **Subtask 3.3: Arriving at possible risk avoidance, mitigation, management, and benefit enhancement measures**

53. An understanding of the benefits, risks, and their severity and availability of frameworks/standards/guidelines/regulations to manage it helped in recommending the possible management measures. To discuss and validate the risks and benefits, the bank team discussed with all stakeholders virtually and the various sections of this document have been written in consultation with the teams (State, District, Block, School) of Nadu Nedu.

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

o **Subtask 4.1: Review of the existing institutional mechanism at State/ Mandal and School Levels to manage the proposed program activities its risks, benefits, and regulatory requirements**

54. Review of program documents, Government Orders, and discussions with various departments and implementing agencies helped in understanding the existing institutional mechanism for planning, designing, implementing, supervising, and monitoring the program. Roles, responsibilities, and capacities of various institutions involved at the State, Mandal / Block, and School levels were reviewed. The review focused on the management of environmental and social aspects in an existing program and previous Bank support projects, mainly risk avoidance, reduction, mitigation, and management and enhancing the benefits during project design, implementation, and Monitoring and Evaluation (M&E) stages. To understand institutional aspects and gaps, the team undertook a) Multi-party virtual stakeholder consultations at the state and district level, b) in-depth interactions with Parent Committee representatives; c) interactions with Principals and special officers from KGBVs to understand and document the specific barriers experienced by adolescent girls in completing secondary education and d) interactions with last-mile delivery officers to understand specific challenges experienced by students from tribal communities and in ITDA blocks of the state.

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

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

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

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

(a) Improvement of the Institutional capacity of SIS and the partnering agencies to effectively manage environmental risks.

(b) Opportunities to upgrade existing guidelines to avoid, mitigate, and manage environmental risks, and

(c) Design of training and capacity-building activities to ensure risk avoidance and management.
During the January 2021 Pre-Appraisal Mission, the preliminary findings – benefits, risks, gaps, and recommendations (environmental and social) were shared with GoAP, and SIS. A draft ESSA was shared with GoAP for disclosure in January 2021 and based on the consultations and feedback received, the report was revised for final disclosure. Details of Stakeholders Consulted in the Region are presented in Annexure VI. The methodology for ESSA preparation is presented in Figure 2.

Figure 2: Methodology adopted for E&S Systems Assessment
3 ENVIRONMENTAL AND SOCIAL CHARACTERISTICS OF ANDHRA PRADESH

3.1 Physical Characteristics

3.1.1 Location and Physiography

58. The State of AP on the south-eastern coast of India is the seventh-largest state of India in terms of area, covering 162975 sqm. AP lies between 12°41’ and 19.07°N latitude and 77° and 84°40’E longitude. It is bordered by Telangana to the north-west, Chhattisgarh to the north, Odisha to the north-east, Tamil Nadu to the south, Karnataka to the west, and the Bay of Bengal to the east. It has the second-longest coastline in India after Gujarat, of about 974 km. Geographically, the state is in peninsular India consisting of the coastal belt on the east and Rayalaseema to the south-west. A small enclave 30 km², the Yanam district of Puducherry Union Territory, lies in the Godavari Delta in the northeast of the state. The state includes the eastern part of the Deccan plateau as well as a considerable part of the Eastern Ghats. The 13 districts of AP are Srikakulam, Vizianagaram, Vishakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Prakasham, Nellore, Kadappa, Chittoor, Anantapur, and Kurnool. Among these, the four landlocked southern Rayalseema districts are Anantpur, Chittoor, Kurnool, and Kadappa while the rest form the coastal Andhra. Rayalaseema region has many places of pilgrimage, while coastal Andhra has very important deltas and sensitive, disaster-prone coast.

- Planning, Designs, Specifications for facilities shall be appropriate for different physical regions of AP.
- Characteristics of coastal and Rayalaseema regions differ and hence, there shall be adequate consultations in both regions.
- In the case of coastal AP, designs shall consider risks due to coastal impacts and cyclones.
- In drought-prone, hot districts, the work schedule shall be modified so that workers do not suffer from heat strokes.

3.1.2 Climatic Conditions

59. The climate of AP is generally hot and humid. The summer season in this state generally extends from March to June. During these months the moisture level is quite high. The coastal areas have higher temperatures than the other parts of the state ranging around 20 °C and 40 °C. The southwest Monsoon season, from June to September is characterized by heavy tropical rains. The major role in determining the climate of the state is played by the southwest Monsoons. About a third of the total rainfall in AP is brought by the north-east Monsoons around October in the state. The winters in AP from October to February are pleasant.

- The need for covered protective spaces for cooking, waste management, and continuous maintenance is important given the extreme climatic conditions and heavy rains.
- Interventions shall be assessed considering the extreme climatic conditions such as cyclone and drought, heatwaves.
- Good vegetated open spaces and good ventilation are essential considerations.

3.2 Environmental Features

3.2.1 Rivers and Water Bodies

60. AP is a riverine state with 40 major, medium, and minor rivers. Godavari, Krishna, Vamsadhara, Nagavali, and Pennar are major interstate rivers. Godavari River enters at Bhurgampad Mandal of state of AP and flows for a distance of around 250 km eastward before joining the Bay of Bengal. AP has the advantage of having most of the east-flowing rivers in the state bringing in copious supplies from the Western and Eastern Ghats and up to the Bay of Bengal. The state has a heritage of cultivation and irrigation dating back to several centuries. In the past, ancient Kings and rulers built artificial lakes and reservoirs by constructing bunds and Anicuts across rivers for creating irrigation potential as well as drinking water for the people. The River Krishna forms the border between the states of Telangana and AP,
and River Tungabhadra is a tributary of Krishna. Pennar River originates in the southwest region of AP with a small catchment area of Karnataka and flows eastward before joining the Bay of Bengal. Besides the above, five interstate rivers north of Godavari viz. Bahuda, Mahendratanaya, Poondi minor drains, Nagavali & Vamsadhara flows through Orissa and AP, and four rivers south of Pennar viz Palar, Aranari. Kosathaliyar and Ponnaiyar flow through AP and Tamilnadu and two rivers i.e., Errakalva and Tammileru originate in the Khammam district of Telangana and flows down to AP state. Apart from its 14 major rivers, 26 medium and minor rivers flow within AP. There are no major rivers through the Rayalaseema region except parts of Krishna and Tungabhadra passing through the northern part of the Kurnool district. The region lacks rain, water, and irrigation. Coastal AP has many eco-sensitive areas and critically vulnerable coastal areas including deltas, mangrove areas, etc.

- Many schools are in coastal Andhra near around streams, rivers, lakes, reservoirs, and the sea. It is important to plan and ensure that wastes and wastewater from the schools do not pollute the water bodies. None of the project activities shall pollute or disturb water bodies.
- Adequate drinking water facilities shall be made available for students and workers in all areas.
- Recycling of water is important to conserve this valuable reserve in water-scarce / drought-prone areas of AP.

3.2.2 Forests and Sanctuaries

61. The total forest cover of AP is 22,862 sq. km. The Eastern Ghats region is home to dense tropical forests, while the vegetation becomes sparse as the Ghats give way to the Deccan Plateau, where shrub vegetation is more common. The varied diversity of fauna includes Bengal tiger, Indian leopard, hyenas, blackbucks, cheetahs, sambars, and sea turtles. The dense forests in mountains offer habitat to the wildlife. There are many wildlife sanctuaries, zoos, and national parks in AP. These include Indira Gandhi Zoological Park and Kambalakonda Wildlife Sanctuary surrounded by the Eastern Ghats and the Bay of Bengal in Vishakhapatnam, Papikonda Wildlife Sanctuary located in East & West Godavari, Coringa Wildlife Sanctuary, and estuary in East Godavari district which is the second-largest stretch of mangrove forests in India with 24 mangrove tree species and more than 120 bird species, Krishna Wildlife Sanctuary in Krishna district, Rollapadu Wildlife Sanctuary in Kurnool district, Sri Penusila Narasimha Wildlife Sanctuary in Nellore District, Gundla Brahmeswara Wildlife Sanctuary in Kurnool and Prakasam Districts, Sri Lankamalleswara Wildlife Sanctuary in Kadapa District, Koundinya Wildlife Sanctuary in Chittoor district, Atapaka Bird Sanctuary (Kolleru Wildlife Sanctuary & Ramsar Site) in West Godavari district, Telineelapuram and Telukunchi Bird Sanctuaries in Srikakulam district, Pulicat Lake Bird Sanctuary in Nellore District. Krishna, Pulicat, and Coringa sanctuaries are Marine Protected Areas in the state.

- All regions of AP have forests and sensitive habitats. Some of the schools may be near protected areas or forests.
- Disposal of solid/liquid wastes and construction-related disturbances shall be avoided in such areas.
- Community involvement in project activities would minimize disturbance to common natural assets.

3.2.3 Disaster Vulnerability

62. In AP, the occurrence of cyclones and floods is more frequent, and the scale of losses is far greater from them than any other natural calamities. Both cyclones and floods cause several deaths and great damage to individual and community assets impacting the state's economy. AP is exposed to cyclones, storm surges, floods, and droughts. A moderate to severe intensity cyclone can be expected to make landfall every two to three years. About 44 percent of the state is vulnerable to tropical storms and related hazards. Along the coast, Nizampatnam and Machilipatnam are the most prone to storm surges. Delta area of the Godawari and the Krishna Rivers experiences recurrent flood and drainage problems.

63. The drought vulnerability of 34 Mandals are severe, 353 are critical and 284 are semi-critical. The severity of the drought is identified in Rayalaseema Region. The most chronic drought-prone districts are YSR Kadapa, Anantpur, Kurnool, Chittoor, and Prakasham. According to the seismic zoning of India, the country is divided into five seismic zones based on severity with AP in Zone II and Zone III, classified under the Moderate risk zone. In the recent past, the
temperature has risen to more than 45 degrees in most districts of the state. Fatalities due to heatwave were high.

- Some of the schools may be near or in disaster-prone areas. Storage of materials, scheduling of construction, typology of works, plinth heights, the layout of buildings, etc. shall avoid disaster impacts.
- Students, teachers, and parent committee shall be trained and made aware of disaster preparedness and response, as suggested by school level guidelines of NDMA. Appropriate training shall be provided to school leaders, teachers, Parent Committees, and communities to facilitate disaster preparedness and emergency response.
- All facilities supported by the project shall withstand disaster impacts and risks.

### 3.2.4 Baseline Description on Environmental Aspects of Schools in AP

#### 1) Infrastructure and Services in Schools

64. The education sector plays an important role in the overall development of society at large. The availability of teachers and infrastructure facilities in schools is important to ensure quality education. The Government has been investing heavily in creating education infrastructure including recruitment of teachers in all categories. In 2013-14, AP ranked 31 (of 35) in the Educational Development Index for infrastructure in Primary schools.

65. The schools in AP are mostly one/two or three-storied structures. Accessibility of schooling facilities is no longer a major problem. Site area of schools varies from urban to rural areas. Schools in cities/peri-urban areas may have just enough space for school building and prayer/assembly area, while those in rural areas may range from 1200 to 2000 sqm in rural areas. As of 2018-19, the percentage of schools in AP with functional girls’ and boys’ toilets and drinking water facilities was 61 percent, 55 percent, and 74 percent respectively. Most classrooms needed major repairs and many lacked furniture for students. Further, despite being connected to the electricity grid, most schools did not have electrical fixtures (lights and fans). The lack of an appropriate learning environment has been leading to a gradual emptying of public schools. Many schools in the Rayalaseema region lack water and sanitation facilities, owing to prevailing drought conditions. Toilets are mostly dilapidated and lack maintenance. Regular cleaning is not possible owing to issues with water availability in many places. Socio-economical Survey (2018-19) of AP explains that around 1000 Anganwadi centers have no toilet facilities while around 10 lack electricity supply. According to the report on physical facilities in schools, around 50-55 percent of elementary schools in AP have no ramp facility, for children with disabilities. Nearly 74 percent of schools do not have separate toilets for girls. More than forty percent of schools do not have playground facilities. Most schools are under Mandal Parishad or GoAP. The survey had found that private unaided schools are better in terms of facilities than government or private aided schools.

66. Among 61519 schools in all districts, for which UDISE data has been provided by DoSE, 40 percent (24379) did not have functional boys’ toilets, a third (18301) did not have separate functional girls’ toilets. Nellore, Srikakulam, and Vishakhapatnam have near around 40 – 50% of schools without functional toilets for boys while Vishakhapatnam, Anantapur have more percentage of schools with no functional toilets for girls. Around 11 percent (6554) of the schools had no functional drinking water facility, while 40 percent (24232) have no functional hand wash facilities. The percentage of schools with no functional drinking water facility was more in the districts of Vishakhapatnam (19%), Nellore (17%), and Anantapur (25%). Similarly, many schools in Anantapur (65%), Vishakhapatnam (48%), and Nellore (50%) also lack sufficient hand washing facilities. Around 5 percent of the schools (3075) have no electricity connections, while 80 percent have no internet connections while 70 percent (44278) of the schools have no computers. In the case of Vishakhapatnam, 20 percent of schools have no electricity connections, while the percentage in other districts ranged from 1 to 6%. On average, 80 percent of the schools have no internet connections, with Anantapur, Nellore, Srikakulam, Vizianagaram, Kadappa, and Prakasam performing poorer in this regard than the state average. As per the data shared by DoSE 49% of total enrolled students have access at home to the digital device.

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15 UDISE Plus (2018-19)
with the internet (computer, mobile phone, or tablet), television, and radio (as per the statistics collected as of 22.07.2020).

Figure 3: Management type-wise Primary Schools in Districts of AP

67. Since most of the primary schools are not having basic facilities there is a dire need for providing infrastructure facilities in all schools. GoAP, through its novel initiative of Nadu Nedu is marching ahead with the task of ensuring these primary facilities in schools thus aiming at overall socio-economic improvement. More than 85 percent of the government-managed schools in the state only offer primary education. Therefore, Nadu Nedu initiative is expected to have an impact on early grade education. PCs are being provided with funds to carry out major and minor repairs to school infrastructure to improve school safety and the learning environment. In many cases, these repairs are required because of years of damage caused by climate-induced incidents (cyclones, floods, etc.). Nadu Nedu is to strengthen the infrastructure and transform the existing infrastructure of the schools in the mission mode in a phased manner over three years, starting from 2019-20. Under Mana Badi – Nadu Nedu program, the following 9 infrastructure components have been taken up. (i) Toilets with running water (ii) Drinking water supply (iii) Major and minor repairs (iv) Electrification with fans and tube lights (v) Furniture for students and staff (vi) Green chalkboards (vii) Painting to schools (viii) English labs and (ix) Compound walls. The project covers a total of 44,512 schools, including residential schools, run by all managements, viz., School Education, Panchayat Raj, Municipal Administration, Social Welfare, BC Welfare, Tribal Welfare, Minority Welfare, Juvenile Welfare, and Fisheries Departments. In Phase-I, 15715 schools have been taken up through the Government implementing agencies - Panchayat Raj Engineering Dept, AP Samagra Shiksha Society, APEWIDC, Municipal & Public Health Engineering Department, and Tribal Welfare Engineering Department.

2) Mid-day Meal Program

68. The Mid-Day-Meal (MDM) scheme is implemented in the state for the children of classes I to X and extended to Special Training Centers (NCLP) from 2010, Model Schools are also being covered from 2013–14. The objective of the scheme is to avoid classroom hunger, increase school enrolment, school attendance, reduce the gender gap, fostering social equality, address malnutrition, promoting school participation, and women empowerment. Under this program, 36.88 lakh children are covered in the state during 2019-20, out of which 18.14 lakh children are in primary including NCLP, 11.48 lakh in upper primary, and 7.26 lakh in high schools. The State Government has enhanced the monthly honorarium of 88,296 cook cum helpers working under the MDM scheme from Rs.1000/- to Rs.3000/- per month. This is a flagship program that has brought in drastic improvement in attendance rates and overall improvement of school education in AP18. The team discussed with various stakeholders including cooking agencies (Self Help Groups), Mandal Education Offices, School heads, Parent Committee members about the mid-day meal program. As per stakeholders consulted, over the past two years, there had been positive changes in the menu, quality, and quantity of nutrition, and food provided. However, the facilities for mid-day meal cooking are limited in many areas. Based on our discussions, it is learned that different areas face different issues related to this important school activity. In many Mandal, the availability of proper kitchen sheds is an important issue and some cooking agents cook food in rented sheds or own houses and supply at schools. Kitchen sheds shall have appropriate covered hygienic space and platforms for washing, cutting, cooking activities, storage area for grains and other ingredients, for safe and hygienic MDM. Though there are regional and urban-rural differentials in availability and quality of kitchens, 10 - 25 percent of schools

18 https://schooledu.ap.gov.in/MDM/website

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have no kitchen space, while more than 50 percent of kitchens need heavy repairs and up-gradation. *Nadu Nedu* considers repairs to the kitchen in around one-third of schools under the program. It is important to uplift existing kitchen spaces and ancillary facilities for safe and hygienic MDM which is the backbone of school education.

69. Schools use firewood, LPG, and smokeless *choolahs* to cook MDM. GoAP has provided LPG cylinders, cooking stoves, and vessels to all schools, though these are old and in need of replacement in many schools. Currently, out of 45423 institutions, 41620 institutions are provided LPG connection and the government is aiming to provide LPG to all. However, even then many cooking agencies (self-help groups/cooks) use firewood in addition to LPG for the following reasons:

- LPG supply is not regular in certain areas, some schools’ reports a non-availability of LPG cylinders
- Very large burner stoves are available only in few schools – mainly in high schools with many students. These are mostly purchased by respective Headmasters and provided to cooking agencies. In other schools, cooks find it difficult to cook rice multiple times in regular stoves as it results in higher cooking time and LPG use. So, they cook in the open using firewood. Even in the case of schools with a large number of students, cooking is carried out in firewood *choolahs* as it is economical and easy to arrange.
- LPG stoves are old, without regular repairs or maintenance, and in some schools, the tubes are in rusted condition. Due to repair needs the cooks’ resort to firewood *choolahs*.

70. Kitchen gardens are developed in some schools where land and water are available (non-drought prone areas), full compound wall and gate and security arrangements; or in places where parent committee is vibrant and prevent the entry of outsiders to school premises. Kitchen gardens are usually destroyed by some villagers/communities who use school compounds for illicit activities during non-school hours. Security of schools and facilities is very important for MDM and overall school facility maintenance. Also, water availability is a concern in certain areas. Local bodies provide water for some schools which face water scarcity. Schools in certain regions, like Kadappa would benefit from facilities like solar cookers, solar water boilers which can accelerate the cooking process.

71. There is also regular monitoring of the staff engaged in kitchen/school cleaning operations. They shall be regular appointees (not on contract) with proper SOP for cleaning of facilities/premises and their attendance, cleaning activities and its effectiveness need to be captured in monitoring formats. Also, grants for school maintenance shall be made available on time so that all activities can be regularized and streamlined.

72. The following are to be ensured to support MDM:

- Hygienic, safe, and spacious cooking and storage areas through provision for new modular sheds and repairs / up-gradation of existing sheds
- Water for cooking and washing
- Provide large LPG burners / solar cookers or boilers as additional facilities to completely phase out firewood use and improve indoor/outdoor air quality
- Kitchen Gardens preferably in greenhouses (which can be kept under lock and key) with facility for recycled water use
- Compound walls with gates, security and under watch and ward of Parent Committees
- Regular maintenance and cleaning of facilities and vigorous monitoring of cleanliness and sanitation.

3) **Overall Campus Environmental Management**

73. The school campuses host classrooms for teaching-learning, student and staff facilities and amenities, and facilities for mid-day meal preparation and consumption. In most schools, especially those in coastal areas and tribal areas, school infrastructure needs repairs and the provision of facilities for staff and students. Toilets are mostly dilapidated and need structural improvement. In some cases, septic tanks used are not designed as per standards and are mostly of single-chamber, without soak pit. Wastewater from septic tanks outflows into the drains outside school compound walls. Food waste is not segregated from other recyclable/reusable wastes in most schools. This is often dumped in the open while the other wastes are usually burned including broken glass electric fixtures etc. Though the
country regulations provide clear guidance on solid wastes (including sanitary pads), plastics, construction & demolition wastes, hazardous wastes, and e-wastes (refer Annexure II) there is no adherence to these rules in AP.

74. There is no capacity to guide, supervise and monitor waste minimization, segregation, recycling and reuse, treatment or disposal. Some of the ULBs have composting facilities, while most have no facilities to treat the waste. Currently, the state has authorized e-waste recyclers including Ms. Binbag Recycling Services Pvt. Ltd (Ananthapur district), Clean earth green earth solutions (Krishna District), Ms. E-Parisarag Pvt. Ltd (Ananthapur District), Ms World scrap (Chittoor District), M/s Veera Waste Management (Vishakhapatnam) M/s Apna Bhoomi E-Waste Management Service (Srikakulam), and M/s Green Wave Environmental Solutions (Vishakhapatnam). Thus, the state has ample facilities for e-waste management. Presently there are 11 Common Bio-Medical Waste Treatment Facilities (CBMWTF) in operation in the state. Every occupier of the Health Care Unit is required to become a member of the respective CBMWTF for disposal of Bio-Medical Waste. Occupiers of non-complying institutions are liable for prosecution under the provisions of the Environmental Protection Act and Rules. There are waste-to-energy Plants in Guntur (covering Guntur, Vijayawada, Thenali, Chilakaluripet, Sattanepalli, Mangalagiri, Narasapet, Ponnur, and Tadepalli) and Vishakhapatnam (Covering Vishakhapatnam, Srikakulam, Vizhiyanagaram, and Nellimarla). There are 23 waste to compost plants treating 548 TPD of bio wastes, 29 have vermicomposting plants, 7 have biogas facilities. Gudur municipality has a waste processing facility including a sanitary landfill. In all remaining urban local bodies, solid waste management plants are proposed. Thus, many of the urban areas of the state have sufficient solid waste management facilities where the wastes from schools can be treated. However, it will be good to have waste management, upscaling facilities for school campus waste in the school itself (in urban schools where land is available and in rural schools), while rejects and inerts can be sent to the common facility if available. E-wastes can be well managed by engaging any of the APCB authorized recyclers.

3.3 Socio-economic Characteristics

3.3.1 Demography

75. Andhra Pradesh is the 10th largest state in India. In 2011, the state had a population of 49.58 million, up 9.21 percent (from the 45.4 million recorded in 2001). There are 996 females for every 1,000 males recorded in 2011.19

The state accounted for about 5.07% of SCs and 3.12% of STs of the total SC/ST population of India. There are about 59 Schedule casts in A.P. of which the important ones are Mala, Madiga, Relli, Adi Andhra, and others. Similarly, there are 35 Scheduled Tribes and the important among them are Gonds, Koyas, KondaReddies, Savaras, and others. Tribal population in Vizianagaram and Srikakulam districts use ‘Savara’ as their dialect. In Visakhapatnam district there are 16 types of tribal communities whose dialects are Konda dora and Kuvi. Aadivasi Languages are Kottiya, Gowdu, Valmiki, Kammera, Konda Kummari, nooka dora, Mali, Muliya. The Koya dialect is prominent in East and West Godavari districts. Within the state, there is a wide variation in the percentage of SC and ST in total population across districts. While the SCs are distributed throughout the state, the STs are concentrated in the hilly forest areas of Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, and West Godavari. The SC and ST population in AP are spread across all the districts but there are some districts where these are concentrated. The SC population is highest in East Godavari and Guntur with 11% of the SCs in this district alone. Vizianagaram district has the least concentration of SCs at 2%. The ST population is highest in Visakhapatnam with 23% of the STs in this district alone. YSR Kadapa district has the least concentration of STs at 2%.

3.3.2 Economy and Growth

76. The economy of Andhra Pradesh is one of the fastest-growing economies in India, with growth outstripping that of the wider Indian economy in the past few years. The GSDP for the year 2018-19 is estimated at ₹850,000 crores as against ₹490,134 crores for 2015-16 indicating a growth of 11.61%. The service sector contributes 46% to the GSDP.

Andhra Pradesh aims to be among the top three performing Indian states by 2022 and a developed state by 2029. Visakhapatnam, Kakinada, Tirupati and Amravati are the state’s four cities that have been selected as smart cities as of January 2018. Despite impressive rise in the growth performance, the fruits of growth and development are not fully percolating down to the last mile.21

### 3.3.3 Income Poverty

77. The state economy, as measured by growth in the real Gross State Domestic Product (GSDP), has been witnessing a strong growth phase since 2004-05. Between 2005-06 and 2007-08, while the country’s economy grew at an impressive rate of 8.02%, the performance of the state economy was even more impressive with the average growth of 8.37%. The advance estimates represent a growth rate of 4.53% was recorded during the eight year period (2005-06 to 2012-13). The GSDP at constant (2004-05) prices for the year 2013-14 (Provisional Estimates) is estimated as Rs. 2,50,282 crore as against Rs. 2,35,930 crore for 2012-13 (first revised estimates) including a growth of 6.08%. The corresponding growth rates are 6.34% (Agriculture), 2.16% (Industry) and 7.25% (Services). As per the provisional estimates of 2013-14, the Per Capita Income (PCI) of Andhra Pradesh at current prices increased to Rs.85,797 from Rs.76,041 in 2013-13 registering a growth of 12.8%. The Per Capita Income (PCI) at constant (2004-05) prices, has also gone up from Rs.42,186 in 2013-13 to Rs.44,481 in 2013-14, a growth rate of 5.4%. In fact, the growth in Per Capita Income of the State during this period is higher compared to all-India.

### 3.3.4 Concentration of Poverty and Human Deprivation in 150 SC and ST dominated Mandals

78. The macro level aggregates mask large intra-state and inter-social group disparities in levels of economic and human development indicators in Andhra Pradesh. SERP has undertaken a systematic exercise to identify those Mandals that have the highest concentration poverty and human deprivation. For this exercise, three criteria were used: SC/ST Population (census 2011), highest levels of female illiteracy (census 2011) and the Mandals with higher unirrigated land (DES 2011). This exercise left out all the urban Mandals notified as Class 1 and 2 towns (Municipalities).

![Figure 4: Concentration of ST population in AP](image_url)

### 3.3.5 School Education

79. State has one of the healthiest Student-Teacher ratios in the country (23) and most (99.97%) of the teachers have appropriate professional qualifications. However, less than a third of them receive in-service training. There is significant drop-out at upper-primary and secondary levels. Quality of school education also needs to improve as the achievement levels are lower than national average. State government has prioritized implementation of RTE guidelines for elementary education thereby making primary school within 1km and upper primary school within 3km of each habitation. “Education is generally accepted as a universal right and not a privilege meant for some classes of society” - Social Inclusion: The SC literacy rate stands at 64.5% while the SC literacy for Females is 57.4%. ST literacy rate stands at 48.8% behind the national average of 59%. A disaggregated analysis by gender and caste shows that ST women were the most affected with a literacy rate of 40.9%.  

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3.3.6 Health and Nutrition

80. The MMR of the state has fallen down from 134 in 2007-09 to 92 in 2011-13 but still 60% of the women are anemic. Close to 32% of the children less than 5 years are underweight and suffers from stunting. Over the years the state’s performance in health sector has remained patchy. Where on one side the rate of institutional deliveries has crossed 90% but still the neonatal mortality rate remains high.

81. National Family Health Survey 5: The infant, neonatal and under-five mortality rates have also dropped to 30.3 per cent (2019-20) from 34.9 per cent (2015-16), 19.9 per cent from 23.6 per cent, and 35.2 per cent from 40.8 per cent, respectively. Gender-based violence can also be seen to be having a decreasing trend. As many as 30 per cent of married women (aged 18 to 49 years) have experienced spousal violence in 2019-20 against 43.4 per cent in 2015-16. Other than that, AP is witnessing stagnation in its population, thereby seeing a changed demographic profile of growing number of adult and old age population in an urbanized environment. This potentially has triggered the emergence of non-communicable and life diseases.

3.3.7 Female Labour Force Participation

82. Female labor force participation rates (FLFPRs) have been historically higher than the national average, in both rural and urban areas. The recently released Periodic Labor Force Survey (PLFS) 2017-18 reports that rural FLFPR is 39 percent, which is way above the national level estimate of 18.2 percent. The difference between the state’s FLFPR and the national FLFPR in rural areas is visible, despite the fact that FLFPR in AP has been consistently declining since 2004-05. It dropped from 48.8 percent in 2004-05 to 44.78 percent in 2011-12, and then declined further to 39 percent in 2017-18.6 Urban FLFPR in AP increased from 18 percent in 2011-12 to 25.1 percent in 2017-18. This is significantly higher than the urban FLFPR for India (15.9 percent).22

3.3.8 Human Capital

83. Andhra Pradesh ranks 7th in NITI Aayog’s Innovation Index ranking with an improvement of 3 places from 2019. The sub-category ‘Human Capital’ shows a positive story with NAS scores and Schools with ICT labs:

3.3.9 Baseline Description on Social Aspects of Schools in AP

A. Education – Enrolment, Transition & Outcomes with a focus on gender and social groups - State Overview

B. Overall strengths – Students, institutions and teachers: Trend across 2014-15 to 2016-1724

Figure 5: States performance on Key Education Indicators 25

84. The number of institutions/schools, teachers and enrolment across the years has been demonstrating an upward trajectory in the state. (Source: UDISE Flash Statistics). In 18-19, the AP teacher strength was 2,94,304 and sufficient availability of subject teachers even in tribal mandals emerged as a key finding of the analysis. 26 The school, teacher and student’s distribution by the school types is presented below:

24 UDISE Flash Statistics 2016-17
25 http://dashboard.seshagun.gov.in/#/StatesProfile
26 https://cse.ap.gov.in/DSE/stateProfileTeacher.do
85. **School distribution across the levels:** Zilla/Mandal school dominates in the Primary School category while Private schools in the High School category. Thus, transition of students from low-income households/tribal households to secondary grades remains a key challenge.

![Graph showing school distribution across the levels](image)

*Legend: Orange: Zilla/Mandal; Red: Private; Blue: Municipal; Pink: Others*

**Figure 6: Distribution of Schools across Administrative Units**

86. The number of schools in the rural areas are approximately 4 times of that in urban areas. (Source: UDISE 2018-19) Among large states, Andhra Pradesh (along with Jharkhand and Madhya Pradesh) has the highest proportion of zero or one teacher schools.

87. **Gender and Social Category**

**Learning Outcomes with a perspective of social groups**

The below graph shows outcomes of STs lag other social across subjects. (Source: UDISE 2018-19) Further, the transition rates of ST girls from primary to upper primary lags behind other social groups at 0.87 as well as from elementary to secondary lags behind at 0.91.

![Graph showing learning outcomes across social groups](image)

**Figure 7: Learning Outcomes across Social Groups**

88. **Gender Parity of the State with respect to the nation**

<table>
<thead>
<tr>
<th>Location</th>
<th>Primary</th>
<th>Upper Primary</th>
<th>Elementary</th>
<th>Secondary</th>
<th>Higher Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>0.95</td>
<td>0.98</td>
<td>0.96</td>
<td>0.99</td>
<td>1.07</td>
</tr>
<tr>
<td>All India</td>
<td>1.01</td>
<td>1.02</td>
<td>1.01</td>
<td>1</td>
<td>1.03</td>
</tr>
</tbody>
</table>

*Table 4: Gender Parity in Schools*

**Poor performance highlighted in red, source: UDISE+ 2018-19 data**

**Enrolment by social category**

89. The below graph shows enrollment by social category and gender (Source: UDISE 2018-19)

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27 https://cse.ap.gov.in/DSE/stateProfile.xls
28 UDISE 2018-19
30 UDISE 2018-19
31 UDISE 2018-19
Gross Enrolment Ratio (GER) by Level of School Education

89. The state lags the national average in all categories except Secondary.

Legend: Red: Primary; Orange: Upper Primary; Green: Elementary; Blue: Secondary; Dark Blue: Senior Secondary

D. School and Infrastructure

90. In Andhra Pradesh, 68% of the schools have functional toilet for girls. Functional toilets for girls, along with boundary walls are a key indicator of school-related gender-based violence (SRGBV). The numbers for different school type are presented here:

E. Education Outcomes

91. National Achievement Survey: The state ranked in the Top 10 highest performing states – those with over 40% of the students in the top performing bands. However, inter-district variations are abound. The table below presents a sample exhibit of variations in learning outcomes across districts for grade 8. Similar variations are also observed for grade 3 and 5.
NITI Aayog’s School Education Quality Index (SEQI) ranking:

92. The state ranks 11th in the NITI Aayog’s SEQI in the Large-States category.

- Of the 20 Large States, 10 perform better on the Outcomes category, with the most noticeable performance differences observed in the cases of Karnataka, Jharkhand, and Andhra Pradesh.
- Among the Large States, Andhra Pradesh improved their score by more than 10.0 percentage points in the equity outcomes.
- Decrease in Governance processes aiding outcomes- the scores for Andhra Pradesh decreased by 1.4 percentage points
- Reference year data shows that 26 States and UTs have integrated their teachers’ unique IDs into electronic databases. In fact, Andhra Pradesh has stored all their teachers’ unique IDs in their respective electronic databases.
- In contrast, Andhra Pradesh has recorded one of the lowest percentages of academic positions filled, at 11.4 at the state level (State level academic institutions) and 19.4 percent at district level.
4 POTENTIAL ENVIRONMENTAL AND SOCIAL EFFECTS OF THE PROGRAM

93. The proposed program aims to improve the quality and management of foundational learning and elementary and secondary education in AP. This includes interventions to strengthen foundational learning, improve the quality of teacher-student interactions, and strengthened institutional capacity and community engagement for service delivery. The following sub-section discusses the program activities planned under each of the Results Areas. This helps understand the potential environmental and social effects of each activity. Overall, the program activities would result in low to moderate environmental risks; mostly during the implementation stage.

94. A detailed description of the existing program in terms of its type of works and guidance, institutional responsibilities for implementation, supervision, and monitoring; impacts and risks, opportunities for improvement are presented in this chapter. Detailed discussion on environmental aspects of the ongoing program and existing environmental regulatory regimes in the country and for AP as applicable for the proposed program (especially for proposed repair and facility provision) is presented in Annexure II.

4.1 Assessment of Environmental Effects

95. The proposed program has three Results Areas as presented below:

![Figure 12: Result Areas of SALT program](image)

4.1.1 Environmental Risks or Impacts and Benefits under Result Area 1

Program activities include:

96. Development and provision of short-term teacher training courses to the Anganwadi workers managing the network of more than 55,000 Anganwadis, and teachers teaching the early grades in roughly 38,000 schools. Standardized TLM across these institutions. Short-term, six-month certificate training program for Anganwadi workers, a shorter training program of three months to teachers managing the Early Grades. Support to the state’s decision to gradually introduce a one-year preparatory grade in primary schools. Training to Anganwadi teachers, lesson plans for early grades on mainstreaming gender, understanding, and appreciation for climate change, and environmental conservation (afforestation, animal protection, water conservation, etc.), and periodic assessment of such learning through SLSAs.

97. Support to GoAP’s Nadu Nedu initiative on improving infrastructure and facilities for primary education - toilets and drinking water facilities, repairs, furniture, and smart television, lights and fans, other measures like the reuse of water.
COVID-19 response: enhancement of the home-based learning opportunities being provided to three to eight-year-old students. Support to the distribution of physical workbooks with supporting lessons broadcasted on television and radio; development of more broad-based physical learning kits (storybooks, puzzles, and play material) that can be distributed to facilitate parent guided learning in a home environment, support to gradual re-opening of schools - online training on safe school operations, provide drinking water facilities, hand washing points, and toilet facilities, emergency maintenance and repairs.

**Environmental Benefits and Risks**

<table>
<thead>
<tr>
<th>Environmental Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provision of TLM and support to teacher development:</strong></td>
</tr>
<tr>
<td>Provision of materials for teacher development, preparation of teacher guidebooks, and</td>
</tr>
<tr>
<td>training to BRCCs, CRCCs, and school principles on academic management and monitoring</td>
</tr>
<tr>
<td>improve overall school management and student performances aimed at long term quality</td>
</tr>
<tr>
<td>improvement. Support to provide guidebooks for home-based learning, physical learning</td>
</tr>
<tr>
<td>kits.</td>
</tr>
<tr>
<td>**Upgradation of WASH facilities, Repairs, Reconstruction, Nodu Nedu, and COVID 19</td>
</tr>
<tr>
<td>response:** Improving WASH facilities in schools is extremely important in the post-</td>
</tr>
<tr>
<td>COVID-19 scenario for its contribution to personal hygiene (includes COVID-19 response</td>
</tr>
<tr>
<td>actions). Improving basic facilities, repairs/renovation of schools, construction of</td>
</tr>
<tr>
<td>boundary walls, lighting, will improve the quality of learning spaces and ensures a safe,</td>
</tr>
<tr>
<td>comfortable learning environment. It ensures long-term benefits like reduction of</td>
</tr>
<tr>
<td>absenteeism due to water-borne diseases and improves enrolment. Improved structural</td>
</tr>
<tr>
<td>conditions due to repairs help provide a better and safe learning environment. Principles</td>
</tr>
<tr>
<td>of universal access, and energy efficiency, and safe and durable materials are</td>
</tr>
<tr>
<td>integrated into the program. The specifications shared by DoSE have certain aspects of</td>
</tr>
<tr>
<td>‘Green Buildings’. The Ceiling Fan specifications mention that the fan wattage should be</td>
</tr>
<tr>
<td>between 50 to 75 which can be called energy-efficient fans considering average fans are</td>
</tr>
<tr>
<td>80 watts although some brands are 45 watts. The current specifications ensure that the</td>
</tr>
<tr>
<td>paint should not have more than 50 grams/liter VOCs which matches with the limits</td>
</tr>
<tr>
<td>specified by Indian Green Building Congress and good quality paint is purchased and</td>
</tr>
<tr>
<td>used from a leading brand. It also mentions that the paint should not have carcinogenic</td>
</tr>
<tr>
<td>materials and should not have toxic metals (Lead, Cadmium, Chromium) and their</td>
</tr>
<tr>
<td>compounds more than 0.1% by mass.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risks / Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pollution and Dust:</strong> Construction of WASH facilities and repairs/refurbishment</td>
</tr>
<tr>
<td>of school facilities in existing school premises will generate dust and air</td>
</tr>
<tr>
<td>pollution, noise and vibration, and generation of solid/liquid wastes during the</td>
</tr>
<tr>
<td>construction and O&amp;M stage. This will impact communities, workers, students, and</td>
</tr>
<tr>
<td>staff.</td>
</tr>
<tr>
<td><strong>Impacts on fauna, flora, communities:</strong> Felling of trees, removing vegetative</td>
</tr>
<tr>
<td>cover, temporary disturbance to</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities to Enhance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Under this results area, there are opportunities to enhance environmental benefits:</td>
</tr>
<tr>
<td>(a) energy conservation by providing energy-efficient fixtures, and adopting</td>
</tr>
<tr>
<td>alternative energy; (b) water conservation by providing water-efficient fixtures,</td>
</tr>
<tr>
<td>integrate water harvesting and recycling/reuse of water (for example reuse of large</td>
</tr>
<tr>
<td>quantities of wasted backup water for flushing / other uses; mechanisms to choose RO</td>
</tr>
<tr>
<td>plants/ filters which will need minimum backwash), (c) enhanced awareness and</td>
</tr>
<tr>
<td>mechanisms on worker and child safety, hygiene, and sanitation by its inclusion in</td>
</tr>
<tr>
<td>teacher/parent training; (d) enhanced school ambiance, green cover, waste</td>
</tr>
<tr>
<td>management, safety and security by tools to monitor and report on facility management</td>
</tr>
<tr>
<td>and issues, integrating environmental aspects into the monitoring tools.</td>
</tr>
<tr>
<td>• Schools shall have safe facilities: buildings of good structural stability,</td>
</tr>
<tr>
<td>kitchens, stores, toilets, play areas, and fenced compounds, functional water</td>
</tr>
<tr>
<td>connections, and arrangements for handwashing and utensil washing and drying. To</td>
</tr>
<tr>
<td>cater to multiple meal requirements, kitchens need double-burner stoves – larger</td>
</tr>
<tr>
<td>burners so that they can avoid using firewood for rice and water boiling, gas</td>
</tr>
<tr>
<td>cylinders, pressure cookers, and required steel cooking vessels. Kitchen gardens</td>
</tr>
<tr>
<td>should be planted with drought-resistant and highly nutritive plants like</td>
</tr>
<tr>
<td>moringa. Green spaces would also act as outdoor learning/engagement spaces for</td>
</tr>
<tr>
<td>children when the weather is conducive (considering the hot summers and cyclonic</td>
</tr>
<tr>
<td>monsoons).</td>
</tr>
<tr>
<td>• Physical learning, guidebooks, and teacher learning materials shall be reusable,</td>
</tr>
<tr>
<td>and of good material quality, and shall also have learning materials on the</td>
</tr>
<tr>
<td>environment, climate, and disaster management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mechanisms to Reduce/Mitigate/Manage</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lead, VOC, and other toxic materials in paints are avoided through specifications</td>
</tr>
<tr>
<td>crafted by DoSE for the ongoing program. Special construction guidelines are in place</td>
</tr>
<tr>
<td>for coastal areas, Toilet accessible for the physically disadvantaged are provided.</td>
</tr>
<tr>
<td>• Provide guidance and monitor EHS practices</td>
</tr>
</tbody>
</table>
flora, fauna; reducing open space by constructing new buildings (eg: new toilets).

- Lack of attention to the choice of material, construction technology, and poor design (including lack of attention to universal design) impacts structural quality, stability, inadequate lighting, ventilation, water & sanitation facilities, space quality and safety, fire and electrical hazards, disaster resilience, and hampers physical accessibility to all (irrespective of disabilities). Children may be exposed to (a) high levels of lead through TLM such as poor-quality crayons, soft plastic toys, (b) asbestos fibers through cutting, drilling, etc., of old roofing sheets, pipes which could be made of ACM; and (c) exposure to smoke from Anganwadi/kitchen (cookstoves) in case firewood/biomass is used as fuel.

- Follow good EHS practices to reduce pollution during Construction & O&M; ensure safety (covered material storage & construction sites, PPEs and guidance for workers esp. while working in heights, hard barricading, warning signs, reflectors in work areas – especially pits, first aid, water, WASH facilities for workers.

- Training and Awareness to Parent Committees, workers, school authorities, students on safety risks during construction / O&M activities

- Proper planning and placement of facilities and good design based on energy conservation, ventilation principles, recycle, reuse.

- Management of all wastes (incl. asbestos, batteries)

- Incorporate climate/COVID-19 related safety standards and Guidelines to choose learning materials, building materials (eg: asbestos), toys, etc. of good quality, devoid of hazardous materials.

- Provide all kitchens with LPG based fuels, improved large burner stoves as they need, and ensure they do not use firewood

- Charter continuous environment enhancement activities and engage students and parent committees in all activities

### 4.1.2 Environmental Risks or Impacts and Benefits under Results Area 2

**Program activities include:**

99. Provision of blended teacher professional development opportunities (on-site teacher training, on-site and remote individual coaching, and an online repository of materials) to about 190,000 public school teachers. To better respond to COVID-19, and learning from the pandemic, courses on the planning and management of remote learning and digital skills will be made widely available to teachers. School complex-based peer-to-peer learning, classroom observation-based coaching, and collective planning of teacher training needs. Support teachers in collating and reporting school complex/cluster level training needs based on their self-assessment results from school/classroom level diagnostic assessments, and classroom-based observation of teaching practices. Developing, implementing, and analyzing periodic SLSAs, and other large-scale assessments of the GoI.

100. Repair and refurbishment of resource centers for Children with Special Needs (CwSN) provide necessary aids and appliances, and kits to support home and school-based support.

101. Establishment of a specialized cell for Inclusive Education (IE) at the SCERT for teacher training and guidebooks to better address the educational needs of the CwSN.

**Environmental Benefits and Risks**

<table>
<thead>
<tr>
<th>Environmental Benefits</th>
<th>Opportunities to Enhance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training/Capacity Building of various agencies/stakeholders especially in digital skills, training need assessment and reporting: Training and capacity building generates awareness and improves the capacity of the stakeholders including officials, teachers, parent committees, and students to perform, supervise and manage to teach and learning more efficiently.</td>
<td>Under this results area, there are opportunities to enhance environmental benefits: (a) energy conservation by providing energy-efficient fixtures, and adopting alternative energy while upgrading resource centers; (b) water conservation by providing water-efficient fixtures, integrate water harvesting, and recycling/reuse of water while upgrading resource enters, (c) enhanced awareness on child safety, hygiene, and sanitation by its inclusion in teacher/parent training – especially by including this as part of the training, capacity building modules; (d)</td>
</tr>
<tr>
<td>Developing and piloting tech-assisted assessment tools, and digital applications: These would enable more efficient teaching, learning performance, and monitoring</td>
<td></td>
</tr>
</tbody>
</table>

*Environmental and Social Systems Assessment 2021 (P173978)*
at various levels; including those of facilities and environmental conditions which would, in turn, improve learning and teaching.

• Upgradation of physical and academic facilities at the resource centers and providing materials and technology equipment to enable the resource centers to provide care remotely at home and schools for CWSN is a very important initiative that ensures better facilities for CWSNs and supports inclusive education. (Mainly focuses on improving the existing facilities by providing lightings, fixtures, furniture, tools - no new large-scale civil construction is envisaged; except minor repairs).

<table>
<thead>
<tr>
<th>Risks / Impacts</th>
<th>Mechanisms to Reduce/Mitigate/Manage</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Training/Capacity Building of various agencies/stakeholders: Training and capacity building activities as such would not cause impacts or risk; except the generation of wastes (paper, solid wastes, plastics, etc.). By planning environmentally sustainable training events and integrating environmental aspects in training, long-term benefits and outcomes on the environment are expected.</td>
<td>• By planning environmentally sustainable training events (training events to follow ‘green protocol’ – ie. avoiding environmentally damaging materials like plastics, and actions); and integrating environmental aspects in training, long-term benefits and outcomes on the environment are expected.</td>
</tr>
<tr>
<td>• Developing and piloting tech assisted assessment tools: these would result in the generation of e-waste (end of life discarded equipment, parts)</td>
<td>• Provide guidance and monitor EHS practices</td>
</tr>
<tr>
<td>• Upgradation of physical and academic facilities at the resource centers may cause minor EHS risks during upgradation activities, generate wastes (including asbestos from repairs of old centers, wiring, electrical / plumbing / sanitary fittings, packaging wastes)</td>
<td>• While upgrading resource centers follow good EHS practices and ensure proper WASH / other facilities ensuring universal access &amp; taking into consideration safety and special requirements of CWSN (including i-BaLA)</td>
</tr>
</tbody>
</table>

4.1.3 Environmental Risks or Impacts and Benefits under Result Area 3

Program activities include:

102. Provide school leaders and decentralized education functionaries with access to relevant opportunities for professional development to improve their competency in key leadership skills including Gender equity, inclusion, Disaster Risk Management (DRM).

103. Support to develop results-oriented Annual Work Plans and Budgets (AWPBs)
104. Development and roll-out of a social audit tool for the PCs, school performance evaluation tool/rubric for the community to monitor school operations and report on its performance to the state and district level administration.

105. Development of the state’s Education Management Information System (EMIS).

**Environmental Benefits and Risks**

<table>
<thead>
<tr>
<th>Environmental Benefits</th>
<th>Opportunities to Enhance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Capacity Building of various agencies/stakeholders for Professional Development: Training and capacity building generates awareness and improves the capacity of the stakeholders including officials, teachers, parent committees, and students to perform, supervise and manage to teach and learning more efficiently. By planning environmentally sustainable training events and integrating environmental aspects in training, long-term benefits and outcomes on the environment are expected.</td>
<td>• Under this results area, there are opportunities to enhance environmental benefits: (a) integrating environmental aspects into the monitoring tool, b) improving the capacities at all levels for better management of facilities and overall school environment; including emergency/disaster response; c) management of e-waste, plastics and packaging wastes arising out of activities.</td>
</tr>
<tr>
<td>• Improved Social Audit and Developing IT-enabled EMIS would enable the availability of accurate and real-time data for better decision making. This would in turn ensure faster and efficient management and monitoring of activities at all levels. Including the dimensions on EHS into EMIS would ensure monitoring and management of facilities sustainably over the long run.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risks / Impacts</th>
<th>Mechanisms to Reduce/Mitigate/Manage</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Training/Capacity Building of various agencies/stakeholders: Training and capacity building activities as such would not cause and impacts or risk; except the generation of wastes (paper, solid wastes, plastics, etc.).</td>
<td>• Training all stakeholders on the use of IT-enabled EMIS</td>
</tr>
<tr>
<td>• Developing IT-enabled EMIS may generate e-wastes, packaging wastes.</td>
<td>• A module on training and awareness to Parent Committees, workers, school authorities, students on environmental aspects, waste management</td>
</tr>
<tr>
<td></td>
<td>• Minimize and manage all wastes during training/capacity building activities by following ‘green protocol’</td>
</tr>
<tr>
<td></td>
<td>• Guidance on e-waste management incorporating the requirements for e-waste EPR in ToRs of EMIS tool developers</td>
</tr>
<tr>
<td></td>
<td>• Incorporate environmental aspects in EMIS for monitoring &amp; reporting</td>
</tr>
</tbody>
</table>

### 4.2 Assessment of Social Management Systems

**Social Management Systems at State Level**

106. The program will be implemented by the Department of School Education (DoSE), GoAP through its agencies. The State Implementation Society (SIS) for Samagra Shiksha will be the nodal implementation agency for the program. It will be responsible for overall program management and coordination. In particular, the Nadu Nedu scheme will be implemented by the SIS through PCs and the AP Education & Welfare Infrastructure Development Corporation (APEWIDC). It will be supported by several other ‘Facilitating Agencies’ (FA) that will not directly be involved in the procurement of goods/works/services under the program and no funds will flow through these FAs. These FAs are providing advisory and administrative support to PCs for fulfilling various requirements for improvement of school facilities envisaged through Nadu Nedu. On the other hand, interventions aimed at improving the quality of teaching and learning will be directly implemented by implementation agencies such as the SCERT, the SIEMAT, and the DIETs. At the sub-district level, program activities will be coordinated by education functionaries (MEOs and CRCCs).

107. The Nadu Nedu scheme which is aimed at improving school facilities will be implemented through a hybrid Community-Driven Procurement (CDP) model that comprises a decentralized component along with centralized procurement at the state level. At the decentralized level, PCs will be involved in the planning, and implementation of community procurement including contract management to ensure a high-quality service in all activities.
maintained. Centralized procurement for items such as furniture, cupboards, green chalkboards, white writing boards, sanitary ware, fans, and tube lights and painting work will be aggregated and procured centrally by the SIS and APEWIDC. While the parent committees and APEWIDC will be the implementation agencies of the *Nadu Nedu* scheme, seven additional government departments including the APSS Engineering Department (wing of Samagra Shiksha SIS), Panchayat Raj Engineering Department, APEWIDC, Municipal & Public Health Engineering Department, Tribal welfare Engineering Department, Rural Water Supply and Sanitation, Housing Department will be engaged as FAs. Each of these has been allocated *Mandals based on the presence and staff strength in the project districts* to facilitate and monitor the overall implementation of the works in their jurisdiction and no money will flow through these facilitation agencies. Samagra Shiksha SIS (APSS Engineering Department) and A.P. Education & Welfare Infrastructure Development Corporation (APEWIDC) are having both the roles of IA as well as FA.

**Existing state government systems for education**

108. The Department of School Education is the largest among the 200 departments in the State. The department focuses on primary and secondary education and arranges to train teachers. The objectives of the Department of School Education are:

- **Provide access to primary education for all children in the age group of 5-15 years**
- Ensure the enrolment of children in schools
- Ensure that the children do not discontinue primary education
- Maintain quality standards in education within the State
- Provide mid-day meals to children in primary and upper primary schools that fall under the government, local bodies, and aided managements
- **Provide free textbooks to children of classes I to V studying in the schools under the government, local bodies, and aided managements**
- **Provide free textbooks to all the children of classes VI to X belonging to Backward Classes (BC), Scheduled Caste (SC) and Scheduled Tribe (ST) studying in the schools under the government, local bodies and aided managements.**
- Provide training to the teachers to help them upgrade their knowledge and skills, thereby ensure quality in teaching
- Strengthen and maintain standards of Pre-service Teacher Education Programmes to ensure quality education
- Ensure community participation in strengthening the school education system within the State

**Social Management Structure at the State Level**

109. At the state level, in Andhra Pradesh, school education sector schemes including the Samagra Shiksha, are executed by the Department of School Education (DoSE) through a State Implementation Society (SIS) set up under the Societies Registration Act, under the administrative control of the State Education Department. From a social management perspective, the DoSE will appoint a nodal officer in charge of monitoring social management aspects including gender-based violence prevention. The DoSE through the State Project Office and State Project Director and the State Implementing Agency for Samagra Shiksha establish linkages with district and sub-district level structures, NGOs, State Government, National Bureau of School Education, and other concerned stakeholders. It is also responsible for effective monitoring and training and capacity building of personnel including in ITDA blocks of the state.

110. Additionally, the DoSE is underpinned by a high degree of inter-departmental convergence, including coordination with the Department of Finance, APEWIDC, (implementation agencies of the *Nadu Nedu* scheme) parents’ committees, Department for Women and Child Development, Tribal Welfare Department, and other departments. Other bodies that compose the administrative structure and provide technical and academic input at

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32 Andhra Pradesh State Portal, https://www.ap.gov.in/?page_id=334

*Environmental and Social Systems Assessment 2021 (P173978)*
the state level are the Andhra Pradesh State Council of Educational Research and Training (SCERT), SIEMAT and the SIS of Samagra Shiksha.

**Social/Gender Implementation Arrangements at the District Level**

111. The SALT Program will support the District Education Officer (DEO) and sub-district level officials to effectively engage with NGOs, as well as technical specialists particularly in ITDA blocks. The SALT Program will also support monitoring of functioning and training aspects of Parent Committees through the DEO's office.

**Social/Gender Implementation Arrangements at the Block Level Arrangements**

112. At the block level, social and gender aspects will be monitored in coordination with the block/cluster resource persons, Parent Committee representatives’ headmasters, teachers, etc.

**Social/Gender Implementation Arrangements at the School Level**

113. Management of social and gender aspects at the school level will be routed through Parent Committees. These comprise 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 attendance of students and teachers.

**4.2.1 Potential Social Opportunities**

114. **Vision 2029 of the state of Andhra Pradesh**

- Andhra Pradesh has adopted ambitious targets of becoming one of the top three states of India by 2022 in terms of socio-economic performance based on equality and equity and achieving the status of a developed state by 2029. The State as per its Vision agenda is targeting a compound annual growth rate of 12% till 2029.

- In order to comprehensively monitor the progress and benchmark it against other countries the state has chosen two summary measures the Human Development Index (HDI) and the Healthy Adjusted Life Expectancy (HALE). The state is committed to achieve an HDI score of 0.9 and HALE of 64yrs by 2029.

- The following vision statement defines AP’s approach to achieve social empowerment and also lays the foundation for the strategies and solutions- “Ensuring Social Empowerment, Equity and Social Justice for all-round Human Development to lead a Healthy and Happy life’.

**Strategies outlined to improve the access and quality of school education**

115. Education will play a significant role in achieving the Vision 2029 target of sustained double-digit growth for the next 15 years. However, the performance of the state on educational indicators has been far from satisfactory

- Improving access to quality education for marginalized sections through incentive schemes, bridge classes and infrastructure development
- Improved monitoring of outcome indicators through the use of ICT tools
- Improving vocational education in schools
- Use of ICT tools and other infrastructural support to improve the quality of education
- Add sufficient capacity to increase GER to 50% by 2029 with special focus on underserved areas by opening more institutions in such regions.
- Set up incentive systems including preferential loans and scholarship for meritorious students from marginalized backgrounds

**Strategies outlined to improve the social empowerment**

116. The key **objective** of the strategy is to achieve “inclusive, equity-based citizen focused development and growth of Swarna Andhra by 2029”. Accordingly, the state needs to focus on more inclusive and sustainable policy
interventions. Strategies and focus areas have been identified with focused emphasis on women empowerment and mainstreaming of various disadvantaged social groups who have historically been at the margin of development agenda.

- Equitable, accessible, affordable and timely delivery of services and goods with adequate infrastructure accompanied by accountability setting mechanisms would be one of the induced approaches to reduce poverty and vulnerability thereby creating better living standards and ensuring human development and a happy society.
- The inclusive growth paradigm has made substantial progress in reducing the poverty head count ratio. State has proposed to achieve further inclusive growth and developmental transformation through the seven mission, five grids, five campaigns, Janmabhoomi program and Smart Village-Smart Ward program. Social security and social protection measures will play a crucial role in reducing the vulnerability and severity of poverty situation.
- Existing social capital base in the state can be leveraged for participation of poor households in the several poverty alleviation and other state support program.
- Women are the potential drivers of double-digit economic growth. For that to happen, the state needs to take suitable policy measures for women empowerment and safety.

4.2.2 Potential Social Benefits

The set of interventions listed below have direct potential social benefits:

- **Children with Special Needs (CwSN) will be provided priority support**: The state has 370 special resource centers for providing physiotherapy, therapeutic and educational support to CwSN. Personnel from these centers also provide school and home-based care and support in their catchment area. The program will support the repair and refurbishment of these centers and provide necessary aids and appliances and kits to support center, home, and school-based support. The program will also support the establishment of a specialized cell for Inclusive Education (IE) at the SCERT. This cell will focus on the development and provision of need-based teacher training and guidebooks that will enable teachers to better address the educational needs of the CwSN in their classrooms.

- **Improving gender outcomes and negating the on-going impacts of COVID-19 on adolescent girls will be a priority**: The Program will support sensitization and intensive training of teachers to support them a) in identification of inherent gender stereotypes in classroom interactions particularly in secondary grades and b) cater to the learning gaps experienced by adolescent girls due to the on-going impacts of COVID-19. The training will include imparting of techniques to communicate effectively with parents and panchayats especially from aspirational districts/ITDA blocks and enable girls to complete their school education. The training will also enable teachers to improve participation and learning outcomes of girls, particularly from ITDA blocks with a focus on improving their participation in STEM courses.

- **The close linkages between assessments and remedial education will be furthered through the piloting of a technology-enabled PAL system in about 700 residential schools with more than 140,000 students**: This system will provide highly customized remedial learning to children, with partial teacher supervision, by leveraging artificial intelligence to provide personalized content suiting each child's needs through a continuous feedback loop. The pilot will be rolled out across Kasturba Gandhi Balika Vidyalayas (KGBVs) and residential schools for tribal students. This will help in ensuring that students most in need of academic support are the first to access this system. Also, as these students reside on campus, they will have enough time to use the system at their convenience.

4.2.3 Potential Social Impacts

118. From a social systems perspective, the process of planning and execution of construction activities involves community representatives and Parents’ Committees in planning and implementation minimizes potential negative impacts. Though the process of planning for school infrastructure has been a well laid out process through the Nadu Nedu Scheme, however, the current process does not specify mechanism for systematic screening of E&S risks and impacts. The social audit process needs to significantly be strengthened to include social monitoring and integrating by-stander interventions on SRGBV.

119. The Samagra Shiksha through the SIS in AP follows a range of consultations with various stakeholders, including monitoring of learning outcomes. Through This, it guides and ensures the responsibility and accountability of different stakeholders. The Samagra Shiksha Framework also proposes to undertake community mobilization and close involvement of community members in school education to foster a ‘bottoms-up approach’ not only for effective planning and implementation of interventions but also for effective monitoring, evaluation. Decentralized planning also significantly reduces the risks of adverse impacts and exclusion, particularly in ITDA blocks of the state.

120. For Grievance Redress Management, Government of AP under the RTE act has authorized local authorities including Gram Panchayat, MEOs, District Education Officer’s Office in rural areas and Ward Office, CRC, Municipal Office, and Administrative Office in urban areas. However, a comprehensive system specifying escalation hierarchy of complaints and time duration for disposal of grievances is missing.

121. RA wise Social benefits and Risks / Impacts are presented in the following table

**Social Benefits and Risks**

<table>
<thead>
<tr>
<th>Component and Activity</th>
<th>Potential Social Benefits</th>
<th>Potential Social Risks/Impacts</th>
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<tbody>
<tr>
<td><strong>Results Area 1 (RA-1) – Strengthened Foundational Learning</strong></td>
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<td>• To enhance the quality of foundational learning being offered to more than 1.5 million three to eight-year-old children enrolled in Anganwadis and government-managed schools, the GoAP has adopted the strategies proposed under the NEP 2020.</td>
<td>• The component 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.</td>
<td>• The component will have overall positive social outcomes. There are no anticipated adverse impacts on account of activities planned under this component.</td>
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<td>• The program will support the state’s decision to gradually introduce a one-year preparatory grade in schools in tribal blocks.</td>
<td>• The support to roll-out one-year preparatory grade in schools in the 66 ITDA blocks will improve transition and completion rates amongst students from vulnerable communities, tribal communities, and particularly first-generation school goers.</td>
<td>• However, it is important to note that in the absence of training on participatory processes of planning, (such as social audits) outcomes are likely to be mixed and may not reflect the real concerns.</td>
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<td>• Across the foundational learning stage, breaking gender stereotypes, the development of a better understanding and appreciation for climate change, and environmental conservation will be key areas of focus.</td>
<td>• The process of participatory bottoms-up planning engaging with parents’ committee representatives will have positive impact on the project outcomes.</td>
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<td>• SALT will also support the GoAP’s Nadu Nedu initiative.</td>
<td>• The training of DEO/SDEOs will further strengthen the process of bottoms-up planning including on addressing the issues related to social inclusion, gender concerns and</td>
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<td>• To strengthen the state’s response to the COVID-19 pandemic, the program will support the enhancement of the home-based learning opportunities being provided to three to eight-year-old students.</td>
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<td>Component and Activity</td>
<td>Potential Social Benefits</td>
<td>Potential Social Risks/Impacts</td>
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<td><strong>Results Area 2 (RA-2) – Improved Quality of Teaching-Learning Interactions</strong></td>
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<td>• The state has introduced curriculum reforms in support of a new competency-based teaching-learning approach. To operationalize this transition, SALT will focus on the provision of blended teacher professional development opportunities (on-site teacher training, on-site and remote individual coaching, and an online repository of materials) to about 190,000 teachers.</td>
<td>• The COVID-19 pandemic has posed many challenges to larger society, country and sectors including education. This has posed a major challenge to teachers coming from various socio-cultural and economic background to learn the art of remote and online teaching and put them on a steep learning curve to cope with. This Result Area aims to understand the challenges faced and device mechanisms and build capacity of teachers to deal with such situation or in any other similar emergency. This will have positive impact especially in areas where disruptions are common due to natural and/or man-made hazards such as floods, cyclone, strikes etc., or other such situations.</td>
<td>• Both access and social inclusion has been one of the important factors for children coming from poor and vulnerable community to join the pre-school. And hence, an adequate focus is required in planning and implementation to address the same as this may require additional measures in some areas/locations.</td>
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<tr>
<td>• To better respond to COVID-19, and learning from the pandemic, courses on the planning and management of remote learning and digital skills will be made widely available to teachers.</td>
<td>• AP is increasingly using ICT for teacher training and this will potentially have positive social outcomes in terms of teachers being prepared to teach in such situations.</td>
<td>• While land acquisition and involuntary resettlement is not expected under the program, instances of encroachers/squatters and legal land related disputes cannot be completely ruled out.</td>
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<tr>
<td>• The program will operationalize a model of needs-based teacher professional development prioritizing school-based coaching of teachers and facilitating peer to peer learning.</td>
<td>• The state has 370 special resource centers for providing physiotherapy, therapeutic and educational support to CwSN. Personnel from these centers also provide school and home-based care and support in their catchment area. The program will support the repair and refurbishment of these centers and provide necessary aids and appliances and kits to support center, home and school-based support.</td>
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<td>• Children with Special Needs (CwSN) will be a priority for the support provided under the results area.</td>
<td>• The Program will support sensitization and intensive training of teachers to support them a) in identification of inherent gender stereotypes in classroom interactions particularly in secondary grades and b) cater to the learning gaps experienced by adolescent girls due to the on-going impacts of COVID-19.</td>
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<td>• Improving gender outcomes and negating the on-going impacts of COVID-19 on adolescent girls will be a priority.</td>
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<td>• In the area of student assessment, the program will support actions at two levels: (i) strengthening the use of classroom assessments as tools for ongoing student remediation and competency-based learning, and (ii) strengthening system-level assessments as tools for informing education policy and practice across the state.</td>
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**Results Area 3 (RA-3) – Strengthened Institutional Capacity and Community Engagement for Service Delivery:**

<table>
<thead>
<tr>
<th>To foster greater accountability to beneficiaries and facilitate greater citizen engagement for improved</th>
<th>The process of participatory planning at all levels beginning at schools to blocks to districts and to state level</th>
<th>Both access and social inclusion has been one of the important factors for children coming from poor and vulnerable community to join the pre-school. And hence, an adequate focus is required in planning and implementation to address the same as this may require additional measures in some areas/locations.</th>
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<td>• Both access and social inclusion has been one of the important factors for children coming from poor and vulnerable community to join the pre-school. And hence, an adequate focus is required in planning and implementation to address the same as this may require additional measures in some areas/locations.</td>
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<td>Component and Activity</td>
<td>Potential Social Benefits</td>
<td>Potential Social Risks/Impacts</td>
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<td>school level planning and budgeting, SALT will support the development and roll-out of</td>
<td>will reflect the local needs and concerns including the concerns of parent committee</td>
<td>vulnerable community to join the pre-school. And hence, an adequate focus is required in</td>
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<td>a social audit tool.</td>
<td>members, community and school management and will have positive impact on the</td>
<td>planning and implementation to address the same as this may require additional measures in</td>
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<td>• The program will support the development of the state’s EMIS to facilitate digital</td>
<td>project outcomes.</td>
<td>some areas/locations.</td>
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<td>transformation of management and monitoring functions of the system.</td>
<td>• The training of planning teams will further strengthen the process of bottoms-up</td>
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<td>• Nodal state and district level educational institutions will be empowered to</td>
<td>planning including on addressing the issues related to social inclusion, gender concerns</td>
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<td>develop results-oriented AWP&amp;Bs</td>
<td>and needs of disabled and vulnerable population.</td>
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<td>• The Program will support establishment/strengthening of village-level inter-</td>
<td>• Representatives of PCs, teachers (especially from KGBVs), and administrative officials</td>
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<td>departmental committees in select ITDA blocks to monitor instances of early marriages,</td>
<td>will receive training in by-stander interventions to mitigate risks associated with</td>
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<td>drop-outs, and physical and/or sexual harassment experienced by adolescent girls.</td>
<td>school-related gender-based violence (SRGBV). Further, the program will support the</td>
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<td>creation of a web-portal for anonymous reporting of grievances related to on-campus</td>
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<td>harassment. The DoSE will identify service providers i.e. community representatives,</td>
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<td>self-help groups, NGOs to create a holistic identification, response, and redressal</td>
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<td>system to mitigate SRGBV related risks.</td>
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<td>system to mitigate SRGBV related risks.</td>
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### 4.2.4 Gaps and Risks in the Social System

**Key social/gender related risks**

122. The key social risks and impacts of the Program are likely to include (i) low transition and completion rates for students from vulnerable communities/ITDA blocks of the state; (ii) low capacity of Parents Committees in ITDA blocks to undertake civil works and regular social audits; (iii) occupational health and safety hazards experienced by laborers on construction sites; (iv) risks of early marriage amongst adolescent girls, especially in tribal/rural areas of the state; (v) barriers to transition from elementary to secondary grades for both girls and boys due to the on-going adverse impacts of COVID-19; (vi) low awareness levels amongst parents/communities in tribal and rural blocks of the state; (vii) lack of clear two-way information flows/communication pathways for sustained beneficiary/citizen engagement; (viii) intra-state variations in capacities of last-mile delivery officials, i.e. BRPs/CRPs, particularly in ITDA blocks and (ix) risks related to on-campus harassment and isolated instances on gender-based violence.

123. **Land management**: The Program does not intend to do any land acquisition or resettlement. Hence, social risks related to land acquisition and/or resettlement are not applicable at this stage. Refurbishments/minor civil works of schools and classrooms are going to be small in nature. The proposed PforR will be supporting mainly the improved mechanisms (including improvements in technical, digital, M&E, institutional aspects) for improving learning environments in classrooms. There can be secondary impact during the operationalization of the Nadu Nedu Scheme in isolated instances. GoI’s environmental and social legislation is strong enough to manage the risks associated with these potential secondary impacts. In addition, the screening requirement for land acquisition will be embedded as a parameter in the current social audit monitoring system.
124. **Risks of exclusion for SC/ST students:** Due to pre-existing inequities experienced by students SC/ST communities and first-generation school-goers, the risks of exclusion and program benefits not reaching students from aspirational districts and/or Schedule V areas/ITDA blocks persist. Review of program interventions suggests no special measures have been planned to focus on specific needs of students from tribal groups, and other vulnerable population including scheduled caste population. For equitable benefit sharing and ensuring inclusion of SC and ST, special institutional mechanism and efforts are required to be put in place such as providing handholding support for longer duration compared to other areas. Targeted interventions to reach students from SC/ST communities need to be embedded into the state strategic investment plans.

### 4.2.5 Key social/gender related gaps

125. Screening for E&S and SRGBV risks and impacts prior to undertaking civil works is a clear gap and it may lead to some instances adverse E&S impacts/effects.

126. The Block and Cluster Resource Centre Coordinators (BRCCs and CRCCs) play a key role in monitoring school level EHS aspects, and Parents’ Committee Representatives play an important role in execution of civil works. Infrequent delivery of trainings go Parents’ Committee Representatives poses gaps in understanding and adherence to EHS aspects as well as SRGBV issues which tend to be extremely sensitive. While the turn-over is inevitable, the system needs to be strengthened for quick/effective on-boarding and sensitization.

127. There is a need to develop a roadmap for targeted monitoring of transition rates (from elementary to secondary) and learning outcomes of SCT/ST students in the 66 ITDA blocks.

128. Lack of a comprehensive feedback/Grievance Redressal Mechanism with an escalation hierarchy and time-bound resolution of complaints received from parents, students, and faculty members.

### 4.3 Summary of E&S effects

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

129. The program activities will not create long-term irreversible risks or impacts. Environmental benefits of proposed capacity building activities, guidance and TLM, minor repairs / up-gradation of facilities (including WASH) in schools and CwSN resource centers, and efficient monitoring are high. The program provides enormous opportunities to incorporate environmental enhancement measures in program activities and for ‘whole school’ improvement through physical up-gradation, awareness generation, and capacity building of teachers, students, PCs, and education functionaries. This would ensure long-term environmental benefits.

130. Impacts and risks associated with the program are mainly due to EHS risks during the construction stage. Harmful substances such as lead, VOC are avoided in the ongoing program by incorporating suitable specifications by DoSE. The civil structures proposed in disaster-prone areas follow specifications to ensure structural safety. Works involving asbestos and banned insecticides shall be avoided in the program. Impacts and risks on natural habitats or resources are expected to be minimal, as proposed activities are expected to take place in existing school premises; however, these shall be avoided following existing regulations. Impacts and risks can be avoided, minimized, mitigated, and managed by following exclusion principles, guidance, regulations, good practices, management plans, and benefits can be enhanced by ensuring adequate capacities at all levels to guide and monitor environmental effects.
5 ASSESSMENT OF ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEMS AND IMPLEMENTATION CAPACITY

5.1 Guidance in P for R Policy

As per the P for R Policy of the bank:

131. A program system is constituted by the rules and “arrangements within a program for managing environmental and social effects,”34 including “institutional, organizational, and procedural considerations that are relevant to environmental and social management”35 and that provide “authority” to those institutions involved in the program “to achieve environmental and social objectives against the range of environmental and social impacts that may be associated with the Program.”36 This includes existing laws, policies, rules, regulations, procedures, and implementing guidelines, etc. that apply to the program or the management of its environmental and social effects. It also includes inter-agency coordination arrangements if there are shared implementation responsibilities in practice.37

132. 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.”38 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) The 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 of projects or programs of similar type and magnitude.

133. An assessment of the environmental and social management systems was carried out by the Bank team in coordination with the borrower to understand the adequacy of existing capacities to manage environmental and social effects identified as part of ESSA including management of risks and impacts (regular and during emergencies) and to enhance benefits. Capacity to manage risks and impacts and enhance benefits were added in terms of institutional capacities and gaps, the existence of appropriate legal and regulatory frameworks, procedures, tools, and guidance at the National, State, and Program level to effectively implement and manage the E&S requirements. Assessments are carried out to understand if the program’s environmental and social management systems are consistent with the core principles and key planning elements contained in the PforR Policy and whether the involved institutions have the requisite capacity to implement these systems’ requirements. Gaps identified through the assessment are proposed to be addressed through a set of actions which are compiled as Environmental and Social inputs to the Program Action Plan.

5.1.1 Program Systems: Legal, Regulatory systems and Frameworks

134. The National Education Policy 2020 (NEP 2020), which was approved by the Union Cabinet of India on 29 July 2020, replaces the previous National Policy on Education, 1986, and outlines the vision of India’s new education system, and is the overarching framework for the educational system in India. The provisions of the existing environmental legal and regulatory framework are comprehensive to ensure environmental sustainability though it requires enabling institutional and technical capacity for monitoring, compliance, and streamlined guidance and

34 Drawn from Program-for-Results Financing: Interim Guidance Notes on Staff Assessments, “Chapter Four: Environmental and Social Systems Assessment Interim Guidance Note,” Page 77, paragraph 1.
36 Ibid., Page 77, paragraph 2, and page 82 paragraph 12.
37 Based “Chapter Four: Environmental and Social Systems Assessment Interim Guidance Note,” Program-for-Results Financing: Interim Guidance Notes on Staff Assessments.
38 Ibid., Page 77, paragraph 2, and page 82 paragraph 12.
Even though the state had implemented programs like Rashtriya Madhyamik Siksha Abhiyan (RMSA) and Samagra Shiksha Abhiyan (SSA), there is very limited awareness about environmental management among state/district/school level stakeholders and the Environmental Management Framework (EMF) for RMSA is not in use for Nadu Nedu program. Environmental Regulations and policies/guidelines applicable for Nadu Nedu include Environmental Protection Act, Forest and Biodiversity Protection Acts, Codes on Occupational Health and Safety of workers, Rules on Solid Waste Management, Construction and Demolition Waste Management, Hazardous Waste Management, Plastic Waste Management, E-Waste Management, etc. Various environmental regulations at the National and State Levels and their applicability to the program are discussed in detail in Annexure II.

The legal/regulatory framework on social aspects ensures the following: (a) protection of the interest of SC and ST population, (b) non-discrimination based on religion, race, caste, and gender, (c) transparency with the right to information, (d) the right to fair compensation in case of land acquisition. This includes:

- National Education Policy 2020
- Samagra Shiksha Mission
- Commission for Protection of Child Rights Act 2005
- The Protection of Children from Sexual Offences (POSCO) Act, 2012
- The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Rules, 1996
- Child Labor (Prohibition and Regulation) Act, 1986
- Bonded Labor System (Abolition) Act, 1976
- Minimum Wages Act, 1948step and they will not know about the O
- The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation, and Resettlement Act (RFCTLARR), 2013
- The Payment of Wages Act, 1936
- The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006
- The Right to Information Act, 2005
- Workmen’s Compensation (Amendment) Act 2009
- The Maternity Benefit (Amendment) Act, 2017
- The Payment of Gratuity Act, 1972
- The ESI (Employee state insurance) Act, 1948
- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013

A comprehensive listing and assessment of social policies, laws, and regulations, as applicable to the school education program in Andhra Pradesh is provided in Annexure II.

Over-all, the provisions of the existing social legal/regulatory framework, including the stipulations to protect the interest of marginalized and vulnerable population such as the SCs and STs, are adequate though enabling institutional and technical capacity building is required for achieving full and more uniform compliance on the ground across districts and blocks of the state.

5.1.2 Program Capabilities: Organisational Capacities

The program will be implemented by the Department of School Education (DoSE), Government of AP through its constituent agencies. The SIS for Samagra Shiksha will be the nodal implementation agency for the program. It will be responsible for overall program management and coordination. In particular, the Nadu Nedu scheme will be implemented by the SIS through PCs and the A.P. Education & Welfare Infrastructure Development Corporation
(APEWIDC). On the other hand, interventions aimed at improving the quality of teaching and learning will be directly implemented by implementation agencies such as the SCERT, the SIEMAT, as well as the DIETs (district level bodies). At the sub-district level, program activities will be coordinated by education functionaries (MEOs and CRCCs).

139. The Nadu Nedu scheme which is aimed at improving school facilities will be implemented through an innovative model that comprises a decentralized component along with centralized procurement at the state level. At the decentralized level, PCs will be involved in the planning, management, and monitoring of work to ensure a high-quality service in all activities is maintained. At the state level centralized procurement for items such as furniture, cupboards, green chalkboards, white writing boards, sanitary ware, fans, and tube lights and painting work will be implemented by the APEWIDC. While the parent committees and APEWIDC will be the implementation agencies of the Nadu Nedu scheme, seven additional government departments including the Panchayat Raj Engineering Department, A.P. Education & Welfare Infrastructure Development Corporation (APEWIDC), Municipal & Public, Health Engineering Department, Tribal welfare Engineering Department, Rural Water Supply and Sanitation, Housing Department will be engaged as facilitating agencies. They will not spend any funds or procure any goods/services under the program. These ‘facilitating agencies’ are only providing advisory and/or supervisory support in the area of civil engineering and/or civil works. Each of these has been allocated Mandals to monitor the execution, quality, and progress of the works in their jurisdiction and no money will flow through these facilitation agencies.

5.2 Assessment of Core Principles

5.2.1 Core Principle 1 – Environmental and Social Management

Environmental Management: Assessment of Program Systems

140. An assessment of program systems under the Core Principle 1 determined that Nadu Nedu program is aimed at the provision of WASH and other facilities, and repairs to the schools. Environmental Assessment as under Environmental Impact Assessment Notification 2006, is not a statutory requirement for small-scale works supported by the program. The program also has not adopted any framework for assessing and managing environmental aspects; including the EMF (prepared in 2011) under Samagra Siksha Program or RMSA. Even though Samagra guidelines were used in the case of earlier / other school programs, there is no awareness about such a framework or use in this program. Notwithstanding this, the ongoing program aims at providing the best facilities to the schools by choosing standard material/equipment decided at the State level. While the scale of works and quality of infrastructure is good, adopting environmental best practices and regulatory guidelines in terms of siting, work activities, water, waste and wastewater management, and environmental enhancement measures would add to the overall enhancement of program effects and benefits focusing on overall school improvement, and help minimize risks and impacts on the environmental parameters, workers, and students.

Environmental Management: Assessment of Program Capacities

141. DoSE of GoAP has extensive experience in providing and improving facilities and services in schools in World Bank-supported and other programs. The past National level school education projects included an ‘Environmental Assessment / Management Framework’ (EMF) developed in 2013 and implemented through the Ministry of Human Resources Development (MHRD) and State authorities. While few state-level officials are aware of the presence of EMF in those programs, it is not followed for Nadu Nedu. The available EMF also does not provide screening criteria or EMP for works but has included best practices for certain activities which were funded under those national programs. There is no designated institutional capacity at State/District/Block/School level on EHS in Nadu Nedu. There is no awareness on monitoring of EHS in program activities. Consultations revealed that since the works are (i) in existing school premises, and (ii) of minor small-scale including renovations/repairs, construction of toilets and wash facilities; EHS issues are considered negligible/not requiring any attention. Since works occurred during COVID-19 imposed lockdown, school premises were devoid of any other activity and fully available for works; which will not be the condition post-COVID-19 lockdowns. However, this needs sufficient care after post-COVID-19 reopening to ensure workplace safety.

Environmental Management: Recommendations

142. To address the gaps highlighted through the assessment, ESSA recommends the following:
i. Create institutional responsibility for E&S management at State/District/Block/School level by establishing an SSU (E&S cell) at the State SPMU to ensure overall E&S sustainability of the proposed program activities who will co-ordinate with designated Nodal person on Environment at District / Block / School levels who will interact and coordinate with regulatory agencies (such as Pollution Control Board (PCB), Local Bodies (Panchayats/Municipalities), District level departments, etc.), and all supporting institutions for E&S management. The parent committee will have a subcommittee on Environment / EHS which will ensure monitoring and reporting regularly,

ii. Support to ‘Green Gift Box’ in program schools with environmental enhancement measures (refer to Annexure IV). Integrate the activities of the National Green Corps (Eco-clubs) to ensure overall sustainability and green practices – by creating tree cover, supporting in recycling wastewater and wastes, and conduct safety audits and awareness drives. Improved school management shall be measured by a standardized tool that includes indicators on environmental sustainability,

iii. Prepare Environmental (& Social) Guidelines for program activities including exclusion criteria, and EMP, and ECoPs/SOPs/Good Practices.

iv. Regular training programs for field engineers and PCs on the provisions of the E&S Guidelines,

v. Include E&S aspects in EMIS and Social Audit; also with a mechanism to report on routine maintenance requirements.

Social Management: Systems

143. From a social systems perspective, the process of planning and execution of construction activities involves community/Parents’ Committees in planning and implementation through SMC/SDMCs. Though the process of planning for school infrastructure has been a well laid out process as a part of the Nadu Nedu Scheme, however, the current process does not specify a mechanism for systematic screening of E&S risks and impacts. The DoSE and SIS for Samagra Shiksha follow a range of consultations with various stakeholders, including monitoring of learning outcomes. Through This, it guides and ensures the responsibility and accountability of different stakeholders. The Samagra Shiksha Framework of GoI also proposes to undertake community mobilization and close involvement of community members in school education to foster a ‘bottom-up approach’ not only for effective planning and implementation of interventions but also for effective monitoring, evaluation, and ownership of the government programs by the community.

144. The DoSE follows the process of the social audit to create transparency, participation, and accountability in the program implementation at the school level, which is clearly articulated in the framework. Social audit is carried out by the community with the participation of other stakeholders including PRI members, local authority, members of SMC/ SDMC, etc. at least once a year, and follows a structured format designed by DoSE in Andhra Pradesh. (A sample social audit report has been attached in Annexure VIII)

145. For Grievance Redress Management, the Government of Andhra Pradesh under the RTE act has authorized local authorities including Gram Panchayat, CRC, Taluk Panchayat, and District Project Coordinator Office in rural areas and Ward Office, CRC, Municipal Office, and Administrative Office in urban areas.

Key Social/Gender Gaps Identified

146. The key gaps identified include the following:

- **Screening for E&S risks and impacts** before undertaking civil works/refurbishments under the Nadu Nedu Scheme is a clear gap and it may lead to some adverse E&S impacts/effects. The screening requirement for land acquisition will be embedded as a parameter in the current social audit monitoring system. The PCs along with the grassroots engineer will be responsible for screening and reporting land-related issues. The screening process will be undertaken before the commencement of civil works under the Nadu Nedu Scheme phase 2 and phase 3.

- **Limited Institutional Capacity**: The legislation at the national (Samagra Shiksha, NEP) and state level are well-developed from a social perspective. The federal-level schemes supported under the program and Nadu-Nedu initiative of the GoAP have clear targets to improve outreach to students from vulnerable groups
and first-generation SC/ST/Women school-goers. However, roles and responsibilities of nodal officers at the district levels on management of social inclusion and gender/SRGBV aspects (for instance: targeted training and outreach for parent committees, tailor-made remediation courses, awareness and outreach strategies for parents of adolescent girls) were largely found to be implemented with gaps.

- **Lack of a robust grievance redressal and feedback mechanism (GRM):** In line with RTE Act 2009 - section 9, section- 24(1)and section-32 (1), the Government of AP has authorized local authorities including Gram Panchayat, CRC, Taluk Panchayat and District project coordinator office in rural areas and similarly ward office, CRC, Municipal office and Administrative office in urban areas. However, a feedback/grievance redressal mechanism with clear channels of communication, two-way information flows, mechanisms to address queries, suggestions, and complaints from direct beneficiaries – parents, students, teachers, and Principals was largely found to be missing.

- **Targeted approaches/roadmap to improve learning outcomes in Integrated Tribal Development Blocks (ITDA)/aspirational districts:** At the policy level, the state has a clear focus on improving retention, transition, and completion rates for SC/ST students particularly from aspirational districts. The DoSE has also translated textbooks in tribal languages for ST students who are first-generational school goers. However, a strategy/roadmap with a comprehensive set of interventions to monitor and hand-hold SC/ST students from aspirational districts/rural areas of the state was largely found to be missing.

**Recommendations**

147. **Labor management and Occupational Health and Safety oversight** will be integrated into the guidelines to the *Nadu Nedu Program*

148. **Establishing/Strengthening of feedback/Grievance Redressal Mechanism (GRM) at the state and district-level:** The Program will support interventions to localize the feedback mechanism at the state-level as well capacity measures to improve the functions of DEOs to build effective information flows targeting first-generation school-goers from SC/ST communities.

149. **Land management:** Assist in developing screening checklists to ensure that there are no risks of involuntary resettlement and/or loss of livelihoods associated with investments supported under the Program.

150. **Awareness and training programs** targeting first-generation school-goers from aspirations districts, SC/ST students and adolescent girls from rural areas.
Table 5: Core Principle 1 – Environmental and Social Management

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<tr>
<th>System Assessment</th>
<th>Capacity Assessment</th>
<th>List of Identified Gaps</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>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.</td>
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<tr>
<td>Key Planning Elements</td>
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<tr>
<td>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.</td>
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**National Regulations** on assessing and managing risks and impacts: Program activities involve small-scale constructions like the addition of a toilet, repairs/renovations, water/sanitation facilities in existing school premises. This creates air/noise impacts, pollution due to waste/wastewater, increased water/energy use, risks to students, communities, and workers during works & maintenance activities.

National ‘Environmental Impact Assessment Notification 2006’ and its Amendments, suggest screening, scoping, and EIA for area/building construction more than 20000 sqm.

As per various national and State Laws, statutory clearances are required in the case of construction near-critical natural habitats and physical cultural resources *(This is discussed under Core Principle 2)*, consent/permits may be required (depending on the type of work). Local Bodies, PCBs, and other agencies for new constructions, repairs, renovations.

The doSE has 20 years’ experience in coordinating the improvement/development of facilities in schools. DoSE and Implementation Agency for Samagra Siksha and RMSA were involved in and working with the World Bank on school education. The State was part of SSA and RMSA (2013-2017), though awareness of its EMF is very limited today; and it is not used in the case of the ongoing program.

While the state-level officials are committed to environmentally friendly practices, there is little awareness among the field engineers, schools, and Parent Committee Members.

Currently, there is no institutional capacity at State, District, Mandal/Block levels or at School Level for assessment and management of environmental risks and impacts. Regulatory permits/clearances are not taken for proposed activities.

**System:**

Absence of mechanism to screen, exclude, assess, or manage risks and impacts at the program level

Absence of guidance on legal/regulatory requirements in case of constructions near-critical natural habitats and physical/cultural resources; consents permit accrual from various agencies

**Capacity:**

Lack of capacity, guidance at the State level to screen, exclude, manage, and mitigate environmental risks and impacts at the program level.

No coordinated mechanism at school, district, State levels for E&S management.

Lack of guidance, training, and capacity building of implementing agencies to identify, mitigate and manage risks and impacts.

Lack of guidance tools for PCs to supervise towards ensuring management of risks and impacts.

Prepare and use Environmental Guidelines for program activities including exclusion criteria, and ECoPs/SOPs covering risks and impacts including safety issues, and pollution due to construction and operations.

Constitute an E&S Management Cell which can be named ‘Sustainable Schools Unit’ (SSU) with Environmental and Social Specialists at State Level to plan, guide, coordinate, oversee, and manage and maintain records on environmental effects of the overall program and its implementing agencies at various levels (district, local). SSU to interact with designated Nodal officer on Environment at each level, school principal & PC to ensure the best E&S effects.

Capacity Building: Training programs for field engineers, schools, and Parent Committees on the SSU, and provisions of ECoPs, and monitoring mechanisms, and grievance redressal mechanisms. SSU to be involved in continual monitoring and provision of E&S enhancement measures and maintenance.
1.2. Incorporate recognized elements of environmental and social assessment good practice, including the following:

1.2 (a) Early screening of potential effects

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<td>The program does not use any screening mechanism for early screening of potential effects. The EMF-SS / RMSA is not in use for the program. EMF-SS/RMSA does not also specify a mechanism for screening for potential effects.</td>
<td>System&lt;br&gt;Absence of guidelines to guide on the best alternative material/technology, sites&lt;br&gt;Capacity&lt;br&gt;Lack of guidance, training, and capacity building of implementing agencies to identify, avoid, mitigate and manage risks and impacts</td>
<td>GoAP shall incorporate a mechanism for screening activities within existing sites, avoid/exclude high risks works, by preparing guidance/EMP/ECoP. This can be undertaken through a site reconnaissance by the Engineer, Parent Committee, and School Head and preparing a note on proposed developments &amp; applicability of Guidance prepared. This is to understand any potential issues of pollution/contamination or safety risks on nearby land uses due to proposed activities during construction or O&amp;M stages.</td>
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<td>1.2 (b) Consideration of strategic, technical, and site alternatives (including the ‘no-action alternative’)</td>
<td>There is no institutional capacity or tools to guide on environmental aspects or guidance on how and when to consider alternatives.</td>
<td>Develop and use Environmental Guidelines for deciding on best alternatives: a) location construct/provide the planned facilities in each site and b) material/technology procurement&lt;br&gt;Prepare and use Environmental (&amp; Social) Guidelines for program activities including exclusion criteria, and ECoPs/SOPs. The school learning environment shall be enhanced with energy and water-efficient fixtures, essential repairs, and furniture. Integrate the activities of the National Green Corps (Eco-clubs) to ensure overall sustainability and green practices – by</td>
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<td>creating tree cover, supporting in recycling wastewater and wastes, and conduct safety audits and awareness drives. Improved school management shall be measured by a standardized tool that includes indicators on environmental sustainability. Regular training programs for field engineers, and PCs on the provisions of the E&amp;S Guidelines.</td>
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<td>1.2 (c) Explicit assessment of potentially induced, cumulative, and transboundary impacts</td>
<td>Induced, Cumulative transboundary impacts are not expected considering (i) the type and scale of works which include repairs, renovations, and small construction activities associated with provision WASH facilities; and (ii) as schools are in spatially distant locations.</td>
<td>Not Applicable.</td>
<td>Not Applicable</td>
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<tr>
<td>1.2 (d) Identification of measures to mitigate environmental or social impacts that cannot be otherwise avoided or minimized</td>
<td>The program targets minor works including renovation, repair, and provision of WASH facilities. Nadu Nedu program guides on eco-friendly materials, energy-efficient fixtures, and designs; and the schools follow NDMA school safety guidelines. However, there is no guidance on sustainable provision and management of facilities except in the case of quality of construction material. Principles of universal access are considered for toilet facilities. EHS needs adequate consideration</td>
<td>Civil engineers in the education department or implementing departments are not oriented to mitigate environmental or safety issues regularly. There is no Review and Monitoring plan on school safety (during works, emergencies/disasters, and normal school days); including safety audit, availability of emergency equipment and materials. There is no institutional capacity to monitor these &amp; ensure implementation at all levels.</td>
<td>System: Measures to mitigate environmental or social impacts that cannot be otherwise avoided or minimized and to ensure the use of site features or landscape design principles, ventilation, use of alternate technology, water resource conservation, and recycling, management of wastes/wastewater, construction/worker/community safety are not integrated into the program. Organize regular and periodic training programs for field engineers, schools, and PCs on Environmental aspects Train Overseers/engineers on EHS Train and Create capacities to monitor safety at school Proposed SSU to prepare and use tools and formats to a) review report, monitor and enforce EHS, school safety; and b) environmental enhancement and mitigation measures through eco-clubs</td>
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### System Assessment

**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.

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<tr>
<td>Absence of tools/formats at different levels to review, monitor, and enforce EHS, School Safety</td>
<td>Capacity: Implementing agencies lack awareness of impacts including EHS</td>
<td>Absence of institutional mechanism at different levels to review, monitor, and enforce EHS, School Safety</td>
<td>(National Green Corps) including green belt, clean school campaign, etc. Develop an institutional mechanism for school safety audit (during key works, O&amp;M of facilities, and periodically)</td>
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1.2 (e) **Clear articulation of institutional responsibilities and resources to support the implementation of plans**

The existing program does not use the Samagra Shiksha Framework or RMSA EMF which specifies institutional arrangements at the national, state, district, block, and school levels. Environment, health, and safety (EHS) aspects are not fully integrated into all program activities. Block / Cluster Resource Centre Coordinators (BRCCs / CRCCs) play a key role in monitoring works. At the community level, PCs and field engineers play a key role in monitoring. However, EHS considerations are not inbuilt in the works or any training provided. While the authorities at the State level are committed to integrating good environmental practices in design, getting consent/permits, and managing the risks or its monitoring; they need support in terms of qualified manpower, tools, and guidance to ensure this. There is little awareness, capacity, and resources (staff, funds, tools) of implementing agencies, for environmental management construction/supervision. Parent committees are not aware of the need to  

**System**

Absence of tools/guidance for implementing agencies to ensure sustainable operations in the long run  

**Capacity**

Absence of institutional mechanism at various levels to integrate EHS concerns into the program and to ensure sustainable operations in the long run  

Lack of training and awareness on EHS to Parent Committees, Students or for integrating their services  

SSU will function as an E&S cell to be constituted at SPMU for SALT. Nodal officers for Environment at District, Block / School / Parent Committee levels (Environment subcommittee) to be designated; who reports to SSU on EHS aspects on a predefined basis (during construction, operations), ensure permits/consents for works and facility installation, and reports on further maintenance needs. Develop mobile apps/tools for Parent Committees/school headteacher to report on maintenance requirements in schools. SSU to arrange regular training and awareness campaigns on EHS to all stakeholders including PCs, Students, and integrating their services.
### 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.

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<tr>
<td><strong>Screen E&amp;S effects and have no time, mandate, or tools to screen environmental risks and impacts, and supervise.</strong></td>
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1.2 (f) **Responsiveness and accountability through stakeholder consultation, timely dissemination of program information, and responsive grievance redress measures**

**Parent Committees are well consulted and are aware of the program activities. Since there is no framework for stakeholder engagement; the immediate communities near schools (except parent committee members) are not much aware of the works or EHS related aspects of the program. There is no mechanism for grievance reporting or management**

**Stakeholders include not just schoolteachers, parent committees, or students. The communities around the school and respective local bodies are stakeholders in school development programs. It is important to inform and get feedback from communities around the schools.**

**Parent committee members and school authorities monitor grievances and redressal of complaints at the school level, there is no capacity to carry self-audits, manage grievances related to safety issues, and ensure accountability in construction.**

**System**

Absence of mechanism to inform and get feedback from communities around the schools regarding ongoing/proposed works and activities.

**Capacity**

Absence of institutional capacity to disseminate program information among all stakeholders including communities and get feedback.

**Grievance**

Absence of grievance mechanism on EHS.

**SSU to engage with stakeholders and communities on proposed activities in schools.**

Establishing a GRM also to report on EHS. Training on GRM to school, parent committees.
5.2.2   Core Principle 2 – Natural Habitats and Physical Cultural Resources

151. Proposed program activities will be implemented in existing school premises and hence impacts or risks on natural habitats and Physical Cultural Resources (PCR) are not expected. This core principle applies only to those program activities which may impact such habitats or resources in schools/locations proximal to these (for example, works proposed in schools impacting the banks of water bodies including in coastal zones, water bodies, hazard-prone areas, notified eco-sensitive zones, near forest areas, or in heritage buildings or premises used for any purpose or are valued by the communities).

Assessment of Program Systems:

152. National and State level laws and regulations exist for the regulation of activities in natural habitats, critical natural habitats, in the proximity of protected monuments, and for management of chance finds. Since program activities take place in existing school premises, such risks are though minimal; and restricted to any pollution or safety issue due to work/facilities provided impacting critical habitats, PCRs or natural resources; or chance finds. There exist no guidelines under the program to specify measures for screening, early identification, exclusion of biodiversity and cultural resource areas to avoid such impacts, or to devise strategies to reduce, mitigate and manage risks and impacts.

Assessment of Program Capacities:

153. Stakeholders are not mostly aware of existing legal/regulatory regime or the need to follow National/State/Local regulations; mainly considering that the works of small scale are proposed in existing school premises. There is no dedicated responsibility at any level to ensure that requisite permits/licenses are arranged as required for the works/facilities or to periodically update such licenses and follow license/permit conditions which will improve overall environmental effects.

Recommendations:

Based on the gaps identified through the assessment, the ESSA recommends the following:

154. Measures to avoid and minimize impacts on any natural habitat or cultural resources. Integrated environmental improvement of school leading to the concept of “Haritha Patashala” (Green Schools). This includes not just the adoption of measures to mitigate and manage environmental risks and impacts but also aimed at overall environmental improvement. This involves overall school campus management and greening not only during program activities; but also in the long term by (i) strengthening student – school-parent involvement in campus maintenance and up-gradation; (ii) school-level management of wastes, scraps, and inerts also involving local bodies (who are responsible for this service); (iii) greening of campus; (iv) water recycling and minimizing wastage; (v) use of safe and alternate fuels, (vi) maintaining and operating WASH facilities; (vii) systems to ensure long term management of facilities through the involvement of parent committees and by use of web-based tool/application to report on the required maintenance and up-gradation; (viii) minimizing energy use and use of alternate energy; (ix) ensuring ‘safe; school concept through better storage of fuels, tools, materials, ensuring safety at all times through periodic audit, reporting and making arrangements to ensure safety.

155. Use simple screening and exclusion to justify the selection of the most appropriate location within existing school premises for new construction and support functions, identify risks and impacts early on and exclude adverse impacts

156. Exclude construction, demolition, repair/up-gradation activities, and discharge of wastewater/ wastes from proposed facilities in the following areas from the PforR program, because of the high risk posed to natural habitats and cultural resources.

157. Develop institutional capacities to list out and follow applicable regulations (National/State/Local) for all program activities and keep records.

158. Include training on regulatory provisions relevant to school development activities in the proximity of natural habitats and heritage sites as part of training programs for PCs and for implementing agencies.
### Table 6: Core Principle 2 – Natural Habitats and Physical Cultural Resources

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>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.</td>
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<td>Key Planning Elements</td>
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<td>2 (a) Includes appropriate measures for early identification and screening of potentially important biodiversity and cultural resource areas</td>
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<tr>
<td>Screening mechanisms for impacts and risks on natural habitats and physical cultural resources will help early identification of these to ensure these are avoided.</td>
<td>It is important to have responsibilities at the site level to ensure screening of risks and impacts and inform the program on areas or types of works/activities to be excluded.</td>
<td></td>
<td>Construction/repair activities in important biodiversity and cultural resource areas are to be excluded from the PforR program. A project team comprising of site engineer (and representative of respective facilitating agency), School Head, and PC representative to undertake onsite screening, exclude activities not supported by the program (which might impact biodiversity, cultural resources), and review based on pre-construction stage review list in EMP &amp; submit work note to SSU. Institutional responsibility at the State level, in the proposed SSU to ensure screening and exclusion at the start of program activities Training to Nodal Environmental person in district offices, Implementing Departments, Parent Committee, School Heads to use screening/exclusion criteria; and to monitor works in this regard</td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>System Assessment</th>
<th>Capacity Assessment</th>
<th>List of Identified Gaps</th>
<th>Recommendations</th>
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</thead>
</table>
| For conservation, maintenance, and rehabilitation of natural habitats, and avoid conversion or degradation, and mitigating environmental risks and impacts, there are various National and State laws National, State, and local level laws and regulations. These include the Forest Conservation Act 1980 that regulates the 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/local level Rules and bylaws that regulate cutting of trees and provide for compensatory afforestation. Also, there are multiple notifications, rules, and permit/license requirements, and guidelines to prevent impacts of new developments, wastes and wastewater management, and discharge/disposal of rejects, inerts, treated water. | The system of seeking statutory clearances for activities will support overall program sustainability. Currently, there is no designated officer/department coordinating required permits/clearance and following up on the status of these. The program would have fewer environmental risks if the stakeholders (State agencies, implementing departments, construction agencies, contractors, Parent Committees, etc.) are aware of the need for permits, clearances and follow consent/permit conditions. | System:
Tools/formats to screen the environmental risks and exclude risky activities and sensitive locations from the program. Capacities:
Absence of Institutional mechanism to screen and exclude projects with higher risks on natural habitats, integrate required good practices in design and guidelines to minimize/mitigate unavoidable risks and impacts; and monitor these. | Develop exclusion criteria: 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. Prepare and update the list of regulatory clearances required for various program activities. Establish institutional mechanism at State, District, to handhold and oversee the status of acquiring these permits/consents/licenses. PCs and engineers overseeing the works to be trained on the regulatory requirements of works/activities in sensitive areas, mitigation measures, and monitoring and reporting needs. |

| 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. | There are National and State level laws and regulations for the regulation of activities in the proximity of protected. Though some of the schools are housed in or near heritage structures/areas, the stakeholders are not aware of the need to | System:
Absence of tools and guidance to avoid, mitigate, minimize, manage impacts and | Prepare and follow Exclusion Criteria; Construction and demolition activities near protected monuments will be |

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<table>
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</tr>
</thead>
<tbody>
<tr>
<td>monuments and management of chance finds of archeological, historical value.</td>
<td>obtain permissions for activities in protected areas or to have a special management plan for activities in unprotected cultural heritage areas. Their program will benefit from excluding, minimizing, managing, and monitoring impacts and risks on such valuable sources</td>
<td>risks on PCRs</td>
<td>excluded from the PforR program. Prepare chance find procedures</td>
</tr>
<tr>
<td>However, there are no existing regulations for unprotected cultural properties.</td>
<td>Capacity: Training of stakeholders to manage &amp; monitor using tools/guidance</td>
<td>Absence of chance find management procedures</td>
<td>Establish an institutional mechanism (in the proposed SSU) to screen, exclude monitor impacts and risks on cultural heritage areas at State / SPMU level. SSU to prepare and monitor using ECOP/EMP with chance-find procedures</td>
</tr>
<tr>
<td></td>
<td>List of Identified Gaps</td>
<td></td>
<td>Train school authorities, local bodies, and Field level engineers on the regulatory requirements to protect all cultural heritage (tangible/intangible) and to identify and avoid such impacts, and monitor works allowed in/near such areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>risks on PCRs</td>
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</tbody>
</table>
5.2.3 Core Principle 3 – Public and Worker Safety

159. The works include minor repairs/renovations and construction of toilets/WASH facilities, colocation of Anganwadis, etc. Hence, the ESSA concludes that the Program is unlikely to have any major adverse risks or impacts on health and safety. There could be construction and O&M state risks emerging from poor design, construction, and O&M practices; mainly related to safety risks to communities, workers, and teachers/students when schools reopen after COVID-19 lockdown; pollution due to smoke/noise/dust during construction and maintenance activities and pollution of water sources nearby due to discharge of solid and liquid wastes. There are also chances of disaster risks and impacts mainly due to climate/hazard proneness of some areas (such as heatwave in Rayalaseema, cyclone risks in Coastal AP).

Assessment of Program Systems

160. The program would benefit from including considerations on the health or safety of communities, workers, or students during construction, and O&M stages. Currently, there is no guidance for incorporating these in program design or tools to monitor and report regularly during construction and operation phases. However, in general, building construction specifications for Coastal AP take into account the special needs of coastal areas; including rusting and structural strengthening requirements to withstand wind, cyclone, and other effects. This is more important in areas in Coastal AP which face the vagaries of climate frequently. The consultations confirmed that schools are not used for community medical emergencies or natural disasters like cyclones; as coastal AP has many cyclone shelters for emergency response and relief and that structures in coastal regions follow specifications to ensure structural safety from cyclones and other risks.

161. Removing/exclusion of activities from work processes: works involving old dilapidated and unsafe buildings are not supported under the ongoing Nadu Nedu program which focuses on minor repairs and refurbishments of functional school buildings. Besides, works involving asbestos are avoided under the Bank-supported program through an ‘Exclusion Criteria’.

162. Probable environmental issues include Noise and vibration due to minor construction and demolition work, probably localized soil erosion especially during rains/cyclones, disturbance to water bodies/water sources, local air quality impacts during excavations (for foundations), and material transport through unsurfaced roads, or open stacking of materials, hazardous materials and fuels, waste water discharges.

163. Occupational Health and Safety (OHS) aspects include overexertion and posture-related discomforts and injuries to workers, slips (into pits mainly for foundations) and fall, work in heights (two storeys), striking objects and moving machinery as in construction/demolition sites, dust, and other hazards due to fuels (used in kitchens, diesel generators) / chemicals/paints and solvents, electrical hazards on site. Child labor and hazardous work conditions for those between 14 to 18 years are also important.

164. Community Health and Safety related issues include general work site hazards due to poor housekeeping or barricading, and type of works, machinery, and materials on-site, increased incidence of communicable and vector-borne diseases due to work-related pollution (Labor camps are not expected as works are arranged by PCs through local laborers) and traffic safety. Since classes have commenced after COVID 19 restrictions, pandemic-related risks, the interaction of students and workers/workspace needs good attention.

Assessment of Program Capacity

165. There is no institutional responsibility to ensure safe work practices and monitor these; thereby avoiding impacts on communities, workers, and other users including students, visitors, and teachers. While engineers and communities are aware of the structural needs, awareness of the need to follow and enforce safe worksite practices is minimal. Construction safety was not highlighted as an issue of concern as mostly the construction under the ongoing program occurred during COVID-19 lockdown. However, parent committee members and nearby communities in urban areas highlighted the probable safety issues and worker-student interactions when schools reopen.
Recommendations

166. Based on the gaps identified through the assessment, the ESSA Team recommends these:

- Institutional mechanism (at state/school levels) to guide, coordinate with other departments, enforce monitoring of work safety, to get required permits/licenses; ensure pollution management and resource conservation, and for sanitization of schools. Improved school management shall be measured by a standardized tool that includes indicators on environmental sustainability,

- The following activities are excluded from the Program considering higher OCHS risks.
  - Construction of new buildings/facilities of more than two storeys in height
  - Works involving hazardous materials, Asbestos, or purchase and Use of banned Insecticides

- All works shall follow building guidelines and Guidelines on work safety / EMP / ECoPs. SSU and respective supervising agencies shall be responsible for OCHS supervision and reporting, with monitoring by PCs and site engineers. There shall be continuous work monitoring to ensure no student – worker/workspace interactions, through daily oversight by teachers or parent committee members.,

- Follow COVID-19 reopening protocols for sanitization, management of chemicals, disposal of related wastes. During March / April, some schools were used as COVID-19 quarantine centers. Currently, schools have been reopened following strict COVID-19 reopening procedures. It is important to ensure full disinfection before the start of school activities and continue to reduce viral load,

- Organize training programs for Parent Committee and implementing agencies on safe work practices and monitor these during construction and operations, integrate monitoring of EHS aspects into the school curriculum, along with course/module on the environment and climate change,

- Include Safety/ EHS aspects for program implementation, management, O&M in the social audit.

167. The system shall be strengthened by focusing on eliminating, controlling, minimizing the hazards, and providing PPEs as per the World Bank Group EHS guidelines. The Nadu Nedu guidelines ensure the integrity of workplace structures: clean to maintain, structurally safe, and ensure protection from climate and universal access and fire resistance. Adequate fire precautions shall be ensured at the workplace, by providing appropriate fire extinguishers (manual firefighting equipment) in working conditions and by training the workmen and community to use these. Workers shall be provided with a separate toilet, washing/changing facility, drinking water, clean eating area, lighting, appropriate tools, and PPEs, first aid facility, isolation facility (for COVID 19 control). OHS training shall be provided to workers daily (toolbox discussion); students and visitors shall be provided with visitor orientation. Hazardous installations, materials, safety measures, and emergency exits, etc. should be marked appropriately and equipment shall be labeled. All workspaces shall be provided with signage in local language (with details of site engineer, school authorities, and PCs) and work areas/machinery storage areas barricaded with hard barricades and adequate lighting and reflectors shall be provided to avoid fall. Hazards may be physical hazards due to rotating equipment, noise, vibration, electrical hazards, welding/hot works, painting works, site traffic, heat wave/temperature at work area during summers, and working at heights. Chemical hazards are not expected, except in the case of fuel used for diesel generators; and LPG cylinders used for mid-day meals. Work involving Asbestos is avoided; while biological, radiological hazards are not expected. Work in confined spaces is not expected in the case of 9 items under Nadu Nedu. Pits may be dug for septic tanks (2 – 3 m open pits) or foundations (commonly 0.6m). However, guidance shall ensure that any work in confined spaces is well organized, with prior intimation

39 Every educational building exceeding two storeys in height shall be constructed of fire resisting material throughout as per Andhra Pradesh Building Bye Laws G.O.Ms.No.119, Dt.28-03-2017 (reflecting the safety concerns in buildings with more than two floors)

40 Height of two floors as applicable to educational buildings as per Andhra Pradesh Building Bye Laws. However minor repairs which are part of Nadu Nedu program are allowed.

41https://www.ifc.org/wps/wcm/connect/1d19c1ab-3ef8-42d4-bd6b-cb79648af3fe/2%28Occupational%28Health%28Band%2BSafety.pdf?MOD=AJPERS&CVID=Is62x8I
to authorities, and carried out by workmen of adequate expertise and PPEs. There shall be mechanisms to monitor the works, surveillance of worker health (esp. considering COVID-related protocols), and training. There shall be an adequate separation of work area from school activities. There shall be a works register on-site to record worker attendance, insurance details, Identification details, health details, and accident register to record all incidents/ accidents including indicative incidents.

168. Communities shall be informed in advance about works in nearby schools and probable disturbances. There shall be no pollution or impacts on their properties or drinking water sources or religious structures/common properties due to works. Adequate water for works shall be arranged and stored safely on the campus (well barricaded to prevent access to students). All works and storage shall happen within school campuses; preferably accessed through separate entry (other than that used by students). It may be helpful to also stagger work hours in such a way that it does not impact school open/closing timings or class timings. Material transport shall be well managed to prevent impacts on communities or students. Drivers and vehicles shall have required licenses and approvals; and there shall be minimal interactions of people/students with construction vehicles and equipment. There shall be appropriate barricading or temporary buffers to prevent impacts on communities due to smoke, dust, fall of materials, etc. School safety codes shall be followed, and training shall be provided for emergency response. It is important to follow COVID 19 safety protocols.

169. Accidents/incidents shall be reported within 24 hours to the Bank and SSU shall investigate the cause and adopt prevention/control mechanisms in all sites immediately. SSU shall update the sample ECoP / EMP provided in Annexure V and provide it to all work sites / Schools & CwSN resource centers. Parent Committees and Site Engineers shall be trained to plan, guide, monitor, and report on OHS aspects using this. There shall be effective GRM also accessible to workers. Child (up to 14 years) labor shall not be used for any works and those in 14-18 years age brackets shall not be involved in any hazardous activities and this will need regular monitoring.
Though there had been other education programs in AP, and the SS Framework specifies that environment, health, and safety practices should be followed for design, planning, preparation, and execution of improvements in the school learning environment following its EMF, National Building Code 2016 and NDMA’s School Safety Policy Guidelines February 2016; EMF of SS or RMSA does not cover EHS adequately.

Occupational Safety, Health, and Working Conditions Code, 2020 of the GoI apply to all civil works in the country.

Even though these works are arranged by PCs, they employ laborers for the purpose; many of whom are migrants. There is no formal contract made with them, and hence there are no formal contractual arrangements for OCHS and pollution management.

Table 7: Core Principle 3 – Public and Worker Safety

<table>
<thead>
<tr>
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<th>List of Identified Gaps</th>
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<tbody>
<tr>
<td>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.</td>
<td>While some of the state-level officials are aware that there was an EMF for SS and/or RMSA, issued by MHRD, they are not aware of its provisions. There is little awareness among the implementing agencies, schools, and PCs regarding OHS or the need to follow these. Construction safety when the school reopens was pointed out as an issue of concern in all school-level stakeholder consultations. Material specifications are good and ensure durability, even though works are small and extent, safety is nevertheless important. Safety issues are not considered for construction activities or O&amp;M. Electric wires/wiring, fire safety, fuel storage for kitchens, storage of lab chemicals, diesel for generators, etc. need attention; in addition to pits dug for the foundation of toilets or septic tanks/repairs/reconstruction, work at height while laying the roofs of small structures, old asbestos and batteries handling, etc. Also, some schools reported incomplete boundary walls due to some litigation, use of EMF: Core Principle 3.</td>
<td>System</td>
<td>No guidance on OCHS standards provided for works No health and safety provisions are made on site: including strong barricades to prevent fall in pits and heights, PPEs for workers, noise abatement measures during works, worker facilities, emergency arrangements and insurance, mechanisms to prevent dust and noise impacts on communities during material transfer, and storage (incl. fuel during construction, operations), preventing spills, etc. Capacity</td>
</tr>
</tbody>
</table>
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.

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</thead>
<tbody>
<tr>
<td>of firewood as additional fuel in kitchens, etc.</td>
<td></td>
<td></td>
<td>disposal arrangements in collaboration with the respective local body/Pollution Control Board</td>
</tr>
</tbody>
</table>

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

Wastes and wastewater from school premises during construction and O&M need appropriate management in line with existing regulations. Wastes include general biodegradable wastes (food, vegetation pruning associated with works), non-biodegradable including packaging, paper, and plastics, construction and demolition wastes including asbestos from old buildings, old solar panels, other potentially Hazardous wastes include sharps/tool parts, batteries, electric wires. National level regulations cover each type of wastes and guide the best approach to deal with these. However, the local bodies are not much equipped to handle various types of wastes even though they have the responsibility to collect, treat and dispose of wastes from premises. Few schools have systems to manage; but considerable quantities of different types of wastes are piled up in premises; or disposed of unscientifically, in the absence of technical know-how and systems to manage these.

Currently, waste management (all types of wastes) is not given consideration; even in the case of biowastes from normal school operations. These are unsegregated, disposed of in the open or buried in pits, or are burned. Awareness of regulatory requirements and best practices is minimal. Hazardous waste management from construction and demolition (asbestos, sharps (glass, tools)), as also wastewater from the septic tank, wastewater, water filtration, etc., need proper management and institutional capacities at all levels to guide, co-ordinate with local bodies/other agencies and schools. Wastes like asbestos need proper stacking, transport, and disposal; and shall not be disturbed during maintenance (eg: drilling, breaking, poor stacking).

**System**
No guidance on waste, wastewater, fuel / other chemical management under the program

**Capacities**
Lack of awareness on regulatory requirements on waste management (all wastes)

Absence of institutional capacity to guide and monitor waste management during construction and O&M at the State level

Lack of capacities at district and school level to coordinate with responsible local bodies and other agencies to ensure good waste management.

Guide waste management (all types) and record maintenance including e-wastes / other wastes associated with proposed TA activities (supported by the IPF)

Develop institutional capacity at the state level to guide and monitor waste management under the program

Develop institutional capacity at the District level to coordinate with local bodies, schools, other agencies for waste management (including COVID-19 related wastes) in line with regulatory requirements and good practices

Training and awareness to officials on the regulatory environment for managing wastes and wastewater.

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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.

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.

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<tr>
<td>The works in hazard-prone areas follow specifications to ensure structural safety. There is a provision to take architectural support for some projects under Nadu Nedu. Site planning guidelines need strengthening. Schools have taken initiatives for capacity building for emergency response in partnership with State Disaster Management Agencies. There is no institutional responsibility to coordinate with various agencies/departments and ensure the sustainable, smart design and to avoid, minimize, mitigate, community, individual, or worker risks in hazard-prone areas or during climatic events. The awareness/capacities of institutions involved are limited at all levels. Also, there is no institutional arrangement to monitor safe work site closure and safety of workers, communities, or students during emergencies or climatic events.</td>
<td>Absence of comprehensive Guidelines / SOPs for site planning and work practices (separate) including for hazard-prone areas Absence of protocols to ensure safe work closure or guidance on the safety of workers, communities, or students in case of emergencies/disaster events.</td>
<td>Develop and use protocols to ensure enhanced EHS measures, safe work closure, or guidance on the safety of workers, communities, or students in case of emergencies/disaster events. SSU with implementing agencies &amp; school management to co-ordinate with various agencies/department’s, monitor and ensure sustainable, smart planning and work practices to avoid, minimize, mitigate, community, individual, or worker risks in hazard-prone areas or during climatic events. Provide awareness/training to all stakeholders including students on safe practices and emergency response. Parent Committees who arrange works to ensure COVID-19 protocols among workers.</td>
<td></td>
</tr>
<tr>
<td>Construction and material specifications adhere to common standards that ensure safety. Structural design for cyclone/hazard-prone areas follows special specifications. However, the functional designs are uniform for all geographic areas (Eg: Plinth above high flood level, erosion control measures, minimal use of glass and solar passive architecture/lighting, ventilation specifics to ensure climate responsiveness). The National Building Code 2016 includes several codes concerning earthquake resistance, cyclone resistance, construction in hill areas, etc. The School Safety Policy Guidelines February 2016 issued by NDMA details procedures for preparation and implementation of school disaster management plans. 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.</td>
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</table>

Pollution due to wastes generated due to consultancies and development of EMIS (under IPF Component)

1. Management of E-Wastes under the Project
   - The project does not envisage purchase of IT equipment, though management of EMIS will require upgradation and deployment of IT equipment and peripherals in nodal institutions. Hence, it is important that project agencies manage e-wastes generated under the project.
Currently, there is no mechanism to manage e-wastes, and these end up getting disposed of along with general solid waste or getting burned; resulting in the release of harmful substances. This is also a dangerous practice owing to the presence of plastics and hazardous components. Hence, the project shall ensure that such practices are discouraged through training of all stakeholders, and incorporation of required management guidance in ToR for consulting agencies for end-of-life disposal of e-waste.

There is no dedicated mechanism / institutional capacity to guide and oversee the management of e-waste in DoSE. The project shall ensure institutional responsibility to guide, develop and oversee the management of e-waste and packaging waste under the project.

### 2. Proposed Arrangements to ensure E-Wastes and Solid Waste Management as part of consultancies

- Though the EMIS development will be supported by vendors, they and institutions involved must have systems to minimize its use, manage these efficiently by reuse/recycling, and disposing of this in an environmentally appropriate manner. ToRs for the MIS component will include the requirements for arranging the disposal of equipment (end-of-life and during repairs) in line with the National Rules and best practices (including segregated storage and including collection, transport, reuse, recycling, and disposal). *The agency shall ensure proper segregation and safe storage, collection, and management (through authorized agencies) of E-wastes and Solid wastes (including packaging wastes and plastic wastes) which will be generated due to their activities following the applicable regulations and as per the guidance of E&S Unit of Project Management Unit.*

- All ToRs for support consultancies (including EMIS development) will include the need to follow good practices on waste management as part of their various activities such as training/capacity building, monitoring, and supervision. ToRs will include the need to follow the ‘Green Protocol’ and ensuring that minimum wastes – solid, plastic, and e-wastes are generated as part of capacity-building activities. *All training/capacity building and monitoring activities as part of the project shall follow ‘Green Protocol’ aiming at minimal waste generation, avoidance of plastics, and proper management of all types of wastes.* These requirements will be included in the ToRs for all consultancies except for IVA. Also, the E&S Unit of the PMU will oversee and report on the implementation of these through their Quarterly Progress Reports.
5.2.4 **Core Principle 4 – Land Acquisition**

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

171. The planned investments under the Program will be restricted to existing land available for existing school structures and building. The ESSA does not foresee risks related to land acquisition, loss of livelihoods and/or involuntary resettlement at the preparatory stage. The E&S screening checklist will include a screening criterion on land availability and ownership to rule-out instances of forced acquisition and involuntary resettlement.

**System and Capacity Assessment**

172. The ESSA does not foresee any risks of land acquisition. Wherever needed the land acquisition follows ‘The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (and further amendments). Based on the request by the Education Department, Revenue Departments through the District Collector follow the procedures as laid out in the above Act and the rules. The process involves Gram Panchayat proposing the requirement to District Education Officer (DEO) of the Education Department and through the DEO to District Collector for initiating the process of land acquisition. A similar process is also followed in case of land donation for legal transfer of land in the name of the school.

173. No land acquisition or displacement of title holders or non-title holders is anticipated under the SALT program. Upgradation will be restricted to government land and will be monitored through the E&S screening checklist.

**Key Gaps Identified**

174. **The key gaps identified include:**

- While for the title holders the Land Acquisition act provides for adequate provisions, however, the act does not cover provisions for encroachers and squatters on government land. The screening requirement for land acquisition will be embedded as a parameter in the current social audit monitoring system. The PCs along with the grassroot engineer will be responsible for screening and reporting of land-related issues.
- The screening process will be undertaken before commencement of civil works under the Nadu Nedu Scheme phase 2 and phase 3.

**Recommendations**

175. The key recommendations to fill gaps are:

- E&S screening mechanism is to be instituted during the planning phase of any new construction under the program to identify any adverse social risks and impact.

- Though both land acquisition and/or resettlement is not anticipated, but in rare case, if any need arises, World Bank ESF policy, Environment and Social Standard (ESS) on Land Acquisition, Restrictions on Land Use and Involuntary Resettlement on land acquisition will be followed and due process to be instituted in consultation with World Bank task team.

- While the land donation is a common practice, there is need to ensure that it is done on voluntary basis and these are no coercion for doing so, and the process of donation shall be institutionalized through gift deed.

**Table 8: Core Principle 4 – Land Acquisition**

<table>
<thead>
<tr>
<th>Core Principle 4</th>
<th>The key recommendations to fill gaps are:</th>
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<tbody>
<tr>
<td><strong>System</strong></td>
<td>E&amp;S screening mechanism is to be instituted during the planning phase of any new construction under the program to identify any adverse social risks and impact.</td>
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<tr>
<td>The ESSA does not foresee any risks of land acquisition. Wherever needed the land acquisition follows ‘The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013</td>
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*Environmental and Social Systems Assessment 2021 (P173978)*
Based on the request by the Education Department, Revenue Departments through the District Collector follow the procedures as laid out in the above Act and the rules. The process involves Gram Panchayat proposing the requirement to District Project Coordinator (DPC) of the Education Department and through DPC to District Collector for initiating the process of land acquisition. A similar process is also followed in case of land donation for legal transfer of land in the name of the school. No land acquisition or displacement of title holders or non-title holders is anticipated under the SALT program. Upgradation will be restricted to government land and will be monitored through the E&S screening checklist.

Capacity

The key gaps identified include:

- While for the title holders the Land Acquisition act provides for adequate provisions, however, the act does not cover provisions for encroachers and squatters on government land.
- Though both land acquisition and/or resettlement is not anticipated, but in rare case, if any need arises, World Bank’s Environment and Social Framework and ESS5 on land acquisition and resettlement will be followed and due process to be instituted in consultation with World Bank task team.
- While the land donation is a common practice, there is need to ensure that it is done on voluntary basis and these are no coercion for doing so, and the process of donation shall be institutionalized through gift deed.
- The screening requirement for land acquisition will be embedded as a parameter in the current social audit monitoring system. The PCs along with the grassroot engineer will be responsible for screening and reporting of land-related issues.
- The screening process will be undertaken before commencement of civil works under the Nadu Nedu Scheme phase 2 and phase 3.

5.2.5 Core Principle 5 – Indigenous Peoples and Vulnerable Groups

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

177. The DoSE has adopted the Samagra Shiksha Framework and process adopted in Andhra Pradesh. It clearly details out the range of consultations to be undertaken with various stakeholder and work with close involvement of community members in school education to fosters ‘bottom up approach’ not only in effective planning and implementation of interventions, but also in effective monitoring and evaluation, and building ownership of the government programs by the community including the Scheduled Tribe (ST) and Scheduled Caste (SC) and other disadvantaged community.

178. As acknowledged by the Samagra Shiksha Framework, the biggest problem faced by tribal children and first-generational school-goers 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.

179. Similar to other states with Schedule V areas in India, AP has developed dictionaries in Gondu, Kolami, Koya, dialects. A local word glossary in Gondu has been prepared and distributed in schools for class I-IV in ITDA blocks. Similarly, a local word glossary in tribal dialect has been prepared for class I-IV in Vizianagaram district and distributed in schools. Discussions with district level officials from education department and members of SMCs/SDMCs in Vizianagaram suggests special efforts are made including at times teacher visiting villages to teach if the children are not able to come to school in the COVID-19 context.

180. The RTE Act, 2009 addresses gender and social equity within a framework that is holistic and systemic. The Samagra Shiksha Scheme envisages improvement quality of education, ensuring equity and inclusion at all levels of school education. The key parameters of the approach informing the following perspective includes:

- The Samagra Shiksha scheme envisages to improve quality of education, ensuring equity and inclusion at all levels of school education and mean not only equal opportunity, but also creation of conditions in which
the disadvantaged sections of the society – children of SC, ST, Muslim minority, landless agricultural workers and children with special needs, transgender children etc. can avail of the opportunity in an inclusive environment free from discrimination.

- Gender is recognized as a critical cross-cutting equity issue and implies not only making efforts to enable girls to keep pace with boys but to bring about a basic change in the status of women.

- Access does not only confined to ensuring that school becomes accessible to all children within specified distance but implies aims to cater the educational needs of the traditionally excluded categories – the SC, ST and other sections of the most disadvantaged groups, the Muslim minority, girls in general, transgender children and children with special needs.

- Equity is seen as an integral part of the agenda on improving quality and therefore encompass issues pertaining to teacher training and education, curriculum, language, educational planning and management.

181. Samagra Shiksha look at education of all children including CWSN in a continuum from pre-school to class XII by (a) Identification of children with disabilities at the school level and assessment of her/his educational needs; (b) Provision of aids and appliance and assistive devices, to the children with special needs as per requirement; (c) Removal of architectural barriers in schools so that students with disability have access to classrooms, laboratories, libraries and toilets in the school; (d) Supplying appropriate teaching learning materials, medical facilities, vocational training support, guidance and counselling services and therapeutic services; (e) General school teachers are sensitized and trained to teach and involve children with special needs in the general classroom; (f) CWSN will have access to support services through special educators, and establishment of resource rooms, vocational education, therapeutic services and counselling; and (g) Work in convergence with other line departments and intends to provide relevant holistic support for effective and appropriate services for education of CWSN.

182. The key gaps identified includes:

- The National Education Policy (NEP, 2020) scheme aims to and provide for equitable and inclusive system of education, due to local geographical terrain and socio-economic condition, it requires special effort in community mobilization and garnering larger community support.

- Providing multi-lingual 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.

- The school education program in Andhra Pradesh in line with RTE Act, 2009 addresses gender and social equity within its framework. Though no specific gaps is identified in addressing the need of vulnerable and disadvantaged community including CWSN, it does require an assessment to understand if what has been planned is being delivered in an smooth manner for addressing the need of vulnerable and disadvantaged community, and address any additional effort to meet the desired objective.

**Recommendations**

183. **Targeted approaches/roadmap to improve learning outcomes in Integrated Tribal Development Blocks (ITDA)/aspirational districts:** At the policy level, the state has a clear focus on improving retention, transition, and completion rates for SC/ST students particularly from aspirational districts. The DoSE has also translated textbooks in tribal languages for ST students who are first-generational school goers. The SALT program will support a strategy/roadmap with a comprehensive set of interventions to monitor and hand-hold SC/ST students from aspirational districts/ITDA blocks.
<table>
<thead>
<tr>
<th><strong>Core Principle 5</strong></th>
<th><strong>System</strong></th>
</tr>
</thead>
</table>
|                    | The DoSE has adopted the Samagra Shiksha Framework and process adopted in Andhra Pradesh. It clearly details out the range of consultations to be undertaken with various stakeholder and work with close involvement of community members in school education to fosters ‘bottom up approach’ not only in effective planning and implementation of interventions, but also in effective monitoring and evaluation, and building ownership of the government programs by the community including the Scheduled Tribe (ST) and Scheduled Caste (SC) and other disadvantaged community. The 66 ITDA blocks in the state have poor transition rates from elementary to secondary grades and poor learning outcomes amongst students from SC/ST communities. As acknowledged by the Samagra Shiksha Framework, the biggest problem faced by tribal children and first-generational school-goers is that of language. AP has developed dictionaries in Gondu, Kolami, Koya, dialects. A local word glossary in Gondu has been prepared and distributed in schools for class I-IV in ITDA blocks. Similarly, a local word glossary in tribal dialect has been prepared for class I-IV in Vizianagaram district and distributed in schools. **Capacity:** The key gaps identified includes:  
- The National Education Policy (NEP, 2020) scheme aims to and provide for equitable and inclusive system of education, due to local geographical terrain and socio-economic condition, it requires special effort in community mobilization and garnering larger community support.  
- Providing multi-lingual 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.  
- The school education program in Andhra Pradesh in line with RTE Act, 2009 addresses gender and social equity within its framework. Though no specific gaps is identified in addressing the need of vulnerable and disadvantaged community including CWSN, it does require an assessment to understand if what has been planned is being delivered in an smooth manner for addressing the need of vulnerable and disadvantaged community, and address any additional effort to meet the desired objective. |
| **Targeted approaches/roadmap to improve learning outcomes in Integrated Tribal Development Blocks (ITDA)/aspirational districts:** At the policy level, the state has a clear focus on improving retention, transition, and completion rates for SC/ST students particularly from aspirational districts. The DoSE has also translated textbooks in tribal languages for ST students who are first-generational school goers. Bilingual textbooks are developed in English and tribal dialects. The SALT program will support a strategy/roadmap with a comprehensive set of interventions to monitor and hand-hold SC/ST students from aspirational districts/ITDA blocks. |
5.2.6 **Core Principle 6 - Social Conflict**

184. Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

185. There is no social conflict affected areas in the state. And, in any case the program interventions do not exacerbate any social conflicts as it supports the school education system in Andhra Pradesh leading to overall learning outcomes. Also, exclusion of any groups in terms of caste, religion, and/ or geography by the program activities is not expected.

186. Under the Samagra Shiksha scheme the preference for various interventions is given to Educationally Backward Blocks (EBBs) and Special Focus Districts (SFDs) and the 115 Aspirational Districts including three aspirational districts in Andhra Pradesh. Also, exclusion of any groups in terms of caste, religion, and/ or geography by the program activities is not expected. The program and its activities are quite inclusive in nature and does not exacerbate any conflicts.

**Table 10: Core Principle 6 – Social Conflict**

<table>
<thead>
<tr>
<th>Core Principle 6 System</th>
<th>No relevant recommendations.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>There is no social conflict affected areas in</strong> the state. And, in any case the program interventions do not exacerbate any social conflicts as it supports the school education system in Andhra Pradesh leading to overall learning outcomes. Also, exclusion of any groups in terms of caste, religion, and/ or geography by the program activities is not expected.</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td><strong>Gaps:</strong></td>
<td></td>
</tr>
<tr>
<td>No relevant gaps.</td>
<td></td>
</tr>
</tbody>
</table>

5.2.7 **Key Findings from Assessment of Borrowers Capacity and Systems**

187. The ESSA has identified key gaps and opportunities for strengthening the existing operational systems and capacities for managing E&S risks and enhancing the program benefits.

188. From the environmental perspective, the most relevant ESSA core principles for the program (and for overall sustainability) are Environmental Management and Public and Worker Safety. The program supports essential repairs, construction of toilets, compound walls, furniture, painting, electrification, drinking water supply, and provision of green chalkboards in all government-owned schools (with existing school campuses) across AP irrespective of urban/ rural (including tribal blocks) differentials. All works follow the same standard specifications and design finalized at the State level with flexibility to ensure special structural safety taking care of additional requirements in coastal areas, where climate risks are high. Plans for works are finalized by PC, school leadership, and site engineer as per the requirements and characteristics of each campus. In each area, existing government departments with a strong presence and local implementation experience are appointed as facilitating agencies (for example Tribal Welfare Department with strong experience working in and understanding the needs of Tribal areas). The assessment revealed that no guidance or framework for environmental management is in use for the GoAP’s Nadu Nedu program. Though the ongoing Nadu Nedu program has specifications and guidelines for toilet designs incorporating the principles of universal design and procurement of materials without hazardous contents (for example: Lead and VOC content of...
Paints are avoided through good specifications, certain gaps can be addressed for overall better environmental performance through dedicated institutional capacities at State, District/Mandal, and School level to ensure environmental sustainability. The focus shall be on ‘Haritha Pathasala’ (Green School) concept for the ‘whole school’ and safe school principals with interventions upgraded to take into account long-term environmental performance and sustainability.

189. Capacity building of Parent Committees, Students and teachers; involvement of student bodies like National Green Corp (or school-based eco-clubs) in continual improvement, operations, and management; guidance for screening and exclusion of high-risk activities/ECOPs/EMP for safe works management would support the program and overall environmental effects in the long run. Strengthening the existing Social Audit mechanism by including environmental sustainability aspects, including environmental aspects in EMIS will also help in effective monitoring and identifying the real-time O&M needs.

190. From a social perspective, the assessment revealed that to meet the core principles on land acquisition and involuntary resettlement, the screening will be required to identify any potential adverse social impacts, which is currently lacking. The DoSE will integrate screening for land management/acquisition related aspects in the social monitoring tool. The PCs and grassroot engineers aligned with the Nadu Nedu Scheme will be responsible for screening and reporting for land management aspects. The DoSE and the SIS for Samgra Shiksha provide the institutional mechanism for school education program implementation along with detailed roles and responsibilities for district-level officials (DEOs, SDEOs) and sub-district level officials (BRPs, CRCCs, CRPs). Through the Nadu Nedu Scheme, Parent Committees are regularly involved in the planning, management, and monitoring of civil works across the state. The DoSE regularly follows the process of social audits to create transparency, participation, and accountability of the program implementation at the school level. The DoSE also has a clear focus on social inclusion and the differentiated needs of students from Scheduled Castes (SC), Scheduled Tribes (ST), children with special needs (CWSN). To enable ease in learning, the department has made textbooks available in their mother tongue to students from tribal communities. The DoSE through Divyang Bhavans (centers for disabled students) attempts to provide learning in an inclusive environment free from discrimination. From a policy perspective, the Right to Education (RTE) Act, 2009 further addresses gender and social equity within a framework that is holistic and systemic. Additionally, the DoSE has a special focus to improve enrolment, transition, completion rates, and learning outcomes for the 66 tribal/ITDA blocks in the state.
6 ENVIRONMENTAL AND SOCIAL INPUTS TO THE PROGRAM ACTION PLAN

191. Previous sections of the report have looked at various actual/potential environmental and social risks and challenges confronting the program, their likely impacts, and benefits within the existing legal and policy framework, and then assessed the consistency of the program with the core principles under PforR policy. It then went on to assess the capacities and adequacy of the existing institution to successfully handle these likely risks and to look at the capacities to take up the social and environmental management within the programs. The current section sums up the assessment of the previous sections and uses it to draw up specific social and environmental actions required for mitigating/minimizing those risks and challenges. E&S inputs to the Program Action Plan for the SALT program are discussed in detail here, to address the gaps identified through the assessment.

192. The risk screening suggests that the overall contribution of the programs is likely to be positive, owing to benefits such as improved WASH facilities and repairs/renovations to schools. Positive impacts expected of the program interventions include: (i) better WASH facilities for the students especially after the current COVID-19 pandemic; (ii) good overall learning environment, thereby leading to better attendance; (iii) better training to teachers, Anganwadi workers, better facilities and support to CwSN; and (iv) by better monitoring and management using digital means. The assessment concludes that SALT program has a moderate environmental risk and moderate social risk. The program risks on dealing with environmental and social aspects are reasonably covered but will require efforts to address the remaining gaps identified in the previous Chapter.

193. A set of actions have been arrived at to address the system and capacity-related gaps. These issues were discussed with stakeholders during the preparation process for the PforR and their suggestions were considered to arrive at the action plan. The action plan was consulted with program counterparts and stakeholders for including them in the Program Action Plan (PAP) for the SALT program, to ensure overall sustainable effects in the long term. During implementation, the World Bank will continue to consult with program counterparts and provide support to help resolve implementation issues. The Bank will also monitor PAP implementation and its effects as part of its progress review.

6.1 Recommendations on Environmental Aspects for each Result area

194. RA wise recommendations are compiled and presented here:

6.1.1 Recommendations on Environmental and Social Aspects for RA 1: Strengthened Foundational Learning

<table>
<thead>
<tr>
<th>Program Support</th>
<th>Category</th>
<th>Proposed E&amp;S Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Development and provision of short-term teacher training courses to the Anganwadi workers managing the network of more than 55,000 Anganwadis, and teachers teaching the early grades in roughly 38,000 schools. Standardized TLM across these institutions. Short-term, six-month certificate training program for Anganwadi workers, a shorter training program of three months to teachers managing the Early Grades. Support the state’s decision to gradually introduce a one-year preparatory grade in primary schools. Training to Anganwadi teachers, lesson plans for early grades on mainstreaming gender, understanding, and appreciation for climate change, and environmental conservation (afforestation, animal protection, water conservation, etc.), and periodic assessment of such learning through SLSAs.</td>
<td>Training, TLM</td>
<td>▪ Develop training modules and schedule (training plan), and prepare TLM on Environment, Climate Change, Social and Disaster Management and its applicability to foundational learning, school-level activities</td>
</tr>
<tr>
<td>2. Support to GoAP’s Nadu Nedu initiative on improving infrastructure and facilities for primary education - toilets and drinking water facilities, repairs, furniture,</td>
<td>Infrastructure development and up-gradation</td>
<td>▪ Provide required infrastructure following environmental best practices. “Green Gift Box” (Details in Annexure IV) to each school (Support to MDM, Greening the</td>
</tr>
</tbody>
</table>
and smart television, lights and fans, other measures like the reuse of water.

<table>
<thead>
<tr>
<th>Program Support</th>
<th>Category</th>
<th>Proposed E&amp;S Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>campus, developing WASH facilities and whole school waste management) under the concept of ‘Haritha Pathasala’ following OHS while constructing and maintaining. EHS, EMP, ECoP/Best Practices for program activities to be prepared, followed, monitored.</td>
</tr>
</tbody>
</table>

- Worker and Community Health and safety shall be ensured by SSU by using of ECoPs / EMP (see Annexure V for sample EMP) through site engineers and PCs and monitored by SSU through District/Block nodal officers. Community and worker awareness and capacity building on health and safety to be ensured.
- Social Audit to include Environmental aspects & Work Closure stage EHS Audit
- Sustainable Schools Unit at PMU and supportive responsibilities at District, School Levels to implement Haritha Pathasala concept
- Integrate screening for land management/acquisition related aspects in the social monitoring tool. The PCs and grassroots engineers aligned with the Nadu Nedu Scheme will be responsible for screening and reporting for land management aspects.

3. COVID-19 response - enhancement of the home-based learning opportunities being provided to three to eight-year-old students. Support to the distribution of physical workbooks with supporting lessons broadcasted on television and radio; development of more broad-based physical learning kits (storybooks, puzzles, and play material) that can be distributed to facilitate parent guided learning in a home environment; Support to gradual re-opening of schools - online training on safe school operations, provide drinking water facilities, hand washing points, and toilet facilities, emergency maintenance and repairs

| Home-based Learning materials, Training, WASH facilities (included in Sl No:2) |

- Include E&S focused chapters in workbooks
- Ensure good quality materials
- Encourage minimal material wastage and reuse or alternate use esp. of packaging materials
- Online training modules on the environment, climate change, social and disaster management (repairs and WASH facilities included in Sl No: 2)

6.1.2 Recommendations on Environmental and Social Aspects for RA 2: Improved Quality of Teaching-Learning Interactions

<table>
<thead>
<tr>
<th>Program Support</th>
<th>Category</th>
<th>Proposed E&amp;S Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provision of blended teacher professional development opportunities (on-site teacher training, on-site and remote individual coaching, and an online repository of materials) to about 190,000 public school teachers. To better respond to COVID-19, and learning from the pandemic, courses on the planning and management of remote learning and digital skills</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Develop training modules and schedule (training plan), and prepare TLM on Environment, Climate Change, Social and Disaster Management, Include these aspects in the assessment.
2. Repair and refurbishment of resource centers for Children with Special Needs (CwSN), provide necessary aids and appliances, and kits to support home and school-based support.

Infrastructure Development/Upgradation

- Provide WASH and repairs with physical improvements / Design interventions to support CwSN including safety, special BaLA interventions (safe and easy to use learning aids and materials)
- Worker and Community Health and safety shall be ensured by SSU by using of ECopS / EMP (see Annexure V for sample EMP) through site engineers and PCs and monitored by SSU through District/Block nodal officers. Community and worker awareness and capacity building on health and safety to be ensured.

3. Establishment of a specialized cell for Inclusive Education (IE) at the SCERT for teacher training and guidebooks to better address the educational needs of the CwSN.

Training/Institutional Support

- Institutional interaction between SSU and SCERT special cell to incorporate E&S, CC, and DM aspects in teacher training & guidebooks for CwSN

### 6.1.3 Recommendations on Environmental and Social Aspects for RA 3: Strengthened Institutional Capacity and Community Engagement for Service Delivery

<table>
<thead>
<tr>
<th>Program Support</th>
<th>Category</th>
<th>Proposed E&amp;S Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide school leaders and decentralized education functionaries with access to relevant opportunities for professional development to improve their competency in key leadership skills including Gender equity, inclusion, Disaster Risk Management (DRM)</td>
<td>Training</td>
<td>Develop training modules for school leaders and decentralized education functionaries in gender, inclusion, CC, Climate resilience capacity building activities, DM, and EHS aspects</td>
</tr>
<tr>
<td>2. Support to develop results-oriented Annual Work Plans and Budgets (AWPBs)</td>
<td>Work Plans</td>
<td>Include E&amp;S aspects in Work Plans through SSU</td>
</tr>
<tr>
<td>3. Development and roll-out of a social audit tool for the PCs, school performance evaluation tool/rubric for the community to monitor school operations and report on its performance to the state and district level administration.</td>
<td>M&amp;E</td>
<td>Social Audit to include E&amp;S Aspects and involvement of SSU This includes screening for land management and on-campus safety of students.</td>
</tr>
<tr>
<td>4. Development of the state’s Education Management Information System (EMIS).</td>
<td>MIS</td>
<td>EMIS to include details on available facilities and environmental performance &amp; mechanism to monitor</td>
</tr>
<tr>
<td>Program Support</td>
<td>Category</td>
<td>Proposed E&amp;S Actions</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>O&amp;M requirements &amp; responsibilities on a real-time basis</td>
</tr>
</tbody>
</table>

### 6.2 Proposed Actions to improve Environmental Systems and Capacities

195. Based on the Environment and Social Systems Assessment conducted for SALT, the following recommendations are being made for inclusion in the Program Action Plan.

196. The program activities are by nature aimed at the overall improvement in WASH facilities (including COVID-19 response strategies), fans, lights and other fixtures, repairs, renovations, up-gradation of resource centers for CWSNs, training, capacity building (IT enabled), and preparation of assessment and monitoring tools. At the State, District, and School levels, institutional guidelines and capacity to align the programs towards better environmentally sustainable and safe operations need improvement.

197. The potential risks that can emerge due to improper planning, execution, and management of various programs are: (i) While the proposed operations would not lead to significant risks, the specific actions to prevent any risks include (a) arrangements for safe storage, management and disposal of solid wastes (including packaging wastes and plastics from schools), construction & demolition wastes, e-wastes, and hazardous wastes, arising due to construction, O&M, purchase/use of materials, training activities; (b) arrangements for managing liquid wastes and sewage from school premises, wash facilities, backwash and O&M of water filtration systems; (iii) effects of inappropriate placement decisions on environmentally sensitive areas, flora fauna, and cultural heritage, (iii) occupational and public safety risks for workers, students, staff and the communities; mainly during construction activities which would take place in existing school premises. The challenge lies in proper conception, incorporation, and compliance to the country’s environmental regulations and giving requisite attention to incorporate these comprehensively in technical design, program planning implementation, and operations.

198. While the existing program incorporates considerations for using durable materials and standard designs for civil construction in their program operations there exist ample opportunities to suitably factor in environmental considerations in program planning, implementation, operation maintenance stages. Prior program screening and planning to avoid and/or mitigate impacts arising out of its operations is essential. Incorporating environmental enhancement opportunities in program design involving students, schools, and PCs.

199. The government’s program is marching ahead with activities to bring in positive changes much needed in the schools. However, the absence of a dedicated unit to focus on environmental and social considerations in program design and implementation is noteworthy. The program has not so far organized any training programs for the staff on environment-related aspects. It is essential to incorporate a separate unit or department at the State level on Sustainable Development to bring environmental considerations into practice.

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

200. The government’s program is marching ahead with activities to bring in positive changes much needed in the schools. However, the absence of a dedicated unit to focus on environmental and social considerations in program design and implementation is noteworthy. While the existing program incorporates considerations for using durable materials and standard designs for civil construction in their program operations there exist ample opportunities to suitably factor in environmental considerations in program planning, implementation, operation maintenance stages. Prior program screening and planning to avoid and/or mitigate impacts arising out of its operations is essential. Incorporating environmental enhancement opportunities in program design involving students, schools, and PCs. The program has not so far organized any training programs for the staff on environment-related aspects. It is essential to incorporate a separate unit or department at the State level on Sustainable Development to bring environmental considerations into practice. It is proposed to have a Sustainable Schools Unit (SSU) – an E&S Cell at State Level with adequate capacities and tools to manage environmental and social aspects under the program and to guide overall improvement. *(Refer Annexure III).* There shall be Nodal Officers for E&S management at District and School levels.
201. It is required to follow exclusion criteria and on-site screening to avoid impacts on critical habitats and cultural resources. This is to be undertaken by the proposed unit/department at the earliest. For all school-level programs of the government, comprehensive program planning based on rapid, phasing, contingency plan, and emergency response mechanism to support activities in case of unforeseen circumstances are essential. Screening and Exclusion of High-Risk Activities: It is proposed to screen the project activities in each campus and exclude those which will entail higher risks. The following activities will be excluded from the program because of the high environmental risk:

1) New Construction, Demolition, Repair/up-gradation activities and discharge of wastewater/ wastes from proposed facilities within the following areas given the high risk posed to natural habitats and cultural resources:
   a. areas within 300m radius of Nation/State protected monuments (including 100m from limit of the protected area – which is the prohibited area, and 200m Regulated area from the boundary or protected area or as declared by the Government) 42
   b. notified wetlands/water bodies, protected/forest areas, areas such as national parks and wildlife sanctuaries, coastal regulation zones I and IV
2) Construction of new buildings or facilities of more than two storeys in height 43
3) Purchase or construction/demolition using Asbestos-containing materials, and purchase and use of banned Insecticides

202. The projects include a ‘Green Gift Box’ a package to schools to ensure overall environmental sustainability in all interventions, which would ensure ‘whole school environment improvement’, through its four components: (i) Safe, hygienic, and Climate Efficient MDM facilities, (ii) Conservation through greening the campus, (iii) Resource Efficient and Accessible WASH facilities and repair activities, (iv) Resource Efficiency through whole school waste management. (Refer Annexure IV). Integrate the activities of the National Green Corps (Eco-clubs) to ensure overall sustainability and green practices – by involving them in creating tree cover, supporting in recycling wastewater and wastes, and conduct safety audits and awareness drives.

203. It is recommended to introduce regular supervision and monitoring mechanisms. Social Audit to report on EHS aspects and following of screening matrix and guidance. There shall be an appropriate work-close-out procedure, covering all aspects for the sustainability of activities related to the project.

204. Improved school management shall be measured by a standardized tool that includes indicators on environmental sustainability. School performance evaluation tool (digital) (EMIS) shall incorporate monitoring of E&S aspects and O&M of assets created as well.

205. Recommended Program Action Plan on E&S Aspects is presented in Table 11.

**Table 11: Recommended E&S Actions for Program Action Plan**

<table>
<thead>
<tr>
<th>Action Description</th>
<th>Source</th>
<th>Responsibility</th>
<th>Timing</th>
<th>Completion Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment of Sustainable Schools Unit (SSU) at the SIS for Samagra Shiksha for E&amp;S</td>
<td>Environmental and Social Systems</td>
<td>DoSE, GoAP</td>
<td>Due Date</td>
<td>Establishment of SSU with qualified staff, scope of work including preparation of E&amp;S guidance and monitoring the implementation of E&amp;S actions (with Nodal E&amp;S persons at</td>
</tr>
</tbody>
</table>

42 Refer The Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, 2010(10 of 2010) on grant of permission within Regulated area: “If the competent authority, after grant of the permission under sub-section (4) and during the carrying out of the repair or renovation work, is of the opinion (on the basis of material in his possession, or otherwise) that such repair or renovation work, or re-construction of building or construction is likely to have an adverse impact on the preservation, safety, security or accessibility to the monument considerably, it may refer the same to the Authority for its recommendations and if so recommended, withdraw the permission granted under subsection (4) if so required”

43 “Every building exceeding two storeys in height shall be constructed of fire resisting material throughout” - as applicable to educational buildings as per Andhra Pradesh Building Bye Laws. This exclusion is applied here considering that the works are under community contracting. Repairs which are part of Nadu Nedu program are allowed beyond two storeys with fire resistant materials.
<table>
<thead>
<tr>
<th>Action Description</th>
<th>Source</th>
<th>Responsibility</th>
<th>Timing</th>
<th>Completion Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td>District and School level and reporting protocols, as in Annex 3 of ESSA</td>
</tr>
<tr>
<td>School based E&amp;S recommendations included in School Performance Evaluation tool</td>
<td>Environmental and Social Systems</td>
<td>DoSE, GoAP</td>
<td>Due Date</td>
<td>31-Mar-2022</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Official notification from GoAP</td>
</tr>
<tr>
<td>Establishment of a web-based Grievance Redressal/ Feedback Mechanism</td>
<td>Environmental and Social Systems</td>
<td>DoSE, GoAP</td>
<td>Due Date</td>
<td>Before Effectiveness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Functional online portal to receive feedback, queries and complaints from parents, students, teachers and administration</td>
</tr>
<tr>
<td>Development of a strategy to improve learning outcomes in the 66 ITDA blocks of AP. The strategy will be developed in collaboration with the Department of Tribal Welfare, GoAP.</td>
<td>Environmental and Social Systems</td>
<td>DoSE, GoAP</td>
<td>Due Date</td>
<td>31-Mar-2022</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Development of a strategy that outlines a) M&amp;E mechanism to regularly monitor attendance and transition rates and learning outcomes of ST students and b) specific measures to improve parental engagement and capacity of PCs in ST Mandals.</td>
</tr>
</tbody>
</table>

206. The composition and duties of SSU and Environmental specialists are provided in Annexure III. The Project Management Consultant (PMC) will be responsible for coordinating with the SSU / E&S Cell under the State Implementation Society for Samagra Shiksha for implementing E&S recommendations and considerations engrained in all Results Areas (RAs). While monitoring each RA and suggesting necessary course corrections, the consultant will integrate E&S aspects in coordination with the E&S cell. This would need to reflect in the quarterly progress reports that the consultant submits to the DoSE, GoAP.

207. Detailed Time Schedule for Sub actions are presented here:

**Table 12: Proposed Actions and Schedule**

<table>
<thead>
<tr>
<th>Proposed Actions</th>
<th>Category</th>
<th>Time Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Results Area 1 (RA-1) – Strengthened Foundational Learning:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Develop training modules and schedule (training plan), and prepare TLM on Environment, Climate Change, Social and Disaster Management and its applicability to foundational learning, school-level activities</td>
<td>Training, TLM</td>
<td>To be complete by 12 months of Program Effectiveness</td>
</tr>
<tr>
<td>▪ Provide required infrastructure following environmental best practices. “Green Gift Box” to each school for developing WASH facilities (safe school protocols - toilets, handwash, and drinking water), repairs, furniture, fans, lights focusing on energy and water conservation, overall greening of school under the concept of ‘Haritha Pathasala’ adding whole school waste management, solar stove/cookers/LPG with large Bhatti/burners for cooking in Anganwadi, Building as Learning Aid (BaLA) Project interventions, fire safety, rainwater, and wastewater reuse, climate-resilient designs, and support to</td>
<td>Infrastructure development and upgradation</td>
<td>Dedicated E&amp;S Unit - SSU to be arranged in PMU within 3 months of project effectiveness. Infrastructure Improvements to be complete by 36 months of Program Effectiveness</td>
</tr>
</tbody>
</table>
### Proposed Actions

<table>
<thead>
<tr>
<th>Proposed Actions</th>
<th>Category</th>
<th>Time Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>cleanliness drives, plantation, kitchen and flower gardening, safety audit, skilling for recycling &amp; product making using National Green Corps, OHS while constructing and maintaining, EHS, EMP, EcoP/Best Practices for program activities to be prepared, followed, monitored&lt;br&gt;▪ Social Audit to include Environmental aspects &amp; Work Closure stage EHS Audit&lt;br&gt;▪ Sustainable Schools Unit at PMU and supportive responsibilities at District, School Levels to implement Haritha Pathasala concept</td>
<td>▪ Home-based Learning materials, Training, Infrastructure Upgradation (included in Sl No: 2)</td>
<td>▪ WASH facilities in priority schools (without any facilities) for COVID-19 response to be complete by 12 months of effectiveness</td>
</tr>
<tr>
<td>▪ Include E&amp;S focused chapters in workbooks&lt;br&gt;▪ Ensure good quality materials&lt;br&gt;▪ Encourage minimal material wastage and reuse or alternate use esp. of packaging materials&lt;br&gt;▪ Online training modules on the environment, climate change, social and disaster management (repairs and WASH facilities included in Sl No: 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Provide WASH and repairs with physical improvements / Design interventions to support CwSN including safety, special BaLA interventions (safe and easy to use learning aids and materials)</td>
<td>Infrastructure Development/ Upgradation</td>
<td>▪ To be complete by 24 months of Program Effectiveness</td>
</tr>
<tr>
<td>▪ Institutional interaction between SSU and SCERT special cell to incorporate E&amp;S, CC, and DM aspects in teacher training &amp; guidebooks for CwSN</td>
<td>Training/Institutional Support</td>
<td>To be complete by 12 months of Program Effectiveness</td>
</tr>
<tr>
<td>▪ Develop training modules and schedule (training plan), and prepare TLM on Environment, Climate Change, Social and Disaster Management, Include these aspects in the assessment</td>
<td>Training &amp; TLM</td>
<td>▪ To be complete by 12 months of Program Effectiveness</td>
</tr>
<tr>
<td>▪ Include E&amp;S aspects in Work Plans through SSU</td>
<td>Work Plans/Institutional Support</td>
<td>Recurring, Annually</td>
</tr>
<tr>
<td>▪ Social Audit to include E&amp;S Aspects and involvement of SSU</td>
<td>M&amp;E</td>
<td>Modified format for 360-degree Comprehensive E&amp;S Audit shall be prepared within 8 months of the start of the program; Audit to be conducted annually</td>
</tr>
<tr>
<td>▪ EMIS to include details on available facilities and environmental performance &amp; mechanism to monitor O&amp;M requirements &amp; responsibilities on a real-time basis</td>
<td>MIS</td>
<td>To be complete by 12 months of Program Effectiveness</td>
</tr>
</tbody>
</table>

### Results Area 2 (RA-2) – Improved Quality of Teaching-Learning Interactions:

| ▪ Develop training modules and schedule (training plan), and prepare TLM on Environment, Climate Change, Social and Disaster Management, Include these aspects in the assessment | ▪ Training & TLM | ▪ To be complete by 12 months of Program Effectiveness |
| ▪ Provide WASH and repairs with physical improvements / Design interventions to support CwSN including safety, special BaLA interventions (safe and easy to use learning aids and materials) | Infrastructure Development/ Upgradation | ▪ To be complete by 24 months of Program Effectiveness |
| ▪ Institutional interaction between SSU and SCERT special cell to incorporate E&S, CC, and DM aspects in teacher training & guidebooks for CwSN | Training/Institutional Support | To be complete by 12 months of Program Effectiveness |

### Results Area 3 (RA-3) – Strengthened Institutional Capacity and Community Engagement for Service Delivery:

| ▪ Develop training modules for school leaders and decentralized education functionaries in gender, inclusion, DM, and EHS aspects | Training | To be complete by 24 months of Program Effectiveness |
| ▪ Include E&S aspects in Work Plans through SSU | Work Plans/Institutional Support | Recurring, Annually |
| ▪ Social Audit to include E&S Aspects and involvement of SSU | M&E | Modified format for 360-degree Comprehensive E&S Audit shall be prepared within 8 months of the start of the program; Audit to be conducted annually |
| ▪ EMIS to include details on available facilities and environmental performance & mechanism to monitor O&M requirements & responsibilities on a real-time basis | MIS | To be complete by 12 months of Program Effectiveness |
6.2.2 Climate Adaptation and Mitigation Measures

208. The school construction standards in AP mainstream disaster-mitigation measures of civil construction, while they adopt NDMA guidelines for capacities and mechanisms for preparedness and response. It is important to mainstream these into the program activities.

209. The program will support disaster preparedness, mitigation, and emergency response through:

   a) Climate-smart practices: adoption of disaster-resilient construction standards including high plinth construction in case of disaster-prone areas and materials suited to withstand risks, installation of key infrastructure and services including electrical installations above High Flood Levels, campus plantation to act as a barrier against disasters in coastal areas, extra bracing and minimal usage of glass for openings for facilities upgrade under the program in the coastal belt, plantations as disaster barriers in areas prone to climate risks, placement decisions to maximize the availability of open areas, allow flood water streamlining and minimize risks, deployment of energy-efficient electrical appliances, disaster safety and EHS audit, use of local materials and techniques (for example pavements, buildings, landscape, play equipment) to reduce heat build-up and prevent quick deterioration, training and awareness building among students, authorities, parent committees so that these principles are reflected in all future works, etc.;

   b) Safe campus practices: safe storage of fuels in campus, management of wastes and wastewater, VOC free paints and avoiding the use of hazardous materials such as asbestos; reporting mechanism for maintenance needs, fire/emergency response plans, training and awareness building among students, authorities, parent committees so that these principles are reflected in all future works, etc. (Current specifications for Paints include avoidance of VOC, lead and other Toxic constituents);

   a) Green practices: including ‘Haritha Patasala’ concept for overall green development of the schools during and beyond the program, energy efficiency, water conservation, student eco-clubs carrying out campus greening/ kitchen gardens, training/ awareness, and inclusion of courses on the environment so that these principles are reflected in all future works, etc. Green spaces would also act as outdoor learning/engagement spaces for children when the weather is conducive (considering the hot summers and cyclonic monsoons).

6.2.3 Capacity Building for E&S Aspects

Table 13: Suggestive Topics for Capacity Building on Environmental Aspects

<table>
<thead>
<tr>
<th>Broad areas</th>
<th>Topics</th>
<th>Stakeholders</th>
</tr>
</thead>
</table>
| Awareness of guidelines and legislation including the development of required guidance material | Government of India and state environmental guidelines, legislation, and project guidelines, clauses to be incorporated in bid documents if any / followed during works | ▪ The staff of the Program Management Unit and the proposed Sustainable Development Unit  
▪ Vendors / Contractors  
▪ Managerial and Engineering staff of Local bodies and project implementing agencies (for various programs) |
| Training on Climate Smart, Safe campus and green principles | Best practices, and how these could be incorporated under the program and beyond | ▪ SDU staff  
▪ Managerial and Engineering staff of Local bodies and project implementing agencies  
▪ Parent Committees, Students, School authorities |
| Environmental impacts and mitigation; Construction and overall program safety, | Identification of environmental impacts from construction, placement decisions and waste management, Safety concerns, guidelines, operationalization of | ▪ The staff of the Program Management Unit and the proposed Sustainable Development Unit  
▪ Implementing agencies |
<table>
<thead>
<tr>
<th>Broad areas</th>
<th>Topics</th>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>contingency/emergency plans, Work Closeout Strategy</td>
<td>safety procedures, PPEs and their use, safe equipment, and implementation methodology</td>
<td>▪ Parent Committees, School authorities&lt;br&gt;▪ Contractors/Vendors, Workers</td>
</tr>
<tr>
<td>Monitoring and supervision</td>
<td>Environment issues during construction and material sourcing, site management, public and worker safety concerns, disposal of waste</td>
<td>▪ The staff of the Program Management Unit and the proposed Sustainable Development Unit&lt;br&gt;▪ Implementing agencies</td>
</tr>
<tr>
<td>Management Information System</td>
<td>Training on inputs into the Management Systems (environmental aspects) which would be created including for emergencies, disasters; and operations</td>
<td>▪ The staff of the Program Management Unit and the proposed Sustainable Development Unit&lt;br&gt;▪ Implementing agencies&lt;br&gt;▪ Parent Committees, School authorities</td>
</tr>
<tr>
<td>Social Audit &amp; Work Exit</td>
<td>Mechanisms to run the operations, audit, and essential actions while the program exits from each area</td>
<td>▪ Representatives of Local body/departments involved&lt;br&gt;▪ Beneficiaries&lt;br&gt;▪ School Heads, PCs</td>
</tr>
</tbody>
</table>

### 6.2.4 Monitoring and Reporting on Environmental Aspects

SSU shall prepare Quarterly Progress Reports (at the end of each quarter, after effectiveness) in an agreed format (to be included in the Program Operations Manual prepared by the Borrower) either as part of overall program progress reports or as a separate document for reporting its activities and progress to the Project Director and then to the Bank. Required documents, data, and best practice notes shall be provided to the Bank as required for Implementation Support Missions, Mid Term Review (MTR - draft shall be ready before MTR mission), and Implementation Completion. These reports/progress notes shall include details on the status of environmental management capacities and systems at State, District, School Levels and contact details of Nodal Persons, training provided to SSU and various other environmental staff, reporting formats and guidelines provided to agencies, documentation of EHS implementation and best practices (with photographs / short site videos), exclusions monitoring and management mechanisms, status, challenges and actions required to achieve environmental inputs to PAP and other required details.

### 6.2.5 Citizen Engagement and Grievance Redress Mechanism

In line with RTE Act 2009 - section 9, section- 24(1)and section-32 (1), the Government of Andhra Pradesh has authorized local authorities including Gram Panchayat, CRC, Taluk Panchayat and District project coordinator office in rural areas and similarly ward office, CRC, Municipal office and Administrative office in urban area. However, DoSE currently lacks a system that identifies specified type of grievances, the authority charged with provision, the time duration of office for its disposal, the appellate authority, and time for grievance redressal by the appellate authority.

Consultations, an established feedback mechanism and communication strategy would be an important aspect for DoSE and the Nadu Nedu scheme to be effective its target beneficiaries. Consultations and communication during project implementation are also required for compliance of the social development principles of inclusiveness, participation, accountability, and transparency. A Stakeholder Engagement Plan, consultation and communication framework for the project has been developed and the following approach shall be adopted to implement it effectively:

- Consultation and communication with clear objective
- Identify stakeholders representing wide range of area (cluster) and diversity (inter-district variations)
- Participatory approach by working closely with stakeholders and the beneficiaries
- Identify key stakeholders’ interests and highlighting them
- Integrate verbal, electronic and written consultation mechanisms for effective outreach
- Ensure gender friendly approach
- Maximize transparency

Vignettes of existing CE initiatives: Leveraging Spaces for Collective Action- CBft project:

213. An illustrative example is the CfBT-supported community score cards, which focused on education delivery in Andhra Pradesh. The CfBT Education Trust in Andhra Pradesh used the space of the school management committee to collectivize women and marginalized communities, enabling them to participate in monitoring processes of the school. The initiative was able to influence the quality of midday meals served, teacher and student attendance, and maintenance of toilet facilities in certain schools.

214. Community monitoring techniques helped to improve education delivery and found that mobilizing parents and initiating collectivization processes are more effective around established bodies like the school management committee.

Mana Badi: Nadu-Nedu:

215. Parent Committees (PCs) have been empowered to carry out assessments of infrastructure/facilities and identify gaps that need to be addressed. A community contracting model is being used to carry out the required development works. The Govt. has planned to strengthen the infrastructure and transform the existing infrastructure of the schools in a mission mode and in a phased manner over a period of three years from 2019-20. In the first year, 15715 schools shall be taken up. The priority of facilities to be taken up under Mana Badi Nadu-Nedu are providing toilets with running water, electrification with fans and tube lights, drinking water supply, furniture for students and staff, paintings to school, major and minor repairs, green chalk boards, English labs and compound walls.

Social Audits:

216. Social audit of the data - the beneficiary lists under the financial assistance are communicated to village/ward secretariats, all schools, all junior colleges, MEOs, DEOs and Intermediate Education Officers and the data was published for social audit from 28-12-2019 to 1-1-2020.

217. Proposed Consultation and Communication Strategy for SALT is presented in Table 14 below.

Table 14: Proposed Consultation and Communication Strategy for SALT program

<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsibility</th>
<th>Method/Tools</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparatory Stage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosure of the ESSA</td>
<td>World Bank and DoSE</td>
<td>Uploading on World Bank, DoSE’s website Display of summary in Telugu in public places</td>
<td>Community, Parent Committee representatives especially potential beneficiaries and stakeholders become aware about the ESSA recommendations</td>
</tr>
<tr>
<td>Preparation of Information, Education and Communication (IEC) materials for awareness campaign rolled-out through State Investment Plans, with a special focus on Schedule V areas/ITDA blocks and</td>
<td>DoSE and Nodal Agencies</td>
<td>By engaging an experienced and expert agency/person by DoSE/other implementing agencies</td>
<td>IEC materials will be utilized in the initial awareness campaign about the scheme</td>
</tr>
<tr>
<td>Activity</td>
<td>Responsibility</td>
<td>Method/Tools</td>
<td>Outcome</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Aspirational Districts.</td>
<td>DoSE, nodal agencies department at district level &amp; their field officials</td>
<td>Distribution/display/organization of handouts, posters, puppet shows, awareness camps</td>
<td>Awareness about the project initiative.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of electronic media and social media through internet and television for awareness. Collaboration with NGOs and other institution working in the sector for communicating.</td>
<td>Target groups are encouraged to participate.</td>
</tr>
<tr>
<td>Awareness campaign for entrepreneurs in unorganized sectors and value chain participants' level to disseminate information about SALT interventions and its coverage to benefits and proposed activities.</td>
<td>DoSE, nodal agencies department at district level &amp; their field officials</td>
<td>Distribution/display/organization of handouts, posters, puppet shows, awareness camps</td>
<td>Awareness about the project initiative.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of electronic media and social media through internet and television for awareness. Collaboration with NGOs and other institution working in the sector for communicating.</td>
<td>Target groups are encouraged to participate.</td>
</tr>
<tr>
<td>Consultation with potential beneficiaries and other stakeholder on the provisions of the central schemes.</td>
<td>DoSE, nodal agencies departments at district level &amp; their field officials</td>
<td>FGDs, Small Group Meetings, interactive workshops and public consultation meetings Use of social media/internet for effective planning for consultation meetings and workshops. Provision of women officials/KGBV special officers in the consultation team for ensuring women participation.</td>
<td>Increased awareness about the project initiative, Issues and suggestions obtained Target groups are encouraged to participate</td>
</tr>
<tr>
<td>Implementation and Operation Stage</td>
<td>DoSE and Nodal Agencies</td>
<td>By engaging an experienced and expert agency/person by DoSE/Nodal Agencies</td>
<td>IEC materials will be utilized in the initial awareness campaign</td>
</tr>
<tr>
<td>The DoSE will focus on preparation of IEC materials on good business practices, benefit of utilization of storage facilities at warehouses, financial and credit literacy campaign, access to market and new technology, etc.</td>
<td>DoSE and Nodal Agencies</td>
<td>By engaging an experienced and expert agency/person by DoSE/Nodal Agencies</td>
<td>IEC materials will be utilized in the initial awareness campaign</td>
</tr>
<tr>
<td>Strengthening of feedback/Grievance Redressal Mechanism (GRM) at the state and district-level with a specific focus on ITDA blocks, Schedule V areas and aspirational districts.</td>
<td>DoSE and Nodal Agencies</td>
<td>The GRM mechanism will include interventions to localize the feedback mechanism at the state-level as well capacity measures to improve the functions of DEO offices.</td>
<td>Build effective information flows targeting first-generation school-goers from SC/ST communities.</td>
</tr>
<tr>
<td>Disclosure of selected list of beneficiaries and stakeholders for various services/benefits of the project</td>
<td>DoSE, Nodal Agencies &amp; their district level DEO offices.</td>
<td>Uploading of list in DoSE, Nodal Agencies web portal Display of list of production and enterprise clusters in vernacular language GP,</td>
<td>Transparency ensured</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Display of list of production and enterprise clusters in vernacular language GP,</td>
<td>Opportunity given for any grievance on selection.</td>
</tr>
<tr>
<td>Activity</td>
<td>Responsibility</td>
<td>Method/Tools</td>
<td>Outcome</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Consultation with selected beneficiaries and stakeholders for Citizen Feedback System (CFS), Gender Action Plan (GAP), and Grievance Redressal Mechanism (GRM)</td>
<td>DoSE, Nodal Agencies &amp; their district level DEO officers</td>
<td>FGDs, Small Group Meetings, interactive workshops and public consultation meetings</td>
<td>Selected beneficiaries and stakeholders become aware about the mechanism to ensure social development.</td>
</tr>
<tr>
<td>Community consultations for financial and credit literacy</td>
<td>DoSE, Nodal Agencies &amp; their district level departments and financial institutions</td>
<td>FGDs, Small Group Meetings, interactive workshops, film shows and public consultation meetings</td>
<td>Better financial decisions and management Access to credit facility</td>
</tr>
<tr>
<td>Disclosure of quarterly reports of social audit</td>
<td>DoSE, Nodal Agencies and their social unit/cell</td>
<td>Uploading of list in DoSE, Nodal Agencies web portal Display in office notice board of concerned institutions at district and divisional level for one month and available to public on demand at any time, if sought for</td>
<td>Transparency ensured Opportunity given for any suggestions/grievance</td>
</tr>
<tr>
<td>Completion Stage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultations with community especially project beneficiary and stakeholders on service</td>
<td>DoSE, Nodal Agencies, and their social unit/cell</td>
<td>FGDs, Small Group Meetings, interactive workshops, and public consultation meetings</td>
<td>Satisfaction level</td>
</tr>
<tr>
<td>Disclosure of final internal and external Monitoring and evaluation reports</td>
<td>DoSE, Nodal Agencies and their social unit/cell</td>
<td>Uploading of list on DoSE’s web portal</td>
<td>Transparency ensured</td>
</tr>
</tbody>
</table>
7 CONSULTATION AND DISCLOSURE

7.1 Disclosure

218. This is the ESSA for the SALT PforR program, the draft of which was disclosed on February 18, 2021 (along with its executive summary translated to local language Telugu to enable its wider reading before consultations) in-country in DoSE website (see: https://schooledu.ap.gov.in/Doc21/Draft_ESSA_SALT.pdf) and on the World Bank’s external website, for stakeholder’s review (government officials, industry associations, non-governmental organizations, civil society organizations, teachers, parents, communities and other relevant stakeholders), discussions, and formal comments. Stakeholder workshop to disseminate the findings of the assessment and the proposed inputs to the program actions took place during 23 – 25 January 2021 virtually with NGOs / CSOs, PCs, communities, School authorities and all stakeholder institutions. Final ESSA was disclosed in-country and on the World Bank’s external website during appraisal in April 2021, after incorporating comments and suggestions.

7.2 Stakeholder Consultations on ESSA

219. Stakeholder consultations were an integral part of the ESSA process and were carried out consistent with applicable World Bank principles and the Bank’s Technical Note on Public Consultations and Stakeholder Engagement in World Bank-supported operations when there are constraints on conducting public meetings (COVID-19 restrictions). Consultations started as early as November 2020 and continued till January 2021 more so, due to movement limitation. Consultations were carried out with relevant institutions and government departments/agencies, school authorities, experts, and beneficiaries, communities around schools, workers, and parent committee members for identification and assessment of environmental and social effects, and to recommend measures to improve environmental and social management capacity based on their comments, and suggestions. List of consultations and compilation of issues, comments discussed are presented in Annexure VI.

220. The World Bank ESSA team consulted the designated personnel in the DoSE and nodal agencies to assess the level of social regulatory compliance the track record, including socially and gender-disaggregated M&E mechanisms that supports compliance. If there are instances of non-compliance, (for instance related to the monitoring of OHS issues, labor-management, or SEA/SH risks) the consultations also sought to identify these and assess what actions were taken to address such non-compliance. Annexure VII provides a detailed list of questionnaires/probe areas utilized for consultations. The consultation inquiries included the issues related to the capacity of District Education Officials, Parents’ Committees, and community representatives to address these challenges, concerns, and risks.

221. Virtual consultations were held with DoSE officials, including Inclusive Educators/Special officers, State Implementation Society, Samagra Shiksha Mission, officials from State Council of Educational Research and Training (SCERT), and other officials from aligned departments such as Tribal Development Department, Social Welfare Department, Department of Women and Child Development. Officials of the Education Department across the implementation chain at district, taluka/block level, NGOs working on education/tribal areas, and members of the community as part of SMCS/SDMCs, including those from tribal-dominated districts were consulted through virtual platforms.

222. Discussions and feedback from these consultations have helped in the preparation of the ESSA report and finalization of recommendations/actions for the Program Action Plan. This includes a state-level consultation held on 23 and 26 February 2021 and attended by participants from a wide spectrum, including civil society representatives who will provide feedback on the Program design and supported the recommendations made by ESSA.

223. The draft ESSA report was revised considering suggestions from Bank’s internal system as well as feedback from government officials, non-governmental organizations, civil society organizations, parents and neighbours, and other interested stakeholders and was redisclosed in line with the Bank requirements.

Summary of Consultations

224. During the consultations, the stakeholders provided inputs on the institutional arrangement for the proposed program, management of environmental and social aspects including implementation of Nadu Nedu, Institutional
Arrangement and Involvement of Parent Committee, Guidance, Trainings Purchase of materials, Water Availability and Quality, Wastes, Land related aspects, Toilets, MHM, COVID-19 Safety, OHS, and potential labor students interface, Monitoring, Building design, Greening, Complaint Redressal, and Disaster management. Inputs of the stakeholders are compiled in Annexure VI.

- **Ongoing program:**

225. Covers all government schools throughout AP. The program supports essential repairs, construction of toilets, compound walls, furniture, painting, electrification, drinking water supply, and provision of green chalkboards in all government-owned schools (with existing school campuses) across AP irrespective of urban/ rural (including tribal blocks) areas. Hence, facilities are ensured in all schools including those in tribal areas. Key agencies in respective areas facilitate or support the activities. Repairs to schools (schools are of max. 3 storeys) are undertaken as part of the program. It is important to have agencies to coordinate these activities along with communities, CSOs, and other agencies and implement best practices and support all schools with essential facilities they require.

- **Result Areas:**

226. The high digital device availability and internet usage amongst teachers can be leveraged to establish school complex level social media groups that facilitate peer to peer learning and communication.

227. Teachers can be motivated through social nudges in the form of recognition of innovations in pedagogy and/or development of TLM, and timely completion of or contribution to offline and online teacher professional development programs.

228. In the schools catering to the ST communities, a focus at the foundational learning stage should be to support students in gradually transitioning from mother tongue to the regular medium of instruction in the state.

229. The participants seconded the need for the program to not just focus on foundational learning but also provide support in the direction of improving learning outcomes of students in senior grades. Remedial education support is crucial, and its need has been further accentuated by the school closures due to the COVID-19 pandemic.

230. Participants from SCERT, SIEMAT, and DIETs appreciated the external technical support that the program would facilitate for them. The same was recognized as critical for delivering better services (teacher professional development, state, and school-level assessments, teaching-learning material/content development, etc.). The NGOs/CSOs participating in the meeting voiced their desire to support the government program, highlighted the value of working in partnership, and recognized that change at scale is only possible when delivered through existing government systems and institutions.

- **Environmental Management:**

231. ‘Environmental Management Framework for Secondary Schools’ referred to in the Samagra Shiksha Framework or other guidance/frameworks are not in use for the ongoing program. Stakeholders are not aware of the contents and it is not in use for Nadu Nedu. At the district or school level, there is no awareness of the EMF for RMSA. PCs play an active role in Nadu Nedu. They are trained mainly on the procurement of materials and overall construction monitoring. They are supported by school HM and engineers on the field on technical aspects. Facilitating agencies’ support works in the areas where they are involved over a long time.

232. Integration of EHS aspects into civil works: There is no focal point at the state level on EHS aspects. Design and estimates for civil works are provided by the civil engineers in the education department for works undertaken by the PCs. Implementation in different regions is through various implementing agencies. Integration of EHS aspects and work safety is important through capacity building and the involvement of qualified engineers as well as community representatives. At the community level, the PCs play a key role in monitoring, including monitoring of civil works along with site engineers and school heads. However, the health and safety of workers, students, and communities are not much integrated into the program, considering that the works are minimal. Though PCs do not find much time for continuous involvement considering their livelihood needs, they are aware of the status of civil works and issues. The committees participate in the preparation of annual school development plans. Civil engineers of the education department or facilitating agencies who are involved in the program are not oriented to EHS issues.
Disaster management awareness programs are organized in schools in coordination with the State Disaster Management Agency.

- **Social Aspects:**

233. ITDA Blocks: From a pilot experience, setting aside 40-45 mins for peer-to-peer learning helps students from rural areas/ITDA blocks learn better. Infrastructure makes a lot of difference in schools. There are definite variations in the school infrastructure between schools in ITDA blocks v/s other areas of the state. For instance, in the Paderu and Vizianagaram areas. The classroom structures in these areas are temporary and at times the pucca structures are leaking.

234. Learning needs of SC/ST students: Representatives from NGOs pointed out that students in ITDA blocks experience issues of lower attendance, low transition rates, and lower outcome levels compared to the national average. Representatives also pointed out that ST students often experience language barriers.

235. Adolescent girls: The NGO representatives stated that there are instances of drop-out amongst girl students due to child marriage. This usually happens due to community/parental pressures, etc. Hence, it is important to train girls and raise their awareness towards the importance of education and work. A suggestion on introducing successful, local role models for girls was also received.

236. Grievance Redressal: NGO presentative shared an experience on SMCs sabhas; a model that facilitates interaction between community members, local representatives, and bureaucracy.
ANNEXURES
ANNEXURE I: Inter-district variations and social diversities in learning outcomes in AP

Social context of AP
ST Population
The below map is post the most recent indicating the latest state boundaries: 44
Highest - Vishakhapatnam: 14%
Lowest - Kurnool: 2%

SC Population
The below map is post the most recent indicating the latest state boundaries: 45
Highest - Prakasham: 23%
Lowest - Vishakhapatnam: 7.7%

45 Footnote
Learning Outcomes with a perspective of Gender and Social Groups

The learning outcomes with a perspective of gender across subjects have very little variation. The learning outcomes of STs lag other social across subjects.

---

46 NAS 2017, visualization generated using Tableau
47 Data taken from http://nas.schooleduinfo.in/dashboard/nas_ncert/#/ for the state of Andhra Pradesh
48 Data taken from http://nas.schooleduinfo.in/dashboard/nas_ncert/#/ for the state of Andhra Pradesh
The below maps (Source: Census2011) depicts the % of ST and SC population in each district of the State.

Note: The maps do not account for new state boundaries.

Maternal Health Indicators: Age at first marriage, Fertility, IMR & ANC visits

1. Age at first marriage
   - The median age at first marriage is 18.1 years among women age 20-49 years and 24.3 years among men age 25-49 years.
   - One-third of women age 20-24 years got married before the legal minimum age of 18.

2. Fertility levels & Contraceptive use
   - The total fertility rate (TFR) in Andhra Pradesh is 1.8 children per woman, implying that the state has reached below replacement level fertility.
   - The greatest differentials in fertility are by schooling. At current fertility rates, women with no schooling will have 0.6 children more than women who had 12 or more years of schooling (a TFR of 2.2, compared with 1.6).

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49 Generated using https://gramener.com/indiamap/
• Contraceptive prevalence varies greatly by the level of schooling, ranging from 80 percent of currently married women with no schooling or less than 5 years of schooling to only 47 percent of those with 12 or more years of schooling.

Health insurance
• Seventy-five percent of households in Andhra Pradesh have any kind of health insurance that covers at least one member of the household.
• Health scheme or health insurance coverage is higher among women and men with less schooling or no schooling than among those with 12 or more years of schooling.

School Education statistics for the state:
• Enrolment in all types of schools in the state during 2019-20 was 72.74 Lakhs, of which 37.95 Lakhs (52.17%) are in I–V classes, 21.37 Lakhs (29.38%) in VI-VIII classes and 13.42 Lakhs (18.45%) in IX-X classes. Under Jagananna Amma Vodi scheme (financial assistance to each mother who is below poverty line household, irrespective of caste, creed, religion and region to enable her to educate her child/children from Class I to XII), as on 27-01-2020, 42.33 lakh mothers/guardians have been identified as eligible and bills processed for transfer of amount to all their bank accounts. An amount of Rs. 6,336.45 Crore has been transferred to the bank accounts of 42,24,302 eligible mothers/guardian, and transfer failed in 8796 accounts.
• 36.88 lakh children are covered under Mid-Day Meal scheme during 2019-20, out of which 18.14 lakh are in Primary including NCLP, 11.48 lakh in Upper Primary and 7.26 lakh children in High schools in the state. The new menu introduced by the government in Mid-Day Meal from 21.01.2020 for school children.
• Government have issued orders for converting all classes from I to VI in Primary, Upper Primary, High Schools into English Medium from the academic year 2020-21 and gradually increasing each further class from the next consequent academic years. 21.96 lakhs of students from Class I to VI in Govt. managed schools including aided schools will move into the fold of English Medium education during 2020-21.
• The Govt. has planned to strengthen the infrastructure and transform the existing infrastructure of the schools in a mission mode and in a phased manner over a period of three years from 2019-20. In the first year, 15715 schools shall be taken up. The Priority of Facilities to be taken up under Mana Badi Noadu-Nedu are toilets with running water, electrification with fans and tube lights, drinking water supply, furniture for students and staff, painting to school, major and minor repairs, green chalk boards, English labs and compound walls.

Gender & social empowerment initiatives of the state:
• The state government has approved to provide additional Nutrition Supplementation (irrespective of Nutritional Status) to all Children (6 months to 6 years), Pregnant & Lactating mothers enrolled in 77 Scheduled and Tribal Sub Plan mandals spread over 7 Integrated Tribal Development Agency (ITDA's) and 8 Districts in the State.
• Government has enacted Disha Act which is a landmark legislation that help create a safe society for women and children in Andhra Pradesh by providing speedy justice. This act for the first time in the country provides for completion of investigation within 7 days and trial within 14 days in cases of heinous offences of rape where substantial conclusive evidence is available.
• Government provides reimbursement of full fee to all eligible students studying ITI, Polytechnic, Degree & above level courses.
Overall strengths – Students, institutions and teachers

Trend across 2014-15 to 2016-1750

Number of institutions/schools, teachers and enrolment across the years
(Source: UDISE Flash Statistics):

School distribution among Urban and Rural:
The number of schools in the rural areas are approximately 4 times of that in urban areas. (Source: UDISE 2018-19)

Dropout Rate across gender and social groups:

<table>
<thead>
<tr>
<th>Social Category</th>
<th>Dropout rate primary</th>
<th>Dropout rate upper primary</th>
<th>Dropout Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girls</td>
<td>Overall</td>
<td>Girls</td>
</tr>
<tr>
<td>General</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SC</td>
<td>0</td>
<td>0</td>
<td>1.18</td>
</tr>
<tr>
<td>ST</td>
<td>0.23</td>
<td>0.53</td>
<td>3.84</td>
</tr>
<tr>
<td>OBC</td>
<td>0</td>
<td>0</td>
<td>0.97</td>
</tr>
<tr>
<td>Overall</td>
<td>0</td>
<td>0</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Poor performance highlighted in red, source: UDISE+ 2018-19 data

Promotion Rate across gender and social groups:

<table>
<thead>
<tr>
<th>Social Category</th>
<th>Promotion rate Primary</th>
<th>Promotion rate Upper Primary</th>
<th>Promotion rate Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>99.92</td>
<td>98.21</td>
<td>78.67</td>
</tr>
<tr>
<td>OBC</td>
<td>99.35</td>
<td>97.32</td>
<td>83.05</td>
</tr>
<tr>
<td>SC</td>
<td>98.73</td>
<td>96.62</td>
<td>81.6</td>
</tr>
<tr>
<td>ST</td>
<td>96.67</td>
<td>93.48</td>
<td>79.24</td>
</tr>
<tr>
<td>Overall</td>
<td>99.15</td>
<td>97.16</td>
<td>81.49</td>
</tr>
</tbody>
</table>

Poor performance highlighted in red, source: UDISE+ 2018-19 data

UDISE Flash Statistics 2016-17
### Repetition Rate across gender and social groups

<table>
<thead>
<tr>
<th>Social Category</th>
<th>Repetition Rate Primary</th>
<th>Repetition Rate Upper Primary</th>
<th>Repetition Rate Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girls</td>
<td>Overall</td>
<td>Girls</td>
</tr>
<tr>
<td>General</td>
<td>0</td>
<td>0.08</td>
<td>1.29</td>
</tr>
<tr>
<td>SC</td>
<td>0.81</td>
<td>1.27</td>
<td>1.91</td>
</tr>
<tr>
<td>ST</td>
<td>2.78</td>
<td>2.8</td>
<td>1.98</td>
</tr>
<tr>
<td>OBC</td>
<td>0.16</td>
<td>0.65</td>
<td>1.74</td>
</tr>
<tr>
<td>Overall</td>
<td>0.2</td>
<td>0.85</td>
<td>1.78</td>
</tr>
</tbody>
</table>

*Poor performance highlighted in red, source: UDISE+ 2018-19 data*

### Transition rate across gender and social groups:

<table>
<thead>
<tr>
<th>Social Category</th>
<th>Primary to Upper Primary</th>
<th>Elementary to Secondary</th>
<th>Secondary to Higher Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girls</td>
<td>Overall</td>
<td>Girls</td>
</tr>
<tr>
<td>General</td>
<td>1</td>
<td>0.99</td>
<td>0.98</td>
</tr>
<tr>
<td>SC</td>
<td>0.97</td>
<td>0.97</td>
<td>0.96</td>
</tr>
<tr>
<td>ST</td>
<td>0.87</td>
<td>0.87</td>
<td>0.91</td>
</tr>
<tr>
<td>OBC</td>
<td>0.98</td>
<td>0.98</td>
<td>0.96</td>
</tr>
<tr>
<td>Overall</td>
<td>0.97</td>
<td>0.97</td>
<td>0.96</td>
</tr>
</tbody>
</table>

*Poor performance highlighted in red, source: UDISE+ 2018-19 data*

### Retention Rate across gender and social groups:

<table>
<thead>
<tr>
<th>Social Category</th>
<th>Primary to Upper Primary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
</tr>
<tr>
<td>General</td>
<td>87.85</td>
</tr>
<tr>
<td>SC</td>
<td>89.01</td>
</tr>
<tr>
<td>ST</td>
<td><strong>83.17</strong></td>
</tr>
<tr>
<td>OBC</td>
<td>97.47</td>
</tr>
<tr>
<td>Overall</td>
<td>92.31</td>
</tr>
</tbody>
</table>

*Poor performance highlighted in red, source: UDISE+ 2018-19 data*

### Education Outcomes:

**National Achievement Survey:**

The state ranked in the Top 10 highest performing states – those with over 40% of the students in the top performing bands.
### 10 Highest Performing States (those with over 40% of students in top performing bands)

<table>
<thead>
<tr>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rajasthan</td>
</tr>
<tr>
<td>Karnataka</td>
</tr>
<tr>
<td>Chandigarh</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
</tr>
<tr>
<td>Jharkhand</td>
</tr>
<tr>
<td>Dadra &amp; Nagar Haveli</td>
</tr>
<tr>
<td>Assam</td>
</tr>
<tr>
<td>Gujarat</td>
</tr>
<tr>
<td>Kerala</td>
</tr>
<tr>
<td>Uttarakhand</td>
</tr>
</tbody>
</table>

**NAS Top 10 performers, 2017**

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**ANNEXURE II: Environmental and Social Management System Assessment**

**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 capacity. Metrics and other information on institutional capacities from State to school levels, such as staff, budget, and human resources. The effectiveness of inter-agency coordination arrangements and previous performance in environmental management in the context of similar projects and programs is also discussed.

**Institutional Framework**

The program will be implemented by the Department of School Education (DoSE), GoAP through its agencies. The State Implementation Society (SIS) for Samagra Shiksha will be the nodal implementation agency for the program. It will be responsible for overall program management and coordination. In particular, the Nadu Nedu scheme will be implemented by the SIS through PCs and the A.P. Education & Welfare Infrastructure Development Corporation (APEWIDC). It will be supported by several other ‘Facilitating Agencies’ (FA) that will not directly be involved in procurement of goods/works/services under the program and no funds will flow through these FAs. These FAs are providing advisory and administrative support to PCs for fulfilling various requirements for improvement of school facilities envisaged through Nadu-Nedu. On the other hand, interventions aimed at improving quality of teaching and learning will be directly implemented by implementation agencies such as the SCERT, the SIEMAT, and the DIETs. At the sub-district level, program activities will be coordinated by education functionaries (MEOs and CRCCs). The Nadu Nedu scheme which is aimed at improving school facilities will be implemented through a hybrid Community Driven Procurement (CDP) model that comprises a decentralized component along with centralized procurement at the state level. At the decentralized-level, PCs will be involved in the planning, and implementation of community procurement including contract management to ensure a high-quality service in all activities is maintained. Centralized procurement for items such as furniture, cupboards, green chalk boards, white writing boards, sanitary ware, fans and tube lights and painting work will be aggregated and procured centrally by the SIS and APEWIDC. While the parent committees and APEWIDC will be the implementation agencies of the Nadu Nedu scheme, seven additional government departments including the APSS Engineering Department (wing of Samagra Shiksha SIS), Panchayat Raj Engineering Department, APEWIDC, Municipal & Public Health Engineering Department, Tribal welfare Engineering Department, Rural Water Supply and Sanitation, Housing Department will be engaged as FAs. Each of these, have been allocated Mandals based on the presence and staff strength in the project districts to facilitate and monitor overall implementation of the works in their jurisdiction and no money will flow through these facilitation agencies. Samagra Shiksha SIS (APSS Engineering Department) and A.P. Education & Welfare Infrastructure Development Corporation (APEWIDC) are having both the roles of IA as well as FA.

Complimenting the facilities upgrading work, all activities aimed at directly improving the quality of teaching and learning will be implemented through the SCERT, SIEMAT and the DIETs. The SCERT along with its network of DIETs in each district will execute all activities related to RA-2 including teacher professional development. Additionally, the state assessment cell at the SCERT will implement the activities on assessment reforms with support from designated assessment experts at each DIET. The SIEMAT will execute all activities related to RA-3 including the school leadership development programs, implementing the school competency framework, development of an EMIS, facilitation of school performance evaluations and training of front-line administrators. The RA-1 on foundational learning will be implemented by the DoSE in a strategic convergence with the DoWCDSC. While the development of an integrated package of ECE services including the curriculum, teaching and learning materials, and teacher training modules and guidebooks will be executed by the SCERT, the DoWCDSC will act as a FA. It will provide access to the Anganwadis, the Anganwadi workers, and the
supervisors for the roll-out of all activities. As suggested by the NEP (2020) and endorsed by the GoAP, the SCERT will play the role of coordinating the efforts between the DoSE and the DoWCDSC. The program will leverage the IPF component to engage technical experts to support the SIS, SCERT, SIEMAT and SAC. The program includes procurement activities like school infrastructure development, TLM and consultancy services based on the defined Eligible Expenditure Program. There is no high value procurement envisaged under the program.

PCs with site engineer and school head teacher decides on the works and prepares the details. Currently, in the ongoing program, there is no responsibility to monitor and report on OCHS. There is no specific responsibility at State, District, Block, or school / PC levels for environmental management including incorporation of environmental aspects in design or specifications to enhance environmental performance.

Environmental Management System

Existing System: This section describes the environmental management system of the proposed program and is organized as per the following sections. Availability of specific frameworks for environmental management: Officials involved in this program are not aware of EMF used in similar national level projects such as Samagra Siksha or RMSA in which AP was also a part of. However, certain good specifications (mainly structural and some environmental) are incorporated as part of ongoing program as below:

- Toilets with Running Water: New toilet locks as per strength, separate girls toilets with incinerator, Design ensures universal access- ramp; special supporting stainless steel bars, specially designed toilet for physically challenged with 1.2m wide door; good quality fixtures, bore-well / sump – 3600 liters capacity to ensure running water; water closet and urinal standards. Ramps preferable 1:20 surfaced with non-slippery materials, handrails to be provided. Septic tanks of Reinforced Cement Concrete.
- Water purifier & RO plant
- Electrification with Fans and Tube lights: Energy Efficient Fan with wattage between 50 to 75, LED tube lights, street light – LED (energy efficient)
- Paining to School: The paint specifications mention that the paint should not have more than 50 grams/ litre VOCs. It also mentions that the paint should not have carcinogenic materials and should not have toxic metals (Lead, Cadmium & Chromium) and their compounds more than 0.1% by mass.
- Structural Safety: Allows special structural safety provisions as required for areas of cyclone / flood risks in terms of materials used, basement height other measures to ensure structural safety. Also allows availing the services of an Architect for planning and design. Good quality cement, steel specifications, leak proof admixture, replacement of damaged flooring, slab, plinth protection, ceiling plastering and arresting leakage considering stability of existing roof, slope of 1:80 for draining rainwater, rain water down pipes. Provision of internal pathways, Doors and windows as per site condition with good materials.
- Additional classrooms – for 100 years minimum life, modules of orientation, colors, good ambience, imageability
- Compound Walls; load bearing on open foundations for hard soils, column structure with isolated footing or pile foundation for loose soils, gate pillars of stone masonry, steel grills for gates
However, there is no guidance on labor / student safety, facilities or monitoring worker-student interactions, including emergency response or accident reporting; management of construction / demolition wastes, prohibition of child labor below 14 years and hazardous labor for 14-18-year-old, and safe housekeeping. It is important to incorporate guidance on OCHS measures, emergency response measures and proper monitoring and reporting of its implementation including labor register, COVID 19 safety protocols and accident reporting.

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

**Relevant Environmental and Education Sector Laws**

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

*National Environment Policy of India:* 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 the conservation of existing environmental resources through regulatory reforms; emphasis on education, information, capacity building; inter-sectoral collaboration; etc.

The following **Table 15** discusses the Environmental Rules and Regulations and their applicability for Program Operations.

**Table 15: Applicable Environmental Policies, Rules, and Regulations**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Acts</th>
<th>Purpose</th>
<th>Applicability to Proposed activities under Result Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applicable State Laws</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land use</td>
<td>AP Town and Country Planning Act 2018</td>
<td>These Acts regulate the development of land, conversion of land use, and construction of buildings.</td>
<td>• No land-use conversion is envisaged under the program, as facilities will be developed in existing brownfield school campuses/resource centers. Not Applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>o Develop Screening / Exclusion to avoid new construction in areas outside existing schools/resource center campuses</td>
</tr>
<tr>
<td>Groundwater/ Tree</td>
<td>The AP Water, Land, and Trees Act, 2002.</td>
<td>These Acts empower the State Ground Water Authority to notify areas for the regulation of groundwater extraction. The sinking of wells requires permission from the Ground Water Authority. The rigs in the state need to be registered. Other provisions include provision for the safety of wells and construction of recharge structures and</td>
<td>• Applicable in case wells are constructed for water extraction and to ensure the safety of wells and for construction of recharge structures and rainwater harvesting systems in buildings above a specified plinth area – for RA 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>o EMP to incorporate considerations for groundwater levels (septic tanks), wells (septic tanks) &amp; trees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>o Regulatory permits &amp; following of consent/permit conditions for tree cutting, well sinking</td>
</tr>
</tbody>
</table>

---
<table>
<thead>
<tr>
<th>Sector</th>
<th>Acts</th>
<th>Purpose</th>
<th>Applicability to Proposed activities under Result Areas</th>
</tr>
</thead>
</table>
| Physical cultural resources | AP Ancient and Historical Monuments and Archaeological Sites and Remains Rules, 1961. | These Acts regulate construction in the vicinity of a protected monument and detail procedures for handling chance finds of archeological value.                                                                 | RA 1: Support to Nadu Nedu program, Training on academic management and monitoring, Provision of TLM, and support to teacher development  
   - All activities including repair, renovations, cleaning of drains, provision of toilets restricted in protected, prohibited areas; activities need permission in regulated areas  
   - Activities take place only on existing campuses. However, need to exclude certain activities in protected and prohibited areas, have chance-find procedures, regulatory permissions for works in regulated areas, mitigation/management measures, monitoring required, and also, for the following concerns/sustainability gaps in managing works near protected areas:  
     - Inadequate waste management resulting in wastes (all types) getting deposited in or near monuments/areas: C&D wastes, solid/hazardous wastes; noise and disturbance  
     - Wastewater outflow from Kitchens, Toilets/septic tanks, backwash/maintenance of filters  
   
   RA 2: Training/Capacity Building, Developing and piloting tech assisted assessment tools, Upgradation of physical and academic facilities at the resource  
   - All activities including repair, renovations, cleaning of drains, provision of toilets restricted in protected, prohibited areas; chance find procedures, activities need permission in regulated areas  
   - Activities take place only on existing campuses. However, need to exclude certain activities in protected and prohibited areas, have chance-find procedures, ... |
<table>
<thead>
<tr>
<th>Sector</th>
<th>Acts</th>
<th>Purpose</th>
<th>Applicability to Proposed activities under Result Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>centers, COVID-19 response (home-based learning packages, recording lessons) regulatory permissions for works in regulated areas, mitigation/management measures, monitoring required, and also, for the following concerns/sustainability gaps in managing works near protected areas:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Inadequate waste management resulting in wastes (all types) getting deposited in or near monuments/areas: C&amp;D wastes, solid/hazardous wastes; noise and disturbance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Wastewater outflow from Kitchens, Toilets/septic tanks, backwash/maintenance of filters</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RA 3: Institutional capacity development, Technical Support to develop EMIS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>○ Not Applicable</td>
</tr>
</tbody>
</table>

National Laws/Policies/Guidance applicable to various program activities

<table>
<thead>
<tr>
<th>Water Pollution</th>
<th>Result Area wise key Activities</th>
<th>Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Regulatory permissions, mitigation/management measures, monitoring required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sewage, drainage, sullage outflow from Schools, Anganwadi, Toilets/septic tanks, backwash/maintenance of filters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ Regulatory permissions, mitigation/management measures, monitoring required</td>
</tr>
</tbody>
</table>

To provide for the prevention and control of water pollution, and the maintaining or restoring of wholesomeness of water in the country. The Act was amended in 1988. The Water (Prevention and Control of Pollution) Cess Act was enacted in 1977, to provide for the levy and collection of a cess on water consumed by persons operating and carrying on certain types of industrial activities.
<table>
<thead>
<tr>
<th>Sector</th>
<th>Acts</th>
<th>Purpose</th>
<th>Applicability to Proposed activities under Result Areas</th>
</tr>
</thead>
</table>
| Water       | Water (Prevention and Control of Pollution) Act, 1974, amended 1988 | response (home-based learning packages, recording lessons)              | wastes  
  • Wastewater outflow from Anganwadi, Toilets/septic tanks, backwash/maintenance of filters.  
    o **Regulatory permissions, mitigation/management measures, monitoring required** |
|             |                                                                      | RA 3: Institutional capacity development, Technical Support to develop EMIS | • Inadequate waste management resulting in wastes (all types including e-wastes)  
    o **Regulatory permissions, mitigation/management measures, monitoring required** |
  RA 1: Support to Nadunedu program incl. COVID-19 response (reopening), Training on academic management and monitoring, Provision of TLM, and support to teacher development  
    • Transport of materials for up-gradation, repairs, and other TLM materials, etc., through unpaved roads  
    • Transport of wastes from construction, demolition, and other wastes including COVID-19 related  
    • Use of fuels in DG set  
    • Use of fuels in Anganwadis  
    o **Regulatory permissions, mitigation/management measures, monitoring / institutional capacities required**  
    and also, for the following environmental/health concerns:  
    − Use of paint / other material with hazardous contents  
  RA 2: Training/Capacity Building, Developing and piloting tech assisted assessment tools, Upgradation of physical and academic facilities at the | • Transport of materials for up-gradation, repairs, and other TLM materials, etc., through unpaved roads |

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</table>
|        |      | resource centers, COVID-19 response (home-based learning packages, recording lessons) | • Transport of wastes from construction, demolition, and other wastes including COVID-19 related  
  ○ Regulatory permissions, mitigation/management measures, monitoring / institutional capacities required and also, for the following environmental/ health concerns:  
    - Use of paint / other material with hazardous contents |
|        |      | RA 3: Institutional capacity development, Technical Support to develop EMIS | ● Transport of materials/wastes (e-wastes) and other wastes including COVID-19 related  
  ○ Regulatory permissions, mitigation/management measures, monitoring / institutional capacities required |
| Environmental Protection | National Environmental Policy No.29 of 1986, [23/5/1986] - The Environment (Protection) Act, 1986, amended 1991, and rules And, EIA Notification 2006 | To provide for the protection and improvement of the environment. It empowers the Central Government to establish authorities [under section 3(3)] charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country. The Act was last amended in 1991. EIA notification suggests impact assessment for land-based projects of high impact. | There is no specific requirement of environmental assessment for the construction of educational institutions (and hostels) with a built-up area of less than 20,000 sq.m. The infrastructure works to be supported under the program are expected to be much smaller than this. Greenfield construction is not proposed under the program. WASH facilities are proposed in existing school/resource center campuses. Local bodies such as Municipalities, Development Authorities, and District Panchayats are required to ensure compliance with environmental conditions before granting an occupation certificate or completion certificate.  
  Not applicable.  
  ○ Exclude high impact construction activities near sensitive areas, monitoring / institutional capacities required  
  ○ Regulatory permissions from local bodies if required for up-gradation/ new facilities in schools & resource centers |
<p>| Public Liability | No.6 of 1991, [22/1/1991] - The Public Liability | To provide for damages to victims of an accident that occurs due to handling of any hazardous substance. The Act applies to all | Usually, large quantities of hazardous chemicals are not stored on campuses. However, commonly used substances such as flammable fuels (for Anganwadis, Hostels, cleaning, and |</p>
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</table>
| Insurance Act, 1991, amended 1992 | owners associated with the production or handling of any hazardous chemicals. | work-related purposes), chlorine compounds, etc. shall be stored only in small quantities prescribed under Act.  
- **Mitigation/management measures, monitoring / institutional capacities required** |
The Indian Forest Act, 1927  
State/Union Territory Minor Forest Produce (Ownership of Forest Dependent Community) Act, 2005 | The Forest Conservation Act 1980 was enacted to help conserve the country's forests. It strictly restricts and regulates the de-reservation of forests or the use of forest land for non-forest purposes without the prior approval of the Central Government. To this end, the Act lays down the pre-requisites for the diversion of forest land for non-forest purposes.  
The Indian Forest Act, 1927 consolidates the law relating to forests, the transit of forest produce, and the duty leviable on timber and other forest produce.  
In case of Construction of schools in hilly areas: The Central Government has conveyed approval for construction of Government schools in hilly areas, over an area of 4 acres or 1.62 ha, where non-forests land is not available with the following conditions: 1. A certificate from the District Magistrate that non-forest land is not available for the school building/other building construction in the area. 2. Reserve forest land with a density of more than 0.4 shall not be allowed. 3. Felling more than 75 trees per hectare shall not be considered in any kind of forest. 4. Besides Compensatory Afforestation as per the Guidelines, the concerned authority should be ensured plantation in vacant areas, wherever available within the school premises | **Result Area wise key Activities**  
RA 1: Support to Nadu Nedu program incl. COVID-19 response (reopening), Training on academic management and monitoring, Provision of TLM, and support to teacher development  

- Siting of facilities, temporary labor camps, fuel, and material storage in/near forests, biodiversity areas resulting in clearing of forest patches  
- **Screening and exclusions, regulatory permissions, mitigation/management measures, monitoring required for clearing forest land, and also, for the following concerns/ sustainability gaps in managing forest areas:**  
  - **Inadequate waste management resulting in wastes (all types) getting deposited in nearby Forest areas:** C&D wastes, solid/hazardous wastes  
  - Wastewater outflow from Anganwadi, Toilets/septic tanks, backwash/maintenance of filters  

RA 2: Training/Capacity Building, Developing and piloting tech assisted assessment tools, Upgradation of physical and academic facilities at the resource centers, COVID-19 response (home-based learning packages, recording lessons)  

- Siting of facilities, fuel and material storage in/near forests, biodiversity areas (even if in school premises) resulting in clearing of forest patches  
- **Screening and exclusions, regulatory permissions, mitigation/management measures, monitoring required for conversion of forest land, and also, for the following concerns/ sustainability gaps in managing forest areas:**  
  - **Inadequate waste management resulting in wastes (all types) getting deposited in nearby Forest areas:** C&D wastes, solid/hazardous wastes  
  - Wastewater outflow from Resource Center Toilets/septic tanks, backwash/maintenance of filters | **Applicability** |

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<tbody>
<tr>
<td>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.</td>
<td>RA 3: Institutional capacity development, Technical Support to develop EMIS</td>
<td>o Not Applicable</td>
<td></td>
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</tbody>
</table>
| Forest dwellers / Tribal support | The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 | Recognizes the rights of forest-dwelling Scheduled Tribes and other traditional forest dwellers over the forest areas inhabited by them and provides a framework for according the same.  
To ensure that tribes and communities (scheduled Tribal (ST) and Other Traditional Forest Dwelling Communities (OTFD)) who live in or near forest areas and are dependent on these for gathering, forest produce, grazing shifting, etc are not deprived of their livelihoods. It applies to the whole country except J&K. Ensures right for the conservation of pattas or lease or grants issued by any local authority or any state government on forest lands to titles. The clearance of such development projects shall be subject to the condition that the same is recommended by Gram Sabha. | Result Area wise key Activities  
RA 1: Support to Nadu Nedu program incl. COVID-19 response (reopening), Training on academic management and monitoring, Provision of TLM, and support to teacher development  
• Siting of facilities, labor camps, fuel, and material storage in/near forest areas inhabited by traditional dwellers  
o Exclusions, regulatory permissions, mitigation/management measures, monitoring required  
RA 2: Training/Capacity Building, Developing and piloting tech assisted assessment tools, Upgradation of physical and academic facilities at the resource centers, COVID-19 response (home-based learning packages, recording lessons)  
• Siting of facilities, labor camps, fuel, and material storage in/near forest areas inhabited by traditional dwellers  
o Exclusions, regulatory permissions, mitigation/management measures, monitoring required  
RA 3: Institutional capacity development, Technical Support to develop EMIS  
• Not Applicable |               |
<p>| Biological Diversity           | No. 18 of 2003, [5/2/2003] - The Biological Diversity Act, 2002 and related | To realize the objectives enshrined in the United Nations Convention on Biological Diversity (CBD) 1992 which recognizes the sovereign rights of states to use their Biological Resources. The Act aims at the (To avoid impacts, risks on biodiversity which are not considered under this regulation, screening, monitoring, management measures are included under EP Act, Forest Act, Wetlands Act) | Not Applicable                                                                                                                                                                                      |               |</p>
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<tbody>
<tr>
<td>Wetland Protection</td>
<td>Wetland (Conservation and Management) Rules 2017</td>
<td>Protection and management of wetlands</td>
<td><strong>Result Area wise key Activities</strong>&lt;br&gt;&lt;br&gt;RA 1: Support to Nadu Nedu program incl. COVID-19 response (reopening), Training on academic management and monitoring, Provision of TLM, and support to teacher development</td>
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<tr>
<td>Heritage Preservation</td>
<td>Antiquity and Art Treasure Act 1972</td>
<td>Excavation of and protection of ancient monuments. Permit for an activity near ancient/protected monuments, chance findings. Protected area: any monument or area declared protected under the Act; Prohibited area: 100m on all sides of protected monument or area; 200m on all sides from the prohibited area is regulated area. No permission to carry out works in a protected area; need to obtain permission for works (including toilets, maintenance, repairs) in the prohibited and regulated area; which may be revoked in case the Authority finds it inappropriate. There are 129 central and 500 state-protected monuments in the current AP</td>
<td>○ Screening and exclusions, regulatory permissions, guidance on mitigation/management measures, monitoring required exclusion of activities from Wetlands</td>
</tr>
<tr>
<td></td>
<td>Ancient Monuments and Archaeological Sites and Remains Act 1958, (Amendment &amp; Validation) 2010</td>
<td></td>
<td>○ Not Applicable</td>
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</tbody>
</table>

**Result Area wise key Activities**

**RA 1: Support to Nadu Nedu program incl. COVID-19 response (reopening), Training on academic management and monitoring, Provision of TLM, and support to teacher development**

- All activities including repair, renovations, cleaning of drains, provision of toilets restricted in protected, prohibited areas; activities need permission in regulated areas
- ○ Screening and exclusion for activities in protected and prohibited areas, a chance to find procedures, regulatory permissions for works in regulated areas, mitigation/management measures, monitoring required, and also, for the following concerns/sustainability gaps in managing works near protected areas:
  - Inadequate waste management resulting in wastes (all types) getting deposited in or near monuments/areas: C&D wastes, solid/hazardous wastes
  - Wastewater outflow from Anganwadi, Toilets/septic tanks, backwash/maintenance of filters

**RA 2: Training/Capacity Building, Developing and piloting tech assisted assessment tools, Upgradation of physical and academic**

- All activities including repair, renovations, cleaning of drains, provision of toilets restricted in protected, prohibited areas; chance find procedures, activities need permission in regulated areas
- ○ Screening and exclusion for activities in protected and prohibited areas, regulatory permissions for works in...
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</thead>
</table>
| Construction standards & Disaster Related | Disaster Management Act, 2005 | Codes for construction in disaster-prone areas | regulated areas, mitigation/management measures, monitoring required, and also, for the following concerns/ sustainability gaps in managing works near protected areas:  
- Inadequate waste management resulting in wastes (all types) getting deposited in or near monuments/areas: C&D wastes, solid/hazardous wastes  
- Wastewater outflow from Anganwadi, Toilets/septic tanks, backwash/maintenance of filters |
| | National Policy on Disaster Management 2009 | Disaster prone areas codes of construction, disaster relief codes, relief and rehabilitation | |
| | | NDM guidelines: 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 responsible stakeholders, monitoring of risk, etc. | |

**RA 3: Institutional capacity development, Technical Support to develop EMIS**
- Not Applicable

**Result Area wise key Activities**

**RA 1: Support to Nadu Nedu program incl. COVID-19 response (reopening), Training on academic management and monitoring, Provision of TLM, and support to teacher development**
- All activities including repair, renovations, provision of toilets shall apply codes of construction and others for disaster-prone areas
- Training to include Disaster Management, Emergency Response
  - Safe work, construction typology standards, and guidance, mitigation/management measures, training, monitoring
  - Energy-efficient fixtures and pumps shall be used; training, awareness programs

**RA 2: Training/Capacity Building, Developing and piloting tech assisted assessment tools, Upgradation of physical and academic facilities at**
- All activities including repair, renovations, provision of toilets shall apply codes of construction under disaster-prone areas
- Training to include Disaster Management, Emergency Response
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<tbody>
<tr>
<td>National Building Code 2016 and relevant standards of the Bureau of Indian Standards (BIS)</td>
<td>Energy Conservation Building Code 2017</td>
<td>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 the building), IS 13828 (guidelines for improving earthquake resistance of low strength masonry buildings), IS 13920 (ductile detailing of a 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 the daylight of building), IS 4963 (recommendation of building and facilities for physically handicapped), IS 7662 (recommendation on the orientation of buildings), IS 8827 (recommendation for basic requirements of school buildings). Besides, 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 codes may not be applicable: as buildings or building complexes under the program have a connected load of less than 100 kW or a contract demand of less than 120 kVA. Buildings with 1000 sq. m. or more of the resource centers, COVID-19 response (home-based learning packages, recording lessons) ○ Safe work, construction typology standards, and guidance, mitigation/management measures, training, monitoring ○ Energy-efficient fixtures and pumps shall be used; training, awareness programs</td>
<td></td>
</tr>
<tr>
<td>RA 3: Institutional capacity development, Technical Support to develop EMIS</td>
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| Wildlife     | The Wildlife (Protection) Act, 1972, as amended in 1993<br>The Wildlife (Protection) Amendment Act, 2006 (No. 39 of 2006)<br>The Wildlife (Protection) Amendment Act, 2002 (No. 16 of 2003, [17/01/2003]) | To effectively protect the wildlife of this country and to control poaching, smuggling, and illegal trade in wildlife and its derivatives. The Act was amended in January 2003 and punishment and the penalty for offenses under the Act have been made more stringent. The Ministry has proposed further amendments in the law by introducing more rigid measures to strengthen the Act. The objective is to protect the listed endangered flora and fauna and ecologically important protected areas. | Applicable for all works/ activities.  
○ Guidance on no disturbance to wildlife - flora, fauna; Protection to be ensured at all stages.                                                                                           |
| Green Tribunal | National Green Tribunal Act, 2010 (No. 19 of 2010)                  | For effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources.                                                                 | Any program can fall under the purview, in case it disturbs forests and wildlife and eco-sensitive regions  
○ Follow all regulations / best practices                                                                                           |
| Noise Pollution | The Noise Pollution (Regulation and Control) Rules, 2000          | To regulate and control noise producing and generating sources (industrial activity, construction activity, generator sets, loudspeakers, and Public address system, horns, mechanical devices) to maintain ambient air quality standards in respect of noise. | **Result Area wise key Activities**  
RA 1: Support to Nadu Nedu program incl. COVID-19 response (reopening), Training on academic management and monitoring, Provision of TLM, and support to teacher development  
○ All activities including repair, renovations, demolitions, provision of toilets will be noise creating including transportation of materials  
○ Less sound-producing construction typology guidance especially near sensitive receptors, mitigation/management measures, monitoring required  
○ Noise barriers (esp when school activities are ongoing)                                                                                                                                                                                                 |
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</table>
| Handling   | The Batteries (Management & Handling) Rules, 2001/20                  | Shall apply to every manufacturer, importer, re-conditioner, assembler, dealer, auctioneer, consumer, and bulk consumer involved in the manufacture, processing, sale, purchase, and use of batteries or components to regulate and ensure the environmentally safe disposal of used batteries. | • All activities including repair, renovations, demolitions, provision of toilets will be noise creating including transportation of materials  
  ○ Less sound-producing construction typology guidance especially near sensitive receptors, mitigation/management measures, monitoring required  
  ○ Noise barriers (esp when school activities are ongoing)  
  • Transportation and training activities may create noise though minimal |
| Hazardous  | Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 | To control the generation, collection, treatment, import, storage, and handling of hazardous waste            | • Storage of new or used Batteries under all RAs/activities  
  • Use of old batteries with more than prescribed heavy metal content  
  • Inadequate management of battery wastes under all RAs/activities  
  ○ Replace old batteries with new ones of less heavy metal content, Safe storage of batteries above HFL away from students/teacher activity areas, storing and end of life disposal batteries to be ensured through EPR, monitoring required |

**Handling of Batteries**

The Batteries (Management & Handling) Rules, 2001/20

Shall apply to every manufacturer, importer, re-conditioner, assembler, dealer, auctioneer, consumer, and bulk consumer involved in the manufacture, processing, sale, purchase, and use of batteries or components to regulate and ensure the environmentally safe disposal of used batteries.

- All activities including repair, renovations, demolitions, provision of toilets will be noise creating including transportation of materials
  - Less sound-producing construction typology guidance especially near sensitive receptors, mitigation/management measures, monitoring required
  - Noise barriers (esp when school activities are ongoing)
- Transportation and training activities may create noise though minimal

**Hazardous Wastes**

Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

To control the generation, collection, treatment, import, storage, and handling of hazardous waste

- Storage of new or used Batteries under all RAs/activities
- Use of old batteries with more than prescribed heavy metal content
- Inadequate management of battery wastes under all RAs/activities
  - Replace old batteries with new ones of less heavy metal content, Safe storage of batteries above HFL away from students/teacher activity areas, storing and end of life disposal batteries to be ensured through EPR, monitoring required
- Transportation and training activities may create noise though minimal

- Some components of appliances used / for use in schools including under various RAs may have Halogenated Hydrocarbons and non-halogenated hydrocarbons used as Refrigerants, Pumps, etc. are classified as Hazardous Wastes. There may be asbestos sheets used in existing schools that may need to be removed during repairs/renovation. These fall under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, under which the occupier and vendors are responsible for maintaining records, transport, storage, and disposal.
  - This shall be ensured through the inclusion of this requirement in bid condition/agreement with vendors
  - Guidance on safe storage, removal, disposal of asbestos
  - Excluding asbestos use from all works
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</table>
| Solid Wastes           | Solid Waste Management Rules, 2016                                   | Apply to every municipal authority responsible for the collection, segregation, storage, transportation, processing, and disposal of municipal solid wastes.                                                                                                                                                                                                                       | • Storage, transport, handling, recycling/reuse, disposal of solid wastes including packaging materials under all program activities (RAs)  
  o Effective waste management to be ensured at the school level in collaboration with local authorities who are responsible for this. Waste shall be segregated and stored, involving students. Biowaste can be composted in bins and used as kitchen garden manure. Maximum recycling/reuse to be ensured at the school level and through recyclers.  
  o Untreatable wastes to be sent to the local body for disposal |
| Plastic Waste          | Plastic Waste Management Rules 2016                                  | The regulatory framework for the management of plastic waste generated in the country; and to implement these rules more effectively and to give thrust on plastic waste minimization, source segregation, recycling, involving waste pickers, recyclers, and waste processors in the collection of plastic waste fraction either from households or any other source of its generation or intermediate material recovery facility and adopt polluter’s pay principle for the sustainability of the waste management system. Guidelines on Thermoset plastic wastes apply to the disposal of thermoset plastics as in Electrical & electronics: housing, fuses, switchgear, etc., and Power utilities like MCB boxes. | • Storage, transport, handling, recycling/reuse disposal of plastic wastes including packaging materials under all program activities (RAs)  
  o Minimize use of plastics under the program / and in schools by following ‘green protocol’  
  o Recycle and reuse plastics with the involvement of students/recyclers |
| E-Waste                | e-waste (Management) Rules, 2016                                     | Shall apply to every manufacturer producer, consumer, bulk consumer, collection centers, dealers, e-retailer, refurbisher, dismantler, and recycler involved in manufacture, sale, transfer, purchase, collection, storage, and processing of e-waste or electrical and electronic equipment listed in Schedule I, | • All programs, where E-Waste is generated including electrical/electronic equipment  
  • As per rules, the manufacturer (like Philips, Syska) has to collect back E-Waste and channelize for collection/disposal; Producer (seller of the assembled product under own brand) shall arrange end-of-life disposal under Extended Producers Responsibility and create awareness on this; and collection centers established by producer /dealer                                                                                                                                 |
<p>| | | | |
|                        |                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                   |</p>
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<tr>
<td>Construction and Demolition waste</td>
<td>Construction and Demolition Waste Management Rules, 2016</td>
<td>emphasizing the roles and accountability of waste generators and various stakeholders, give thrust to segregation, recovery, reuse, recycle at source, address in detail the management of construction and demolition waste</td>
<td>• Applicable to RA 1 &amp; 2; where Construction / Demolition activities are planned.</td>
</tr>
<tr>
<td>Electric Safety</td>
<td>Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Amendment Regulations, 2016</td>
<td>Safety requirements for Operations, Construction, and maintenance of electric plants and electricity lines</td>
<td>• Applicable to RA 1 &amp; 2; where Construction / Demolition activities are planned.</td>
</tr>
</tbody>
</table>
|                             | Electricity Act 2003, relevant para-electricity Laws, section 67, 68 & 69.                                                                                                                           | Electricity Act - Para 67 & 68 give provision for granting a license to project proponent to break-up any utility area like roads, railway line, sewage lines, drain or tunnel to lay the transmission lines. This is required to install poles and lattice structures and laying of transmission lines. The Act says that ‘...the consent in writing of the appropriate government, local authority, owner or occupier as the case may be shall be required for carrying out the work.’ This applies to agricultural land as well. | o Guidance on safe practices for electrical wiring and works
  o Guidance on permission requirement for laying new lines

The vendors are mandated to maintain records, collect, transport, and channelize to authorized disposal arrangements.

This should be made a tender condition/guidance at the State level.
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<tr>
<td>Worker Health and Safety at the workplace</td>
<td>February 2009, the National Policy on Safety, Health, and Environment at Workplace Code on Occupational Safety, Health and Working Conditions Bill 2019</td>
<td>Declared by the Ministry of Labor and Employment, Government of India in February 2009 after consultations with partners. The Action Program to implement the Policy is part of the document. Sets out a set of goals with the view to building and maintaining a national preventative safety and health culture and improving the safety, health, and environment at the workplace. The Policy also expresses a set of national objectives. It emphasizes that awareness generation on occupational safety needs to be done by suitably incorporating teaching inputs on safety, health, and environment at workplace in schools, technical and vocational courses. Code on occupational safety, health, and working conditions applies to all establishments with 10 or more workers and includes building and construction workers. It applies to all infrastructure works supported under the program.</td>
<td>All RAs under the program involving workers o <em>Guidance on safe work practices, safe worksites, use of PPEs</em> o <em>Awareness/training to stakeholders and worker on safe practices</em></td>
</tr>
<tr>
<td>Sanitary Napkins</td>
<td>Guidelines for Management of Sanitary Waste 2018, CPCB</td>
<td>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 superabsorbent polymers; electric incinerators for a bulk amount of napkin waste; deep burial for compostable sanitary pads; pit burning for cotton cloth</td>
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<tr>
<td>Material safety</td>
<td>Indian Standard Safety Requirements for</td>
<td>Part 1 of this Standard specifies the safety aspects related to</td>
<td>• Applicable to all programs: Learning materials, teaching Aids, etc.</td>
</tr>
<tr>
<td></td>
<td>Toys IS 9873</td>
<td>mechanical and physical properties; part 2 specifies flammability</td>
<td>◦ <em>Guidance on use Toys, other materials conforming to minimal heavy metals, migration elements, Training/Awareness</em></td>
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<td>requirements; part 3 specifies maximum acceptable levels for migration</td>
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<td></td>
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<td>of the elements antimony, arsenic, barium, cadmium, chromium, lead,</td>
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<tr>
<td></td>
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<td>mercury, selenium, and phthalates from toys.</td>
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<tr>
<td>Universal access</td>
<td>Harmonized Guidelines and Space Standards for Barrier-Free Built Environment for Persons with</td>
<td>These guidelines issued by the Ministry of Urban Development specify</td>
<td>• Applicable to all programs: Learning materials, teaching Aids, etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>universal design elements within building premises, signage, level</td>
<td>◦ <em>Guidance on use Toys, other materials conforming to minimal heavy metals, migration elements, Training/Awareness</em></td>
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<td>changes, access to toilet facilities, fire evacuation needs, etc. The</td>
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<td></td>
<td></td>
<td>guidelines also include an ‘access audit checklist’.</td>
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<tr>
<td>Sector</td>
<td>Acts</td>
<td>Purpose</td>
<td>Applicability to Proposed activities under Result Areas</td>
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</tbody>
</table>
| Disability and Elderly Persons 2016 |                                                    | 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) are 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. | • Applicable to RA 1 & 2: repair, renovation, new toilet/WASH structures in CRZ areas  
  o Exclusion of works in CRZ 1 areas  
  o Regulatory permissions as required for all works in CRZ |
| Coastal Zones                  | Coastal Regulation Zone (CRZ) Notification 2019     |                                                                                                                                                                                                         |                                                                                                                        |
| Eco-sensitive Areas            | Eco-Sensitive Zone Notifications                    | Areas around National Parks and Wildlife Sanctuaries are notified as ESZs to regulate 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 which are 15 for AP. | • Applicable to RA 1 & 2: repair, renovation, new toilet/WASH structures in/ near Eco-sensitive Zones  
  o Exclusion of works in/near Eco-sensitive Zones |
| Use of Fly Ash                 | 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). | • Applicable to RA 1 & 2: repair, renovation, new toilet/WASH structures  
  o Guidance on the possible use of Fly Ash in areas within 300 km of coal or lignite based thermal power stations |
<p>| Food Safety                    | Food Safety and Standards Act 2006                  | This Act requires all food business operators to be registered/licensed and follow basic rules. The program activities require these requirements. | • Not directly applicable to program activities. There is a strong monitoring system for food quality checking in GoAP as part of its Mid-Day Meal Program |</p>
<table>
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<tr>
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<th>Purpose</th>
<th>Applicability to Proposed activities under Result Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidelines on Food Safety</td>
<td>Guidelines on Food Safety and Hygiene for</td>
<td>hygiene and safety requirements. It is relevant to all educational institutions and hostels with food services. 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 fuelwood for cooking – but encourage the use of smokeless stoves and ventilation.</td>
<td>• However, in general, school Anganwadi / Hostel / Canteens shall follow the provisions of this Act to ensure health for all and have required facilities</td>
</tr>
<tr>
<td>for School Level Kitchens 2015</td>
<td>Safety and Hygiene for School Level Kitchens 2015</td>
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</table>
| Insecticide Use             | 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 | • Applicable to RA 1 & 2: maintenance and cleaning of new toilet/WASH structures and also to cleaning schools as COVID-19 response or routine cleaning operations  
  ○ Exclusion of banned insecticides in the school campus  
  ○ Safe storage of insecticides above HFL, avoid spills, spill management, and safe usage  
  • Applicable to all RAs  
  ○ Provide Guidance / SOPs on COVID-19 response, monitoring, management mechanism, and facilities required to ensure the health                                                                 |
| COVID-19                    | COVID-19 Guidelines of MoH                | Provides do’s and don’t’s and the need for personal hygiene and safe operations during COVID-19                                                                                                                                                                      | • Applicable to all RAs  
  ○ Provide Guidance / SOPs on COVID-19 response, monitoring, management mechanism, and facilities required to ensure the health                                                                                                                                            |
| Safety of Children          | 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 | • Applicable to all RAs; and covered under other rules above  
  • Provide Exclusion Criteria for locations to be avoided, Facilities essential in schools, Guidance / SOPs  
  • Also, incorporate guidance’s for those aspects not covered under this: including locations near sensitive habitats, disaster resilience, usage of hazardous materials, the safety of toys and materials used, worker/labor interface & safety issues during transport of materials and loading / unloading, maneuvering vehicles inside the school                                                                 |
<p>| Standard Operating Procedures (SOPs) – Sustaining Water, |                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                     |</p>
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<thead>
<tr>
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<th>Applicability to Proposed activities under Result Areas</th>
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</thead>
<tbody>
<tr>
<td>Sanitation, and Hygiene in Schools:</td>
<td>the guidelines include: (a) location of new schools away from hazardous locations such as highways, unmanned railway crossings, water bodies, etc. (b) provision of the boundary wall or fencing with a plantation (c) ensuring the 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 Parent Committees (PC) 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 (such as asbestos-containing construction waste). 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 campus, installation and maintenance of facilities, energy, water use efficiency; reuse/recycle, greening the campuses and the need to follow green protocol</td>
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## Relevant Social Policies, Laws and Regulations

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<tbody>
<tr>
<td>1</td>
<td>The Constitution of India (especially, Articles 15,16 and 46)</td>
<td>The Indian Constitution (Article 15) prohibits any discrimination based on religion, race, caste, sex, and place of birth. Article 16 refers to the equality of opportunity in matters of public employment. Article 46 directs the state to promote with special care the educational and economic interests of the weaker sections of the people, particularly of the Scheduled Castes and the Scheduled Tribes and also directs the state to protect them from social injustice and all forms of exploitation.</td>
</tr>
<tr>
<td>2</td>
<td>Articles 38, 41 and 46 of the Constitution</td>
<td>State to secure a social order for the promotion of welfare of the people through Right to work, to education and to public assistance in certain cases, Promotion of educational and economic interests of Scheduled Castes and other weaker sections.</td>
</tr>
<tr>
<td>3</td>
<td>Right to Information Act, 2005</td>
<td>Provides a practical regime of right to information for citizens to secure access to information under the control of Public Authorities. The act sets out (a) obligations of public authorities with respect to provision of information; (b) requires designating of a Public Information Officer; (c) process for any citizen to obtain information/disposal of request, etc.; and (d) provides for institutions such as Central Information Commission/State Information Commission.</td>
</tr>
<tr>
<td>4</td>
<td>Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act 1989 and further Amendments 2018.</td>
<td>To prevent atrocities against scheduled castes and scheduled tribes. The objectives of the Act clearly emphasized the intention of the government to deliver justice to these communities through proactive efforts to enable them to live in society with dignity and self-esteem and without fear or violence or suppression from the dominant castes. With the reported misuse of the Act, In August, 2018, the parliament of India passed the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Amendment Bill, 2018, to bypass the ruling of the Supreme Court of India laying down procedures for arrests under the Act.</td>
</tr>
<tr>
<td>5</td>
<td>Minimum wages Act, 1948</td>
<td>This act ensures minimum wages that must be paid to skilled and unskilled labours. The employer shall pay to every employee engaged in scheduled employment under him, wages at the rate not less than the minimum wages fixed by such notification for that class of employee without any deductions except authorized.</td>
</tr>
<tr>
<td>6</td>
<td>The Right to Fair Compensation and Transparency in Land Acquisition,</td>
<td>Aims to ensure, a humane, participative, informed and transparent process for land acquisition with least disturbance to the owners of the land and other affected families and provide just and fair compensation to the affected families whose land has been...</td>
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<tr>
<td>1</td>
<td>Rehabilitation and Resettlement Act, 2013</td>
<td>acquired or proposed to be acquired or those that are affected by such acquisition and make adequate provisions for their rehabilitation and resettlement and for ensuring that the cumulative outcome of compulsory acquisition should be that affected persons become partners in development leading to an improvement in their post-acquisition social and economic status.</td>
</tr>
<tr>
<td>7</td>
<td>The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013</td>
<td>An act that aims at providing a sense of security at the workplace that improves women's participation in work and results in their economic empowerment. It requires an employer to set up an “Internal Complaints Committee” (ICC) and the Government to set up a ‘Local Complaints Committee’ (LCC) at the district level to investigate complaints regarding sexual harassment at workplace and for inquiring into the complaint in a time bound manner. The ICC need to set up by ever organization and its branches with more than 10 employees.</td>
</tr>
<tr>
<td>8</td>
<td>National Disaster Management Guidelines –School Safety Policy 2016</td>
<td>National Disaster Management- School Safety Policy 2016 guidelines have been formulated by the National Disaster Management Authority (NDMA) with a vision of safety of school children. The Hon’ble Supreme Court has directed all the States to prepare an action plan along with timeframe for implementation of the guidelines. This policy is statutory in nature. With the view of building capacities for disaster resilience, AP State Disaster Management Authority conducts various programs at institutional levels.</td>
</tr>
</tbody>
</table>
ANNEXURE III:    Work Scope of the Proposed Sustainable Schools Unit

This Annexure outlines the key tasks that are recommended for the proposed Environment and Social Department/ Sustainable Schools Unit at the State Program Management Unit.

This unit would be primarily responsible for coordinating, streamlining, and mainstreaming environment and social aspects in program operations, and regularly reporting to management on key issues. This department must be adequately staffed by professionals of relevant academic and professional experience, such as environmental sciences, environmental law, social development, and community outreach.

Tasks or activities which would fall under the purview of such a department would include:

- Implementation of PAP actions on E&S aspects
- Prepare and update environmental guidelines and Environmental and Social Management Plan (ESMP) and providing to nodal officers, schools, PCs for implementation
- Designate nodal officers at District, Block, School, and PC levels to co-ordinate and monitor environmental aspects
- Development of staff and capacity of various support agencies, PCs, and school leadership to manage Environmental Aspects. The SSU would develop and deliver training programs, operational, technical, and contractual staff as required for each result area and E&S actions, with support of PMC and other technical support consultants. Provide or arrange Information, Education, and Communication (IEC), and Training to all levels of staff, communities, and contractors/workers. Monitor staff awareness with periodic surveys
- Prepare guidelines, action plans and arrange training/capacity building for Nadu Nedu implementation with Green Gift Box, and screen, implement, supervise and monitor E&S aspects
- Monitor the implementation of E&S aspects and ESMP, collect and maintain school wise activities and E&S actions, with photographs and permits, minutes of meetings etc.; prepare a bi-annual report on implementation performance, strengths, weaknesses. These shall be used to report on E&S aspects in Quarterly Progress Reports of PMU to the World Bank.
- Periodical reporting to management on key EHS implementation, compliance, training actions, and any challenges related to specific programs or institutional capacity and co-ordinate with PMU to solve any E&S issues
- Introduce Supervision and Monitoring Mechanisms and Ratings on E&S Aspects including, OCHS, facilities & housekeeping, labor facilities, and safety, noise & vibration
- Prepare Maintenance and Service Charters for infrastructure created and supervising their implementation
- Co-ordinate various regulatory procedures at State Level in co-ordination with district officials
- Check permits and ensure tender conditions on safe storage, handling, transporting recycling, and disposal to Suppliers, Recyclers, and Disposal agencies
- Include relevant conditions in contract documents of Vendors/Suppliers/Contractors as applicable to ensure compliance with all applicable Rules and Laws
- Incorporate considerations related to environmental Issues due to the Products, operations, Wastes, and placement decisions
- Integrate Green Gift Box, & EMP implementation into EMIS and Social Audit
- Monitoring outcome/outputs of infrastructure and environmental improvements through school visits, stakeholders opinions, EMIS, and Social Audit
- Participate and showcase program achievements during real / virtual missions
For the above-recommended tasks, the following Professionals are required. Specific skillsets or functional areas required are also mentioned in Figure 13 below.

**Figure 13: Outline of the Proposed Sustainable Schools Unit**

### Terms of Reference for Environmental, Health, and Safety Specialist at SSU

There shall be a nodal officer at the State level who shall address environmental systems-related concerns for the implementation of the SALT program.

1. The Officer will be part of the SSU and will report to the Project Director (PD).
   a) The Nodal Environmental Officer will be responsible for the overall coordination of all environment systems-related activities to ensure that there is no violation of statutory provisions, standard protocols, and identified environment systems and procedures.
   
   b) The Officer will support the PD in implementing environmental aspects and will provide guidance and support, as required.

   c) The Officer will be responsible for planning, formulation, and coordination of the environment and social system activities and implementation of PAP on the environment.

2. **Specific responsibilities** of the Officer will include the following:
   
   a) Implementation and co-ordination of all environmental aspects in the Scope of work of SSU
   
   b) All activities follow applicable National / State Environmental Regulations, by effective planning, monitoring, and reporting
   
   c) Regular interactions with all environmental nodal persons at district, School levels, and PC sub-committee on the environment to plan, design, arrive at a consensus, implement, monitor, and keep records of implementing all environmental aspects under the program including PAP actions

   d) Interact with State and PMC personnel in charge of each Result Area (RA), and integrate environmental aspects / PAP actions on the environment under the activities in each RA

   e) Relevant capacity building courses and syllabus are incorporated in training activities

   f) Advise, coordinate and monitor that each school prepares and maintains program details in Comprehensive Screening & Environmental Management Checklist (refer to Annexure V of ESSA) and sends to District Nodal Officer & SSU

   g) Provide guidelines, EMP / SHS standards for all activities

   h) Guide schools, workers, PCs on EHS / EMP and good practices on time
i) Monitor that EHS standards and EMP are met for all program activities including in ToRs for TA activities, training, etc.

j) Ensure the overall environment of the school is improved following the Green Gift Box

k) Undertake periodic site visits to schools under the program and review EMP implementation and environmental performance of assets created & program activities

l) Ensure there are universal access, safety and emergency response mechanisms are in place

m) Promote green buildings, water-saving, and energy-efficient systems, where possible; incorporate in ToRs for TA/training activities and contracts,

n) Ensure availability of funds for water supply, sanitation, drainage, and waste systems and monitor the quality of the systems in place

o) Develop and include an environment and social system checklist including provisions for the continued sustainability of environmentally appropriate and safe interventions to be a part of regular monitoring activities and ensure that it is used

p) Support Schools in convening, co-ordinating various requirements under Green Gift Box.

q) Identify gaps in the implementation of environmental systems and work with State, District and school teams to address them

r) Prepare a list of environmental officers / nodal person at State, District ad State levels, progress reports, documentation of good practices

s) Arrange training to trainers/students and all stakeholders Environmental aspects / EMP as required.

3. Reporting and Communication

a) The Officer will report to the PD, but may communicate directly with the District / School officers and implementing agencies for the environment and social systems related aspects;

b) For strategically important decisions regarding the duties (assignments), the Officer needs to obtain approvals of the PD or appropriate authorities from time-to-time;

c) Review Monthly Progress of environmental interventions and capacity augmentation activities reported by District Nodal officers

d) Prepare Quarterly Reports on all environmental and social systems related activities;

e) Prepare Minutes of all meetings on environment and social systems aspects;

f) Compile and maintain records, provide inputs to Social Audit & EMIS as required.

4. Meetings

The Officer will,

a) Participate in the Project Steering Committee meetings/Joint Review Mission, if required;

b) Have regular/periodical meetings or discussions with the environmental and social systems nodal in-charges at all levels, to ensure required environmental and social systems are being implemented properly;

c) Have regular meetings with the consultants, suppliers, and contractors, to monitor the progress of their work;

d) Organize/attend ad-hoc meetings, as necessary.

5. Qualifications and Experience

Candidates with the following qualifications may be selected by nomination or on deputation.
a) Essential Qualifications:
   i. B.E. or B.Tech. preferably with an engineering degree in civil/environmental engineering or an environment degree or equivalent from a recognized university, or having at least 5 years of experience in managing environment issues/ITIs.
   ii. Should have proficiency and strong communication skills in English and the local language (Telugu).
   iii. Should have knowledge of Information Technology (IT) & Computer skills including database management.

b) Desired Qualifications:
   i. The candidate should be able to deliver results without any supervision and able to work independently, conversant with environmental monitoring tools and techniques, and familiarity with State Government and National standard procedures and practices will be given preference.
   ii. Experience of working in government as a consultant/staff in similar projects.
ANNEXURE IV: Proposed Green Gift Box – Nadu Nedu Scale-up

The program will support the ongoing Nadu Nedu Program of the GoAP through its Green Gift Box to participating schools. Through upscaling Nadu Nedu, a Green Gift Box to each school is planned to include additional interventions focusing on greening, resource and climate efficiency, and safety, hygiene, and universal access. This falls under the overall concept of ‘Haritha Pathasala’ and has four key intervention heads; as presented in the following Figure 14.

![Figure 14: Environmental Principles of Green Gift Box](image)

**Interventions under each head will include:**

1. **Safe, hygienic, and Climate Efficient MDM facilities**

<table>
<thead>
<tr>
<th>Proposed Scale-up for improved Environmental Effects</th>
<th>Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Upgradation of Kitchen sheds (and seating areas) or provision of new sheds with spacious, easily cleanable modular arrangements for pre-cooking/preparations (peeling, cutting, washing), cooking facilities (boiling, baking, heating, frying), storage of powders, oil, nutrient additives, grains, fruits, and vegetables;</td>
<td>▪ Climate efficiency through introducing alternate energy - solar cookers, and avoiding the use of firewood (as a top-up fuel to LPG) by ensuring large burners and alternate cooking facilities</td>
</tr>
<tr>
<td>▪ Provision of good quality water for cooking, good quality vessels, and large burner cooking stoves, solar cookers or boilers for large quantities of rice to avoid firewood usage;</td>
<td>▪ Better air quality and learning environment in the campus through full avoidance of firewood</td>
</tr>
<tr>
<td>▪ Training to MDM cooking agencies, cooks, and cleaning support staff for hygiene practices and use of PPEs;</td>
<td>▪ Hygienic kitchens by providing cover, good quality storage, cooking and eating areas, water availability, capacity building, and monitoring</td>
</tr>
<tr>
<td>▪ Fire and electric safety, and fuel storage;</td>
<td>▪ Fire (fuel storage and use, cooking activities, material choice) and electric safety</td>
</tr>
<tr>
<td>▪ App-based real-time monitoring arrangements.</td>
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2. **Conservation through greening the campus**

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<tr>
<th>Proposed Scale-up for improved Environmental Effects</th>
<th>Principles</th>
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</thead>
<tbody>
<tr>
<td>▪ Campus plantation drives – developing ‘seed banks’ through students’ collective action</td>
<td>▪ Conservation efforts through developing a seed bank of indigenous trees, plants</td>
</tr>
<tr>
<td>▪ Planting indigenous varieties of trees, and plants – layered green belt for schools, developing flower garden for Anganwadis;</td>
<td>▪ Green Belts, Plantations, gardens, and Kitchen garden also fostering principles of conservation and food security, climate responsive to create shades and cool outdoor learning / playing spaces</td>
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<tr>
<td>▪ Developing kitchen garden in schools where there is space available: providing small greenhouse (which could be maintained under lock and key), with watering arrangements using recycled water from kitchen activities and rainwater harvesting;</td>
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</table>
3. **Resource Efficient and Accessible facilities**

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<tr>
<th>Proposed Scale-up for improved Environmental Effects</th>
<th>Principles</th>
</tr>
</thead>
</table>
| ▪ Ensuring campus security through provision of compound walls & biofencing, watch and ward through local bodies, and monitoring through communities and PCs. | ▪ Campus watch and ward, to ensure safe keeping of campus resources  
▪ ‘Naturetainment’ – entertainment to kids through nature education (virtual and real), virtues of managing resources and wastes etc |

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<tr>
<th>Proposed Scale-up for improved Environmental Effects</th>
<th>Principles</th>
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</table>
| ▪ Upgrading existing dilapidated toilets, use double-chambered septic tanks with soak pits or new models like Biotanks / Biodigestor toilets and hand wash facilities (with storage areas for cleaning agents and disinfectants, touchless handwash facilities), with adequate water and incorporating the principles of universal design (access for all);  
▪ Recycling and managing wastewater effectively;  
▪ Ensuring potable water, arrangements for minimal wastage of water and materials, energy-efficient fixtures & pumps, and backwash water recycling for plantations or reed bed;  
▪ Incorporating principles of BaLA in campus; also, for the differentially abled | ▪ Ensuring universal access through incorporating physical design elements such as separate toilets and BaLA for the differently abled  
▪ Resource efficiency through reusing wastewater from kitchens in gardens, backwash water from filters and rainwater for flushing |

4. **Resource Efficiency through whole school waste management**

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<tr>
<th>Proposed Scale-up for improved Environmental Effects</th>
<th>Principles</th>
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| ▪ Segregated storage of wastes at source-from general school activities; including solid waste, packaging, and plastics, sanitary napkins (and menstrual hygiene management) construction and demolition wastes from works and repairs, end-of-life e-waste from obsolete IT products, hazardous waste (such as asbestos), electrical and electronic appliances and batteries;  
▪ Bin composting of solid / food wastes for use in gardens, recycling, reuse or disposal of C&D wastes through local bodies/contractors, upcycling and use of packaging and plastic wastes for school needs thereby ensuring resource efficiency and circularity;  
▪ Disposal of scrap, e-waste, and hazardous wastes, used Napkins and masks as per regulations and following EHS; Provisions for laboratory wastes and effluents  
▪ Skilling and training to students, teachers, and PCs in waste management and upcycling. | ▪ Resource efficiency and support to the circular economy by segregating, proper storage, recycling, upscaling, reuse of wastes  
▪ Segregated storage and Disposal of scrap and e-wastes from campus to ensure health and safety |

Detailed interventions under the proposed Green Gift Box are presented in Table 16 below.
### Table 16: Green Gift Box: Detailed Support Interventions Proposed

<table>
<thead>
<tr>
<th>Proposed Scale-up for improved Environmental Effects</th>
<th>Existing Program</th>
<th>Additional Interventions and Environmental Considerations in Proposed Program</th>
<th>Principles</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Safe, hygienic, and Climate Efficient MDM facilities</strong></td>
<td>Repairs to Kitchen Sheds allowed</td>
<td>1) Provision of new lockable Kitchen sheds with steel worktops (preparatory &amp; cooking), storage (pucca construction), hand &amp; utensil wash if there is safe space in existing campus (min 50 sqm) (Add to program guidelines on repairs, improve existing specifications, allot additional budget) 2) Guidelines for clean and safe spaces and cooking practices (including fire resistance) (Prepare Guidelines on Clean and safe cooking &amp; distribute to cooking agents/schools. PCs/ Social Audit to monitor)</td>
<td>Climate efficiency through introducing alternate energy - solar cookers, and avoiding the use of firewood (as a top-up fuel to LPG) by ensuring large burners and alternate cooking facilities</td>
</tr>
<tr>
<td>Upgradation of Kitchen sheds (and seating areas) or provision of new sheds with spacious, easily cleanable modular arrangements for pre-cooking/preparations (peeling, cutting, washing), cooking facilities (boiling, baking, heating, frying), storage of powders, oil, nutrient additives, grains, fruits, and vegetables</td>
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</tr>
<tr>
<td>Provision of good quality water for cooking, good quality, safe vessels (to replace existing old ones), and large burner cooking stoves, solar cookers, or boilers for large quantities of rice to avoid firewood usage</td>
<td>Drinking-Water Supply (also may be used for cooking) ensured</td>
<td>3) Provision of single large ‘commercial kitchen burner’ LPG burners for rice preparation for large no: of students (Add new purchase item, allot additional budget) 4) Alternate fuel (solar) based additional stoves, water boilers (Add new purchase item, allot additional budget) 5) Essential utensils (appropriate material, safe) (Add new purchase item, allot additional budget)</td>
<td>Better air quality and learning environment in the campus through full avoidance of firewood</td>
</tr>
<tr>
<td>Training to MDM cooking agencies, cooks, and cleaning support staff for hygiene practices and use of PPEs</td>
<td>Nil</td>
<td>6) PPEs for cooks/support staff (Add new purchase item on PPEs, allot additional budget) 7) Training on safe/hygienic, energy &amp; resource-efficient cooking practices (Provide training through ongoing training programs)</td>
<td>Hygienic kitchens by providing cover, good quality storage, cooking and eating areas, water availability, capacity building, and monitoring</td>
</tr>
<tr>
<td>Fire and electric safety, and fuel storage</td>
<td>Nil</td>
<td>8) Fuel storage under lock and key (Add new purchase item – grill enclosure, safe for fuel, allot additional budget) 9) Fire extinguishers (Add new purchase item, allot additional budget) 10) Training on fire &amp; electric safety use of portable extinguishers, awareness boards (Provide training through ongoing training programs/ through fire and Safety Department / other agencies)</td>
<td>Fire (fuel storage and use, cooking activities, material choice) and electric safety</td>
</tr>
<tr>
<td>App-based real-time monitoring arrangements.</td>
<td>Nil</td>
<td>11) EMIS app to include also O&amp;M aspects, including maintenance needs (Include monitoring &amp; O&amp;M in EMIS proposed under the program)</td>
<td>Improved monitoring for sustainability</td>
</tr>
<tr>
<td><strong>2. Conservation through greening the campus</strong></td>
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</tr>
<tr>
<td>Campus plantation drives – developing ‘seed banks’ through students’ collective action</td>
<td>Nil</td>
<td>12) Develop seed bank in school through students collective action &amp; use it for plantation, provide seedboxes using recycled packaging (Develop through students/teachers collective action)</td>
<td>Conservation efforts through developing a seed bank of indigenous trees, plants</td>
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*Environmental and Social Systems Assessment 2021 (P173978)*
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<thead>
<tr>
<th>Proposed Scale-up for improved Environmental Effects</th>
<th>Existing Program</th>
<th>Additional Interventions and Environmental Considerations in Proposed Program</th>
<th>Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planting indigenous varieties of trees, and plants – layered green belt for schools, developing flower garden for Anganwadis</td>
<td>Nil; but some efforts by schools, mostly through National Green Corps</td>
<td>13) NGC to be engaged in planting green belt &amp; flower garden (Provide seed fund by including a budget &amp; schedule classwork hour)</td>
<td>Green Belts, Plantations, gardens, and Kitchen garden also fostering principles of conservation and food security, climate-responsive to create shades and cool outdoor learning/playing spaces</td>
</tr>
<tr>
<td>Developing kitchen garden in schools where there is space available: providing small greenhouse (which could be maintained under lock and key), with watering arrangements using recycled water from kitchen activities and rainwater harvesting</td>
<td>Nil, but some efforts by schools to plant vegetables, in case there is compound wall/security</td>
<td>14) Provide greenhouse (with lock and key) with water tank (for recycled water (drip irrigate) from the kitchen, washing areas &amp; rainwater harvesting); or in case of schools with compound walls, encourage multilayered gardens in campus; walls (in used containers, pipes). Use kitchen waste or compost in the garden (Add new purchase item, allot an additional budget for schools having required land)</td>
<td>resource recovery and reuse, school nutrition support, respect for growing own food, climate change adaptation</td>
</tr>
<tr>
<td>Ensuring campus security through provision of compound walls, watch and ward through local bodies, and monitoring through communities and PCs</td>
<td>Yes - Compound walls are proposed. No watch and ward of physical assets by PCs/Communities</td>
<td>15) Organize watch and ward in consultation with local bodies, PCs, Communities (Arrange through Local body, PCs) 16) ‘Nature-tainment’ integrated into all training. Learning materials, curriculum (Integrate into the curriculum (also for CwSN), training calendar)</td>
<td>Safety, security, resource preservation</td>
</tr>
<tr>
<td>3. Resource Efficient and Accessible facilities</td>
<td>Yes, provision for upgradation &amp; repairs to toilets, handwash with universal access</td>
<td>17) Sanitizing arrangements - Pedal type or automatic - touchless (COVID-19 response) (Add new purchase item, allot additional budget – COVID-19 response.) 18) Use new models of Septic Tanks – Biotanks / Biodigestor Toilets (DRDO model), Use soak pits for existing septic tanks, Reed plantation before disposal of water from septic tank soak pits for root zone absorption, to prevent pollution/impacts, regular maintenance (Add new Guidelines, specifications, purchase items, allot additional budget) 19) De-sludge once every five years or as required and taken to authorized FSTPs for treatment by authorized agents (Prepare O&amp;M schedule for assets, include in Monitoring Tool) 20) Use NSSI Guidelines for toilet provision. Use of water-efficient fixtures - Small flush discharging not more than 3 liters and big flush than 6 liters. Taps discharging not more than 12 liters/ minutes under 5 bar pressure. (Include in Specifications) 21) There shall be timely allocation of cleaning fee from Government to clean the Toilets or GoAP to arrange mechanized daily cleaning of toilets through NGOs – for a group of schools. Toilets must be cleaned with soft disinfectants at least once a day (Include in O&amp;M Schedule, Monitoring Tool)</td>
<td>Ensuring universal access through incorporating physical design elements such as separate toilets</td>
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<td>Ensuring potable water, arrangements for minimal wastage of water and materials, and backwash water</td>
<td>No Recycling arrangements</td>
<td>22) Minimum 500-liter storage tank for water for 100 children (subsequent calculation @ 5 liters per child; plus, for emergency) (Include in Specifications)</td>
<td>Resource efficiency through reusing wastewater from kitchens</td>
</tr>
<tr>
<td>Proposed Scale-up for improved Environmental Effects</td>
<td>Existing Program</td>
<td>Additional Interventions and Environmental Considerations in Proposed Program</td>
<td>Principles</td>
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<td>recycling for plantations or reed bed; Recycling and managing wastewater effectively; energy-efficient fixtures &amp; pumps</td>
<td>Water quality testing is advised Suggests energy-efficient Fans with wattage between 50 to 75</td>
<td>23) Ensure water availability also through Rainwater Harvesting &amp; Recycling: Water tank with supply &amp; distribution pipes, to store and reuse water from handwash facilities, filter backwashing, kitchens - to be reused for kitchen gardens or plantations, cleaning, flushing (Add new Guidelines, purchase the item, allot additional budget) 24) Based on water quality (through testing) Bleaching powder, liquid bleach, chlorine tablets, and other sources of chlorine may be used for disinfection as required to meet National Standards depending on local availability (Include in O&amp;M guidelines, Monitoring Tool) 25) Septic tanks and grey water storage areas shall be at least 15m away from the source of water (wells, rivers, ponds, etc) (Include in siting guidelines) 26) Use energy-efficient fixtures, LED tube lights, Fans &amp; Pumps (5 star rated) (Include in specifications for procurement)</td>
<td>in gardens, backwash water from filters and rainwater for flushing, using energy-efficient fixtures</td>
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<td>Incorporating principles of BaLA in campus; also, for the differentially abled/CwSN</td>
<td>Painting is eligible under Nadu Nedu or MGNREGS</td>
<td>27) inclusive - BaLA (i-BaLA) to be used for Schools &amp; CwSN centers (Add new purchase item, allot additional budget especially for BaLA interventions for ‘children of determination’)</td>
<td>Inclusion through BaLA</td>
</tr>
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4. Resource Efficiency through whole school waste management

<p>| Segregated storage of wastes at source-from general school activities; including solid waste, packaging, and plastics, sanitary napkins, construction and demolition wastes from works and repairs, end-of-life e-waste from obsolete IT products, hazardous waste (such as asbestos), electrical and electronic appliances and batteries | Nil | 28) Conduct ‘whole school waste audit’ involving NGC (NGC action) 29) Arrange locations in the campus for storage of segregated waste, category-wise: Use recycled plasticboxes, upscaled cardboard boxes, etc for storage. Mark storage areas; Menstrual Hygiene Management (NGC action) 30) Purchase and Provide Safe &amp; Hygienic storage and disposal arrangements for sanitary napkins &amp; face masks &amp; ash/other byproducts of disposal. Provide napkin vending machine under monitoring - Toilet design changes &amp; including disposal / vending arrangements. (Add new purchase items, allot additional budget –under COVID-19 response) Incinerator ash to be disposed of as per standards in deep pits (Include in O&amp;M Schedule, Monitoring Tool) 31) Training on Menstrual Hygiene Management / Hygiene Education for parents, students (As part of ongoing training/support of other specialized agencies) | Resource efficiency and support to the circular economy by segregating, proper storage, recycling, upsaling, reuse of wastes |
| Bin composting of solid / food wastes for use in gardens | Nil | 32) Provide Bin composting facility for biowaste, with leachate collection arrangement &amp; greenbelt around. Provide waste incoming &amp; covered compost storage space (a small area near the treatment bin). This compost can be used in Kitchen gardens, school plantations (Add new purchase item, allot additional budget) | Reduces methane emission, and chemical fertilizer usage, Natural way of recycling |
| Disposal of scrap, e-waste, and hazardous wastes as per regulations and following EHS | Nil | 33) Arrange with local body/recyclers for scrap, C&amp;D waste disposal. Refurbishment and donation or recycling E-wastes (incl. unused computers etc), | |</p>
<table>
<thead>
<tr>
<th>Proposed Scale-up for improved Environmental Effects</th>
<th>Existing Program</th>
<th>Additional Interventions and Environmental Considerations in Proposed Program</th>
<th>Principles</th>
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<td>used fans/electric, RO Membranes/candles appliances, furniture shall be recycled through authorized recyclers or disposal agents/Extended Producer responsibility (Through local body / local recyclers, EPR)</td>
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<td>Disposal of scrap and wastes from campus to prevent pollution, ensure hygiene</td>
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<td>34) Include contract clauses on end-of-life e-waste collection &amp; disposal - in all computer/peripherals supply contracts (at State level) (Contract clauses in all equipment contracts, TA contracts)</td>
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<td>Skilling and training to students, teachers, and PCs in waste management and upcycling, upcycling and use of packaging and plastic wastes for school needs thereby ensuring resource efficiency and circularity, recycling, reuse, or disposal of C&amp;D wastes through local bodies/contractors</td>
<td>Nil</td>
<td>35) Safe storage for Recycling or disposal of C&amp;D wastes for campus purposes, Existing hazardous waste to be stored and disposed of following APPCB guidelines; asbestos to be disposed of following guidelines (Follow Guidance, support from the local body)</td>
<td>Green skilling, resource efficiency, circularity</td>
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<td>36) Arrange workshops/training to impart upscaling skills for packaging wastes &amp; other usable types. Properly Store or dispose, all packaging wastes, upscale and use these for school purposes or arrange exhibition &amp; sale (Add new training - allot additional budget)</td>
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**ANNEXURE V: Comprehensive Screening & Environmental Management Checklist**

This Annexure V shall be sent to all participating schools by SSU (though District Nodal E&S persons). This shall be filled in during a joint school visit by School Head Teacher, Parent Committee E&S representative, and site engineer and submitted to District / State E&S Cell when works are planned. Update and submit if any change during implementation.

### Work Details

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<tr>
<th>School / Resource Centre</th>
<th>UID</th>
<th>Name</th>
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<tr>
<td>Location (City / Town/ Village with ward numbers, co-ordinates)</td>
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<tr>
<td>Details of the implementing Agency and Site Engineer</td>
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| Name of the Agency: Name, Designation of>Contact Person: Phone Number: Email: |
|---|---|

### Work Components

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<th>Area (in Sqm) / Length (in meters) / No:s to be purchased</th>
<th>Type of Work</th>
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<tr>
<td>New Construction on campus</td>
<td>Upgradation of Existing</td>
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- Toilets, Handwash
- Sanitary Napkin & Face Mask Dispenser & Ash disposal
- Drinking-Water
- Pedal Type / Touchless Sanitiser
- Water Recycling, Reed Bed
- Kitchen Shed up-gradation
- Utensils, Fuel Storage
- Fire Extinguishers
- PPEs for Cooks
- Large Burner Stove, Solar Cooker
- Kitchen Garden / Green House
- Bin Composting
- Electrification with Fans, Lights
- Painting (with i-BALA)
- Furniture
- Green Board
- English Lab & Classrooms
- Repairs (mention)
- Compound Walls
- Add any Other

### Exclusion List

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<tr>
<th>SI No:</th>
<th>Non-permissible Activities</th>
<th>Yes/No</th>
<th>Details (Fill in only after discussion with concerned agency and Local body)</th>
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</thead>
</table>
| 1 | New Construction, Demolition, Repair / up-gradation activities and discharge of wastewater / wastes from proposed facilities within the following areas given the high risk posed to natural habitats and cultural resources:  
a. areas within 300m radius of Nation / State protected monuments (including 100m from limit of the protected area – which is the prohibited area, and 200m Regulated | Yes/No | |

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<th>Yes/No</th>
<th>Details (Fill in only after discussion with concerned agency and Local body)</th>
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<td>area from the boundary or protected area or as declared by the Government)(^{52})</td>
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<td>b. notified wetlands/water bodies, protected/forest areas, areas such as national parks and wildlife sanctuaries, coastal regulation zones I and IV</td>
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<td>2</td>
<td>Construction of new buildings or facilities of more than two storeys in height (^{53})</td>
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<td>3</td>
<td>Purchase or construction / demolition using Asbestos containing materials, and purchase and use of banned Insecticides</td>
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</tbody>
</table>

Regulatory Requirements

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<tr>
<th>Sl. No.</th>
<th>Work Components</th>
<th>Fill in only after discussing with Concerned Agencies</th>
</tr>
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<tr>
<td></td>
<td>Regulatory Permissions Required (Keep records on all permissions (workwise) taken)</td>
<td>Yes</td>
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<tr>
<td>1</td>
<td>Permission from Local Body for construction, renovation/ up-gradation</td>
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<tr>
<td>2</td>
<td>Permission from Local Body for Disposal of outflow from Septic Tanks/ soak pits</td>
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<td>3</td>
<td>Permission for Tree cutting</td>
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<td>4</td>
<td>Permissions from Archaeology Department for works near Heritage areas</td>
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<td>5</td>
<td>Prior clearance from Andhra Pradesh State Disasters Response &amp; Fire Services Department from fire safety point of view</td>
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<td>6</td>
<td>Records of Wastes sent to Treatment, Disposal, or Recyclers</td>
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<td>7</td>
<td>Any Permit from Pollution Control Board</td>
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<td>8</td>
<td>Any other permits (Details)</td>
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</table>

Add Generic Environmental Management Plan or ECOPs including Work Supervision Responsibilities and Closeout Procedures (to be Prepared by SSU after including all proposed components and sent to Schools. (A Sample EMP is provided here for reference)

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<tr>
<th>Sl No</th>
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</thead>
</table>
| 1     | General       | Prohibitions               | The following activities are prohibited on or near construction sites:  
• Cutting of trees for any reason outside the approved construction area. If a tree is cut from an approved area, plant 10 in the identified location  
• Illegal dumping of demolition material and debris;  
• Use of unapproved toxic materials, including lead-based paints, asbestos, etc.  
• Disturbance to anything with architectural or historical value  
• Burning of waste or open fires |
| 2     | Regulations   | Regulations and General    | The local bodies and communities shall be notified of the works through discussion, appropriate notification in the media, and/or at publicly accessible sites (including the site of the works)  
• Follow Applicable building bye-laws of Government of Andhra Pradesh |

\(^{52}\) Refer The Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, 2010(10 of 2010) on grant of permission within Regulated area: “If the competent authority, after grant of the permission under sub-section (4) and during the carrying out of the repair or renovation work or re-construction of building or construction referred to in that sub-section, is of the opinion (on the basis of material in his possession or otherwise) that such repair or renovation work or re-construction of building or construction is likely to have an adverse impact on the preservation, safety, security or access to the monument considerably, it may refer the same to the Authority for its recommendations and if so recommended, withdraw the permission granted under subsection (4) if so required”

\(^{53}\) “Every building exceeding two storeys in height shall be constructed of fire resisting material throughout” - as applicable to educational buildings as per Andhra Pradesh Building Bye Laws. This exclusion is applied here considering that the works are under community contracting. Repairs which are part of Nadu Nedu program are allowed beyond two stores with fire resistant materials.
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</table>
| 3     | Rehabilitation, Repair, Construction Activities | Air Quality    | • Safe and careful demolition activities, without allowing dust; especially roofs  
• Appropriately barricade all construction and demolition areas to prevent the entry of any; notify all occupants and other workers to be careful about falling materials, and slippage of tools  
• Keep demolition debris in a controlled area and spray with water mist to reduce debris dust and/or installing dust screen enclosures at the site  
• Keep surrounding environment (sidewalks, roads) free of debris to minimize dust  
• Do not allow excessive idling of construction vehicles at sites  
• Selectively remove potential hazardous air pollutants, such as asbestos, from existing infrastructure before demolition.  
• Place dust screens around construction areas, provide fencing along the boundary so that emissions do not affect immediate neighbors, pay attention to areas close to housing, commercial areas, and recreational areas.  
• Spray water periodically as needed on construction areas, especially near residential areas |
| 4     |                                               | Water Quality  | • There shall be appropriate erosion and sediment control measures from material storage or fuel storage areas to prevent these from causing excessive turbidity or pollution in nearby streams and rivers. There shall be proper drainage and berm around storage areas. Fuels and materials shall be stored above flood level. This is especially a requirement in Coastal Andhra and during rains |
| 5     |                                               | Noise          | • Avoid noisy activities and transport during school hours so as not to disturb the school activities  
• To the extent possible, maintain noise levels associated with all machinery and equipment at or below 90 dB. Operate noisy equipment like generators away from classrooms, residences. As far as possible carry noisy operations during holidays  
• Apply proper measures to minimize disruptions from vibration or noise coming from construction activities.  
• Implement particularly strict measures to prevent undesirable noise levels in sensitive areas (including in residential neighborhoods, near hospitals, etc.). In such areas, minimize the production of dust and particulate materials at all times, to avoid impacts on vulnerable people (children, elders). |
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<tr>
<td>6</td>
<td>Waste Management</td>
<td>• Waste collection and disposal pathways and sites to be identified for all major waste types expected from demolition and construction activities. • Construction waste shall be collected and disposed of properly as advised by the local body • The records of waste disposal shall be maintained as proof for proper management as designed. • Whenever feasible the works shall reuse and recycle appropriate and viable materials (except asbestos) • Storage of wastes (solid and liquid) shall be minimized, storage of materials shall follow proper stacking, good practices barricading, and find alternative means of disposal.</td>
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<td>7</td>
<td>Disaster Management</td>
<td>• The buildings to be designed for earthquake, cyclonic wind resistance • Plinth level of the school buildings to be kept at least 15 cm above the known highest flood level, minimum 45 cm above the ground level. • In storm surge-prone coastal areas either the whole school or the roof of the school made accessible through stairs should be kept higher than the estimated maximum flood inundation due to cyclonic rains/storm surges. • All buildings shall follow fire safety regulations and applicable building rules</td>
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<td>8</td>
<td>Historic Buildings (Not protected)</td>
<td>Cultural Heritage</td>
<td>• Works near notified heritage precincts are excluded from the program and shall be arranged separately by the DoSE considering the need to have proper conservation and safety of students and workers during works • If the building is a designated historic structure (not very old or notified), very close to such a structure, or located in a designated historic district, notify and obtain approval/permits from local authorities and address all construction activities in line with local and national legislation • Ensure that provisions are put in place so that artifacts or other possible “chance finds” encountered in excavation or construction are noted, officials contacted, and works activities delayed or modified to account for such finds. • In the case of old buildings of heritage value, care should be taken to ensure that proposed activities would not disturb the structure or its safety. This shall be certified by Supervising Engineer of implementing agency • Works detrimental to the safety of workers or students should preferably be carried out during holidays • Workers, students, and communities shall be informed of the works, safety concerns, and emergency procedures</td>
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<td>9</td>
<td>Chance find</td>
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<td>• In the unlikely event that physical cultural property chance-finds occur in any school/resource center site, responsible local authorities would be in charge of protecting and preserving any archeological sites, historical sites remain, and objects before deciding on subsequent appropriate procedures. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values. • Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration, and salvage. • If the workers discover archeological sites, historical sites remain and objects they shall: (1) Stop the construction activities in the area of the chance find; (2) Delineate the discovered site or area; (3) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a nightguard shall be arranged until the responsible local authorities take over; (4) Notify the School leadership team and Supervisory Engineer who in turn should notify the responsible local authorities immediately (within 24 hours or less);</td>
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<td>Asbestos Management</td>
<td>• Resume construction work after permission is given from the responsible local authorities concerning the safeguard of the heritage.</td>
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</table>
| 10    | Toxic Materials              |                            | • Asbestos or components/fixtures having asbestos shall not be purchased or used under the program (Include in Specifications, Monitoring Tool)  
• Construction, renovation, dismantling works involving Asbestos or Asbestos-containing materials shall not be undertaken as part of this program.  
• In case there is existing asbestos or asbestos-containing material; school leadership and PCs should be made aware that these are to be removed without any breakage; stacked in a covered and safe way without possible breakage in a remote corner of the site and APPCB guidance to be sought on its disposal.  
• If asbestos is located on the project site, mark it clearly as hazardous material  
• When possible, the asbestos to be appropriately contained and sealed to minimize exposure  
• The asbestos before removal (if removal is necessary) shall be treated with a wetting agent to minimize asbestos dust  
• Asbestos shall be handled and disposed of by skilled & experienced professionals  
• If asbestos material is be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately  
• The removed asbestos shall not be reused  
• All workers working near asbestos materials to use face masks and take care not to break the material |
| 11    | Other Toxic Hazardous, E-Waste Management |                            | • Temporarily storage on site of all hazardous or toxic substances shall be in safe containers labeled with details of composition, properties, and handling information  
• The containers of hazardous substances should be placed in another leak-proof container to prevent spillage and leaching  
• Such wastes are transported by specially licensed carriers and disposed of in a licensed facility.  
• Paints with toxic ingredients or solvents or lead-based paints shall not be used (this is avoided in Nadu Nedu Specifications)  
• Construction and decommissioning activities may pose the potential for the release of small quantities of hazardous materials. The site engineer should screen and assess the presence and contents of hazardous materials and petroleum-based products in building systems (e.g. PCB containing electrical equipment, asbestos-containing building materials, lamps or lamp ballasts, used batteries, empty paint cans) and process equipment and remove them before initiation of decommissioning activities, and manage their treatment and disposal according to Hazardous / EWaste Management Rules, of GoI, and World Bank Group’s General EHS guidelines (www.ifc.org/ehsguidelines).  
• Hazardous wastes should always be segregated from non-hazardous wastes. If the generation of hazardous waste cannot be prevented through the implementation of the above general waste management practices, its management should focus on the prevention of harm to health, safety, and the environment  
• E-waste from all schools shall be preferably donated after refurbishment and/or recycled through authorized service providers. Local Pollution Control Board Office will guide on certified/licensed nearby E-Waste / Hazardous waste Recyclers or Disposal facilities |
| 12    | Nearby Forest, Protected Areas | Protection / Conservation | • All recognized natural habitats and protected areas near the activity shall not be damaged or exploited, all staff shall be strictly prohibited from hunting, foraging, logging, or other damaging activities.  
• For large trees in the vicinity of the activity, mark and cordon off with a fence and protect the root system to avoid any damage |
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<td>13</td>
<td>Traffic / Pedestrian Safety</td>
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<td>• Institute procurement measures that recognize opportunities to return usable materials such as containers;</td>
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<td>• Minimize hazardous waste generation by implementing stringent waste segregation to prevent the commingling of non-hazardous and hazardous waste.</td>
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<td>• Recycling planning: The total amount of waste may be significantly reduced through the implementation of recycling plans. This may for example include the evaluation of waste production processes and the identification of potentially recyclable materials.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>• Clean-up procedures. Establish and enforce daily site clean-up procedures, including maintenance of adequate storage and treatment/disposal facilities for construction wastes to avoid potential impacts to human health and the environment.</td>
</tr>
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<td>• Management approaches should be consistent with the characteristics of the waste and local regulations, and may include one or more of the following principles:</td>
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<td>• On-site or off-site biological, chemical, or physical waste material should either be treated to render it nonhazardous before final disposal or treated or disposed at permitted facilities (local body / PCB authorized) specially designed to receive the waste.</td>
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<td></td>
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<td>• Debris generated due to the demolition of existing structures shall be suitably reused, to the extent feasible. The disposal of remaining debris shall be carried out only at sites identified and approved by local authorities.</td>
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<td>• No material shall be disposed of in environmentally sensitive areas.</td>
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<td>• All garbage, metals, used oils, and excess material generated during construction should be disposed of in authorized areas incorporating recycling systems and the separation of materials.</td>
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<td>• In the event any debris or silt from the sites is deposited on adjacent land, the school leadership team shall ensure that such debris is immediately removed by the workers, and the affected area is restored to its original state.</td>
</tr>
<tr>
<td>16</td>
<td>OCHS</td>
<td>Worker Safety</td>
<td>• Appropriate signposting of the sites shall inform workers of key rules and regulations to follow. Community, Parents, and Students to be informed about the works and presence of workers on site</td>
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<td>• Child labor and forced labor shall not be allowed for any work</td>
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<td>• Equal pay/wage for men and women laborers</td>
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<td>• All laborers to be provided with temporary photo ID cards for accessing the construction site.</td>
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<td>• All laborers engaged at the construction site to be provided with the required Personal Protection Equipment (PPE) – masks, hard hats/safety helmet, and shoes, secured harness when working at heights, electrical gloves, eye protection for welding, etc., without which entry to the construction site shall not be allowed. All work areas above 1.8m height (including stairs, roofs, parapets) shall be provided with safety nets in a such a manner to prevent any accidental fall.</td>
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<td>• Steps necessary to prevent labor harassment, including sexual harassment, gender-based violence, and any discrimination based on religious, political, and/or sexual orientation.</td>
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<td>• Application of GoI Codes/Regulations for worker’s facilities and safety: Follow EMP in all worksites</td>
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<td>• Provision of PPE for all workers especially for construction works, site clearing, work on ladders or height, pits. Workers working at heights should work with the guard rail, safety harness, and anchorage systems. Ensure full PPEs for regular toilet cleaning &amp; maintenance</td>
</tr>
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<td>• Provide awareness on the presence of hazards on-site before work activities (such as the presence of reptiles, pits, loose mud, etc.)</td>
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<td>• Nadu Nedu, guidelines recommend local workers. They shall be provided with appropriate training as necessary.</td>
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<td>• Ensure workers insurance as prescribed by Country Laws / Codes</td>
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<td>• No use of fuelwood for cooking or heating at the construction site or surrounding area.</td>
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<td>• Clean and well-maintained toilets, water, first aid should be made available to workers as per country regulations</td>
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<td>• Any huts, office accommodations, toilets, and welfare facilities should be accommodated within the boundaries of the construction sites</td>
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<td></td>
<td>• Follow COVID-19 work safety guidelines</td>
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<tr>
<td>17</td>
<td>Student and Community Safety</td>
<td></td>
<td>• Any unauthorized entry to or exit from the construction sites should be restricted as much as possible.</td>
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<td>• There should be an appropriate signboard next to the construction site barricade &amp; at school entry regarding the type of works, schedule and contact persons, and cautions</td>
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<td>• Teacher or other staff or PC representative shall be posted at a construction site (with appropriate PPEs) to watch overworks, workers and to prevent the entry of students and to monitor worker-student interactions</td>
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<td>• Emergency Procedures: The school team including PC, HM, and Sie Engineer must ensure that emergency procedures are developed as per local conditions to facilitate effective actions in case of medical/fire emergency as well as environmental pollution (major spillage of gasoline, used oil, and/or toxic chemicals, etc.). The emergency procedure must contain emergency phone numbers and the method of notifying the statutory authorities.</td>
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<td>• Fire Prevention and Control: All construction sites and associated accommodation or welfare facilities must have appropriate plans and management controls to prevent fires in place. The site fire plans must be prepared and must have due regard to government regulations.</td>
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<td>• Workers shall be well aware of emergency procedures related to equipment and vehicles, and how to comply with them.</td>
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<td>• The specification of non-combustible materials, products, and packaging should be pursued wherever reasonably practicable.</td>
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<td>• Operation of equipment: Operations of cranes and other large equipment must be closely supervised. Permission may be required.</td>
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<td>• Students shall not be allowed to gather around the functioning of such equipment. The work site shall be barricaded, works shall preferably occur during holidays or non-school hours.</td>
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<td>• There shall be trained flagmen with a whistle while operating these and while reversing any vehicle or equipment; and the area should be cordoned</td>
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<td>• Accident prevention. All safety requirements (Government regulations and shall be followed to ensure there are no construction site accidents including the following:</td>
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<td>• All material supply and heavy equipment works shall take place during non-school hours and holidays. Children and Parents shall be warned of heavy vehicle or equipment movement during this time and to avoid visiting the school during such time</td>
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<td>• Conduct safety training for construction workers before beginning work;</td>
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<td>• During emergencies of any kind including natural calamities, suspend all work.</td>
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<td>18</td>
<td>COVID-19 guidance</td>
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<td>• Early screening: Check Photo IDs, COVID-19 / other health issue symptoms, use of mask and temperature (non-physical temperature screening), collect names, contact numbers of workers at Entry &amp; maintain a daily register</td>
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<td>• Paid leave to be mandatorily given if labor contacts COVID-19 and/or any other contagious disease while working at the construction site.</td>
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<td>• Arrange temporary isolation and ambulance facility available on call</td>
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<td>• Masks, adequate hand washing/ sanitization, clean drinking water and sanitation facilities to be provided at the construction site. (Workers working on heat / fire (like welding) shall not use sanitizers while at work. Adequate soap and water shall be made available for hand washing)</td>
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<td>• Provide health and safety training/orientation on COVID19 to all workers and staff including cough etiquette, hand wash, and social distancing</td>
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<td>• Prepare a detailed profile of the project workforce, key work activities, schedule for carrying out such activities, different durations of contract and rotations, confirmed addresses of the labor and any underlying health conditions that increase the risk of severe infection, to facilitate tracking of workers in case of COVID-19 exposure.</td>
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<td>• Infected persons not allowed on site, observe mandatory quarantine for 14 days</td>
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<td>• Signages in the school compound and outside on personal hygiene, use of mask, sanitizers, handwash in local languages &amp; contact numbers</td>
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<td>• Provide handwash facilities for workers with running water, soap, paper towels, waste bins &amp; disposal arrangements in toilets. Proper drainage</td>
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<td>• Separate lunch hours of workers to maintain social distancing.</td>
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<td>• Designated separate space for storing construction material and biomedical wastes. Medical wastes to be treated following country regulations &amp; WHO/GoI guidelines</td>
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<td>• Worksite shall be demarcated with hard barricades and warning boards. Students to be warned of unauthorized intrusion into workspaces</td>
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<td>• Disinfect worksite every day at work closure or in case anyone is infected, or as found required</td>
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<td>• Do not use sanitizers while working with electrical fittings or near fires, or in food preparation areas. Use soap and water instead and dry completely without the chance of shocks</td>
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<td>• Worker data (including COVID-19 register) and Incident record to be maintained on-site</td>
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<td>• PC and schoolteachers on rotation to check and monitor records, and take daily backups/file records</td>
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<td>• Regular monitoring to prevent student – worker interactions</td>
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<td>• This EMP &amp; EHS requirements for each work item shall be made accessible to PC members and School Functionaries (and workers/masons who use smart phones) with one click on their mobile apps</td>
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<td>19</td>
<td>Work Closeout Procedures</td>
<td>Ensuring Site Safety after work closure</td>
<td>• On completion of the works the mason/workers should clear away and remove all materials and rubbish and temporary support works, ladders, tools, debris, left out materials, used clothes or materials; or facilities of every kind. Construction sites should be left clean and in a condition to the satisfaction of the delegated authorities</td>
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<td>• Site engineer, PC representative, and School HM shall review closeout procedures and certify</td>
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This EMP shall be implemented at each of the schools under the program by School Principal, Parent Committee member, and Implementing Agency / Engineer, and monitored through site reconnaissance and discussions.

Signature (of Team Leader/School Head): ----------------------------------------Date: ------------------------------------------

Name of the Monitoring Personnel/s: ---------------------------------------

Designation of the Monitoring Personnel/s: -----------------------------------
### ANNEXURE VI: Details of Stakeholder Consultations

**Table 17: Stakeholders Consulted – District / Mandal Level, Civil Society, Parent Committees**

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Name</th>
<th>Designation</th>
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<tbody>
<tr>
<td>1</td>
<td>Mr. VN Mastanaiah</td>
<td>Director SIEMAT</td>
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<tr>
<td>2</td>
<td>Mr. Srinivas CE</td>
<td>Chief Engineer, Nadu Nedu</td>
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<tr>
<td>3</td>
<td>Dr. M. Prasanna Kumar</td>
<td>Secretary KGBV</td>
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<tr>
<td>4</td>
<td>Ms. Mahalakshmi Annapurna</td>
<td>AGCDO KGBV</td>
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<tr>
<td>5</td>
<td>Mr. Rajendra Prasad</td>
<td>Nadu Nedu</td>
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<tr>
<td>6</td>
<td>Mr. Srinivas Reddy</td>
<td>JD Infrastructure Nadu Nedu APSS-Krishna Dt</td>
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<tr>
<td>7</td>
<td>Mr. R. Madhusudhna reddy</td>
<td>ASPD APSS</td>
</tr>
<tr>
<td>8</td>
<td>Mr. Madhusudhna Rao</td>
<td>JD Model Schools</td>
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<tr>
<td>9</td>
<td>Mr. Sivareddy</td>
<td>Pollution Controller Board AP, Joint chief engineer</td>
</tr>
<tr>
<td>10</td>
<td>Ms. P Parvathi</td>
<td>DIRECTOR RMSA</td>
</tr>
<tr>
<td>11</td>
<td>Ms. Chandrika</td>
<td>DD OSC</td>
</tr>
<tr>
<td>12</td>
<td>Ms. Dhanalakshmi</td>
<td>APSS DEE Krishna Dt</td>
</tr>
<tr>
<td>13</td>
<td>Mr. Srinivas</td>
<td>APSS Architect-Krishna Dt</td>
</tr>
<tr>
<td>14</td>
<td>Ms. V Vani</td>
<td>Representative For Director of Municipal Administration, AP</td>
</tr>
<tr>
<td>15</td>
<td>Mr. Venkatataratnam</td>
<td>Engg APWIDC</td>
</tr>
<tr>
<td>16</td>
<td>Executive Engineer</td>
<td>APWIDC KADAPA</td>
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<tr>
<td>17</td>
<td>Mr. D.V. Lakshmana reddy</td>
<td>APWIDC Kakinada</td>
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<tr>
<td>18</td>
<td>Dr. Narasimha</td>
<td>OSC APSS</td>
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<tr>
<td>19</td>
<td>Mr. DV Narasimharao</td>
<td>Ex Engg MBNN VIZAG APSS</td>
</tr>
<tr>
<td>20</td>
<td>Mr. T Waheed</td>
<td>PR Engineer</td>
</tr>
<tr>
<td>21</td>
<td>Ms. V Swathi dev</td>
<td>UNICEF CONSULTANT</td>
</tr>
<tr>
<td>22</td>
<td>Ms. G Priyanka</td>
<td>WASH(UNICEF) CONSULTANT</td>
</tr>
<tr>
<td>23</td>
<td>Ms. Rajeswari</td>
<td>Faculty SCERT</td>
</tr>
<tr>
<td>24</td>
<td>Ms. Renuka</td>
<td>DEO West godavari</td>
</tr>
<tr>
<td>25</td>
<td>Ms. Sailaja</td>
<td>DEO Kadapa</td>
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<tr>
<td>26</td>
<td>Mr. Y. David raj kumar</td>
<td>Administrative /SCERT</td>
</tr>
<tr>
<td>27</td>
<td>Mr. Hema Prasad</td>
<td>SCERT AP</td>
</tr>
<tr>
<td>28</td>
<td>Ms. Varalakshmi</td>
<td>Kadapa</td>
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<tr>
<td>29</td>
<td>Ms. G. Angel Praneetha</td>
<td>KGBV Jamalamadugu</td>
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<td>30</td>
<td>Ms. Ruth Mari</td>
<td>KGBV Pullampeta</td>
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<td>31</td>
<td>Ms. Reddy Jyothi</td>
<td>KGBV Kalasapadu</td>
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<td>32</td>
<td>Ms. Meharunnisa</td>
<td>KGBV Reddigudem</td>
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<tr>
<td>33</td>
<td>Ms. Jigna</td>
<td>Kaivalya Education Foundation</td>
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<tr>
<td>34</td>
<td>Ms. N. V. Rama</td>
<td>Sikshana Foundation</td>
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<td>35</td>
<td>Lt. Cdr. Sunil</td>
<td>Sikshana Foundation</td>
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<tr>
<td>36</td>
<td>Ms. Sonia Mondal</td>
<td>Peepul</td>
</tr>
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<td>37</td>
<td>Mr. Rahul Raina</td>
<td>Peepul</td>
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<tr>
<td>38</td>
<td>Ms. Gauri Sharma</td>
<td>Centre for Science of Student Learning</td>
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<tr>
<td>39</td>
<td>Ms. Sailaja Ravikanth</td>
<td>Centre for Science of Student Learning</td>
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<tr>
<td>40</td>
<td>Ms. Padmasudha Chandrasekhar</td>
<td>GAME</td>
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<tr>
<td>41</td>
<td>Mr. Deepak Korrapati</td>
<td>Educational Initiatives Pvt. Ltd.</td>
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<tr>
<td>42</td>
<td>Ms. Samyukta Subramanian</td>
<td>Pratham Education Foundation</td>
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<tr>
<td>43</td>
<td>Mr. Saransh Vaswani</td>
<td>SAAJHA</td>
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<td>44</td>
<td>Mr. V Venkata Rami Reddy</td>
<td>CK Dinne Mandal MEO</td>
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<td>45</td>
<td>Mr. P. Raghu Ramulu</td>
<td>Porumamilla MEO</td>
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<td>46</td>
<td>Mr. Ch Kurmarao</td>
<td>L.KOTA MEO</td>
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<tr>
<td>47</td>
<td>Mr. B. Naga Swarnalatha</td>
<td>Mandal Education Officer, Khajipet</td>
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<tr>
<td>48</td>
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<td>Mandal Education Officer, L.KOTA</td>
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<tr>
<td>49</td>
<td></td>
<td>HMs/ Principal</td>
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</tbody>
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Environmental and Social Systems Assessment 2021 (P173978)
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<tr>
<th>SI No</th>
<th>Name</th>
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<tr>
<td>49</td>
<td>Mr. Chandra Sekher</td>
<td>ZPHS Muzaffernagar - HM</td>
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<td>50</td>
<td>Mr. C Venkata Sree Latha</td>
<td>MPPS Nagi Reddy Palli - HM</td>
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<td>51</td>
<td>Mr. N. Venkataramireddy</td>
<td>APSWREI - Principal</td>
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<tr>
<td>52</td>
<td>Ms. SV Lakshmi</td>
<td>AP Model School and junior College Reddigudem - Principal</td>
</tr>
<tr>
<td>53</td>
<td>Mr. T Nageswara Rao</td>
<td>CRP-Nellore Kaluvi</td>
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<tr>
<td>54</td>
<td>Dr S Prasadara Rao</td>
<td>Lecturer SIEMAT</td>
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<tr>
<td>55</td>
<td>Dr V Satish Reddy</td>
<td>Lecturer SIEMAT</td>
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<tr>
<td>56</td>
<td>Dr. N. Srinivas</td>
<td>Lecturer SIEMAT</td>
</tr>
<tr>
<td>57</td>
<td>Dr. Sowjanya</td>
<td>Professor, Education Policy</td>
</tr>
<tr>
<td>58</td>
<td>Ms. Suhasin.A</td>
<td>Professor, Education Policy</td>
</tr>
<tr>
<td>59</td>
<td>Dr. M. Sowjanya</td>
<td>Professor SIEMAT</td>
</tr>
<tr>
<td>60</td>
<td>Dr. S. Prasada Rao</td>
<td>Lecturer SIEMAT</td>
</tr>
<tr>
<td>61</td>
<td>Dr. V. Satish Reddy</td>
<td>Lecturer SIEMAT</td>
</tr>
</tbody>
</table>

List of Stakeholders consulted during School / Block / District Level Consultations on Environmental Aspects of Nadu Nedu Works

Table 18: Stakeholders Consulted at School, Block, District Level

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name</th>
<th>Districts</th>
<th>School/Area/ Position</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ms. SV Lakshmi</td>
<td>Krishna</td>
<td>Principal, AP Model School, and Jr. College, Maddulaparva, Reddigudem Mandal, District Krishna</td>
<td>Material Purchase, Supervision, Reporting</td>
</tr>
<tr>
<td>2</td>
<td>Ms. Rajyalakshmi</td>
<td>Krishna</td>
<td>Parent Committee Member, AP Model School, and Jr. College, Maddulaparva, Reddigudem Mandal, District Krishna</td>
<td>Material Purchase, Supervision, Reporting</td>
</tr>
<tr>
<td>3</td>
<td>Mr. V Kirankumar</td>
<td>Srikakulam</td>
<td>Assistant Engineer, AP Educational Welfare Infrastructure Development Corporation, District Srikakulam</td>
<td>Supervision, Reporting</td>
</tr>
<tr>
<td>4</td>
<td>Mr. Laxman Reddy</td>
<td>East Godavari</td>
<td>Deputy Executive Engineer, AP Educational Welfare Infrastructure Development Corporation, District East Godavari</td>
<td>Supervision, Reporting</td>
</tr>
<tr>
<td>6</td>
<td>E.Rambabu</td>
<td>West Godavari</td>
<td>Executive Engineer, APEWIDC, District West Godawari</td>
<td>Implementation, Supervision, Reporting</td>
</tr>
<tr>
<td>7</td>
<td>V.V.Krishnaiah</td>
<td>Srikakulam</td>
<td>Executive Engineer, Samagria Shiksha, District Srikakulam</td>
<td>Implementation, Supervision, Reporting</td>
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<tr>
<td>8</td>
<td>Smt. Rajyalakshmi</td>
<td>Visakhapatnam</td>
<td>Deputy Executive Engineer, Samagria Shiksha, District, Visakhapatnam</td>
<td>Implementation, Supervision, Reporting</td>
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<tr>
<td>9</td>
<td>SMT. M Venkata Lakshmi</td>
<td>Prakasam</td>
<td>Assistant Executive Engineer, Panchayat Raj Engineering Department, District, Prakasam</td>
<td>Implementation, Supervision, Reporting</td>
</tr>
<tr>
<td>10</td>
<td>S. Chandra Sekher</td>
<td>Srikakulam</td>
<td>Site Engineer, APEWIDC, District, Srikakulam</td>
<td>Implementation, Supervision, Reporting</td>
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<tr>
<td>11</td>
<td>S Sai Baba</td>
<td>Kadappa</td>
<td>Executive Engineer, Panchayat Raj Engineering Department, District, Kadapa</td>
<td>Implementation, Supervision, Reporting</td>
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<tr>
<td>12</td>
<td>Smt. Padmavathi</td>
<td>Chittoor</td>
<td>Deputy Executive Engineer, Panchayat Raj Engineering Department, District, Chittoor</td>
<td>Implementation, Supervision, Reporting</td>
</tr>
<tr>
<td>13</td>
<td>Sri Konda Reddy</td>
<td>Krishna</td>
<td>Special Officer KGBV, KGBV, Konduru, Krishna Dt</td>
<td>Implementation, Supervision, Reporting</td>
</tr>
<tr>
<td>14</td>
<td>S. Chandra Shekhar</td>
<td>Kadappa</td>
<td>Headmaster, ZPHS Muzaffarnagar, District, Kallur Mandal Kadapa district</td>
<td>Overall Management - School Level</td>
</tr>
<tr>
<td>S. No.</td>
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<td>Role</td>
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<tr>
<td>15</td>
<td>Sri Narayana</td>
<td>Kadappa</td>
<td>Parent committee member, ZPHS Muzaffarnagar, District, Kallur Mandal Kadapa district</td>
<td>Procurement, Supervision</td>
</tr>
<tr>
<td>16</td>
<td>Smt. Padmavathi</td>
<td>Krishna</td>
<td>Head Mistress, ZPHS Kunaparajuparva, District, Reddy Gudem Mandal Krishna Dt</td>
<td>Overall Management - School Level</td>
</tr>
<tr>
<td>17</td>
<td>Sri. Gopinath reddy</td>
<td>Kadappa</td>
<td>Headmaster, ZPHS, Thallaramapuram, District, Poduturu Mandal, Kadappa</td>
<td>Overall Management - School Level</td>
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<tr>
<td>18</td>
<td>G.Kullayamma</td>
<td>Kadappa</td>
<td>Parent committee member, ZPHS, Thallaramapuram, District, Poduturu Mandal, Kadappa</td>
<td>Procurement, Supervision</td>
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<tr>
<td>19</td>
<td>Sri Konda Reddy</td>
<td>Kadappa</td>
<td>Headmaster, Dorasanipalem, ZPHS, District, Poduturu Mandal, Kadappa</td>
<td>Overall Management - School Level</td>
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<tr>
<td>20</td>
<td>Lakshmidevi</td>
<td>Kadappa</td>
<td>Parent committee member, Dorasanipalem, ZPHS, District, Poduturu Mandal, Kadappa</td>
<td>Procurement, Supervision</td>
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<td>21</td>
<td>Sri Narayana</td>
<td>Ananthpur</td>
<td>Headmaster, ZPHS Oravakonda village, District, Oravakonda Mandal, Ananthapur</td>
<td>Overall Management - School Level</td>
</tr>
<tr>
<td>22</td>
<td>Mr. Shrinivasan</td>
<td>State</td>
<td>APSS Architect, DoSE</td>
<td>Designing</td>
</tr>
<tr>
<td>23</td>
<td>Mr. Venka Reddy</td>
<td>Prakasam</td>
<td>Headmaster, ZPHS Marlapadu, District Prakasam</td>
<td>Material Purchase, Supervision, Reporting</td>
</tr>
<tr>
<td>24</td>
<td>Ms. Suvaratha</td>
<td>Krishna</td>
<td>Parent Committee Member, Kasturba Gandhi Balika Vidyalaya, District Krishna</td>
<td>Material Purchase, Supervision, Reporting</td>
</tr>
<tr>
<td>25</td>
<td>Mr. Veeraswami,</td>
<td>Guntur</td>
<td>Assistant Executive Engineer, Panchayat Raj Rural Development Department, District Guntur</td>
<td>Supervision, Reporting</td>
</tr>
<tr>
<td>26</td>
<td>Mr. U Bhaskar</td>
<td>Ananthapur</td>
<td>Parent Committee Member, Zilla Parishad High school, District Ananthapur</td>
<td>Material Purchase, Supervision, Reporting</td>
</tr>
<tr>
<td>27</td>
<td>Mr. Gopal</td>
<td>Guntur</td>
<td>Assistant Engineer, Panchayat Raj Rural Development Department, District Guntur</td>
<td>Supervision, Reporting</td>
</tr>
<tr>
<td>28</td>
<td>Mr. Naranya</td>
<td>Ananthapur</td>
<td>Headmaster, Voravakunda, District Ananthapur</td>
<td>Overall Management - School Level</td>
</tr>
<tr>
<td>29</td>
<td>Mr. Ravi Raj</td>
<td>Vijayanagaram</td>
<td>Headmaster, MPSS Dattirajeru, District Vijayanagaram</td>
<td>Overall Management - School Level</td>
</tr>
<tr>
<td>30</td>
<td>Mr. A. Venkata Ramana</td>
<td>Vijayanagaram</td>
<td>Headmaster, Marchela ZPHS, District Vijayanagaram</td>
<td>Overall Management - School Level</td>
</tr>
<tr>
<td>31</td>
<td>Ms. Meharunisa</td>
<td>Krishna</td>
<td>Special Officer, KGBV Reddygudem, District Vijayanagaram</td>
<td>Supervision, Reporting</td>
</tr>
<tr>
<td>32</td>
<td>Mr. Gopinath Reddy</td>
<td>Krishna</td>
<td>Headmaster, ZPHS Talamapuram, District Krishna</td>
<td>Overall Management - School Level</td>
</tr>
<tr>
<td>33</td>
<td>Mr. Venkata Lakshmi</td>
<td>Krishna</td>
<td>Special Officer, KGBV Akonduru, District Krishna</td>
<td>Supervision, Reporting</td>
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<tr>
<td>34</td>
<td>Mr. Veera Swamy</td>
<td>Guntur</td>
<td>Assistant Engineer, Panchayat Raj Rural Development Department, District Guntur</td>
<td>Implementation, Supervision, Reporting</td>
</tr>
<tr>
<td>35</td>
<td>Mr. Govardhan Rao</td>
<td>Guntur</td>
<td>Assistant Engineer, Panchayat Raj Rural Development Department, District Guntur</td>
<td>Implementation, Supervision, Reporting</td>
</tr>
<tr>
<td>36</td>
<td>Mr. Prithvi Raj</td>
<td>Krishna</td>
<td>Assistant Engineer, Panchayat Raj Rural Development Department, District Krishna</td>
<td>Implementation, Supervision, Reporting</td>
</tr>
<tr>
<td>37</td>
<td>Mr. Ravi Shankar</td>
<td>Kadappa</td>
<td>Assistant Engineer, Panchayat Raj Rural Development Department, District Kadapa</td>
<td>Implementation, Supervision, Reporting</td>
</tr>
<tr>
<td>38</td>
<td>Ms. Dhanalakshmi</td>
<td>Vijayawada</td>
<td>APSS DEE, District Vijayawada</td>
<td>Implementation, Supervision, Reporting</td>
</tr>
<tr>
<td>39</td>
<td>Mr. Waheed</td>
<td>Kurnool</td>
<td>Assistant Executive Engineer, Panchayat Raj Rural Development Department, District Kurnool</td>
<td>Supervision, Reporting</td>
</tr>
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### S. No.
<table>
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<th>Role</th>
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</thead>
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<tr>
<td>40</td>
<td>Mr. S. S. Nageshwar Rao</td>
<td>East Godavari</td>
<td>Executive Engineer, Samagra Shiksha Abhiyan, District East Godawari</td>
</tr>
<tr>
<td>41</td>
<td>Mr. Vinay Prakash</td>
<td>East Godavari</td>
<td>Superintending Engineer, Municipal Corporation Rajamundri, District East Godawari</td>
</tr>
<tr>
<td>42</td>
<td>Mr. Shiva Reddy</td>
<td>State</td>
<td>Chief Environmental Engineer, Sr. Administrative Manager, Vijaywada</td>
</tr>
<tr>
<td>43</td>
<td>Ms. PN Sridevi</td>
<td>Chittoor District, Mandal Nagiri</td>
<td>Mandal Education Officer, Nagiri</td>
</tr>
<tr>
<td>44</td>
<td>Mr. Venkaram Reddy</td>
<td>Kadappa</td>
<td>Mandal Education Officer</td>
</tr>
<tr>
<td>45</td>
<td>Mr. Mohd Baig</td>
<td>Kurnool</td>
<td>Assistant Director, Mid-day meals, Kurnool</td>
</tr>
<tr>
<td>46</td>
<td>Mr. Kotaiah</td>
<td>Kurnool</td>
<td>Assistant Director, Mid-day meals</td>
</tr>
<tr>
<td>47</td>
<td>Mr. K. Venugopala Rao</td>
<td>Machlipatnam</td>
<td>Mandal, Vizhianagarm: CRP-ZPHS, Cheepurupallu</td>
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<tr>
<td>48</td>
<td>K Ramakrishna</td>
<td>Cheepurupalli Mandal, Vizhianagarm:</td>
<td>Monitoring various school activities</td>
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<tr>
<td>49</td>
<td>Yugandhar</td>
<td>Kottapetta</td>
<td>Monitoring various school activities</td>
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<td>50</td>
<td>Vishnu</td>
<td>Nellore</td>
<td>Monitoring various school activities</td>
</tr>
<tr>
<td>51</td>
<td>T Nageswara Rao</td>
<td>Nellore</td>
<td>Monitoring various school activities</td>
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#### Key Comments Received Consultation on draft ESSA

<table>
<thead>
<tr>
<th>Comment By</th>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jigna, Kevaliya Education Foundation</td>
<td>It may not be possible for the schools in tribal area to manage wastes without disposing in natural habitats or monuments. It is required to understand the ground realities in each school and device program</td>
<td>Schools shall be supported by a good team at State level to make a basket of facilities / technologies available to them to manage wastes without disturbing the sensitive environs. This is very important in tribal areas, near forests. ESSA suggests mechanisms to manage this effectively. The ESSA was prepared after multiple rounds of consultations, information seeking and discussions with stakeholders and agencies virtually and the issues in tribal areas are well understood. The program suggests additional downstream activities which will ensure required measures are available, and sustainability of the interventions proposed. This is recognized by the ESSA. All schools shall have efficient solid and liquid waste management and the program has added additional activities to support this. At a program level, to understand and respond to ground realities at each school, the SSU proposed as the E&amp;S Cell of PMU with nodal officials at various levels; and engineers at ground level, along with PC and school leadership team ensures planning and that the program includes essential requirements. Balasabhas will discuss required facilities and issues. Measures to monitor these through EMIS and Social Audit also would ensure better effects.</td>
</tr>
<tr>
<td>RAMA, Sikshana Foundation (NGO)</td>
<td>The schools in tribal areas need more repairs and facilities</td>
<td>The Nadu Nedu program targets all government schools including those in tribal areas. It aims at providing repairs, toilets, compound wall and other essential facilities while construction of schools is taken up under GoAP and GoI programs. The PCs, school leadership and engineers together examine the school requirements and finalize program activities. By incorporating the need for environmental enhancement measures associated with these activities, and by ensuring adequate capacities and systems at all levels, the program ensures better facilities in schools in tribal areas</td>
</tr>
</tbody>
</table>
Comment By | Comment | Response
--- | --- | ---
RAMA, Sikshan Foundation (NGO) | Introducing peer-to-peer learning helps students from tribal communities learn better. | This was an extremely useful recommendation and has been included as an intervention under the proposed SALT Program.

**Compilation of Stakeholders Inputs / Suggestions on Ongoing Program:**

**Institutional Arrangement and Involvement of Parent Committee**

The implementing agencies for Nadu Nedu are AP Samagra Shiksha Society (erstwhile SSA), APEWIDC, Panchayat Raj Engineering Department, Municipal & Public Health Engineering Dept., Tribal welfare Engineering Department. The work progress is monitored through software called School Transformation Monitoring Software (STMS) developed by M/S TCS. The Commissioner of School Education monitors the project with the assistance of the State Project Director, APSSS, and other implementing agencies.

The 5-member Parent Committee (PC) was created in February 2020 throughout the state and its elections would happen in February each year. Each PC opens a bank account and use the funds provided for carrying out the identified works. Department of School and Education has provided training to the Headmasters/ Principles on how to work with the Parent Committee. The works shall be executed by the PCs through community contracting methodology. The committee meets every month and takes resolutions to sanction the works. The PC suggests the work locations in the school campus and then the Assistant Engineer checks and approves. It has a five-member (with three women members) Committee for cheque signing and a subcommittee for construction works. The PC shall enter into a Memorandum of Understanding with the Executive Engineer of the respective implementing agency for execution of the school infrastructure works. Once the work is approved it progresses through the following steps. Appointment of mason and quantity and specifications are discussed and decided at the PC meeting. The plan for the construction work is selected from the already approved sample plans as per the site conditions and requirements of the school. Regular supervision is carried out by Engineering Assistant arranged by the Village Secretariat (Panchayat Department) and all the bills are approved through an online system.

Engineering Assistant and implementing supervising agencies have regular communication with PC and attend meetings every week. Assistant Executive Engineer is a member of the PC. The AEE finally reports to Superintending Engineer Panchayat Raj Rural Development through Deputy Engineer and Executive Engineer. Superintending Engineer Panchayat Raj Rural Development reports to District Education Officer/ Additional Project Coordinator (Samagra Shiksha) and District Collector. Assistant Engineer visits the site almost every week for supervision.

The engineer will not take any decisions but provide technical guidance and ensure prudent expenditure. Masons/labor contractor will be appointed by the Committee on a turn-key basis (Rs X per square feet) including the work on architectural elements. Committees can engage an architect to give plans and designs and drawings, who will sit with the community and finalize the plans, elevations, designs, and drawings. The architect will be paid at 1 % on the estimated cost of the total work.

**Overall Program**

The program shall not just focus on foundational learning but also provide support in the direction of improving learning outcomes of students in senior grades. Remedial education support is crucial, and its need has been further accentuated by the school closures due to the COVID-19 pandemic.

Various agencies such as SCERT, SIEMAT and DIETs appreciated the external technical support that the program would facilitate for them. The same was recognized as critical for delivering better services (teacher professional development, state and school level assessments, teaching learning material/content development etc.). The NGOs/CSOs participating in the meeting voiced their desire to support the government program, highlighted the value of working in partnership, and clearly recognized that change at scale is only possible when delivered through existing government systems and institutions.

**Guidance, Trainings Purchase of materials**

Cement, furniture, fans, green boards, and sanitary fittings are provided by the state. Flyash bricks, electrical fittings, and wiring, LED tube lights, sand, grills, pipes, and tiles are locally purchased. The material is stored in the school. Painting is arranged through state-level procurement and the agency is allotted space in large schools for storing...
material for use in many nearby schools. The local purchase follows the guidelines for material selection provided by
the Assistant Engineer. PCs and officials received training including District wise training. All the technical guidance is
available through the Website. Any changes to the guidelines/ specifications are immediately informed through the
website.

**Water Availability and Quality**

Many schools/districts reported water scarcity. Some schools use small RO units provided by donors. The quality of
available water was tested by the Water Resource department on request by the school.

Sanitation Department gives guidelines for monitoring water pollution. Water samples are provided to Water
Resource Department for testing and sampling reports are available with all schools. Rural Water Supply Executive
Engineer usually guides on water treatment required.

Rural Water Supply Department visits the schools for finalizing the source of good quality water/borewells with the
help of a geologist. The engineers of the Rural Water Supply Department are invited to the PC meeting.

In many schools, small RO plants (1000 l capacity) are in use for water treatment. The RO reject is drained into the
sink pit and drained out in the open. The state team is exploring new filters to remove TDS - using coconut husk-based
filters, macron filters, etc. In available units, the requirement of water for backwash is high and backwash water is
disposed of in the open.

**Wastes**

Waste management in schools is not given much attention. Village Panchayats have no centralized solid waste
treatment or disposal facility. Some panchayats / ULBs have dumping yards for wastes and all wastes are collected
from schools and dumped in these open dumping yards. There are no guidelines for disposal of any waste including
general solid waste, construction, and management wastes under the program. Solid waste from normal school
activities is either openly dumped on the campus or burned or buried in pits dug for the purpose. The candles of the
RO units, old tube lights, etc. are disposed of as normal solid waste. Construction waste is in some cases used for
village roads, or mostly for leveling low-lying areas; plastic waste goes to solid waste handling sheds created by the
village panchayat in few cases whereas it is usually collected by recyclers (informal) or openly burned. Topsoil is not
stored and is being disposed of as general solid waste.

The state has Construction & Demolition Waste Treatment Plants at three places i.e. Vijayawada, Vishakhapatnam,
and Tirupati. The nearest school construction waste can be sent to these plants, if not reused on the campus. Paints
are supplied after detailed measurement which solves the problem of the excess remaining paint. There are no
guidelines for the treatment of Empty paint cans, so they are stored in the school. Used Paint cans have to be properly
cleaned before being used for any other purposes. Guidelines to that effect should be circulated. Hazardous Waste
Management Facilities are located at Nelloor and Vishakhapatnam. There are many E-Waste disposal units in the
state, which can handle the end-of-life disposal of computers and peripherals. Engineers also pointed out the
possibility of providing solar-based evaporation units for lab wastes. The Regional Officers/representatives of the
Pollution Control Board can be made a member of the district-level advisory committee of Nadu Nedu.

**Land issues**

In case of some school’s land ownership-related issues have hindered the construction of compound walls. In such
cases, Assistant Engineer and Revenue officer visits and tries to arrive at a consensus.

**Toilets, MHM**

Girls' toilets are in dire need of incinerators and napkin vending machines (secondary/high school level) and Menstrual
Hygiene Management is important. Currently, few schools have functional incinerators, and ask is disposed of in the
school compound in the open or in pits, or along with the general solid waste.

Available toilet facilities do not match the demand in quality or numbers. Two (2) sanitary workers are appointed in
schools to clean the toilet every day. The budget for maintaining the toilets comes from Ammawadi Program and
donations from parents. Septic tanks are installed to provide decentralized treatment of sewage from toilets/water
closets. Specific funds are not available for maintaining a septic tank or any other facility and the school has to carry
out maintenance through available funds. Guidelines for the design of Septic Tank are available under the ongoing

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*Ívi*
program, but there are no maintenance guidelines. State Govt has developed a sanitation app where everyday toilet photos are uploaded to confirm the cleanliness of toilets.

There are no guidelines or training on how and when the outlet water from the septic tank should be checked. There is usually no regular check or maintenance works on septic tanks or soak pits. Septic tank outfall also discharges into canals. Water from washbasin and urinals are discharged into the nearby canal. When the septic tanks are full (say, after around 10 years of use) the sludge is emptied in suction tankers by private agencies providing septic tank cleaning services and is often disposed of in the open. They shall be linked with septage management facilities in the state. Some urban local bodies have sewage treatment plants (eg: municipal corporation East Goda-Rajamundry has city-level STP of 30 MLD capacity) or Faecal Sludge Treatment Plants which can treat the sludge from septic tanks.

**COVID-19 Safety**

COVID 19 safety meetings are conducted in schools. Parent handbook was developed to sensitize parents on COVID 19 safety protocols and also to help kids in learning activities. Weekly once, parents were invited to schools with kids to get the worksheets done by students checked. Interactions with parents helped them get over the fear of learning loss of their kids

**OHS and potential Worker/Workplace - Students interface**

The program has no specifications for construction worker safety or disposal of construction waste. This is mainly because the works are carried out using community contracting methods. The PC selects labor agencies/masons for the works. Currently, since the works are minor, involving small construction or repairs, the program has not prepared any guideline or standard for OHS or labor safety. As Nadu Nedu follows community contracting, works are entrusted to local contractors or groups of workers (without formal contract) by PCs. Hence, EHS procedures are not followed or monitored. Some (not so deep) pits are made for foundations, septic tanks, etc. Works/repairs may happen also on roofs of single-storied structures. No PPEs are used by workers, there are no display boards on ongoing works, no facilities are provided to laborer’s and they use available facilities in schools. There are no accidents/incidents and no register is maintained on this. Schools have first aid kits, though it is not for use by laborers. There is no insurance coverage for the workers. Housekeeping is not followed on-site and material storage is not given much attention, except in the case of paints which are kept under lock and key. There were not many issues at the worksites now as schools were closed during the first phase of works due to COVID 19 imposed restrictions. However, parents and teachers opine that EHS and worksite management and student – worker interface need good attention post reopening.

**Monitoring**

District Collector monitors the works weekly through District Level Monitoring Committee. The committee, as per GO 87 is composed of District Collector (Chairman), Chief Executive Officer Zilla Parishad, Superintending Engineer Panchayat Raj, Regional Director Municipal Administration, Deputy Director Social Welfare, District BC Welfare Officer, District Minorities Officer, Project Officer ITDA/ District Tribal Welfare Officer, Executive Engineer PR, Executive Engineer APEWIDC, Executive Engineer TW, Executive Engineer PHED and District Educational Officer School Education.

The work specification and formats of handing over the work to the school are standardized. Thus, all the executing agencies follow the same and the work carried out is uniform. However, there is no work close-out procedures on safety or environmental upkeep.

**Building design**

All the buildings designed for Nadu Nedu are as per CPWD guidelines/ NBC guidelines. To understand the daylight or ventilation performance of the typical plans no daylight modeling or CFD analysis is carried out. Sufficiency of daylight is interpreted from the ratio of window area to floor area. Cross ventilation is achieved by providing ventilators. For any change or new suggestions Architect, Project Director, and Superintending Engineer would discuss the matter and provide suggestions to Sr. Technical Advisor Infra. The school design can be slightly modified by the Executive Engineer considering the special needs (such as in the case of the coastal area).
Greening
Urban Forestry and Rural Forestry Departments provide saplings and Bio fencing to an educational institute, through their departmental programs. Under the national program, the National Green Corps (NGC - comprising of students of respective schools) undertake plantation/greening drives.

Complaint Redressal
Complaints received from all levels are recorded, discussed, and solved regularly in the meeting.

Disaster management
Schools are not used as cyclone/emergency shelters in case of disasters as there are many high-rises developed as cyclone shelters in the coastal Andhra under various projects. Some schools were initially (during March – April) used as COVID – 19 centers, but this practice subsequently stopped, and all schools were sanitized for imminent reopening.
Figure 15: Photographs: Stakeholder Consultations
ANNEXURE VII: Questionnaires used for FGDs and Stakeholder Interviews

Questionnaire I: Guiding Scoping Questions on Environmental and Social Aspects

1. Structure of Department of School Education. Especially the section that deals with
   - Identifying the need for modifications in existing buildings or construction of new buildings
   - Selection of material and consultant for modifications in existing buildings or construction of new buildings
   - Execution/Supervision of the modification or construction
   - Maintenance of structures
   - Environmental good practices, selection of locations for providing facilities, occupational health, and safety

2. Are there any guidelines for environmental aspects, monitoring/supervision for these at State/District/School level or any agency level (all 7/8 agencies involved)?

3. Process of decision making for the need of modification in existing structure or construction of the new structure.

4. What are the standards/guidelines DoSE adhering to which choosing the design of the structure and materials for it?

5. Dependence of the DoSE on State Public Works Department/other agencies for design, execution, supervision, and maintenance of structures.

6. Are any grievance/accidents on-site? If yes; types; mitigation measures adopted?

7. Has AP Public Works Departments adopted Green Rating for Integrated Habitat Assessment (GRIHA) guidelines in the material specifications?

8. Has Samagra Siksha adopted EMF for RMSA in Nadu Nedu? If yes what all aspects?

9. Is there any involvement of the State Pollution Control Board in regulatory aspects related to schools?

10. Before the disbursement of the project starts, some funds are being allocated to the state to respond to the COVID-19 situation. Which activities will be considered for funding? Any existing guidelines being followed?

11. Co-ordination of Disaster/Emergency Management

   Social aspects covered during stakeholder consultations and focused-group discussions:

12. Barriers/Issues experienced by students in aspirational districts in terms of access, attendance rates and drop-out rates

13. Special focus/targeted for SC/ST students in ITDA/tribal blocks in AP.

14. Special focus to reduce gender-based violence towards adolescent girls

15. Safety initiatives in KGBVs

16. Role and Parents’ Committees: Regularity of meetings, representation of mothers, civil works handled, training received by Parent Committees

17. Social audit templates and reports for aspirational districts

18. Career counselling facilities/initiatives in tribal districts

19. Needs of disabled students and students from tribal communities

20. Initiatives targeting disabled students

21. Safe campus spaces – land issues, boundary wall, engagement of parent committees, handover, etc.

22. Grievance redressal process at the state-level/Feedback from parents, teachers, etc.
23. Training of teachers in inclusive education
24. Training of BRCs/CRCs/MEOs in needs of adolescent girls, CWSN and SC/ST children.

**Questionnaire II: Discussions with Institutional Partners/Implementing Agencies**

1. Collate available brochures, documents, communication material, media reports, studies conducted - by GoAP, outside agencies, documentations done
2. What are the environmental benefits due to the project which you understand and advertise?
3. Any benefit advertised by suppliers?
4. Any risk you are aware of or anticipate?
5. What environmental/social / management risks are anticipated during the project cycle; during implementation or including during special occasions and disasters?
6. What are the considerations to ensure environmental risk management during project design?
7. What are the guidelines and standards developed for environmental risk management and the extent of its coverage on required safeguards?
8. How are the Policy / environmental rules considered during project design and its implementation / M&E?
9. What is the institutional support mechanism for factoring in environmental risks and response during implementation and M&E?
10. How are the Selection and Quality assurance of appliances/materials done?
11. Opinion on the suitability of appliances/materials used etc. to special situations
12. Impacts and risks of handling and transport - Any issues reported/noticed
13. Risks during storage of materials off and on-site?
14. What are the safety risks for handlers, communities?
15. Any need to act on emergencies during any stage? - quick action on installation and quick action due to disasters?
16. Any opinion on installation mechanisms?
17. Any direction on environmental issues due to storage (land), water (production), waste handling/disposal?
18. Any impacts of incompetent installations noticed?
19. What is the safety risk for handlers, labor force, types of wastes arising out of the project, and disposal-related aspects (after product life / of damaged products)?
20. Comments on mechanisms for selection of program regions
21. Any special considerations on impacts and decision mechanisms
22. Any special event/occurrence during implementation reminding the benefits, risks, opportunities
23. What are the policies, rules, acts, laws applicable to various parts of the project?
24. Write up on institutional details? Organogram?
25. Specifics on responsibility for environmental & social impacts /aspects/management – implementing agency, PC, school authorities, contractors, local bodies
26. What is the institutional mechanism to factor in Environmental benefits during project design, implementation, and M&E? Who handles decisions regarding the Environment?
27. Any training for implementation of Environmental Risk Management mechanism
28. Any gender policies/practices, no: of women employed, indigenous people employed? considerations for the old who buys - like support in installation, etc.?
29. Any other agency/activity as a forward linkage - for installation, replacement, maintenance support?

30. Any instance when anyone has brought environmental impacts during any stage to your attention

31. Any change in program design - including the introduction of additional services/amenities, support activities of introducing other equipment, products suggested to bring in sustainability?

32. Comments on Awareness levels of various agencies/officials/workers regarding Environmental impacts, risks?

33. Any impacts on natural resources like water bodies, forests, open land, plants, animals, birds reported?

34. Any impacts on physical/cultural resources reported - like heritage buildings, common areas/resources/common property, parks, activities?

35. Are they aware of possible impacts - various officials, workers, people - on natural/physical/cultural resources?

36. Do any media report any such Environmental, social issues regarding this program? How was the program affected due to this?

37. Any efforts from any party or suggestions to avoid, minimize, mitigate Environmental, social impacts

38. Observed gaps between desirable and existing performance regarding the impact on natural/physical/cultural resources

39. Actions required for gap filling (impacts on resources) - any suggestions?

40. Any Issues related to public and labor safety during Pre/during / post-implementation or operation of facilities (impacts of lights, electricity, heat issues, short circuits, power shortage issues), material safety (exposure to toxic / Hazardous materials during, pre and post-implementation, products, byproducts, disposal/wastage), reconstruction/rehabilitation during special events hazards

41. What are the perceived risks? How aware are they about risks?

42. Is there a need for better support, change in work timings, and additional equipment?

43. Observed gaps between desirable and existing performance regarding safety

44. Actions required for gap filling on safety aspects - any suggestions?

45. Any instance of land-related issues and disturbance to natural resources during production

46. What are the wastes, the sites where waste is disposed, who gets impacted?

47. Any instance of Loss of natural resources due to land requirement for storage, other requirements

48. Observed gaps between desirable and existing performance regarding land issues

49. Actions required for gap filling on land-related aspects - any suggestions?

50. What are the role and opportunities for participation of SHGs/communities in repair, management, maintenance, and other avenues for involvement?

51. How does the program involve people (initial interactions)?

52. Does it provide the capacity to ULBs and/or GPs to manage assets? How is that done?

53. How does the program build community ownership on the resources provided to ensure maintenance and sustainability?

54. What are efforts are taken to gauge user experience, consumer feedback? How is this incorporated in program design to inform course correction? If not, can this be done?

55. How are safeguards integrated into the program operations, what are the available frameworks, how are social effects reported and monitored?

56. What are the opportunities for training and capacity building on social issues and safeguards?
57. Any mechanism to discuss environmental/social issues/grievances related to the project?
58. What are the felt gaps in grievance redressal?
59. Any suggestions to fill gaps on grievance redressal?
60. Any suggestion on how the management system must change to mitigate adverse impacts
61. Any suggestion to provide transparency, accountability
62. Any suggestion on how to / what mechanism/arrangement shall identify and address Environmental risks?
63. Any suggestion on the type of guidelines/standards required
64. What are the opportunities to develop adequate guidelines to avoid, mitigate, and manage environmental risks?
65. How shall the training and capacity-building activities be designed to ensure risk avoidance and management?

Any additional comments and questions

**Questionnaire III: Focus Group Discussion with Schools**

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Types of wastes/pollution</th>
<th>Details</th>
<th>Institutional Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollution &amp; Wastes</td>
<td></td>
<td>Points of accumulation, quantities, How do they manage now</td>
<td>Responsible persons &amp; systems for storage, disposal, monitoring</td>
</tr>
<tr>
<td>Solid Wastes</td>
<td>Bio &amp; Plastic/paper other waste from school activities, lunchtime, Anganwadi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-Wastes, and Scrap</td>
<td>End of life Computer / IT equipment and ancillary equipment; end-of-life electrical fixtures, wires, unused furniture, books, etc.</td>
<td>Points of accumulation, quantities, How do they manage now</td>
<td>Responsible persons &amp; systems for storage, disposal, monitoring</td>
</tr>
<tr>
<td>General Construction Wastes</td>
<td>there will be C&amp;D wastes whatever we do while constructing</td>
<td>Points of accumulation, quantities, How do they manage now</td>
<td>Responsible persons &amp; systems for storage, disposal, monitoring</td>
</tr>
<tr>
<td>Asbestos / other any Hazardous</td>
<td>Is it there on-premises now</td>
<td>Points of accumulation, quantities, How do they manage now</td>
<td>Responsible persons &amp; systems for storage, disposal, monitoring</td>
</tr>
<tr>
<td>Solar Panels</td>
<td>Is it there on-premises now</td>
<td>Points of accumulation, quantities, How do they manage now</td>
<td>Responsible persons &amp; systems for storage, disposal, monitoring</td>
</tr>
<tr>
<td>Septic Tank outfall</td>
<td>Is it the way toilet wastes are managed? Or any place where there are dry pits, twin pits, or any other type of latrines</td>
<td>Is it a designed septic tank? Is there a soak pit Where is the outfall to</td>
<td>Responsible persons for permitting Who monitors? Any issue How is it reported to Mandal, State level?</td>
</tr>
<tr>
<td>Water Supply</td>
<td>Is water potable</td>
<td>Has testing been done?</td>
<td>Who requests tests? Who does tests?</td>
</tr>
<tr>
<td>Aspects</td>
<td>Types of wastes/pollution</td>
<td>Details</td>
<td>Institutional Responsibility</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>RO Water – small purifiers</td>
<td>Is it effective to provide potable water</td>
<td>How many in premise</td>
<td>Who undertakes repairs?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How do they dispose of the cartridge?</td>
<td>What frequency?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>How is it reported to Mandal, State level?</td>
</tr>
<tr>
<td>RO Water – Large purifier system</td>
<td>Capacity</td>
<td>How many in premise</td>
<td>Who undertakes repairs?</td>
</tr>
<tr>
<td></td>
<td>What all pollutants to be removed?</td>
<td>How do they dispose of backwash water?</td>
<td>What frequency?</td>
</tr>
<tr>
<td></td>
<td>Is the water in the premises alone is polluted or in the panchayat/region?</td>
<td>What is the quantity of backwash water?</td>
<td>How is it reported to Mandal, State level?</td>
</tr>
<tr>
<td></td>
<td>Is the area water scarce?</td>
<td>Any chemicals used – (Eg: Chlorine)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where do they store chemicals etc?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any generator used? If yes - type</td>
<td></td>
</tr>
</tbody>
</table>

**Occupational & Community Health and Safety**

| Material Storage                              | Area of school premise – Average                              | how far is the material storage area from the classrooms/student activity area | Who monitors material storage?                      |
|                                              | Is material for works stored inside the school premises?     | Is it in the open or the storeroom?                                       | Who monitors if vehicles unload at the designated area for storage? |
|                                              |                                                              | Does goods vehicle come near storage area?                               | Who monitors safety – barricading, sprinkling water, or cover of material storage? |
|                                              |                                                              | Is the road access inside paved?                                         | Frequency of monitoring?                            |
|                                              |                                                              | Is the material storage area barricaded?                                 | How is it reported to Mandal, State level?          |
|                                              |                                                              | Is it covered to prevent dust?                                           |                                                    |

| Community Health & Safety                     | What type of vehicles carry materials                         | Are vehicles carrying materials plying through unpaved roads             | Who monitors community health & safety?             |
|                                              |                                                              | Is the community informed about works?                                   | Who restricts vehicle speed etc?                    |
|                                              |                                                              | How distant is the nearest residence?                                   | Is there Board describing works in the school?     |
|                                              |                                                              | Are vehicles employed with licensed drivers, PUC, etc.?                  | Is there a complaint registering mechanism?        |
|                                              |                                                              |                                                                             | Any issues observed on any site?                    |
|                                              |                                                              |                                                                             | How is it reported to Mandal, State level?          |

<p>| Workers Health and Safety                     | Where are they sourced from? – Nearby areas?                 | Are workers engaged in work at heights and pits provided guidance and PPEs? | Who monitors workers’ health and safety?           |</p>
<table>
<thead>
<tr>
<th>Aspects</th>
<th>Types of wastes/pollution</th>
<th>Details</th>
<th>Institutional Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do they stay on school premises?</td>
<td></td>
<td>Is there first aid, provision for water, toilets? Where?</td>
<td>Is there an accident register on the premises?</td>
</tr>
<tr>
<td>What is work duration in a school? (in months)</td>
<td></td>
<td>Is there an insurance provision?</td>
<td>Who provides awareness, PPEs?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How many hours they work in a day – work time</td>
<td>How is it reported to Mandal, State level?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are they getting rest hours/meals</td>
<td></td>
</tr>
<tr>
<td>Children’s health and safety</td>
<td>Which are all classes functioning now in COVID-19 times?</td>
<td>Are children aware of works &amp; do’s and don’ts?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are there any safety issues – open unguarded pits, works happening on the roof, etc?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Will such work activities are risky when schools start functioning full strength &amp; works does on at the same time (in other schools) (Esp. during co-locating Anganwadis)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>What are the health &amp; safety concerns then?</td>
<td></td>
</tr>
<tr>
<td>Other aspects related to Anganwadi functions</td>
<td>Fuel &amp; safety</td>
<td>What is the fuel used?</td>
<td>Who monitors Anganwadi safety, fuel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where is fuel stored? How many / quantity stored at a time</td>
<td>How is it reported to Mandal, State level?</td>
</tr>
<tr>
<td>Other enhancement measures</td>
<td>School plantation, New Anganwadis, Lighting</td>
<td>Is there a green belt for school?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is there eco-club</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are the Anganwadi/store areas/ toilets to be on a higher platform to evade cyclone/flood effects?</td>
<td></td>
</tr>
<tr>
<td>Long term maintenance</td>
<td>Long term maintenance of assets</td>
<td>Is long-term maintenance planned?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>What will be most crucial to maintain/operate</td>
<td></td>
</tr>
<tr>
<td>The key environmental issue faced?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role of School Teachers/HM, PCM, School Leaders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permissions required &amp; Obtained from various agencies based on Regulations applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEXURE VIII: Sample of Social Audit Report in use

Mana Badi Nadu-Nedu Social Audit Report
KGBV Siva Nagar, Dharmavaram - Ananthapuram

The evaluation was conducted for KGBV Sivanagar in the period 29.06.2020 to 18.07.2020. The evaluation team consisted of 3 members who visited the school.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Work</th>
<th>Estimated cost in Rs.</th>
<th>Expenditure (as per MIS) in Rs.</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Toilets with Running water</td>
<td>783768</td>
<td>263550</td>
<td>In-Progress</td>
</tr>
<tr>
<td>2</td>
<td>Drinking Water Supply</td>
<td>169181</td>
<td>155397</td>
<td>In-Progress</td>
</tr>
<tr>
<td>3</td>
<td>Major &amp; Minor Repairs</td>
<td>1571037</td>
<td>766679</td>
<td>In-Progress</td>
</tr>
<tr>
<td>4</td>
<td>Electrification</td>
<td>133254</td>
<td>85261</td>
<td>In-Progress</td>
</tr>
<tr>
<td>5</td>
<td>Furniture</td>
<td>523687</td>
<td>0</td>
<td>Not-Started</td>
</tr>
<tr>
<td>6</td>
<td>Green Chalk Boards</td>
<td>62349</td>
<td>0</td>
<td>Not-Started</td>
</tr>
<tr>
<td>7</td>
<td>Painting for Campus</td>
<td>1029231</td>
<td>0</td>
<td>Not-Started</td>
</tr>
</tbody>
</table>

Recommendations:
1. The recommendation is that the school should have a PC with a printer and a separate ledger for record-keeping.
2. The school should also consider additional courses beyond the curriculum.

Tax in voice:
1. Seat tax: Rs. 3000 (for 13 members)
2. Shot tax: Rs. 21 (for 24 members)
3. Foot tax: Rs. 37 (for 37 members)
4. Others: Rs. 29 (for 29 members)
5. Tax in voice: Rs. 78000 (for 78000 members)
8. On 22.06.2020, 22 Drinking water supply (overhead tank) was commissioned in the G building. The total cost of 22 overhead tanks is 50000 Rs. A certificate was issued, and the works for 23 overhead tanks were completed on 22.06.2020 in the G building.

9. On 05.03.2020, 122379029619001 Drinking water supply (overhead tank) was commissioned in the G building. The total cost was 40920 Rs. A certificate was issued, and the works were completed, and the Tax invoice was issued. The works were completed on 22.06.2020.

Conclusion:

- Praveen (L), Ayesha (PC MEMBER).
- MEO (MASON, CARPENTER)
- AEE / AE / MEO (MASON, MASON, MASON)
- MEO (MASON, MASON, MASON)
- CRP (MASON, MASON, MASON)
- MBook (MASON, MASON, MASON)
- AEE / AE / MEO (MASON, MASON, MASON)

Drinking water supply (overhead tank) was commissioned in the G building.

- AEE / AE / MEO (MASON, MASON, MASON)
- MEO (MASON, MASON, MASON)
- CRP (MASON, MASON, MASON)
- MBook (MASON, MASON, MASON)

- MEO (MASON, MASON, MASON)
- CRP (MASON, MASON, MASON)
- MBook (MASON, MASON, MASON)

Environmental and Social Systems Assessment 2021 (P173978)
ఇపపట వర్కు ఎటువంట రాజకీయ ఒత్తాళ్లెవు.

పాఠశాలకు ఇంట్రీట్స్దాపాయంతో డిజిటల్ త్ర్గతి గదులు ఏరాపటు చేసే పాఠశాల అభివృది అవుతంది.

కొవిడ్-19 వలన షాప్లు తీయట్లేదు అందువలి మెటీరియల్ కొనుగోలు చేయుట్కు వీలుగా లేదు క్ష్తంగా ఉంది.

ఈ కార్ణం చేత పనులు అనేవి సకాలంలో పూరితావాట్లేదు.

ఫీడ్బయ్యాక్ ( AE ):-

ఇది చాలామంచి ప్లరగ్రీమ్స్కూలు అభివృది చందుతుంది దీని ప్లయించుకుంటుంది శిక్షణ ఇస్తుంది.

ఫీడ్బయ్యాక్ ( CRP ):-

మన బడి నాడు నేడు పథక్ంద్వారా పనులు అని నాణ్యత గా ఉనీవీమరియు డబుులు వృధాఅవాదుఅని తెల్పార్చాము.

పేరంట్స్కమిటీమెంబెర్స్ సహకార్ంబాగానే ఉంది కాన్నవలు స్కూల్ దగండావరు ఈ పనులు చూస్తుందునీందుకు వాళుక్ ఎటువంట సహకార్ంలేదు వాళుక్ కూడా ఏదైనా గౌర్వవేతనంలా చల్పించారు ఇంకా ఇష్టంపడి పనులను చేయించడానికి అవకాశం ఉంది.

ఫీడ్బయ్యాక్ ( PC MEMBERS ):-

మనస్కు సౌతోథ వారు కూల్పనులు చేసుకంటున్నారు. అయితే ఈ స్కూల్ కీ సంబంధంచి ఏవడి నా పనులు జర్చగుతిపుడు మరియు మెటీరియల్ కొనుగోలు హెడ్మాస్టార్గేరించగారెడు జరుగూతంది. కానీ అనేక మెటీరియల్స్ పెండని అవగాహనలేదని తెలపడం జరిగాము పనులు జరుగుతున్న ప్పుడు తీసిన్ ఫొటోలు;