

EXECUTIVE SUMMARY

E1. Introduction

Background. Following the bifurcation of Andhra Pradesh (AP) in 2014, Amaravati was chosen as the new capital. It is located along the Krishna River and spans 217.23 km² (53,748 acres) across 24 villages (covering 29 habitations across 25 Gram Panchayats) in Guntur district. The Amaravati Capital City (ACC) Project, launched in 2014, pooled 34,389 acres through the voluntary Land Pooling Scheme (LPS), offering farmers 22–30 percent of developed land and other benefits. Between 2017 and 2019, major infrastructure projects were initiated, but development halted due to a change in government policy to make three capitals. Following the 2024 state elections, the new government has decided to revive the development of the capital at Amaravati.

The development of Amaravati Capital City is divided into two phases based on land availability and strategic investment needs. Phase 1 focuses on constructing trunk infrastructure, entire AGC, and LPS Zones 1-7 and 10. Phase 2 will cover the remaining trunk infrastructure and neighborhood services for other zones. This Environmental and Social Systems Assessment (ESSA) has been undertaken primarily for the proposed Phase-1 activities, parts of which will be supported by the operation, the Amaravati Capital City Development Program (ACCDP), financed by the World Bank and the Asian Development Bank (ADB) and includes trunk infrastructure, apartment buildings within the AGC, and LPS Zones 1-3, 5B, 5D, and 6.

World Bank's Earlier Engagement. The Government of India (GoI) had requested World Bank for the development of Amaravati in 2016 through the Amaravati Sustainable Infrastructure and Institutional Development Project (ASIIDP), but withdrew the request for financing in 2019 following the change in the then state government's priorities. As part of the preparation for the ASIIDP, APCRDA had prepared key safeguards documents, including the Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF), Environmental Impact Assessments (EIAs), and Environmental Management Plans (EMPs) and Resettlement Action Plans (RAPs) for proposed interventions such as priority roads, upgradation of village infrastructure and flood mitigation works. These documents were aligned with the World Bank's Operational Policies, were consulted upon and duly disclosed by Andhra Pradesh Capital Region Development Authority (**APCRDA**) and adopted by issuing Government Orders (GOs) and provide a base for current environmental and social (E&S) assessment.

Proposed PforR Program. The Government of Andhra Pradesh (GoAP) is developing the ACCDP for Phase 1 and has sought financing from the World Bank in accordance with the World Bank policy on Program-for-Results (PforR) Financing, and ADB Results-Based Lending (RBL) Policy. The Program Development Objective (PDO) is to support the initial institutional, socioeconomic, and infrastructural development of ACC. It aims to create an economically dynamic, inclusive, and sustainable city. With a budget of INR 15,000 crores (US\$1.8 billion), the Program focuses on activities aligned with the World Bank's PforR policy and ADB standards, supporting three interrelated results areas (RAs): RA1 - Strengthened governance and financing framework, RA2 - Inclusive socioeconomic growth for community development, and RA3: Sustainable infrastructure and resilient service delivery.

E2. Environmental and Social Effects

Environmental and social integration in Master Plan. The ACC Master Plan¹ seeks to integrate E&S aspects to create a balanced, sustainable, and inclusive city. It is aimed at balancing urbanization with sustainability, economic growth, and cultural preservation, ensuring a high quality of life for its citizens while protecting natural ecosystems. Key features include (a) protection of forests and water bodies through the preservation of 251.77 ha of forests and natural water bodies; (b) reliable drinking water supply from the Krishna River, with wastewater treated and reused for non-potable purposes, and rainwater harvesting; (c) dedication of 30 percent of the city to parks, ecological reserves, and water

¹ Detailed Master Plan of Amaravati 2016-2036.

bodies to enhance livability and mitigate the urban heat island effect; (d) climate resilience and carbon neutrality aimed through urban greenery, clean transportation fuels, and renewable energy such as rooftop solar; (e) zero waste goal through integrated waste management facilities; (f) green transport through electric buses and a comprehensive walking and cycling network; and (g) zoning and thematic clusters, organizing the city into residential, commercial, and industrial areas while promoting growth in sectors such as finance, health, education, and tourism.

The Master Plan is designed to create a socially responsible urban environment that integrates the needs of all stakeholders, including marginalized communities. Central to its vision is the land pooling scheme (**LPS**), which serves not just as a tool for land acquisition (LA) but as a core design principle embedded within the **APCRDA Act of 2014**.

The LPS scheme seeks to integrate elements of social inclusion to ensure that development benefits extend to local landowners and non-landowners/landless and laborers, and improving their economic well-being while also preserving their local and social ties. Elements such as the offer of developed urban plots in return for pooled land for landowners, pension for landless households, and livelihood support to both landowners and landless households have been incorporated into the LPS, making it a potential model for inclusive development of greenfield cities where social cohesion and economic empowerment are prioritized.

E&S benefits. The GoAP expects the development of ACC to drive economic growth, generate employment, and promote sustainable urban development. Key E&S benefits include (a) economic development of Amaravati that attracts significant private sector investments, particularly in information technology (IT), finance, education, and health care, with the potential of creating 1.5 million jobs by 2050 through public-private partnerships (PPPs) and land monetization strategies; (b) employment and social development by generating jobs and providing employment with skill development programs to help farmers, landless households, and street vendors transition to new livelihoods; and (c) integration of existing villages of the area into Amaravati's urban framework, while preserving their identities and providing modern services, including clean water supply, sewage treatment, and waste management systems.

Environmental effects. The environmental effects of the Program are primarily positive, especially in RAs 1 and 2, which focus on governance and community development and will help contribute to improved E&S outcomes. However, RA3, which includes large-scale infrastructure projects such as trunk infrastructure, flood mitigation, and neighborhood development, can present environmental concerns. The operational phase of the city will increase resource consumption and waste generation, which can have implications for sewage, stormwater management, pollution, and traffic congestion, the city's design includes systems for waste management, sewage treatment, efficient water supply, integrated and inclusive emergency preparedness and response (EPR) systems. These systems will require thorough environmental and social impact assessments, regular maintenance, training, drills, ongoing stakeholder engagement (including grievance redressal mechanism and awareness raising) to ensure their long-term effectiveness. Other potential negative impacts of construction activities include soil erosion, pollution of ecosystems such as natural water bodies, air quality deterioration from dust and emissions, increased carbon emissions, poor management of construction waste, traffic congestion, construction-related nuisances, and occupational health and safety (OHS) risks for both workers and local communities.

In 2018, the APCRDA commissioned an institution to conduct an ex-post audit of the Environmental Management Plan (EMP) implementation for the construction of 10 sub-arterial roads in Amaravati, which began in 2017. The audit aimed to evaluate the effectiveness of the EMP measures, assess their compliance with World Bank policies and national regulations, identify gaps in implementation, and provide recommendations to improve future development phases. The findings from the audit report of previous construction works have been considered to develop mitigation measures, ensure compliance, and minimize adverse impacts. These measures include controlling soil erosion through stormwater drainage systems, preserving topsoil, and planting native species to enhance biodiversity. Flood management will involve regular maintenance of stormwater systems and proper disposal of

spoils, which will be undertaken by applying Good International Industry Practices (GIIP). For waste management, contractors will segregate waste at the source, use existing waste management facilities in nearby cities, treat wastewater, and secure fuel and chemical storage areas to prevent contamination. Dust and air pollution will be mitigated through regular water sprinkling and emission monitoring. Occupational and community health and safety risks will be addressed with site-specific OHS plans, the use of personal protective equipment (PPE), medical facilities, and traffic management to reduce congestion and prevent accidents. In the existing villages that will be integrated into the capital city area, timely connections to sewage and waste management services will be prioritized, with controls on unplanned growth through building approvals and ongoing infrastructure maintenance.

Social effects. As of September 2024, 34,389.79 acres (90.6 percent) have been pooled through the LPS for the entire Capital City in exchange for serviced residential and commercial plots and other safety net benefits from 28,740 farmers. Most of this land collation occurred between 2016 and 2019 and now only 3,551.79 acres remains to be pooled for the entire city. For Phase 1 activities which will form a part of the Bank-financed Program, around 1 percent (224.45 acres) of the 20,420 acres required is yet to be pooled or acquired.

The key social risks emerge from (a) the need for land procurement/acquisition and resettlement necessary for Phase 1 infrastructure, including potential legacy issues associated with the LPS and the physical and economic displacement of non-landowning users (including disadvantaged and vulnerable) and workers; (b) disruptions due to construction activities, including increased traffic and construction nuisances in those areas; (c) OHS risks to workers and local communities; (d) poor labor standards enforcement; (e) labor influx requiring accommodation; (f) risks of sexual exploitation and abuse (SEA) and sexual harassment (SH) and gender-based violence (GBV); ; and g) unplanned growth in existing villages to accommodate the transient population. All farmers participating in the LPS receive developed urban plots, amounting to 20–30 percent of their original land, for residential or commercial use. They also receive livelihood support such as an annuity, which increases annually by 10 percent; free education; healthcare; and Agriculture loan waivers. The landowners who opted to participate in the LPS have already seen benefits in terms of substantial increases in the market value of the plots they received in the capital area; according to APCRDA and farmers met during stakeholder consultations land price in the area has been estimated to have already increased 10-15 times (by September 2024) compared to the rate before land pooling and is expected to go up further with infrastructure development in the city. According to estimates by the Real Estate Developers' Association of India (CREDAI), land price in the area appreciated five times between 2015 -2019 and hovered around INR40 k to INR50 k per square yard on the main roads of ACC in June 2024.

The revival of development plans for the ACC has also seen a revival of interest from some remaining farmers in joining the LPS. Some 151 farmers presented a total of 140 acres of land over August - September 2024. APCRDA has offered additional incentives to promote further land pooling. For landowners not joining the LPS, land is being acquired under the Land Acquisition, Rehabilitation, and Resettlement (LARR) Act 2013. Some of the trunk infrastructure packages under Phase I, such as flood mitigation activities, may affect private lands within village boundaries that are not eligible for LPS. The negotiated settlement (NS) policy of the APCRDA will be followed for these areas. This may also affect some houses and community structures, and the APCRDA has already initiated the process of identifying and verifying the resettlement requirements.

At the time of land pooling in 2015-16, around 21,374 families were identified as landless laborers working in the Capital City area. They were eligible to receive a combination of livelihood restoration benefits, including a pension of INR 2,500 per month per family for 10 years (increased to INR 5,000 per month as of February 2024, with the period extended to 15 years). And based on the six-step validation² process used as common eligibility for all categories of social security pensions in Andhra Pradesh, around 17,176 landless families receive a monthly pension from the APCRDA, of which about

² That includes land ownership, asset ownership, government employment/ pension, income tax payee, size of house in municipal area, and monthly electricity consumption

5,504 landless families receive both the social security pension of INR 4,000 per month as per GoAP norms and the APCRDA pension. Also, of the 7,876 families that were identified as houseless in 2015, 5,024 have received the government-built Economic Weaker Section (EWS) housing units.

Amaravati's development has also affected the livelihoods of agricultural laborers and landless families, many of whom transitioned to other occupations. About 2,600 locals found employment in universities and government offices established in Amaravati, while street-vending created new jobs for around 3,300 individuals. About 25,319 women in 2,427 self-help groups (SHGs) have accessed skill training and collectively secured or received over INR 100 crores per annum in funding or credit through links with the National Bank for Agriculture and Rural Development (**NABARD**) and other banks³. The APCRDA is also actively working with SHGs, Mahila Police, and nongovernmental organizations (NGOs) to monitor labor camps for GBV risks, ensure that complaint mechanisms are in place, and sensitize laborers.

World Bank Inspection Panel Cases. In the context of the proposed ACCDP PforR program, it is important to take note of and draw lessons from the World Bank's previous engagement. During the preparation of the ASIIDP in 2016-17, the World Bank's Inspection Panel received two Requests for Investigation from complainants regarding the impacts of the LPS, on their livelihoods, environment and food security, and claiming inadequate consultation as a result of the Bank's non-compliance with its policies in the preparation of the project at that time.

In response, the Panel conducted a review of these Requests, visiting India in September 2017, and engaging with various stakeholders, including community members, landowners, government officials, and civil society representatives, and recommended an investigation. This investigation, however, was deferred twice following World Bank Management's request for time to address the concerns raised through several impact mitigation and management actions. These actions included an independent audit of the land assembly arrangements; the inclusion of all 21,374 landless laborer households in the area as project-affected; targeted support for the most vulnerable; and measures to enhance public participation and voice through the formation of a Citizens' Advisory Committee and stronger grievance redressal mechanisms.

However, in March 2019, the Panel, while acknowledging the positive steps taken by Management to address issues of concern, recommended still going ahead with an investigation due to remaining concerns about the Bank's due diligence and Project design, especially regarding livelihood restoration requirements, and the considerable risks of a rural-to-urban transition at such a large scale. Subsequently, as the project was withdrawn at the Government of India's request, the Panel updated its recommendation not to investigate as the project was no longer under consideration by the Bank; this recommendation was approved by the World Bank Board in July 2019. The design of the current engagement takes into account the issues and concerns raised by the Requests about possible impacts, and factors those in mitigation and management measures.

E3. Assessment of Borrower's E&S Capacity and Systems

Institutional systems. The Program is managed by the APCRDA and supported by the Amaravati Development Corporation Limited (ADCL) for infrastructure works. The APCRDA will be further supported by a Program Management Consultant (PgMC) for operational support and a Project Management Consultant (PMC) for each of the subprojects/packages. The Landscape and Environment Wing of the APCRDA monitors environmental compliance with a team led by an Additional Director and comprising eight environmental staff. There is one existing environmental staff, and recruitment is ongoing to fill two additional positions. This unit's responsibilities include securing environmental clearances (ECs), integrating norms into city by-laws and permitting procedures, green development, and overseeing flood management and waste treatment. For land acquisition and land pooling, the APCRDA has a Land Unit headed by a Special Grade Deputy Collector and supported by two land and resettlement officers along with 11 Competent Authority Offices (CAOs) at the village level. The APCRDA also has a Social Development Unit headed by a Group Director

³ APCRDA White Paper September 2024

to oversee social development and gender-related aspects. The assessment identifies the gaps and the need for further strengthening and recommends establishing a dedicated Environmental and Social Management Division (ESMD) or unit within the APCRDA which also includes strengthening institutional capacity for grievance redressal. The APCRDA is in the process of strengthening its capacities for public outreach by setting up a communication unit which will be supported by PgMC as well as a professional communications agency to support broader outreach with all stakeholder groups including the farmers and landless households in the capital city area.

Regulatory systems. The legal framework for E&S systems in Amaravati is adequate, governed by the APCRDA Act, 2014, which regulates the city's planning and development. Key environmental regulations, such as the Environmental Impact Assessment (EIA) Notification 2006, require projects to obtain EC. As a Category B1 project, Amaravati mandates both an EIA and an EMP, with the EC secured in 2015 and valid until 2026, with potential extensions. The social framework includes the LARR Act 2013 and the LPS. Land assembly is carried out through three methods—LPS, NSs, and LA—and aims to minimize resettlement. Consultations have led to adjustments in the LPS, such as differentiated compensation for various land types and provisions for non-titled occupants, ensuring social inclusion, and other welfare measures. The implementation of these aspects and its impacts on the farmer groups and landless households will be further informed by a study in 2026, and thereafter annually to plan necessary actions.

Alignment with World Bank Core Principles. The proposed program and the government systems are broadly aligned with all the Core Principles. Some gaps have been identified and measures have been recommended as program actions to bridge them.

- **Core Principle 1: Program E&S Management System.** The E&S management system for the Program complies with national and state regulations, such as the Environmental Protection Act (1986) and EIA Notification (2006). However, gaps in implementing environmental risk management were identified, including inconsistently applied EMPs and Bills of Materials (BOMs). To address these issues, stronger integration of EMPs (to be updated by using Standard Operating Procedures -SOPs) into bidding documents, site-specific mitigation strategies, and better oversight are needed. Future actions should focus on developing SOPs to address gaps in the EMPs, including budgetary provisions in procurement and ensuring regular reporting to align with Core Principle 1.
- **Core Principle 2: Natural Habitat and Physical and Cultural Resources.** The Program aligns well with Core Principle 2 on protecting natural habitats and physical and cultural resources through measures such as buffer zones and a no-construction zone around the forests and the Undavalli Rock Caves. There will also be no construction or development on the active floodplains of the Krishna River, in the area between the existing embankment and the river. In addition, as noted in the Program Appraisal Document (PAD), the Program will not finance any activities involving significant conversion or degradation of critical habitats or important cultural heritage sites. The Amaravati Master Plan designates 30 percent of land for green and blue spaces to enhance ecosystem services through afforestation, ecological and water quality monitoring initiatives. However, enhancing ongoing monitoring, coordination with regulatory agencies, and adaptive management are essential to mitigate any potential risks and ensure long-term sustainability.
- **Core Principle 3: Public and Worker Safety.** The Program aligns with Core Principle 3 by incorporating OHS plans, ensuring contractors provide PPE, conduct safety inspections, and follow labor standards. However, gaps in EMPs regarding OHS risks, GBV, and hazardous materials management require addressing through updated SOPs. Better coordination with licensed waste management vendors and training on handling hazardous chemicals are also needed. The APCRDA is committed to addressing these gaps through detailed OHS risk assessment, stronger safety measures, updated EMPs, developing key performance indicators (KPI) aligned with GIIP, enhanced worker training, monitoring and reporting mechanism, including periodic audits and follow up

of corrective measures, if any. These improvements will ensure public and worker safety and minimize environmental and labor-related risks and necessary provisions will be integrated into the bidding documents.

- **Core Principle 4: Land Acquisition and Resettlement.** The Program largely aligns with Core Principle 4 as having necessary policies and systems in place for LA and resettlement. The ACC development primarily used the LPS to acquire land, offering farmers returnable urban plots while preserving their social ties and providing livelihood support. As of September 2024, out of 20,420 acres, 224.45 acres are yet to be procured under Phase 1. Some LA and resettlement are needed for infrastructure in village habitation areas where LPS does not apply and will be done as per the NS Policy notified in 2018. The Right to Fair Compensation and Transparency in Land Acquisition Act 2013, governs any necessary acquisition. The RPF aligns with World Bank policies, but institutional mechanisms and resettlement processes need updates and strengthening.
- **Core Principle 5: Rights and Interests of Indigenous People.** The Program aligns with Core Principle 5, as it addresses the needs of the landless and vulnerable population, including those from Scheduled Caste (SC) and Scheduled Tribe (ST) communities and women. There are no primitive tribal groups (PTG) in the ACC area. The ACC area includes 31 percent SC and 4.6 percent ST populations, primarily from the Yerukulas, Yenadi, and Nayaks/Lambadis tribes. These groups are often landless, with occupations and livelihoods similar to those of SCs and other poor households in these villages. They, among others, have been supported by the APCRDA through targeted initiatives for vulnerable households, including skill training, job opportunities, and social security measures. In 2018, the APCRDA constructed 5,024 houses for 7,876 identified families lacking proper housing, with additional housing planned. Despite these efforts, there is a need for updated socioeconomic assessments to better address the changing livelihood patterns of SC, ST, and vulnerable populations since 2015–18, which is integrated into the Program actions.
- **Core Principle 6: Social Conflict.** The Program aligns with Core Principle 6, as the Program interventions are designed to set up city institutions and service infrastructure that is inclusive and enhances social cohesion in the capital city area. While recent consultations indicate broad stakeholder support for the development of the ACC, there have been conflicts of opinion in the past between groups of differing political or social affiliation who were either supportive of or opposed to the program. APCRDA is cognizant of the need to ensure social cohesion and inclusion for the speedy and sustainable realization of the vision of Amaravati as a People's Capital. It is committed to maintaining several two-way channels of communication with all stakeholders, as well as setting up platforms for voice and participation such as the proposed Citizens' Committee. It maintains village-level offices in 11 villages for direct interaction with local stakeholders and addressing questions, concerns and grievances. Going forward, APCRDA further aims to strengthen the Grievance Redress Mechanism (GRM) system with feedback and audit function and setting up clear accountability for resolution and initiate regular communication with all stakeholder groups including farmers and landless households, and other disadvantaged and/or vulnerable communities.
- **Grievance redress management.** APCRDA has an effective and robust GRM in place. This includes the GoAP Public Grievance Redress Management System (PGRMS), APCRDA dedicated online system, and a mechanism to register and resolve grievances at CAOs. Grievances received through these channels are redirected to the APCRDA portal for feedback and tracking and redirected to appropriate departments for resolution. Once the grievance is redressed, it is closed with a proper digital signature of the officer closing it so that the process is transparent and the authorities are held accountable. The Additional Commissioner of APCRDA also convenes public meetings every Friday at the village level as an open communication channel with the citizens. Finally, citizens who would like to meet with the APCRDA in person and/or are not able to use any of the

abovementioned channels can request for meeting with the APCRDA officials at various levels to communicate their grievances verbally or in writing, attend village-level camps held by the Additional Commissioner, and/or directly go to the APCRDA office. The APCRDA further plans to strengthen the GRM system by instituting a grievance audit and feedback mechanism.

E4. Stakeholder Consultations

Since 2015, the APCRDA has undertaken numerous consultations with each of the stakeholder groups and many of the policies, including LPS, ESMF, RPF, and Resettlement Action Plans (RAPs), have been informed by those consultations before being notified by the GoAP. As part of the ESSA process, apart from consultations with the APCRDA and ADCL officials, stakeholder consultations conducted with farmers, landless laborers, SHG women members, and community representatives from Venkatapalem, Lingayapalem, Mandadam, Thullur, Undavalli, Penumaka, and Nidamarru during August, September and October 2024. Consultations were also held with Competent Authority Officers, EWS housing beneficiaries, farmer associations, civil society members, and resettled landless households, alongside stakeholders such as university officials, village secretariat staff, and local government officers.

Based on feedback during these consultations, the Bank’s current assessment is that there is support for the ACC amongst local farmers and landless households. Farmers who joined the LPS have reported satisfaction with increased land values, the developed plots they have received, and annual annuities which, for some farmers, exceed their previous farming income. They also expressed satisfaction with the support for free education and healthcare. Some farmers used the benefits to support educational and livelihood opportunities for their families. Some of the landless households also reported satisfaction with social security pensions, and increased livelihood opportunities in the ACC area with the functioning of GoAP Secretariat, High Court, and other academic institutions. They also expressed satisfaction with the free education and healthcare.

The draft ESSA report will be disclosed on the APCRDA and World Bank's websites before Appraisal to facilitate discussion and gather feedback. Based on this input, including from the multi-stakeholder consultation workshop, the draft ESSA report will be revised, and the final ESSA report will be re-disclosed on the World Bank's external website before negotiations. In addition, the APCRDA is putting into place a multi-layered approach to engage proactively with stakeholders on an ongoing basis.

E5. Recommendations and Actions

Exclusion of high-risk activities. The Program will exclude high-risk activities that conflict with the World Bank’s PforR financing policy, specifically those with significant adverse environmental or social impacts, including (a) packages with significant LA and physical displacement, (b) activities involving significant conversion or degradation of critical habitats or important cultural heritage sites, (c) activities involving large-scale changes in natural resources and designated forest areas and/or key biodiversity areas (during implementation, it will be necessary to ensure that all such activities remain excluded from the World Bank-financed program), and (d) civil works commencing in the portions where the land parcel is not in possession.

Recommendations to be integrated into the Program’s disbursement-linked indicators (DLIs) are as shown in Table 1.

Table 1. Recommendations Integrated into the DLIs

S.No.	Recommendation	Responsibility	Timeline	Means of Verification
1	Establishment of an Environmental and Social Management	APCRDA	Before December 31, 2025)	Aligned with DLI 1/ DLR 1.2

	Unit/Division (ESMU/D) within APCRDA			
2	Environmental and Social Monitoring	APCRDA	Continuous	Aligned with DLI 1/ DLR 1.3
3	PgMC and PMC to have adequate qualified E&S staff	APCDRA and ADCL	Before December 31, 2025	Aligned with DLI 1/ DLR 1.1
4	Skill development and employment from ACC villages for women and youth in construction and urban services jobs	APCDRA and ADCL	Continuous	Aligned with DLI 4
5	Strengthening community participation with gender focus through reviving Citizen Advisory Committee, Village Level Committees	APCRDA	Before December 31, 2025	Aligned with DLI 6

Measures for inclusion in the Program Action Plan (PAP). The recommendations for the PAP are provided in Table 2.

Table 2. PAP Recommendations

Sl.No.	Recommendations	Responsibility	Timeline	Means of Verification
1	Prepare RAPs for Phase I packages as per GoAPs RPF and LARR 2013 Act.	APCRDA	Before award of Contract	RAP prepared and disclosed
2	Prepare SOPs to strengthen EMPs	APCRDA and ADCL	Before June 30, 2025	SOPs prepared and adopted for implementation including addressing risks like waste management, OHS, labor influx, and GBV/SEA
3	Strengthen OHS/E&S clauses in the bidding documents (by newly developed SOPs and updated EMPs and other GIIPs)	APCRDA and ADCL	Before Issuance of Bidding Document	Bidding documents to be standardized and available on APCRDA website with OHS/E&S clauses, and contractor performance indicators including E&S staffing, bill of quantities for EMP implementation, and review, monitoring mechanisms.

Sl.No.	Recommendations	Responsibility	Timeline	Means of Verification
4	Create a socio-economic baseline covering LPS farmers and landless households for assessing current skills and livelihood profiles for preparing and implementing livelihood action plans and this to be monitored through annual sample studies.	APCRDA	Baseline survey and livelihood action plan by June 30, 2025 and thereafter monitoring study reports every year by December 31 starting 2026.	Socio-economic baseline and annual monitoring reports shared
5	Implement LPS Benefits as per the APCRDA Act and Rules	APCRDA	Continuous	Biannual reports
6	Annual orientation programs for E&S teams to improve capacities on E&S aspects	APCRDA	Continuous	Programs delivered and reports shared
7	Resolve grievances related to assigned land farmers.	APCRDA	Continuous	Share updates through bi annual reports
8	Implement APCRDA's policy to upgrade basic infrastructure in existing villages on a priority basis	APCRDA	December 31 st , 2027	Village infrastructure upgraded as planned
9	Fill in Social Facilitators positions for all villages	APCRDA	June 30, 2025	Recruited and reported