

**Andhra Pradesh Integrated Irrigation and Agriculture Transformation Project
(P160463)
Appraisal Mission: July 22-27, 2018**

Aide Memoire

Introduction

1. A World Bank Appraisal Mission¹ visited Vijayawada, Andhra Pradesh, from July 22-27, 2018, with the **objective of appraising** the status of the Andhra Pradesh Integrated Irrigation and Agriculture Transformation Project (APIIATP) preparation and the Government of Andhra Pradesh (GoAP) readiness for Negotiations. Detailed discussions were held with project authorities, line departments and relevant consultants in Vijayawada, regarding all components of the project.

2. The mission team, in collaboration with the Project Management Unit (PMU), specifically focused on (i) the progress made by the PMU on actions agreed to at the pre-Appraisal mission, including with regard to the Department of Economic Affairs (DEA) readiness criteria; (ii) key activities to be financed under various project components and finalize proposed implementation arrangements and procurement; (iii) finalization of the detailed project costing and the results-framework; (v) follow-up on the recommendations from the Bank's Decision Meeting; and (iv) the status of all projects documents required prior to Negotiations.

3. The World Bank team would like to convey its sincere thanks and appreciation to GoI, GoAP, the Project Director and his team at the PMU, and the line department officials for their cooperation, support and active participation in the mission. This Aide Memoire summarizes the discussions and agreements reached between the Bank team and counterparts during the mission.

Readiness Status

4. This mission builds on the outcomes of the pre-Appraisal mission that took place during December 14 – 16, 2017, and the recommendations from the Bank's Decision Review Meeting for the project, held on June 5, 2018. The Decision Meeting confirmed the IBRD financing (US\$245.4 million) and the Project Development Objective (PDO), endorsed the project design and components, and formulated a set of recommendations that the task team followed during the Appraisal mission. A separate Appraisal Completion Note will be compiled for Bank Senior Management.

5. **Overall progress and status of previously agreed actions:** The Task team was pleased to note the overall progress achieved by the PMU with the project preparation since the pre-Appraisal mission. As reported in Annex 1, most activities from the Action Plan

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agreed to during the last mission in December 2017 have been completed in a manner satisfactory to the Bank, and a few are in the process of being finalized and expected to be completed before Negotiations.

6. **Project readiness:** During the Appraisal mission, the Bank team and the PMU reviewed the readiness status of the project against Bank filters as well as DEA criteria. The matrix below presents the progress made by the PMU to complete all readiness requirements since the pre-Appraisal mission.

7. **Required project manuals:** During the Appraisal mission, the Bank team provided technical guidance to the PMU to finalize all project manuals. These manuals include: the Project Implementation Plan (PIP), the Finance Management (FM) manual, the Procurement manual, the Project Procurement Strategy for Development (PPSD), the first 18 Months procurement Plan, the Environment and Social Management Framework (ESMF), the Water User Association (WUA) Manual, and the Support Organization (SO) guidelines. They were reviewed during the Appraisal mission and endorsed by the Bank team. The Safeguards documents have been publicly disclosed on the website of Department of Water Resources (DoWR) and in the Bank’s InfoShop (see Table 1).

8. **Project Appraisal Document (PAD) and Legal Agreements:** The Bank team shared an advanced draft version of the PAD with the Project Director, along with a draft of the Loan Agreement (LA), Project Agreement (PA) and Disbursement Letter (DL). Preliminary discussions on the draft legal documents were held during the Appraisal mission with the Project Director, and suggested revisions for consideration by the Bank were noted.

9. **Other readiness criteria:** The PMU has finalized a Procurement Plan (PP) for the first 18-month of project implementation and submitted it for Bank approval through the STEP platform at the end of the Appraisal mission. The PMU has already completed the procurement process for all services, works, and goods. In addition, the Third Party Monitoring & Evaluation Agency is in place.

Table 1: Status of project documents required for Appraisal

Item	At pre-Appraisal (Dec 2017)	At Appraisal (July 2018)
Project Implementation Plan (PIP)	The draft PIP was reviewed and finalized after incorporating all task team member comments, and will be disclosed now.	Ready. PIP finalized by the PMU. Reviewed and endorsed by the Bank.
Environment and Social Management Framework (ESMF) includes: Integrated Pest and Nutrient Management Plan (IPNMP), Social Management Framework (SMF), Tribal Development Plan (TDP), and Gender Action Plan (GAP).	Bank team provided additional comments for incorporation by PMU. Final ESMF draft to be submitted for disclosure by February 20, 2018 in World Bank InfoShop.	Ready. All safeguard documents finalized by PMU. Reviewed and endorsed by the Bank. Previous versions of the EMF, SMF and TPPF publicly disclosed on DoWR website (March 2018) and Bank’s InfoShop (March 2018).

Financial Management Manual	It is now ready for disclosure after incorporating all comments.	Ready. Financial Manual finalized by PMU. Reviewed and endorsed by the Bank.
Procurement Manual	All drafts were discussed in detail and comments will be incorporated by December 22, 2017. The revised drafts will be ready for disclosure by the project no later than December 31, 2017.	Ready. Procurement Manual finalized by PMU. Reviewed and endorsed by the Bank.
18-month Procurement Plan (PP)		Ready. Procurement Plan finalized by PMU, submitted through STEP for final review and approval by the Bank; approved by the Bank.
Documents prepared to launch procurement for activities listed in the 18-month PP		Ready. ToRs, EoIs and RFPs for large consultancy contracts (M&E firms, HR agency, ICT firm) prepared by the PMU and approved by the Bank. Other procurement processes are in advanced stages.
Project Procurement Strategy for Development (PPSD)		Ready. PPSD finalized by PMU. Reviewed and endorsed by the Bank.
Project area (total number of tanks and their command areas to be treated by the project)	Selection of 1,000 tanks has been finalized for project implementation, accounting for 90,000 ha of tank command.	Ready. List of selected tanks, villages and clusters approved by GoAP and included in the PIP.
Project cost tables	Revised cost tables were finalized by the PMU during the mission, and will be ready for disclosure before Appraisal.	Ready. Cost tables have been further adjusted to account for the use of GoAP cost-sharing norms for project matching grants. Cost tables updated by the PMU and the Bank.
Draft Project Appraisal Document (PAD)	Under review by the Bank team.	Ready. Draft PAD prepared for Bank Decision Review Meeting, and further updated with the outcomes of the Appraisal mission. Revised version shared with PD.
Results Framework (RF)	Revised draft was reviewed and finalized during pre-appraisal mission. All baseline values (where applicable) and end-of-project targets have been	Ready. Results Framework updated to incorporate recommendations from Bank Decision Meeting and finalized during the mission with inputs

	inputted and finalized.	from PMU. Glossary of Indicators now added to RF. Final version of the RF included in the distributed PAD.
GHG accounting and Climate co-benefits	Completed, using EX-ACT methodology and WB guidelines (Joint MDB Methodology)	Ready. Co-benefits assessment revised based on final costs/ activities? decided during the Appraisal mission.
Draft Financing Agreement (FA)	Under preparation by the Bank team.	Ready. Draft prepared for Bank Decision Meeting and further revised with inputs from Appraisal mission. Draft LA and PA shared and discussed with PD; subsequently revised.
Draft Disbursement Letter (DL)	Under preparation by the Bank team.	Ready. Draft DL prepared for Bank Decision Meeting. Draft DL shared with PD.

Main issues addressed

10. The project development objective is to enhance agricultural productivity, profitability and climate resilience of smallholder farmers in selected districts of Andhra Pradesh. The activities are grouped into four components: (i) Improving Irrigated Agriculture Efficiency; (ii) Promoting Climate Smart Agriculture Practices; (iii) Post-harvest Management, Market and Agribusiness Promotion; and (iv) Project Management and Capacity Building. Implementation arrangements as discussed during pre-appraisal for the first 3 components are complied; Detailed Project Reports (DPR) for SSCBI (Small-Scale Community Based Irrigation) systems are finalized; initial discussions held with identified WUA; Farmer Producer Organization (FPO) in project area have been mapped and required specialists are in place. Detailed below is readiness status of key issues.

11. **Institutional Strengthening and Capacity Building:** The project is expected to have substantial positive social impacts, resulting from enhanced tank-based livelihoods. Key interventions relate to bridging the gap between designed and actual irrigable area, with participation from the local water using communities. Major challenge of mobilizing the local tank-based community towards group action, and establishing linkages with other public and private sector institutions, has been addressed successfully under the first project (APCBTMP) with the help of an ESMF. This project has further refined the same, considering the latest legislative developments, and expanded the scope of interventions into agriculture and fisheries. In this light, 960 WUAs have been mapped, their capacities assessed, and procurement process for engaging SO is in advanced stage of finalization.

12. As the project will rehabilitate and modernize the existing tanks only, no acquisition of lands is envisaged. In fact, towards qualifying this further, it is agreed that no tanks will be taken up for project intervention wherein 'displacement' is envisaged. This aspect would also be reflected in the project's legal agreements. Recognizing that the project is expected to

intervene in the scheduled/ tribal areas, the Bank's Operational Policy (OP) 4.01 (Indigenous Peoples) is triggered, and a Tribal Peoples Planning Framework (TPPF) has also been worked upon. All these forms a part of the Social Management Framework; for which the reports are discussed with the stakeholders and disclosed on the Borrower's website as well as Bank's Operations Portal. It was also agreed that the Executive Summary of the ESMF translated into local language (Telugu) would be uploaded on the borrower's website.

13. **Rehabilitation and Modernization of the SSCBI systems:** Bids for 363 SSCBI systems covered in 221 DPRs have been received with previous mission comments duly incorporated, satisfying DEA criteria for project readiness. All these DPRs have been accorded administrative and technical approval, and the bids are in advanced stage of being awarded.

14. **Agriculture and groundwater management:** A small cell with a Joint Director level official in charge will be set up in early August 2018 in the Department of Agriculture to oversee and guide project implementation. Activity plans for launching climate smart agriculture interventions are in place for which a majority of the staff has already been deployed. Funds for horticulture activities (Rs 347 Crore) have already been allotted for the project to initiate work. The PMU has selected 120 PGM (Participatory Groundwater Management) tanks, out of total 250 PGM tanks, on which piezometers with automatic water level recorders were installed in 50 tanks. In addition, 120 manual piezometers are also being installed on the selected tanks. The PMU has already conducted orientation training for 100 staff on World Bank's safeguard and fiduciary compliances. The trainees include officials of the Groundwater Department and the Assistant Project Directors.

15. **Climate-smart aquaculture production:** The Project Implementation Plan (PIP) and DPR along with comprehensive budget for this subcomponent has been prepared focusing on the component description including, transfer of innovative and climate resilient production technologies; improved post-harvest technology and enhanced value chain participation; and policy reform to ensure quality in fish production and marketing. The milestones along with the timeline and performance indicators have also been finalized. Procurement plan and implementation arrangement for this subcomponent has been completed. Project implementation cells will be established at the headquarters of the Fisheries Department linking with District level offices for the coordination and efficient management of project implementation. The implementing agency will formally sign the Memorandum of Understanding (MoU) with the Indian Council of Agricultural Research (ICAR) Institution, Rajiv Gandhi Centre for Aquaculture (RGCA) and Fisheries College for technical support and staff capacity building.

16. **Post-harvest Management, Market and Agribusiness Promotion:** The role of Department of Agriculture and Department of Horticulture is very critical in implementation of various activities under this component. For ownership and smooth implementation of APIIATP, it is necessary to have strong linkages of PMU with Departments of Agriculture and Horticulture, and close coordination with SOs hired under component A for capacity building (of WUA and FPOs). Linkages between the activities implemented under this component and relevant activities under other sub-components/activities (value chain assessment and development, post-harvest infrastructure, capacity building and promotion of

FPOs, etc.) have to be in synergy. The mission advised the PMU to designate a senior officer/resource for effectively coordinating activities at the PMU level for Component-C.

17. The Directorate of Agriculture, GoAP has proposed involving MANAGE (National Institute of Agriculture Extension Management), an organization under Ministry of Agriculture, GoI to support the implementation of component C and for supporting its key activities with respect to demand-driven production of horticulture crops, fostering market linkages and in planning critical market infrastructural interventions in synergy with Component B. The mission advised the PMU to work out a plan for project implementation stages. The additional effort being made by PPT with the inputs received from the mission strengthened the quality of the relevant PIP sections and finalized it.

18. **Staffing and Implementation Arrangements:** In terms of staffing and institutional arrangements, 65 per cent of staff in PMU and DPMU is already in place, including the Social and Institutional Development Expert and the Capacity Building and Communications Expert. The project is in advanced stage of hiring SOs for strengthening of WUAs. These SOs will be actively involved in planning, implementing and monitoring of project at the WUA and Cascade levels. In addition, the project will contract Training Facilitation Agency (TFA) to support SPMU and DPMUs in implementing the training and capacity building activities. The process of contracting SO and the TFA is currently underway and these agencies are expected to be in place by mid-September 2018.

19. **Financial Management:** The project's Financial Management arrangements are adequate to account for and report on the project expenditure, as well as satisfy the fiduciary requirements in the context of an agreed financial management framework. **External and Internal Audit:** The Comptroller and Auditor General of India (C&AG) through its offices in AP will be the external auditor for the project. The audit report will be submitted to the Bank within six months of the close of each financial year. The project will also establish an in-house internal audit department headed by a Deputy Internal Audit Manager in the cadre of APAO adequately supported by supporting staff.

20. **Procurement:** Procurement under the project will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers for Goods, Works, Non-Consulting and Consulting Services, dated July 2016, revised November 2017. The Procurement arrangements, Thresholds for using various procurement methods, and the Prior Review thresholds and indicated in the Institutional Arrangement of the PAD were reviewed and agreed to by the Project. The PPSD, and the 18-month procurement plan were also reviewed and agreed. The confirmed versions of the PPSD and procurement plan will be shared by the project by July 31, 2018. All the Implementing Departments have been registered in STEP, and will be using this platform for all their forthcoming procurement activities. The project is ready to publish the General Procurement Notice (GPN) during 3rd week of August 2018.

21. The procurement of civil works for tank improvement in 67 packages (out of 220 packages or about 30%) is underway. Evaluation of bids in about 37 packages is completed, and contracts will be ready for award by 2nd week of August 2018. The bids for remaining 30 packages will be opened in 2nd week of August 2018, and contracts can be expected to be awarded by the 4th week of August. The procurement of key consultancy services for

engaging support organizations, Baseline and ESMF studies, Monitoring and Evaluations has reached the Contract Negotiations stage.

22. **Economic and Financial Analysis:** The Economic and Financial analysis (EFA) for the APIIATP was modified and readjusted based on the new agreed figures including, the total project costs; the coverage of areas expanded through this project; and the result framework. The EFA is now consistent with the numbers that have been changed since the last mission in May 2018, and the overall framework of the EFA base model was modified during this appraisal mission.

23. **Project costing and matching grants:** Based on the updated exchange rate and changes in the costs for some components and sub-components since the last mission, the project costs were modified and finalized. The Government of Andhra Pradesh and the World Bank mutually agreed on the final project costs. The EFA of this project was conducted using the new figures of the project costs, and incremental benefits derived from the project implementation was compared against the revised project costs and both the financial and economic return of investment were calculated. The modified and revised project costs are presented below. The new project costs exclusive of the front-end fees were finalized at US\$ 245.4 million (inclusive of 5 per cent contingencies that are additional to the base costs).

24. The World Bank will finance US\$ 172.2 million (around 70 per cent of the total project cost) through IBRD loan, and the Government of Andhra Pradesh will finance the remaining US\$ 73.6 million. Around US\$ 6.8 million will be allocated to institutional strengthening and capacity building of WUAs. Nearly 60 percent of the project cost, i.e., US\$ 145.8 million will cover the improvement of tank systems, water productivity and water use efficiency (Component A). Around 31.1 per cent (US\$ 76.4 million) of the total project cost will be allocated to improving agriculture practices, of which US\$ 60.4 million will be allocated to climate-smart diversified agriculture production practices. The fisheries sub-component will have around 6.5 percent (US\$ 16 million) of the total project cost. The remaining total project costs will be split between activities on climate-friendly market and agribusiness promotion (around US\$ 14 million - 5.7 per cent), and the project management and capacity building of PMU (US\$ 9.2 million - 3.7 per cent).

Table 2: Revised Project Costs

Components	INR (in Crore)	USD (in Million)	% of Project Cost
Component A: Improving Irrigated Agriculture Efficiency at Farm Level	950.9	145.8	59.5
A1. Institutional Strengthening and Capacity Building	44.2	6.8	2.8
A2. Improving Small Scale Community Based Irrigation System Performance and Resilience	869.7	133.4	54.3
A3. Improving Water Productivity and Efficiency	37.0	5.7	2.3
Component B. Promoting Climate Smart Agriculture Practices	498.3	76.4	31.1
B1. Climate Smart Diversified Agriculture Production Systems	394.0	60.4	24.6
B2. Innovation and Technology Transfer for Fishery	104.3	16.0	6.5

Production			
Component C. Post-harvest Management, Market and Agribusiness Promotion	91.0	14.0	5.7
Component D. Project Management and Capacity Building	59.8	9.2	3.7
TOTAL	1,600.0	245.4	100.0

25. **Results Framework and Indicators:** The Bank team and the PMU reviewed and finalized the Results Framework (RF) during the Appraisal mission, taking into consideration the recommendations from the Bank's Decision Review meeting. Five PDO level indicators and seven intermediate level indicators were discussed and finalized. All baseline values and end-of-project targets have been computed and incorporated in the RF.

26. **Project Risk Ratings:** As recommended during the Bank's Decision Review meeting, the Bank team applied the Systematic Operations Risk-rating Tool (SORT) ratings for the project and confirmed that the project Overall Risk rating at Appraisal should be maintained at Moderate.

27. **Next steps:** A set of critical actions have been identified that need to be completed in order for GoI and the Bank to hold Negotiations. These actions are already underway and with the momentum in place and the progress made so far by the PMU, the Mission is confident that those few actions will be completed soon, and that Negotiations can be held in August 2018, and the project submitted for Board approval soon after. The GoAP has agreed to take the following actions before proceeding to Negotiations:

- (i) The PMU has submitted revised Project Implementation Plan on July 27, 2018, along with all other manuals.
- (ii) Finalize DPRs and BID documents of civil works equivalent to 36% of project's civil works are ready to be awarded by August 10, 2018.
- (iii) The Draft Negotiations Package (PAD, Loan Agreement, Project Agreement, Disbursement Letter, and Letter to Negotiate) will be circulated by World Bank by August 15, 2018 for clearances.
- (iv) The final negotiations schedule will be announced by DEA.

Annexure

Annex 1: Status of Action Plan from the pre-Appraisal mission

Annex 1

Status of Action Plan from the pre-Appraisal mission

S No.	Agreed Actions	Lead taken by	Comments and Source of Verification	Deadline	Status of implementation (at Appraisal)
1	All manuals to be ready for disclosure in the State Government's website.	PMU	Share final drafts for Bank's review and approval Disclosure on State Government's website	Jan. 15, 2018	Completed. All manuals have been reviewed, approved and disclosed.
2	ESMF to be disclosed in World Bank InfoShop.	WB	Disclosure on DA website Disclosure in WB InfoShop	Jan. 30, 2018	Completed.
3	Finalization of DPRs for 30% of the total civil works proposed for 1,000 tanks.	PMU	-	Feb. 20, 2018	Completed.
4	Finalization of Bid Documents to award contracts for 30% of the total civil works proposed for 1,000 tanks.	PMU	-	Mar. 5, 2018	Completed.
5	Share Final Draft of the FMM with the Bank	PMU	Share final draft for Bank's review and approval	Immediately	Completed.
6	Write to State Govt for delegation of financial powers with respect	PMU	-	At the	Completed.

	to establishment expenditure to SPD			earliest	
7	Write to FD for sanctioning of posts for internal audit team	PMU	-	Immediately	Completed.
8	Write to FD for appointment of DAOs at vacant DPUs	PMU	-	At the earliest	Completed.