



Technical Assistance Report

Project Number: 47152
PPTA
December 2013

Republic of the Union of Myanmar: Preparing the Irrigation Command Area Development Project

Asian Development Bank

PROJECT PREPARATORY TECHNICAL ASSISTANCE

A. Justification

1. The Government of Republic of Union of Myanmar requested Asian Development Bank (ADB) for support for the improvement of rural infrastructure, including small and medium-scale irrigation systems, rural roads, and broader development of the rural sector during the preparation of the Country Business Operations Plan for 2014-2016 and the Initial Sector Assessment, Strategy, and Roadmap in agriculture, natural resources and environment sector of Myanmar (April 2013). A project preparatory assistance (PPTA) will help ensure compliance with ADB's requirements and incorporation of international best practices in the project design.

B. Major Outputs and Activities

2. The PPTA will prepare an investment project for irrigated agriculture, including gathering of information and other baseline data, survey and feasibility study of the subprojects, and address the required due diligence: (i) assess the technical feasibility of the project based on the prioritized subprojects; (ii) conduct due diligence on the economic and financial feasibility of the project; (iii) conduct financial management and procurement capacity assessment and identify training needs; (iv) assess the impacts on poverty, social and gender; (v) conduct due diligence and prepare safeguards requirements; (vi) prepare project documents, including the draft report and recommendation of the President (RRP) and key linked documents.

3. The major outputs and activities are summarized in Table A4.1.

Table A4.1: Summary of Major Outputs and Activities

Major Activities	Expected Completion Date	Major Outputs	Expected Completion Date
Consultant mobilization	April 2014		
Sector assessment and stakeholder analysis	May 2014	Inception report	May 2014
Draft feasibility studies of the subprojects and project technical, economic, financial, environment and social appraisal	Interim results by September 2014 Draft final results by November 2014	Interim report Draft final report with all appendices including social safeguards documents, participation plan, social and poverty analysis report, GAP, economic and financial analysis report, financial management assessment report, PPMS, and draft RRP including PAM	September 2014 December 2014
Social economic survey and consultations, social safeguards, and poverty assessment	October 2014		
Institutional capacity and training needs	November 2014	Institutional capacity and training needs assessment report	December 2014
Financial analysis	November 2014	financial management assessment and project cost estimates	December 2014
Procurement capacity assessment	November 2014	Procurement plan and procurement capacity assessment report, sample bidding document	December 2014

GAP = gender action plan, PAM = project administration manual, PPMS = project performance management system, RRP = report and recommendation of the President.

Source: Asian Development Bank

C. Cost Estimate and Proposed Financing Arrangement

4. The PPTA is estimated to cost \$1,200,000 and to be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources). The government will provide counterpart support in the form of counterpart staff remuneration and transport, data collection, logistic support in arranging workshops and field visits, office facilities for consultants and other in-kind contributions. The detailed cost estimate is presented in Table A4.2.

Table A4.2: Cost Estimates and Financing Plan
(\$'000)

Item	Total Cost
Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (25 person-months)	573.0
ii. National consultants (69.5 person-months)	267.0
b. International and local travel	138.0
c. Reports and communications	21.0
2. Equipment (computer, printer, etc.) ^b	15.0
3. Workshops, training, seminars, and conferences ^c	25.0
4. Vehicle ^d	32.0
5. Surveys ^e	40.0
6. Miscellaneous administration and support costs	8.0
7. Representative for contract negotiations	5.0
8. Contingencies	76.0
Total	1,200.0

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-other sources).

^b Equipment

Type	Quantity	Cost
Computers, printers, photocopier	9	\$8,000
Miscellaneous		\$7,000

The equipment will be handed over to the government upon completion of the project preparatory technical assistance.

^c Workshops, training, seminars, and conferences

Purpose	Venue
Inception, interim and final workshops, and training	Nay Pyi Taw
Public consultations	Subproject areas

The costs for Workshops, training, seminars, and conferences will be included in the consultant's contract for services and will be administered by the consultant.

^d Vehicle

Justify the use of and the need to purchase or lease a vehicle	Expected length of use
Field studies, survey, technical design and consultations with farmers will require transport. Subprojects and field work will be in rural areas without mass transit.	8 months for 2 leased vehicles

^e Surveys and technical designs will be included in the consultant's contract for services and these will be administered by the consultants.

Source: Asian Development Bank estimates.

D. Consulting Services

5. A total of 94.0 person-months (pm) of consulting services (consisting of 24.0 pm of international and 70.0 pm of national input) will be required for project preparation. The consulting services will be recruited from a firm selected using QCBS method at a ratio of 80:20 based on a full technical proposal. The consultants will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). The outline terms of reference for the project preparatory TA consultants are described as follows.

6. **Water Resources Specialist/Team Leader** (international, 7.5 pm). With a minimum experience of 15 years, the expert will (i) have overall responsibility for effective and timely

implementation of the PPTA and quality of all PPTA outputs; (ii) coordinate and manage all TA activities as team leader; (iii) coordinate and consolidate inputs of the other specialists; (iv) prepare a sector assessment (including, but not limited to, an assessment of regional hydrology and water resources availability, cropping patterns, crop water use, organizational and institutional aspects, irrigation system operation and maintenance [O&M], and opportunities for disaster risk mitigation and management); (v) lead in formulating the project design; (vi) identify subprojects; (vii) prepare inception, interim, draft final and final reports, including a draft report and recommendation of the President (RRP) and related linked documents in ADB format.

7. **Irrigation Management Specialist/Deputy Team Leader** (national, 11.0 pm). With a minimum experience of 10 years, the expert will (i) assist the Team Leader to ensure effective and timely implementation of the PPTA and quality of all PPTA outputs; (ii) coordinate and consolidate inputs of the government; (iii) contribute to the sector assessment report; (iv) assist in formulating project design, identification of subprojects; and (v) assist in the preparation of inception, interim, draft final and final reports, including a draft report and recommendation of the President (RRP) and related linked documents in ADB format.

8. **Irrigation Engineers** (international, 3.0 pm; national 6.5 pm), **Farm Land Consolidation and Mechanization Engineer** (national, 5.0 pm), and **Irrigation Organizational Specialist** (national, 6.5 pm). With a minimum experience of 10 years (international) and 5 years (national), the team, working closely with the agricultural and social specialists, will: (i) prepare feasibility studies of identified subprojects, describing agricultural development, water requirements, infrastructure, organizations and management; (ii) review subproject hydraulic and structural designs; (iii) assess the need for land consolidation, mechanization and resettlement; (iv) assess rural access/connectivity infrastructure needs (roads, bridges, culverts, etc.) if needed; (v) identify system management, operation and maintenance requirements and procedures; and (vi) estimate subproject costs (including construction and future O&M). The team, supported by the agricultural, social and resettlement specialists, will undertake stakeholder consultation to (a) identify necessary system improvements, (b) explore options to involve farmers in the construction and rehabilitation of system facilities (including control structures, canals and development of tertiary and on-farm distribution systems), (c) discuss proposals for establishment of water user groups for system management and operation; and (d) prepare a stakeholder participation plan.

9. **Agricultural Specialists** (international, 2.0 pm; national 6.5 pm) With a minimum experience of 15 years (international) and 5 years (national), the experts will: (i) assess the current cropping patterns; (ii) design and implement the baseline survey of agricultural, socio-economic and livelihood data (as a basis for project design and future impact assessment); (iii) undertake stakeholder participation; (iv) review and coordinate activities with other organizations on high value and diversified crop production; (v) propose the improved cropping patterns taking into account the future impact of climate change; and (vi) work closely with the irrigation and social specialists to identify appropriate activities for ensuring farmer participation in the project, and determine the need for project support of agricultural improvements and initiatives.

10. **Agricultural Economists** (international, 3.0 pm; national 6.5 pm). With a minimum experience of 15 years (international) and 5 years (national), the experts will (i) work closely with the agricultural specialists in the design and implementation of baseline agricultural, socio-economic and livelihood surveys; (ii) assist team leader and irrigation engineers in prioritization of interventions and subprojects; (iii) compile the project cost estimates and financing plan (including computation of contingencies and financial charges); (iv) review baseline studies of agricultural production and farmers' livelihoods;¹ (v) conduct project economic and financial analyses in

¹ The World Bank, FAO and IRRI are jointly implementing a 2000 household agricultural survey covering from the Ayeyarwaddy Delta to the Dry Zone in the next half year. The PPTA consultants should explore opportunities to augment this survey coverage, such that the intended area of the irrigation project is included, and advise ADB on proposed actions.

accordance with ADB requirements, with particular attention to access to markets (taking into account rural access/connectivity); (vi) analyze the needs of private sector to promote agribusiness; (vii) identify opportunities for agro-processing; (viii) identify the support required to enhance value chains and promote agricultural processing;² (ix) if proposed as project activities, assess in collaboration with the social specialist (a) the potential impact of mechanization on labor requirements/equity and (b) the impact of land consolidation on land tenure; and (x) explore options to establish linkages with local and national retail/wholesale markets for farmers' produce.

11. **Financial Management Specialist** (international, 1.0 pm; national 5.0 pm). With a minimum experience of 15 years (international) and 5 years (national), and recognized professional accountancy qualifications, the experts will (i) assess the capacity of the executing agency in financial management in accordance with ADB requirements; (ii) design fund flow and disbursement mechanisms; (iii) develop, in collaboration with the procurement specialist, financial management guidelines for the project, particularly to monitor the flow and use of funds for force account works and community based procurement; (iv) assess and reach agreement on financial reporting, auditing and disclosure arrangements; (v) conduct as appropriate, financial evaluations (financial cost-benefit analyses) including sensitivity analyses; and (vi) review/prepare (in collaboration with the procurement specialist) the financial management sections of the project administration manual (PAM).³

12. **Procurement Specialists** (international, 2.0 pm; national 6.5 pm). With a minimum experience of 15 years (international) and 5 years (national), the experts will: (i) assess procurement capacity of the executing agency; (ii) review the status of national consulting services and civil works contractors in the irrigation sector; (iii) assess procurement procedures of the government in accordance with ADB's procurement guidelines; (iv) determine opportunities for improvement and capacity strengthening; (v) review/prepare (in collaboration with the financial management specialist): (a) the organizational and procurement sections of the PAM; (b) procedures for the use of force account procurement; and (c) procedures for community based participation procurement; (vi) prepare the procurement plan; (vii) provide on-the-job training in ADB procurement and contract management for the staff of MOAI as necessary; (viii) prepare sample bidding documents for the use under local and other procurement procedures; and (ix) assist the executing and implementing agencies to achieve necessary project readiness conditions.

13. **Environment Specialists** (international, 1.5 pm; national 5.5 pm). With a minimum experience of 15 years (international) and 5 years (national), the experts will: (i) assess the existing conditions and baseline status of environment in all subproject areas and summarize for the whole project; (ii) assess potential environmental impacts and any necessary mitigation measures in accordance with ADB requirements, both during construction and long-term; and (iii) prepare the environmental management plan and other required environment safeguards documents.

14. **Resettlement and indigenous Peoples Specialists** (international, 2.0 pm; national 5.5 pm). With a minimum experience of 15 years (international) and 5 years (national), the experts will fulfill safeguard requirements in accordance with ADB's Safeguards Policy Statement (2009), including (i) assessing project impacts (both positive and negative) on resettlement and ethnic minorities; and (ii) assist the government to prepare the required resettlement and indigenous peoples plans and related documents.

² Review especially small-scale processing/milling stations/hydropower schemes related to the Mekong Business Initiative funded by AusAid to facilitate private sector development (TA currently being processed)

³ Refer specifically to the following ADB documents: (i) Technical Guidance Note on Project Financial Reporting and Auditing; (ii) Methodology Note on Financial Due Diligence Financial Management Assessment Questionnaire; and (iii) ADB Products and Financing Modalities for Sovereign Guarantees, Loans, and Grants.

15. **Social and Gender Specialists** (international, 2.0 pm; national 5.5 pm). With a minimum experience of 15 years (international) and 5 years (national), the experts, with prior experience in designing and implementing community participation initiatives, will in subproject areas (i) collaborate with agricultural specialists and economists to collect necessary baseline data; (ii) conduct a poverty and social analysis in accordance with ADB requirements; (iii) conduct a labor analysis; (iv) identify existing community participation methodologies and propose, in collaboration with irrigation and agricultural specialists, appropriate activities for ensuring farmers'/water users' participation in the project; (v) if proposed as project activities, assess in collaboration with the economist (a) the potential impact of mechanization on labor requirements/equity, and (b) the impact of land consolidation on land tenure; (vi) conduct gender analysis; (vii) develop a plan for women's involvement in construction, irrigation management and future value chains; and (viii) prepare a gender action plan (identifying specific targets in both numbers and percentages) and a consultation and participation plan.

E. Implementation Arrangements

16. The MOAI through Irrigation Department will be the executing agency. The implementing agencies will be the Department of Agricultural Planning, Irrigation Department, Water Resources Utilization Department, Agricultural Mechanization Department and Department of Agriculture in MOAI. A project management office (PMO), comprising staff from the related department, will be established to administer day-to-day PPTA activities, coordinate with ADB and implementing agencies, and provide guidance to the project preparation. Disbursements under the PPTA will be done in accordance with ADB's *Technical Assistance Disbursement Handbook* (May 2010, as amended from time to time). The proposed PPTA commencement date is 1 April 2014 and the completion date is 30 December 2014 (9 months).

17. The proposed TA processing and implementation schedule is listed in Table A4.3.

Table A4.3: Technical Assistance Processing and Implementation Schedule

Major Milestones	Expected Completion Date
Concept paper approval	December 2013
Recruitment of consultants	December 2013 - March 2014
Commencement of PPTA	April 2014
Submission of PPTA draft final report ^a	December 2014
Loan fact-finding mission	February 2015
Submission of PPTA final report	March 2015

PPTA = project preparatory technical assistance

^a to include indicative procurement plan, companion cost estimates and EA capacity assessments for review by OSFMD

Source: Asian Development Bank estimates.