



# Technical Assistance Report

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Project Number: 41076-045  
Project Preparatory Technical Assistance (PPTA)  
December 2013

## Philippines: Improving National Roads for Inclusive Growth in Mindanao Project

Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 30 November 2013)

Currency unit – peso (P)

P1.00 = \$0.023

\$1.00 = P43.88

## ABBREVIATIONS

ADB	–	Asian Development Bank
DPWH	–	Department of Public Works and Highways
TA	–	technical assistance

## NOTES

- (i) The fiscal year (FY) of the Government of the Philippines and its agencies ends on 31 December.
- (ii) In this report, "\$" refers to US dollars.

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## PROJECT PREPARATORY TECHNICAL ASSISTANCE

### A. Justification

1. The Government of the Republic of the Philippines has requested the Asian Development Bank (ADB) to provide a project preparatory technical assistance (TA) to prepare the Improving National Roads for Inclusive Growth in Mindanao Project.<sup>1</sup> This project supports the government's agenda for Mindanao in the Philippines Development Plan 2011-2016. The TA is included in ADB's Country Operations Business Plan 2014-2016 for the Philippines.<sup>2</sup>

### B. Major Outputs and Activities

2. The major activities of the TA are: (i) updating the Mindanao road network master plan; and (ii) preparing the feasibility study and project design for a project suitable for ADB financing. For the road network master plan, the consultants will consolidate plans and projects of responsible government agencies and update them for recent economic developments to update the overall roadmap for Mindanao's road network, including the Autonomous Region of Muslim Mindanao. The feasibility study and project design will cover engineering, economic, social impact, and safeguards activities. The engineering study will include geological, topographical, and hydrological surveys; preliminary pavement design; detailed cost estimates; and implementation plan. The economic work will include traffic surveys and an assessment of the economic feasibility of the project. The financial work will include a financial management assessment of the executing agency and analysis of the financial sustainability of the project. The social tasks will cover poverty, social, and gender analysis; and preparation of a social/gender action plan, stakeholder communication strategy, consultation and disclosure plan, and community engagement plans. The safeguards activities will include capacity building for government staff; assessment of impacts on environment, involuntary resettlement, and indigenous peoples; and preparation of an assessment report and resettlement and indigenous peoples plans. The TA consultants will conduct an institutional capacity assessment to develop the capacity-building component of the project and a procurement capacity assessment. They will also assist the Department of Public Works and Highways (DPWH) in the preparation of the Project Design Proposal to be submitted to the National Economic Development Authority.

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

**Table 1: Summary of Major Outputs and Activities**

Major Activities	Expected Completion Date	Major Outputs	Expected Completion Date
1. Road network master plan	July 2014	Master plan	July 2014
1.1 Consolidate and review existing plans			
1.2 Update existing plans			
1.3 Examine prospects for roads to form part of economic corridors			
2. Feasibility study and project design	January 2015	Inception report	May 2014
2.1 Prepare preliminary engineering design and detailed cost estimate			July 2014
2.2 Conduct traffic demand forecast and economic analysis		Interim report	
2.3 Assess financial sustainability of project and conduct financial management assessment			December 2014

<sup>1</sup> The government has informed development partners that grant funding by a development partner for project preparation does not commit the government to avail of a loan from that partner for the ensuing project.

<sup>2</sup> Listed under its former name of Second Road Improvement and Institutional Development Project.

Major Activities	Expected Completion Date	Major Outputs	Expected Completion Date
2.4 Conduct procurement capacity assessment and institutional development capacity assessment; prepare capacity development component		Draft final report	January 2015
2.5 Conduct poverty, gender, and social analysis and prepare social/gender action plan, stakeholder communication strategy, consultation and disclosure plan, and community engagement plans		Final report	
2.6 Conduct environment and social safeguards assessment and prepare EIA/IEE, resettlement and indigenous peoples plans. Conduct capacity building in safeguards fields for government staff at all levels based on training needs assessment.			

ADB = Asian Development Bank, EIA = environment impact assessment IEE = initial environment examination; GAP = gender action plan; RP = resettlement plan; TA = technical assistance.  
Source: Asian Development Bank.

### C. Cost Estimate and Proposed Financing Arrangement

4. The TA is estimated to cost \$1.4 million equivalent, of which \$1.2 million equivalent will be financed on a grant basis by ADB's Technical Assistance Special (TASF-other sources). The government will provide in-kind counterpart support. The detailed cost estimate is presented in Table 2. Disbursements under the TA will be made in accordance with the ADB's Technical Assistance Disbursement Handbook (*May 2010, as amended from time to time*). The TA consultants will turn over the equipment to DPWH following TA completion.

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

Item	Total Cost
<b>Asian Development Bank<sup>a</sup></b>	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (24.0 person-months)	489.8
ii. National consultants (40.0 person-months)	339.4
b. International and local travel	60.0
c. Reports and communications	25.0
2. Equipment <sup>b</sup>	15.0
3. Workshops, training, seminars, and conferences	20.0
4. Surveys	125.0
5. Local land transport <sup>c</sup>	10.5
6. Miscellaneous administration and support costs	18.0
7. Contingencies	97.3
<b>Total</b>	<b>1,200.0</b>

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

<sup>b</sup> Includes computers, printers, photocopier, etc., to be turned over to the Department of Public Works and Highways following completion of the TA.

<sup>c</sup> Vehicle rental.

Note: The cost of the TA amounts to an equivalent of \$1,400,000, of which contributions from ADB are presented in the table above. The government will provide counterpart support in the form of counterpart staff, office accommodation, communication facilities, and other in-kind contributions, whose value is estimated to account for 14% of the total TA cost.

Source: Asian Development Bank estimates.

### D. Consulting Services

5. An international consulting firm will be engaged to implement the TA. The services will require a total of 24 person-months of international consultants and 40 person-months of national consultants. Quality and Cost-Based Selection (QCBS)<sup>3</sup> will be used in accordance with ADB's *Guidelines on the Use of Consultants*. A full technical proposal will be required.

<sup>3</sup> Selection will be based on a 90% technical and 10% cost basis.

**Table 3: Summary of Consulting Services Requirement**

<b>International Positions</b>	<b>Person-Months Required</b>	<b>National Positions</b>	<b>Person-Months Required</b>
Team Leader/Highway Engineer	6.50	Deputy Team Leader/Pavement Engineer	6.0
Bridge/Structural Engineer	2.00	Bridge/Structural engineer	4.0
Transport planner	1.75	Transport Planner	6.0
Resettlement Specialist	1.75	Resettlement Specialists	4.0
Indigenous Peoples Specialist	1.50	Indigenous Peoples Specialists	3.5
Social/Gender Specialist	1.50	Social/Gender Specialists	4.0
Environmental Specialist	1.75	Environmental Specialist	5.0
Climate Change Specialist	1.50	Biodiversity Expert/Specialist	2.0
Institutional Specialist	1.25	Institutional Specialist	1.5
Procurement Specialist	1.00	Transport Economist	1.0
Transport Economist/Financial Specialist	2.50	Financial Specialist	1.0
Road safety Engineer	1.00	Road Safety Engineer	1.0
		Hydrologist/Drainage Engineer	1.0
<b>Total</b>	<b>24.00</b>	<b>Total</b>	<b>40.0</b>

Source: Asian Development Bank.

6. The outline terms of reference for the TA consultants is discussed below. The preferred qualifications for all candidates are a minimum of 10 years relevant experience on similar projects and at least a bachelor's degree.

- (i) **Team Leader/Highway Engineer.** He/she will have the overall responsibility for the management of the consultant team; and will lead the preparation of the (a) preliminary design of the project roads to include climate resilience and road safety features; and (b) cost estimate for the civil works; and the total costs of the project including capacity-building programs for DPWH, and design review and supervision consultants for project implementation. He/she will also prepare the construction methods and construction sequence; investigation of market conditions including prices of materials, depreciation/operation cost of machines and equipment, wages, taxes, and duties. He/she will prepare the basic technical specifications and design criteria for the project roads, will examine the possibility of including the private sector in maintenance of project roads, and will also supervise the administration of surveys, workshops, training, and seminars.
- (ii) **Deputy Team Leader/Pavement Engineer.** He/she will support and represent the team leader, and carry out specific engineering tasks required.
- (iii) **Bridge/Structural Engineers.** They will review the existing and proposed structures and recommend improvements and innovative construction methods.
- (iv) **Transport Planners.** They will collect and review existing feasibility studies, master plans, and other relevant information on the development of Mindanao; analyze the present and future developments; update and validate the studies and plans; and consolidate them into an overall road network master plan. They will also assess the potential for the project roads to form parts of economic corridors in Mindanao, including links to regional cooperation initiatives such as the Brunei Indonesia Malaysia Philippines-East ASEAN Growth Area.
- (v) **Transport Economists.** They will prepare traffic forecasts and economic analysis, including alternative and least cost analysis and sensitivity and distribution analysis, and the project performance monitoring system.
- (vi) **Financial Specialists.** They will analyze the financial sustainability of the project; assess the financial management capacity of the executing agency; design the funds flow/disbursement mechanism of the project; and examine governance issues that may arise during project implementation.

- (vii) **Institutional Specialists.** They will undertake an assessment of the institutional capacity of DPWH, and prepare the capacity building program.
- (viii) **Procurement Specialist.** He/she will undertake a procurement capacity assessment, recommend improvements, and prepare the procurement plan.
- (ix) **Social/Gender Specialists.** They will undertake poverty, social, and gender analysis and prepare a social/gender action plan, stakeholder communication strategy, consultation and disclosure plan, and community engagement plans.
- (x) **Resettlement and Indigenous Peoples Specialists.** They, together with the executing agency and local authorities, will assess social impacts for involuntary resettlement and indigenous peoples and prepare the required resettlement and indigenous peoples plans in accordance with ADB's Safeguard Policy Statement. They will carry out capacity building for DPWH and local authorities. They will also work closely with the social/gender specialists in the preparation of the stakeholder communication strategy, consultation and disclosure plan, and community engagement plans specific to social safeguards.
- (xi) **Environmental Specialists.** They will work as a team in the analysis of environmental issues, and in the preparation of a project environmental assessment report as well as due diligence for ongoing works along the project roads. A biodiversity expert will analyze any potential ecological impacts of the project on biodiversity in protected areas in the project area.
- (xii) **Climate Change Specialist.** He/she will undertake an assessment of the vulnerability of the project roads to climate change and develop a costed management plan to increase climate resilience for incorporation in the design.
- (xiii) **Hydrologist/Drainage Engineer.** He/she will assess available data on existing and proposed drainage structures along the project roads in terms of catchment areas and will coordinate with the highway and bridge engineers and the climate change specialist. He/she will conduct preliminary analysis on the technical feasibility of bridge sites and elevations.
- (xiv) **Road Safety Specialist.** He/she will review the designs for road safety aspects and prepare road safety measures for incorporation into the design.

## E. Implementation Arrangements

7. DPWH will be the executing agency for the TA. DPWH's Planning Service will be responsible for implementation of the TA. The TA will be implemented over 15 months, with commencement expected on 6 January 2014 and financial closing on 6 April 2015. The proposed TA implementation schedule is listed in Table 4.

**Table 4: Technical Assistance Processing and Implementation Schedule**

<b>Major Milestones</b>	<b>Expected Completion Date</b>
TA approval	December 2013
TA commencement	January 2014
Shortlisting of consultants	February 2014
Receipt of proposals	March 2014
Mobilization of consultants	May 2014
Submission of TA draft Final Report	December 2014
Final review and submission of TA Final Report	January 2015
TA physical closing date	March 2015
TA financial closing date	April 2015

TA = technical assistance

Source: Asian Development Bank.