

# Report and Recommendation of the President to the Board of Directors

Project Number: 48175-002

May 2018

Proposed Loan
Republic of the Union of Myanmar: Third Greater
Mekong Subregion Corridor Towns Development
Project

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## **CURRENCY EQUIVALENTS**

(as of 7 May 2018)

Currency unit - kyat (MK) MK1.00 = \$0.0007493 \$1.00 = MK1,334.500

#### **ABBREVIATIONS**

ADB Asian Development Bank Department of Urban and Housing Development DUHD economic internal rate of return EIRR environmental management plan **EMP** East-West Economic Corridor **EWEC Greater Mekong Subregion** GMS initial environmental examination IEE **KSG** Kavin State Government MSG Mon State Government  $m^3$ cubic meter MOC Ministry of Construction Neighbouring Countries Economic Development Cooperation NEDA Agency PAM project administration manual project implementation unit PIU PMO project management office TICA **Thailand International Cooperation Agency** 

#### NOTE

In this report, "\$" refers to United States dollars.

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## **CONTENTS**

		Page
PRO	DJECT AT A GLANCE	
MAP		
l.	THE PROPOSAL	1
II.	THE PROJECT	1
	<ul> <li>A. Rationale</li> <li>B. Impact and Outcome</li> <li>C. Outputs</li> <li>D. Summary Cost Estimates and Financing Plan</li> <li>E. Implementation Arrangements</li> </ul>	1 3 3 4 5
III.	DUE DILIGENCE	6
	A. Technical     B. Economic and Financial     C. Governance	6 6 7
	<ul> <li>D. Poverty, Social, and Gender</li> <li>E. Safeguards</li> <li>F. Summary of Risk Assessment and Risk Management Plan</li> </ul>	8 8 9
IV.	ASSURANCES AND CONDITIONS	10
V.	RECOMMENDATION	10
APP	PENDIXES	
	esign and Monitoring Framework	11
	st of Linked Documents	14

## **PROJECT AT A GLANCE**

Co Bo 2. Se ✓ W	roject Name ountry orrower ector	Third Greater Mekong Subregion Corridor Towns Development Project Republic of the Union of Myanmar	Department /Division	Project Numbe SERD/SEUW	
2. Se ✓ W	orrower	Republic of the Union of Myanmar			
2. Se ✓ W	orrower				
✓ W	ector	Republic of the Union of Myanmar	Executing Agend		
		Subsector(s)		ADB Financin	
in	later and other urban	Urban policy, institutional and capacity de	evelopment		10.00
	frastructure and services	Urban solid waste management			35.00
		Urban water supply			35.00
			Т	otal	80.00
3. St	trategic Agenda	Subcomponents	Climate Change	Information	
	clusive economic growth	Pillar 2: Access to economic	Adaptation (\$ milli		3.70
(IE	EG)	opportunities, including jobs, made	Mitigation (\$ millio		1.70
		more inclusive	CO <sub>2</sub> reduction (to		74,000
	nvironmentally sustainable rowth (ESG)	Global and regional transboundary environmental concerns	Climate Change in Project	npact on the	Medium
gı	iowiii (E3G)	Urban environmental improvement	i roject		
Re	egional integration (RCI)	Pillar 1: Cross-border infrastructure			
4. Dr	rivers of Change	Components		nd Mainstreaming	
G	overnance and capacity	Organizational development	Effective gender r	nainstreaming	✓
	evelopment (GCD) nowledge solutions (KNS)	Knowledge obering activities	(EGM)		
	` ,	Knowledge sharing activities			
	rivate sector development PSD)	Public sector goods and services essential for private sector development			
5. Po	overty and SDG Targeting		<b>Location Impact</b>		
	eographic Targeting	No	Urban		High
	ousehold Targeting	No			
	DG Targeting DG Goals	Yes			
	isk Categorization:	SDG6, SDG9, SDG11 Complex			
	afeguard Categorization	Environment: B Involuntary Rese	ottlomont: B. Indi	gonous Pooplos: C	
	inancing	Environment. D involuntary nest	ettiement. Dinai	genous reopies. O	
	Modality and Sources		T	Amount (\$ million)	
	ADB				80.00
-	· ·	ssional Loan): Ordinary capital resources			80.00
(	Cofinancing	, , , ,			0.00
	None				0.00
(	Counterpart				6.53
	Government				6.53
7	Total				86.53



#### I. THE PROPOSAL

- 1. I submit for your approval the following report and recommendation on a proposed loan to the Republic of the Union of Myanmar for the Third Greater Mekong Subregion Corridor Towns Development Project.<sup>1</sup>
- 2. The proposed project will upgrade basic infrastructure and strengthen urban management capacities to develop the towns of Mawlamyine in Mon State, and Hpa-An and Myawaddy in Kayin State as competitive economic nodes along the Greater Mekong Subregion (GMS) East–West Economic Corridor (EWEC).<sup>2</sup>

#### II. THE PROJECT

#### A. Rationale

- 3. **Development of Greater Mekong Subregion corridor towns.** The GMS EWEC has contributed to economic growth in the region since its launch in 1998 as a GMS flagship initiative. The objective of developing the GMS corridor towns is to increase economic activities along these economic corridors by investing in urban infrastructure. Local economic development in Mawlamyine, Hpa-An, and Myawaddy is indispensable to transform Myanmar's portion of the EWEC into a full-fledged economic corridor. International tourist visits increased from about 50,000 in 2011 to 170,000 in 2016 in Mon State and from 5,000 in 2011 to 90,000 in 2016 in Kayin State.<sup>3</sup> Border trade at Myawaddy in Myanmar and Mae Sot in Thailand increased from about \$1 billion in 2010 to \$3 billion in 2016 accounting for about 12% of Myanmar's border trade.<sup>4</sup> The project will be the third phase of the GMS corridor towns development initiative and will contribute to environmentally sustainable and inclusive growth of the region.
- 4. **Country's urbanization and urban issues.** Although 66.0% of Myanmar's population resides in rural areas, the urban population has grown by 2.5% per year, faster than the country's total population (0.8% per year). The percentage of the urban population in Myanmar increased from 27.0% of the total population in 2000 to 34.1% of the total population in 2015. It is expected to increase to 36.9% in 2020 and 42.8% in 2030.<sup>5</sup> On the other hand, chronic underinvestment in urban infrastructure has resulted in seriously deficient municipal services throughout Myanmar. Lack of urban infrastructure and limited capacity to manage municipal services are major disincentives to external investments, which are critical to socioeconomic development and growth.<sup>6</sup>
- 5. **Regional context.** Kayin State and Mon State have significant potential for development due to (i) an expected increase in trade with Thailand, (ii) better access to Yangon, (iii) its link to the Bay of Bengal, (iv) expected increases in tourist visits, and (v) connection with a new international airport in Bago. Upgrading urban infrastructure and developing urban management capacity are essential to strengthen Kayin and Mon states' competitiveness and tie-in with wider economic growth in the GMS.

<sup>&</sup>lt;sup>1</sup> The design and monitoring framework is in Appendix 1.

<sup>&</sup>lt;sup>2</sup> The Asian Development Bank (ADB) provided project preparatory technical assistance for Preparing the Third Greater Mekong Subregion Corridor Towns Development Project (TA 8756-MYA).

<sup>&</sup>lt;sup>3</sup> Directorate of Hotels and Tourism of Myanmar. 2017. Tourist & Local Arrival Record. Nay Pyi Taw.

<sup>&</sup>lt;sup>4</sup> Mae Sot Custom House. 2017. Trade Statistics. Bangkok.

<sup>&</sup>lt;sup>5</sup> United Nations, 2015, World Urbanization Prospects: The 2014 Revision, New York,

<sup>&</sup>lt;sup>6</sup> Sector Assessment (Summary): Water and Other Urban Infrastructure and Services (accessible from the list of linked documents in Appendix 2).

- 6. **Project town profiles.** Mawlamyine is the capital of Mon State with an urban population of about 254,000 and has been a hub for trade with Thailand. The town's history and built heritage are a major attraction for tourists but the built environment is deteriorating due to improper maintenance. Hpa-An is the capital of Kayin State with an urban population of about 75,000. It is expected to grow as a service center along the EWEC for small industries such as textiles and agro-processing. The town also attracts tourists to its beautiful limestone hills and Buddhist heritage sites. Myawaddy borders Thailand and has an urban population of about 113,000. The GMS Regional Investment Framework (2013–2022) identified the border crossing between Myawaddy in Myanmar and Mae Sot in Thailand as one of the 17 key GMS border crossings.<sup>7</sup> It is expected to boost cross-border trade with Thailand upon completion of the second Thailand–Myanmar Friendship Bridge in 2019, which is supported by grant funds from the Government of Thailand. Development partners in the urban sector have supported mainly Yangon and Mandalay, and the proposed project is the first effort to work in Myanmar's secondary cities in a holistic manner.
- 7. **Core issues and binding constraints in urban service delivery.** Although the state governments through town development committees are tasked with urban planning and urban service delivery, they do not effectively carry out their responsibilities because they lack staff, skills, funds, and data. The following provides an overview of core urban services in the project towns:<sup>8</sup>
  - (i) Water supply. In Mawlamyine, 30% of the population has access to piped water supply and nonrevenue water is estimated at about 80%, while in Hpa-An, only 13% of the population has access to piped water supply and nonrevenue water is estimated at 70%. Myawaddy has no public water supply system but granted two private operators the right to distribute piped water for 54% of the population. The operators' networks are extended on an ad hoc basis without any formal planning in response to customer demands. None of the existing facilities in the three project towns treats the water, apart from a natural sedimentation process in Mawlamyine.
  - (ii) Solid waste management. Only about half of the generated waste are collected in the three project towns. The remaining waste is illegally dumped or burned along roads, nearby watercourses, and the riverfront. It not only causes environmental degradation but also increases damages from seasonal flooding. Waste is also taken to uncontrolled dump sites that are located upstream of water supply river intakes in Mawlamyine, near major tourist attractions in Hpa-An, and along the river bordering with Thailand in Myawaddy.
- 8. **Strategic alignment.** The proposed project supports the thrusts of the GMS Strategic Framework 2012–2022 in facilitating cross-border trade, investment, and tourism; <sup>9</sup> and is included in the GMS Regional Investment Framework (2013–2022). <sup>10</sup> The development of sustainable cities and reduction of pollution and environmental degradation are included in the policy measures to achieve the government's overarching goals toward inclusive and sustainable economic development. <sup>11</sup> The Asian Development Bank's (ADB) country partnership strategy for Myanmar 2017–2021 identifies infrastructure development as a main pillar of ADB operations. <sup>12</sup> The proposed project is also consistent with ADB's Midterm Review of Strategy 2020, and the urban and

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<sup>&</sup>lt;sup>7</sup> ADB. 2015. GMS Urban Development Strategic Framework 2015–2022. Manila.

<sup>&</sup>lt;sup>8</sup> Sanitation services is through individual septic tanks and desludging vehicles. The towns' population density is not high enough to generate flushing velocities that require sewerage systems and sewage treatment plants.

<sup>&</sup>lt;sup>9</sup> ADB. 2011. The Greater Mekong Subregion Economic Cooperation Program Strategic Framework 2012–2022. Manila.

<sup>&</sup>lt;sup>10</sup> ADB. 2013. Greater Mekong Subregion Economic Cooperation Program: Overview of the GMS Regional Investment Framework (2013–2022). Manila.

<sup>11</sup> Government of Myanmar. 2016. Economic Policy of the Union of Myanmar. Nay Pyi Taw.

<sup>&</sup>lt;sup>12</sup> ADB. 2017. Country Partnership Strategy: Myanmar, 2017–2021: Building the Foundations for Inclusive Growth. Manila.

water operational plans as it will promote sustainable and inclusive growth in cities, integrate climate change adaptation measures in the project design, and mainstream efficiencies in water use.<sup>13</sup>

- 9. **Lessons learned.** Key lessons from ongoing ADB-financed urban projects in Myanmar and other GMS countries, including the first phase<sup>14</sup> and the second phase<sup>15</sup> of the GMS corridor towns development project, are that (i) creation of urban and spatial development plans was important to inform sector master plans and infrastructure project design; (ii) civil society participation and demand-driven development activities support local ownership; (iii) a streamlined approach to procurement and contract packaging secures effective project implementation; (iv) capacity development on ADB procedures is crucial for efficient implementation; and (v) start-up assistance for the executing and implementing agencies will accelerate project implementation. These lessons informed the project design and implementation arrangements.
- 10. **Value added by ADB assistance.** ADB added value by introducing new and innovative approaches to (i) conserving built heritage from the British colonial period and in traditional Mon style in Mawlamyine, and (ii) developing a joint spatial development plan for two border towns at the Thailand–Myanmar border. For heritage conservation, the project team prepared a knowledge product on heritage buildings in Mawlamyine as part of project preparation, and pilot renovation of one of the heritage buildings was included in the project. These activities are expected to help raise awareness on conservation and effective utilization of heritage buildings, and thereby promote opportunities for scale up. The joint spatial development plan will detail the future development strategy for the two linked towns of Mae Sot in Thailand and Myawaddy in Myanmar. Development patterns of these two border towns will change substantially upon completion of the second Thailand–Myanmar Friendship Bridge in 2019, which will bypass the urban center of both towns. The plan will help inform urban management actions responding to rapid urbanization near and along the new bridge and access roads by controlling land use and providing urban services. The plan could be a model for future GMS border area development.

## B. Impact and Outcome

11. The project is aligned with the following impact: increased economic activities along the GMS EWEC (footnote 8). The project will have the following outcome: urban services and development in Mawlamyine, Hpa-An, and Myawaddy improved.

#### C. Outputs

12. **Output 1: Urban planning improved.** Output 1 comprises the (i) renovation of the government's General Administration Department building adjoining the courthouse in

ADB. 2014. Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and the Pacific. Manila; ADB. 2013. Urban Operational Plan 2012–2020. Manila; and ADB. 2012. Water Operational Plan 2011–2020. Manila.

ADB. 2012. Report and Recommendation of the President to the Board of Directors: Proposed Loan, Grant, and Administration of Grant to the Lao People's Democratic Republic: Greater Mekong Subregion East—West Economic Corridor Towns Development Project. Manila; ADB. 2012. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Loan and Grants to Kingdom of Cambodia: Greater Mekong Subregion Southern Economic Corridor Towns Development Project. Manila; and ADB. 2012. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Grant to the Socialist Republic of Viet Nam: Greater Mekong Subregion Corridor Towns Development Project. Manila.

ADB. 2015. Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Kingdom of Cambodia: Second Greater Mekong Subregion Corridor Towns Development Project. Manila; ADB. 2015. Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Lao People's Democratic Republic: Second Greater Mekong Subregion Corridor Towns Development Project. Manila; and ADB. 2015. Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Socialist Republic of Viet Nam: Second Greater Mekong Subregion Corridor Towns Development Project. Manila.

Mawlamyine as a pilot built-heritage conservation, (ii) preparation of a joint spatial development plan for Myawaddy and Mae Sot as a formal document detailing the future development strategy for the two linked towns, and (iii) development of the Hpa-An industrial zone development plan to help the industrial zone grow as a regional economic hub along the EWEC.

- 13. **Output 2: Basic social infrastructure upgraded.** Output 2 will improve priority services of water supply and solid waste management in Mawlamyine and Hpa-An. The project will (i) rehabilitate the existing dam, construct a new water treatment plant, extend the water distribution network, and construct new connections in Mawlamyine; and (ii) build a new water intake and treatment plant, extend water distribution network, and construct new connections in Hpa-An. The project will (i) upgrade the existing dump site to a waste management center, including sanitary landfill and compost plant, in Mawlamyine; and (ii) construct a new waste management center, including sanitary landfill and compost plant, and close the existing dump sites in Hpa-An.
- 14. **Output 3: Urban management capacity strengthened.** Output 3 includes (i) capacity development and policy dialogue with the Kayin State Government (KSG) and Mon State Government (MSG) in the operation and maintenance and financial management of the project facilities, and municipal financial management; (ii) assistance to the Department of Urban and Housing Development (DUHD), Ministry of Construction (MOC) to implement the Urban and Regional Development Planning Law; and (iii) a public awareness program on environmental protection and public health for the residents in Mawlamyine, Hpa-An, and Myawaddy to increase willingness to connect to and to pay for the improved water supply and solid waste collection.

## D. Summary Cost Estimates and Financing Plan

15. The project is estimated to cost \$86.53 million (Table 1).

Table 1: Summary Cost Estimates (\$ million)

Item		Amount <sup>a</sup>
A.	Base Cost <sup>b</sup>	
	Urban planning improved	2.88
	Basic social infrastructure upgraded	61.72
	Urban management capacity strengthened	6.33
	Subtotal (A)	70.93
B.	Contingencies	12.33
C.	Financing Charges During Implementation <sup>d</sup>	3.27
	Total (A+B+C)	86.53

<sup>a</sup> Includes taxes and duties of \$3.32 million to be financed from government resources through cash contribution.

c Physical contingencies computed at 10% for civil works and 10% for all other costs. Price contingencies computed at 1.5% on foreign exchange costs, and at 7.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

d Includes interest. Interest during construction for the Asian Development Bank loan is 1% per year and will be capitalized. There are no commitment charges.

Source: Asian Development Bank estimates.

16. The government has requested a concessional loan of \$80 million from ADB's ordinary capital resources to help finance the project. The loan will have a 32-year term, including a grace

b In mid-2017 prices.

<sup>&</sup>lt;sup>16</sup> ADB has confirmed that there is sufficient water resources to increase water supply based on a water demand balance analysis during project preparation.

period of 8 years; an interest rate of 1.0% per year during the grace period and 1.5% per year thereafter; and such other terms and conditions set forth in the draft loan agreement. The borrower will be the Republic of the Union of Myanmar, which will make the loan proceeds available to KSG and MSG. The government will finance the taxes and duties, land acquisition, and project management. Climate change mitigation is estimated to cost \$1.7 million and climate change adaptation is estimated to cost \$3.7 million of which 100% will be funded by ADB. Details are in the project administration manual (PAM).<sup>17</sup> The financing plan is in Table 2.

**Table 2: Summary Financing Plan** 

	Amount	Share of Total
Source	(\$ million)	(%)
Asian Development Bank		
Ordinary capital resources (concessional loan)	80.00	92
Government	6.53	8
Total	86.53	100

Source: Asian Development Bank estimates.

17. The government also requested the Government of Thailand for parallel financing of a \$24.24 million loan from the Neighbouring Countries Economic Development Cooperation Agency (NEDA) and \$0.50 million in technical cooperation from Thailand International Cooperation Agency (TICA) to complement the project. The NEDA loan will improve water supply and solid waste management in Myawaddy. TICA will provide training for the three project towns on urban infrastructure planning and management. This is the first collaboration between ADB with NEDA and TICA, and ADB conducted feasibility studies for the components financed by NEDA and TICA. Coordination with NEDA and TICA is detailed in the PAM. Parallel financing from NEDA and TICA will significantly enhance the project impact by increasing the number of beneficiaries and may encourage public—private partnerships between Thailand and Myanmar.

## E. Implementation Arrangements

18. The implementation arrangements are summarized in Table 3 and described in detail in the PAM.

**Table 3: Implementation Arrangements** 

Aspects	Arrangements		
Implementation period	October 2018–March 2025		
Estimated completion date	31 March 2025		
Estimated closing date	30 September 2025		
Management			
(i) Oversight body	The chief minister, KSG, and MSG will chair the project coordination committee. Members will include ministers and secretaries of KSG and MSG.		
(ii) Executing agency	DUHD, MOC		
(iii) Implementing agencies	KSG and MSG		
(iv) Implementation unit	Two PMOs will be established under KSG (Hpa-An) and MSG		
	(Mawlamyine), each headed by a project director and comprising a		
	sufficient number of qualified staff. A PIU will be established in		
	Myawaddy under the PMO-KSG.		
Procurement	International 7 contracts \$72.8		
	competitive bidding million		

<sup>17</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2).

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Aspects	Arrangements		
	National competitive	1 contract	\$0.5 million
	bidding		
	Shopping	None	_
Consulting services	QCBS	140 person-months (international)	\$5.7 million
	6 packages	475 person-months (national)	
Advance contracting	PMOs, assisted by ADB, will initiate the selection of the project implementation support consultant and tendering of design—build—operate packages for water supply system improvement in Mawlamyine and Hpa-An.		
Disbursement	The ADB loan will be disbursed in accordance with ADB's Loan Disbursement Handbook (2017, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.		

ADB = Asian Development Bank, DUHD = Department of Urban and Housing Development, KSG = Kayin State Government, MOC = Ministry of Construction, MSG = Mon State Government, PIU = project implementation unit, PMO = project management office, QCBS = quality- and cost-based selection.

Note: All goods and works, and consulting services to be financed and administered by ADB under the project will be procured in accordance with ADB's Procurement Guidelines (2015, as amended from time to time) and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). Source: Asian Development Bank.

19. DUHD requested ADB's assistance in selecting the project implementation support consultant to expedite its mobilization. To improve project readiness, the project team prepared the technical specifications for the new water treatment plants in Mawlamyine and Hpa-An.

#### III. DUE DILIGENCE

#### A. Technical

- 20. Detailed feasibility assessments and preliminary designs were undertaken for the water supply and solid waste management infrastructure components. The locations for project facilities were selected in consultation with the KSG, MSG, and other stakeholders. The project team analyzed alternative technical options for each project facility and identified the optimum design solutions. In reviewing the alternatives, the project team considered the improvement of the overall efficiency of capital investment and operational expenditure, the use of appropriate technology within operating agencies, and the reduction of negative social and environmental impacts. The project will provide training to ensure the sustainable operation and maintenance of project facilities.
- 21. The Khin Pon Chong dam in Mawlamyine, which was built in 1904, will be rehabilitated to adapt to the climate change impacts. The rehabilitation will reduce seepage losses during the dry season and reservoir overflows during the monsoon season, thus the dam will be operated year-round, even considering detrimental changes of rainfall and temperature patterns in the future.

#### B. Economic and Financial

22. **Economic analysis.** The economic analysis assesses the economic viability of the project through standard cost–benefit analysis.<sup>19</sup> The analysis is undertaken separately for each of the water supply and solid waste management components in each project town as well as for the built-heritage conservation component in Mawlamyine. Since most of the project benefits cannot be valued within traditional measures, they are assessed in terms of willingness to pay for the

<sup>&</sup>lt;sup>18</sup> Provided that DUHD will negotiate and sign the consulting service contract.

<sup>&</sup>lt;sup>19</sup> Economic Analysis (accessible from the list of linked documents in Appendix 2).

improved services based on the contingent valuation survey for the water supply and solid waste management components. Benefits for the built-heritage conservation component were based on increases in international tourism. The economic analysis indicates that the overall project has an economic internal rate of return (EIRR) of 13.1% and an economic net present value of MK1.13 billion. The EIRRs of water supply are 17.6% in Mawlamyine, 3.0% in Hpa-An, and 14.8% in Myawaddy. The EIRRs of solid waste are 13.0% in Mawlamyine, 15.9% in Hpa-An, and 18.7% in Myawaddy. The heritage component has an EIRR of 35.5%. The high poverty rate in Hpa-An, of awareness of water quality, and unsanitary hygiene are the factors justifying the low willingness to pay for better water supply, which is needed as a basic service.

23. **Financial analysis.** The government will make the funds available to MSG and KSG. To enhance the sustainability of the water supply and solid waste management investments, KSG and MSG will prepare a tariff road map at the start of project implementation. The water tariff road map and solid waste tariff roadmap will be implemented for each project town prior to full operation, with regular tariff increases to ensure that operational costs are fully covered, while ensuring affordability by low-income households. If the towns do not have sufficient funds to cover operation expenditures, the union government and the states will jointly undertake to balance each town's budget through increased financial support.<sup>22</sup>

#### C. Governance

- 24. The risk rating for financial management is *high*. The public financial management systems in Myanmar are relatively weak because of insufficient capacity and computerization. The major risks are (i) limited capacity of the executing and implementing agencies to (a) conduct project financial management, (b) prepare financial management reports, and (c) implement an internal audit; and (ii) weak financial management system controls. The proposed risk mitigation measures involve (i) application of the direct payment procedure for all payments without using an imprest account; (ii) provision of training for the project management offices (PMOs) on ADB's disbursement policies and procedures, and international best practices; and (iii) improvement of project budgeting and accounting systems, including computerization.
- 25. The procurement risk is rated *high*. The executing and implementing agencies do not have experience in implementing externally funded infrastructure development projects. To mitigate procurement risks (i) the number of contracts was reduced to a minimum; (ii) international competitive bidding will be used for most procurement packages; (iii) DUHD has requested ADB to assist in selecting the project implementation support consultant,<sup>23</sup> provided that DUHD will negotiate and sign the consulting service contract; and (iv) ample training on ADB's procurement requirements will be conducted under the project.
- 26. ADB's Anticorruption Policy (1998, as amended to date) was explained and discussed with the government and DUHD. The specific policy requirements and supplementary measures are described in the PAM.

<sup>20</sup> Based on the results of the contingent valuation survey and a per capita income of \$1.25/day as the poverty line, the poverty incidence is estimated at 65.1% for Mawlamyine, at 65.4% for Hpa-An, and at 60.1% for Myawaddy.

<sup>22</sup> Financial Analysis (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>21</sup> The results of the 2014 Household Census for Myanmar indicate that only 1.9% of urban residents of Hpa-An had access to piped tap water for drinking and 12.9% had access to piped tap water for other purposes; this compares with 23.1% access to piped tap water for drinking and 53.5% access to piped tap water for other purposes for Myawaddy, and 9.2% access to piped tap water for drinking and 29.7% access to piped tap water for other purposes for Mawlamyine.

<sup>&</sup>lt;sup>23</sup> This contract includes procurement expert inputs.

### D. Poverty, Social, and Gender

The primary beneficiaries of the three project towns are the residents along selected 27. corridors. They will benefit from the improved water system and better solid waste management, which is anticipated to yield health and economic gains. The stakeholder strategy and participation plan for the project will maximize the participation of stakeholders—particularly women, the poor, and vulnerable groups—by raising awareness of the project. As the project is in former conflict areas. PMOs will implement a detailed communication strategy to inform all stakeholders of project progress and ensure meaningful dialogue throughout the implementation period.<sup>24</sup> The project is categorized effective gender mainstreaming. PMOs will implement and monitor the gender equality and social inclusion action plan at regular intervals to ensure that women, the poor, and the vulnerable are included and involved in the project.<sup>25</sup> PMOs will collect sex-disaggregated data and social and economic background information within a year to help establish baseline figures to track social and gender equality results as the project progresses. The project will establish pro-poor affordability measures through a system of deferred payments for water connection as well as block water-use tariffs with the best rates available for those consuming less. The project will also modernize urban planning and management by building the capacity for community consultation and engagement, which will improve the communication flow and trust between the government and residents.

## E. Safeguards

- 28. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.<sup>26</sup> In compliance with ADB's information disclosure and consultation requirements, the safeguard documents for environment and involuntary resettlements have been posted on ADB's website in April 2017.
- Environment (category B). The project team prepared an initial environmental 29. examination (IEE) for both Kavin State and Mon State, in accordance with ADB's Safeguard Policy Statement and the applicable environment regulations of the government.<sup>27</sup> The project is not expected to cause irreversible adverse environmental impacts. Environmental impacts will be predominantly positive: any negative impacts will be due to nuisances during construction. IEEs have identified impacts and mitigations with particular attention to (i) occupational health and safety in construction and operations, (ii) design of landfill sites to prevent leachate migration, and (iii) closure of the existing dump sites. The IEEs also prioritized the environment, health, and security issue in terms of (i) capacity building for the PMOs and project implementation unit, (ii) detailed specifications in tender documents, and (iii) inspection and supervision during construction. The project team recommended the integration of the potential impacts of climate change and natural hazards into the detailed engineering design. At the detailed engineering design stage, PMOs will update and finalize the environmental management plans (EMPs). Estimated costs to implement the EMPs were integrated into the project costs. The final EMPs, cleared by ADB, will form part of the bidding documents. PMOs will ensure effective environmental monitoring at all stages of subproject implementation. From March to October 2016, the project team conducted meaningful stakeholder consultations through meetings, key informant interviews, focused group discussions, and public consultations. The IEE also describes the grievance redress mechanism for the project.

<sup>24</sup> The community strategy is included in the PAM (accessible from the list of linked documents in Appendix 2).

<sup>26</sup> ADB. Safeguard Categories. https://www.adb.org/site/safeguards/safeguard-categories.

<sup>&</sup>lt;sup>25</sup> Gender Action Plan (accessible from the list of linked documents in Appendix 2).

<sup>27</sup> Initial Environmental Examination: Kayin State and Initial Environmental Examination: Mon State (accessible from the list of linked documents in Appendix 2).

- 30. Involuntary resettlement (category B). In Kayin State, a total area of 24.79 hectares (ha) will be acquired and three households (17 persons) will be affected. The solid waste management subproject will have impacts on 25 waste-picker households (119 persons) that will be economically displaced, of which one household (four persons) requires relocation. In Mon State, a total area of 19.82 ha will be acquired and two households (10 persons) will be affected. The solid waste management subprojects will have impacts on 10 waste-picker households (40 persons) that will be economically displaced. All other impacts in both Kayin and Mon states are partial and temporary. The project team has established a cutoff date with extensive stakeholder consultation and participation. Counterpart funds will finance an estimated \$485,105 for the land acquisition, compensation, and income restoration program. The project team prepared two resettlement plans for Kayin State and Mon State. The resettlement plans comply with ADB's Safeguard Policy Statement and consider relevant provisions of local laws and regulations. ADB will clear the resettlement plans at appraisal and the updated resettlement plans at the detailed engineering design. KSG and MSG have disclosed project information during project preparation, and PMOs will update and distribute a project information booklet during a detailed measurement survey. PMOs will ensure effective monitoring and public consultation with all stakeholders and affected people at all stages of project implementation. Stakeholder consultations will continue through formal and informal focus group discussions. KSG and MSG informed the affected people that a grievance redress mechanism will be established to help facilitate resolution of complaints regarding project performance.
- 31. **Indigenous peoples (category C).** The population in the project area consists of Bamar (55.2%) followed by Kayin (15.7%) and Mon (11.3%). However, no communities of ethnic minorities or groups live separately in the urban area. As the project will benefit all residents equally, no adverse impact on indigenous peoples is anticipated. In accordance with ADB's Safeguard Policy Statement, no separate indigenous peoples' plans are required.

## F. Summary of Risk Assessment and Risk Management Plan

32. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.<sup>28</sup>

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Poor households do not connect to the centralized water networks.	Targeted aid for low-income households will be introduced: flexible payment options for water connection or waiver of water connection fees.
PMO and PIU staff do not have sufficient knowledge and experience in the implementation of externally funded projects, thus risks to financial management and procurement are rated <i>high</i> .	The number of procurement packages was minimized, and most procurement packages will be procured using international competitive bidding. DUHD will engage a consultant to support project implementation, and ADB will train PMO and PIU staff on ADB's requirements and procedures for procurement.
Revenues of the KSG and MSG are insufficient to cover the operation and maintenance of project facilities.  Project implementation is delayed because of slow start-up in recruiting	KSG and MSG will ensure that they secure in a timely manner a subsidy, fiscal transfer, or any other financial support from the central government to cover the shortfall.  Advance contracting will take place. ADB will assist DUHD in selecting the project implementation support consultant,

<sup>&</sup>lt;sup>28</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

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Risks	Mitigating Measures
Poor households do not connect to the centralized water networks.	Targeted aid for low-income households will be introduced: flexible payment options for water connection or waiver of water
the project implementation support	connection fees.  provided that DUHD negotiates and signs the consulting
consultant.	service contract.

ADB = Asian Development Bank, DUHD = Department of Urban and Housing Development, KSG = Kayin State Government, MSG = Mon State Government, PIU = project implementation unit, PMO = project management office. Source: Asian Development Bank.

#### IV. ASSURANCES AND CONDITIONS

- 33. The government has assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and loan documents.
- 34. The government has agreed with ADB on certain covenants for the project, which are set forth in the loan agreement.
- 35. The government has agreed that no withdrawals will be made from the loan account until the PMOs and project implementation unit have been established with qualified staff.

#### V. RECOMMENDATION

36. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of \$80,000,000 to the Republic of the Union of Myanmar for the Third Greater Mekong Subregion Corridor Towns Development Project, from ADB's ordinary capital resources, in concessional terms, with an interest charge at the rate of 1.0% per year during the grace period and 1.5% per year thereafter; for a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board.

Takehiko Nakao President

10 May 2018

## **DESIGN AND MONITORING FRAMEWORK**

## Impacts the Project is Aligned With

Economic activities along the GMS East–West Economic Corridor increased (National Comprehensive Development Plan, 2016–2021)<sup>a</sup>

Development Pl	Development Plan, 2016–2021) <sup>a</sup>			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks	
Outcome Urban services and development in Mawlamyine, Hpa-An, and Myawaddy improved	By 2027 a. Households with access to improved water supply increased to 24,000 (2016 baseline: 5,000) in Mawlamyine, and 14,000 (2016 baseline: 1,000) in Hpa-An b. Nonrevenue water reduced to 30% (2016 baseline: 80%) in Mawlamyine, and 25% (2015 baseline: 70%) in Hpa-An	a–b. Annual report of the Water and Sanitation Department of MSG and KSG	Revenues of KSG and MSG are insufficient to cover the operation and maintenance of project facilities.	
	c. Solid waste collection rate increased to 80% of the total households (2016 baseline: 50% of the total households) in Mawlamyine, and 80% of the total households (2016 baseline: 45% of the total households) in Hpa-An	c. Annual report of the Cleansing Department of MSG and KSG		
Outputs  1. Urban planning improved	By 2025  1a. The General Administration Department building renovated and upgraded in Mawlamyine (2016 baseline: not applicable)  1b. Hpa-An Industrial Zone development plan developed (2016 baseline: not applicable)  1c. Joint spatial development plan for Myawaddy and Mae Sot developed	1a–1c. Quarterly project progress report of engineering firm	PMO and PIU staff do not have sufficient knowledge and experience in the implementation of externally funded projects.	
2. Basic social infrastructure upgraded	(2016 baseline: not applicable)  2a. Water production capacity increased to 22,000 m³/day (2016 baseline: 10,000 m³/day) by rehabilitating the existing dam and constructing a new water treatment plant in Mawlamyine, and 12,000 m³/day (2016 baseline: 2,000 m³/day) by constructing a new water intake and treatment plant in Hpa-An  2b. Water distribution network extended to 190 km (2016 baseline: 50 km) in	2a–2e. Quarterly construction report of an engineering firm		
	Mawlamyine, and 110 km (2016 baseline: 30 km) in Hpa-An  2c. 19,000 new water connections (2016 baseline: 5,000) constructed in			

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	Mawlamyine and 13,000 (2016 baseline: 1,000) in Hpa-An		
	2d. Existing dump site upgraded to waste management center comprising sanitary landfill and compost plant in Mawlamyine (2016 baseline: 0), and existing dump site closed, and new waste management center constructed in Hpa-An (2016 baseline: not applicable)		
	2e. 12 trucks in Mawlamyine (2016 baseline: 7) and 7 in Hpa-An (2016 baseline: 4) used for waste collection and transfer		
	2f. At least 60 participants with increased skills in alternative livelihood, of which at least 75% are women (2016 baseline: not applicable)	2f. Attendance sheets, end-of- training survey conducted by PMOs	
3. Urban management capacity strengthened	3a. Capacity development assessed, training programs in urban management developed, and attended by at least 30 participants from KSG and MSG (2016 baseline: not applicable)	3a. Draft legal documents  3b–3d. Program	
	3b. Urban and Regional Development Planning Law implemented (2016 baseline: none)	materials, attendance sheets, end-of-training survey conducted by PMOs	
	3c. Awareness materials on environmental protection and public health developed, and awareness programs attended by at least 100 persons (with equitable share of male and female participants) (2016 baseline: not applicable)		
	3d. Gender awareness and GAP implementation programs attended by all PMO and PIU staff increased (2016 baseline: not applicable)		

# **Key Activities with Milestones**

## **Output 1: Urban planning improved**

- 1.1 Prepare detailed designs (by 2019), conduct procurement (by 2019), and renovate and upgrade (by 2021) the Mawlamyine General Administration Department building.
- 1.2 Recruit consultant (by 2019) and prepare (by 2020) the Hpa-An Industrial Zone development plan.
- 1.3 Recruit consultant (by 2019) and prepare (by 2020) the joint spatial development plan for Myawaddy and Mae Sot.

#### **Key Activities with Milestones**

#### Output 2: Basic social infrastructure upgraded

- 2.1 Prepare detailed designs (by 2019), update EMPs and resettlement plans (by 2019), procure works and goods (by 2020), and complete civil works and equipment installation (by 2024) for the water supply
- 2.2 Prepare detailed designs (by 2019), update EMPs and resettlement plans (by 2019), procure works and goods (by 2020), and complete civil works and equipment installation (by 2024) for the waste management center.
- 2.3 Prepare specifications (by 2019) and purchase (by 2020) waste collection vehicles.

#### Output 3: Urban management capacity strengthened

- 3.1 Recruit consultant (by 2019) and help DUHD implement the Urban and Regional Development Planning Law (by 2021).
- 3.2 Assess capacity development needs (by 2019), develop training programs (by 2020), and conduct training (by 2024) for KSG and MSG.
- 3.3 Develop public health and environmental protection awareness programs and materials (by 2019) and conduct awareness programs (by 2024).

#### **Project Management Activities**

Conduct needs assessment for specific skills and knowledge areas (by 2018)

Customize learning modules to fit participants' needs (by 2018)

Deliver and evaluate training courses in disbursement, procurement, safeguard, and project management (by 2020)

#### Inputs

Asian Development Bank (loan): \$80,000,000

Government of Myanmar: \$6,530,000

## **Assumptions for Partner Financing**

The outputs financed by the following partners in parallel will be implemented without delay. Neighbouring Countries Economic Development Cooperation Agency (loan): \$24,200,000 for the improvement of water supply and solid waste management in Myawaddy

Thailand International Cooperation Agency (technical cooperation): \$500,000 for part of output 3b

DUHD = Department of Urban and Housing Development, EMP = environmental management plan, GAP = gender action plan, GMS = Greater Mekong Subregion, km = kilometer, KSG = Kayin State Government, m³ = cubic meter, MSG = Mon State Government, PIU = project implementation unit, PMO = project management office.

<sup>a</sup> Government of Myanmar. 2016. *Economic Policy of the Union of Myanmar*. Nay Pyi Taw.

Source: Asian Development Bank.

## LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=48175-002-3

- 1. Loan Agreement
- 2. Sector Assessment (Summary): Water and Other Urban Infrastructure and Services
- 3. Project Administration Manual
- 4. Contribution to the ADB Results Framework
- 5. Development Coordination
- 6. Financial Analysis
- 7. Economic Analysis
- 8. Country Economic Indicators
- 9. Summary Poverty Reduction and Social Strategy
- 10. Gender Action Plan
- 11. Initial Environmental Examination: Kayin State
- 12. Initial Environmental Examination: Mon State
- 13. Resettlement Plan: Subprojects in Kayin State
- 14. Resettlement Plan: Subprojects in Mon State
- 15. Risk Assessment and Risk Management Plan