

Periodic Financing Request Report

Project Number: 42265-025 MFF Number: 0064-IND November 2017

India: Assam Urban Infrastructure Investment Program–Tranche 2

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CURRENCY EQUIVALENTS

(as of 3 November 2017)

Currency Unit	_	Indian rupee (₹)
₹1.00	=	\$0.0154
\$1.00	=	₹64.8609

ABBREVIATIONS

ADB – Asian Development Bank	
AUIDMA – Assam Urban Infrastructure Develo	opment and Management
Agency	
EMP – environmental management plan	
FFA – framework financing agreement	
GAP – gender action plan	
GDD – Guwahati Development Departmer	nt
GJB – Guwahati Jal Board	
GRM – grievance redress mechanism	
IEE – initial environmental examination	
km – kilometer	
NGO – nongovernment organization	
O&M – operation and maintenance	
PIU – project implementation unit	
PMU – program management unit	
SWM – solid waste management	
UDD – Urban Development Department	
ULB – urban local body	

NOTE

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

Vice-President	Wencai Zhang, Operations 1
Director General	Hun Kim, South Asia Department (SARD)
Director	Sekhar Bonu, Urban Development and Water Division, SARD
Team leader Team members	Sanjay Joshi, Principal Urban Development Specialist, SARD Maricar Barrogo, Project Analyst, SARD
	Saswati Belliappa, Safeguards Specialist, SARD
	Atsushi Kaneko, Principal Portfolio Management Specialist, SARD Shinjini Mehta, Urban Development Specialist, SARD Marimar Montemayor, Operations Assistant, SARD Takako Morita, Counsel, Office of the General Counsel Jaemin Nam, Financial Management Specialist, SARD Ninette Pajarillaga, Environment Specialist, SARD Ashok Srivastava, Senior Project Officer (Urban), SARD
Peer reviewer	Vijay Padmanabhan, Technical Advisor (Urban), Sustainable Development and Climate Change Department

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Project Classification Information Status: Complete

1.				
	Basic Data			Project Number: 42265-025
	Project Name	Assam Urban Infrastructure Investment Program - Tranche 2	Department /Division	SARD/SAUW
	Country Borrower	India India	Executing Agency	Guwahati Development Department
2.	Sector	Subsector(s)	1	ADB Financing (\$ million)
1	Water and other urban infrastructure and services	Urban flood protection		58.00
		Urban policy, institutional and capacity development Urban water supply		2.00
				Total 149.00
3.	Strategic Agenda	Subcomponents	Climate Change Inf	
	Inclusive economic growth (IEG) Environmentally sustainable growth (ESG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive Disaster risk management Urban environmental improvement	Adaptation (\$ million Climate Change im Project	pact on the High
4.	Drivers of Change	Components	Gender Equity and	
	Governance and capacity development (GCD)	Institutional development	Effective gender ma (EGM)	instreaming 🖌
	Knowledge solutions (KNS) Partnerships (PAR)	Application and use of new knowledge solutions in key operational areas Civil society organizations Implementation		
5.	Poverty and SDG Targe	eting	Location Impact	
	Geographic Targeting Household Targeting SDG Targeting SDG Goals	No No Yes SDG6, SDG11, SDG13	Rural Urban	Low High
6.	Risk Categorization:	Low		
7.	Safeguard Categorizati	on Environment: B Involuntary Resettlement:	B Indigenous Peop	ples: C
8.	Financing			
	Modality and Sources			Amount (\$ million)
	ADB			149.00
		che (Regular Loan): Ordinary capital resources		149.00
	Cofinancing			0.00
	None			0.00
	Counterpart			64.00
	Government			64.00
			Total	213.00

TRANCHE AT A GLANCE

I. BACKGROUND

1. The Asian Development Bank (ADB) approved the multitranche financing facility for the Assam Urban Infrastructure Investment Program for an aggregate amount not exceeding \$200 million from ADB's ordinary capital resources on 30 September 2011. The investment program supports the Government of India's strategy to provide sustainable urban infrastructure and services in the cities of Guwahati and Dibrugarh in Assam state by improving access to water supply, sanitation, and other urban infrastructure.

2. On 17 November 2014, ADB approved a minor change in the investment program to exclude two subprojects (sewerage and a bus rapid transit system for Guwahati) and to include a new subproject for urban drainage for Guwahati. ADB approved an additional minor change in the investment program on 23 June 2017 to (i) extend the availability period under the multitranche financing facility from 30 June 2018 to 29 June 2021 based on a request from the government, and (ii) extend the date of execution of the last financing tranche from June 2014 to December 2017. Tranche 1 of the investment program amounting to \$81 million was approved on 18 November 2011, signed on 9 March 2012, and declared effective on 25 April 2012. The project amount was reduced to \$51 million after canceling \$20 million in March 2014,¹ and canceling an additional \$10 million in September 2016.² The scheduled loan closing date of the tranche 1 is 30 June 2018.

3. The Guwahati Development Department (GDD), the executing agency of the investment program, submitted through the Department of Economic Affairs of the Ministry of Finance a periodic financing request amounting to \$149 million for tranche 2 on 18 April 2017. The second tranche project will improve water supply infrastructure in Guwahati, and drainage infrastructure in Guwahati and Dibrugarh. Only 30% of Guwahati residents currently have access to piped water supply, while the rest depend on water vendors, who charge high rates, or ground water, which has high fluoride and arsenic content. Guwahati and Dibrugarh suffer from devastating floods regularly, leading to loss of life and economic hardships because of poor drainage infrastructure and inadequate solid waste management (SWM). Climate change is likely to exacerbate flooding because of projected changes in rainfall patterns and intensity.

II. ASSESSMENT OF IMPLEMENTATION

4. **Status of road map and policy framework.** The road map of the investment program is aligned with the Government of India's Eleventh and Twelfth Five-Year Plans (2007-2012 and 2012-2017), and Three-Year Action Agenda 2017–2018 to 2019–2020, which seek to achieve faster, sustainable, and more inclusive growth. The objective of the road map, prepared as part of the framework financing agreement (FFA), is to provide urban residents with basic municipal services as per national standards through quality infrastructure and creation of a sustainable environment for further investment and operations. To achieve the overall development targets of the road map, the state government of Assam has also taken up parallel development activities from other financing sources.³ The investment program considered water use efficiency, cost recovery, and institutional reforms during the design.

¹ The amount was reduced because of cancelation of a water supply contract in Guwahati, which was combined with a large water supply contract in Guwahati under the second tranche project.

² The uncommitted amount was reduced as a result of cancelation of the urban transport and sewerage subprojects.

³ These include funds from Jawaharlal Nehru National Urban Renewal Mission and Japan International Cooperation Agency.

5. **Implementation progress of tranche 1.** The project aims to improve water supply in Guwahati, and improve drainage and SWM in Dibrugarh. Four works contracts for the Guwahati water supply and Dibrugarh drainage and one design and supervision consultancy contract have been awarded. Two works contracts for the Guwahati water supply are progressing well and will be completed within the extended period of the investment program. Two works packages for SWM in Dibrugarh were awarded in the second quarter of 2017, while one package for procurement of equipment for SWM is under rebidding as on 10 October 2017. Construction activities can be undertaken in Assam for only 6–7 months as a result of prolonged and heavy rains and flooding during the monsoon season, resulting often in implementation delays. Overall, the project has achieved 25% physical progress against the elapsed loan period of 85% and is rated *potential problem.*⁴ The cumulative contract awards amounted to \$50.84 million (99.68%) and disbursement to \$15.54 million (30.47%) as of 4 December 2017. The project loan closing date will be extended coterminous with the investment program.

6. **Compliances.** Out of 24 undertakings of the FFA, 17 are being complied with and three are not yet due. Out of 31 covenants of tranche 1, one has been complied with, 21 are being complied with, four are not yet due, and four are not applicable. Four undertakings of the FFA and five project covenants related to a bus rapid transit system and/or sewerage in Guwahati are no longer applicable following the approval of a minor change in the investment program. Critical loan covenants, which may require substantial efforts to ensure compliance, are related to institutional reforms and sustainability, such as the increase in water tariff collection rate and cost recovery.⁵ The government of Assam is planning to assign all water supply assets to the Guwahati Jal Board (GJB), which was set up to manage water and sewerage services for the city of Guwahati.⁶ The GJB has engaged a consultant to help undertake institutional reforms including preparation of a plan for revised water tariffs to meet full operation and maintenance (O&M) costs. The Dibrugarh Municipal Board has issued notification framing by-laws incorporating provisions for payment of user fees by all waste generators, including households, to fund SWM on a sustainable basis.⁷

7. **Lessons learned.** The implementation of tranche 1 suffered from slow progress in the initial years because of delay in procurement of civil works, poor performance of contractors, insufficient staffing of the project management unit (PMU) and project implementation units (PIUs), and delay in environmental clearances. The GDD took corrective actions, including contractor outreach efforts to attract competent bidders. The design of the second tranche project incorporated lessons learned from the implementation of tranche 1, including use of precast concrete box-type drainage and trenchless technology to reduce construction periods and minimize social impacts. A major contract for the Guwahati water supply incorporates the design-build-operate modality to overcome capacity constraints, and to ensure sustainable O&M. Implementation arrangements will also be strengthened by (i) streamlining decision-making processes; (ii) retaining only one consultant for design, management, and supervision; and (iii) defining the job descriptions of the PMU, PIUs, and consultants to avoid duplication of work.

⁴ The disbursements are lower than projections for the third quarter of 2017 but will pick up once the construction activity resumes from September 2017, and the project is expected to be on track by the end of 2017.

⁵ The deadline will be extended from 2017 to 2020 for two institutional reforms and sustainability undertakings: (i) achieving the water tariff collection rate of 90%, and (ii) adopting and implementing a water tariff revision plan to ensure the water tariff level is sufficient to cover the O&M costs and SWM user charges. These new deadlines will apply to both the tranches, and have been reflected in the draft loan agreement.

⁶ At present, the water supply facilities in Guwahati are operated by three separate entities: the Guwahati Municipal Corporation, Assam Urban Water Supply and Sewerage Board, and the Public Health Department.

⁷ The by-laws are framed as per Rule 15(e) of Solid Waste Management Rules, 2016.

8. **Environment.** The implementation of environmental safeguards is satisfactory based on site visits, reviews of monitoring reports, and discussions with stakeholders. ADB reviewed and approved initial environmental examinations (IEEs) and environmental management plans (EMPs), which were disclosed on the ADB website, and relevant information was shared with local stakeholders. During the implementation, no major safeguard issues were identified and no major gaps in EMP implementation noticed. Grievance redress mechanisms (GRMs) were established and no complaints were received. Issues identified during due diligence relate to (i) strengthening occupational health and safety measures, particularly the availability of personal protective equipment, first aid, adequate toilet and bathing facilities for workers, safe movement at the construction sites, and maintenance of accident logs; (ii) improving materials storage and handling, such as covering stockpiles to protect from dust and erosion, safely disposing of construction wastes and ensuring disposal in pre-identified locations; and (iii) posting contact numbers on boards. All environmental clearances as per local laws were obtained. Semiannual environmental monitoring reports are being submitted and publicly disclosed regularly.

9. **Social.** No major social safeguards issues were identified based on site visits, review of monitoring reports, and discussions with affected people and other stakeholders. ADB reviewed and approved the due diligence reports and resettlement plans, which were disclosed on the ADB website and relevant information was shared with relevant stakeholders. Semiannual social safeguards monitoring reports are being submitted and publicly disclosed regularly. No major complaints related to social safeguards or indigenous peoples were reported during implementation of the project. Appointment of social safeguards officers in the PMU and PIUs and appointment of a design, management, and supervision consultant is expected to further improve (i) timely updating of resettlement plans, (ii) timely submission of semiannual safeguards monitoring reports for disclosure, (iii) meaningful consultation with project-affected people and communities, and (iv) dissemination of the project GRMs and procedures to all affected people and communities.

10. **Gender.** As the project was classified as effective gender mainstreaming, a gender action plan (GAP) and a consultation and participation strategy were prepared to engage and empower the poor and women. These are being implemented satisfactorily with the assistance of a nongovernment organization (NGO) in Dibrugarh. The implementation in Guwahati has been slow due to initial delays in the appointment of NGOs. The GAP monitoring reports have been submitted in a timely manner since the fourth quarter of 2014.

III. PERIODIC FINANCING REQUEST

A. Impact and Outcome

11. Tranche 2 is aligned with the following impact: access to sustainable water supply, sanitation, and urban infrastructure facilities for the urban population in Guwahati and Dibrugarh cities of Assam improved.⁸ It will have the following outcome: quality and sustainability of water supply in Guwahati, and drainage services in Guwahati and Dibrugarh improved⁹.

B. Outputs

12. Tranche 2 will have three outputs:

⁸ Government of India, National Institution for Transforming India. 2017. India Three-Year Action Agenda (2017–2018 to 2019–2020). New Delhi. <u>www.niti.gov.in/writereaddata/files/coop/ActionPlan.pdf.</u>

⁹ The design and monitoring framework for tranche 2 is in Appendix 1.

- (i) Output 1: Metered water supply infrastructure in Guwahati improved. The second tranche project will provide 24-hour metered piped water supply to approximately 350,000 residents in the southeastern zone of Guwahati by 2022. The output includes (a) construction of a 155 million liters per day water intake with pumping station, 2.3 kilometers (km) of raw water transmission lines, a 98 million liters per day water treatment plant, and a 500 km water distribution network connecting over 70,000 households; and (b) preparation of water supply user charge plans with special subsidized rates for low-income households and households headed by women.
- (ii) Output 2: Drainage system in Dibrugarh and Guwahati improved. In Dibrugarh, the output will include rehabilitation of 13 km of the Dibrugarh town protection drain, and construction of 12 km of secondary drains, culverts, and allied works.¹⁰ In Guwahati, the outputs will include desilting 1,100 km of existing drains using flood control equipment, constructing priority flood control works, ¹¹ establishing community O&M committees for drainage system management (30% women), and community awareness campaigns on sanitation, hygiene, health, and social and gender-related issues with 50% women's participation in all campaigns.
- (iii) Output 3: Project management capacity of implementing agencies and urban local bodies strengthened. The output includes a gender audit conducted and the gender strategy of Urban Development Department (UDDs) prepared and approved; at least 250 staff of urban local bodies (ULBs) and implementing agencies (30% women) trained; O&M manuals emphasizing gender and social inclusive considerations prepared and disseminated; and an automated building permit system developed.

C. Investment and Financing Plans

13. The tranche is expected to cost \$213.0 million (Table 1).¹²

Item	Amount ^a
A. Base Cost ^b	
1. Water supply facilities in Guwahati	113.2
2. Urban drainage systems in Dibrugarh and Guwahati	68.6
3. Capacity development of ULBs and implementing agencies	1.1
Subtotal (A)	182.9
B. Contingencies ^c	21.7
C. Financing Charges ^d	8.4
Total (A+B+C)	213.0

Table 1: Tranche Investment Plan (\$ million)

ADB = Asian Development Bank, ULBs = urban local bodies.

^a In mid-2017 prices; exchange rate of \$1 = ₹65 is used.

^b Includes taxes and duties of \$19.3 million to be financed from government resources by cash contribution.

^c Physical contingencies are computed at 6.0% for civil works and equipment. Price contingencies are computed at 1.4%–1.5% on foreign exchange costs and 5.5%–5.8% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

¹⁰ The proposed works under the second tranche project are a continuation of the works being executed under tranche 1 to increase channel flow by providing reinforced concrete channel to enlarge drains, and widening road culverts along the Dibrugarh town protection drain.

¹¹ Guwahati Smart City Limited is developing flood control plans for Guwahati city under the Smart Cities Mission. The priority works for drain intercepts and pumping will be identified by the end of 2017 after completion of studies being undertaken by consultants appointed by Guwahati Smart City.

¹² The cost estimates have been prepared by the PMU based on subproject appraisal reports.

^d Includes interest and commitment charges. Interest during construction for the ADB loan has been computed at the 5-year United States dollar fixed-swap rate (1.79%) plus a spread of 0.50% and a maturity premium of 0.10%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Source: Asian Development Bank estimates.

14. The government has requested a loan of \$149 million from ADB's ordinary capital resources to help finance the project. The loan will have a 25-year term, including a 5-year grace period, an annual interest rate determined following ADB's London interbank offered rate (LIBOR)-based lending facility, a 20-year straight line repayment method, a commitment charge of 0.15% per year, and such other terms and conditions as set forth in the loan and project agreements.¹³

15. The financing plan is in Table 2. The ADB loan will partly finance civil works, equipment, consulting services, capacity building, project administration costs, and contingencies. The government of Assam has provided ADB with (i) reasons for its decision to borrow under ADB's London interbank offered rate (LIBOR)-based lending facility based on the terms and conditions, and (ii) an undertaking that the choice was its own decision and not made based on any communication or advice from ADB.

Table 2: Financing Plan		
Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (regular loan)	149.00	70.00
Government	64.00	30.00
Total	213.00	100.00

Source: Asian Development Bank estimates.

D. Implementation Arrangements

16. The government of Assam set up a special-purpose vehicle, the Assam Urban Infrastructure Development and Management Agency (AUIDMA), in February 2017 to provide functional autonomy for implementation of the investment program.¹⁴ All other arrangements, as included under Schedule 3 of the FFA, are in place for ensuring the agreed institutional arrangements for the project implementation.

17. The implementation arrangements are summarized in Table 3 and described in detail in the project administration manual (Appendix 4).

Aspects	Arrangements	
Implementation period	October 2016 to January 2021 ^a	
Estimated completion	The project completion date is 31 January 2021.	
date	(The loan closing date is 29 June 2021.)	
Management		
(i) Oversight body	Empowered Committee of the government of Assam chaired by the chief secretary of government of Assam. Members include principal secretary of GDD (member–secretary), principal secretaries of the UDD and Planning	

Table 3: Implementation Arrangements

 ¹³ The loan will follow the straight-line method of repayment. The average maturity is 15.25 years and the maturity premium payable to ADB is 0.1% per annum.
 ¹⁴ The AUIDMA has been registered as a society under the Societies Registration Act 1860 and is in the process of

¹⁴ The AUIDMA has been registered as a society under the Societies Registration Act 1860 and is in the process of becoming able to sanction, approve, implement, and monitor investment program activities and other urban infrastructure projects assigned by the government of Assam. Once the AUIDMA is fully operational, the PMU or PIU will move from the GDD to the AUIDMA.

Aspects	Arrangements		
	and Development Department; commissioner and secretaries of Finance Department, Transport Department, and Public Works Department (Roads);		
	secretaries of Forests and Environ	nment Department, W	ater Resource
	Department, Revenue Departmen		
	Department; and the investment p	program project direct	or.
(ii) Executing agency	GDD		
(iii) Key implementing agency	PMU working under GDD and/or	AUIDMA (15 staff)	
(iv) Implementation units	PIU in Guwahati under GDD (17 staff)		
() I	PIU in Dibrugarh under GDD (14 s		
Procurement	International competitive bidding	2 contracts	\$112.8 million
	National competitive bidding	3 contracts	\$57.0 million
Consulting services	Quality- and cost-based	956 person-	\$5.2 million
_	selection	months (national)	
	Quality-based selection	104 person-	\$0.3 million
		months	
	Individual consultant selection	10 person-months	\$0.2 million
Retroactive financing	Advance contracting is for the procurement of works and consulting services		
and/or advance	under the second tranche project. Retroactive financing will apply up to 20% of		
contracting	the loan amount for the above contracts incurred prior to the effectiveness of		
	the loan agreement but not earlier than 12 months prior to the signing of the		
	loan agreement.		
Disbursement	The loan proceeds will be disbursed in accordance with ADB's Loan		
	Disbursement Handbook (2017, as amended from time to time) and detailed		
	arrangements agreed upon betwe		

ADB = Asian Development Bank, AUIDMA = Assam Urban Infrastructure Development and Management Agency, GDD = Guwahati Development Department, PIU = project implementation unit, PMU = project management unit, UDD = Urban Development Department.

^a The advanced contract for the Dibrugarh drainage package under the second tranche project was signed in October 2016, however no expenditure has been incurred on the contract.

Source: Asian Development Bank estimates

E. Project Readiness

18. Readiness of the second tranche project is high with the following status:

- (i) The PMU and PIUs are adequately staffed (46 out of 51 staff appointed), and have improved their capacity to handle the investment program effectively, including implementing the second tranche project. The professional staff have been recruited with compensation at par with market conditions to avoid frequent staff turnover;
- (ii) All contracts except for the Guwahati drainage are expected to be awarded by the fourth quarter of 2017;¹⁵
- (iii) The recruitment of consultants under a major design, management, and supervision consulting contract in the second tranche project is underway following quality- and cost-based selection (quality–cost ratio of 90:10);
- (iv) More than 90% of the land required under the second tranche project is already owned by the government; and
- (v) Obtaining no-objection certificates including environmental clearances is ongoing.

¹⁵ For the Guwahati drainage subproject, the safeguards documents will be available by December 2017 and tendering is expected to be initiated by January 2018.

F. Advance Contracting and Retroactive Financing

19. ADB approved the government's request for advance contracting for procurement of civil works and consulting services, and retroactive financing (in principle) of expenditures for the same not exceeding an amount equal to 20% of the loan amount, incurred before loan effectiveness but not earlier than 12 months before the signing of the loan agreement. The government has been advised that the approval of advance contracting and retroactive financing will not constitute a commitment by ADB to finance any ensuing project.

IV. DUE DILIGENCE

A. Technical

20. All proposed subprojects under the second tranche project follow the subproject selection criteria in Schedule 4 of the FFA. All the designs of the subprojects have been completed in accordance with national and international standards. The GDD reviewed and approved detailed project reports to ensure compliance with the government's urban policies and technical standards. The technologies selected are sound and appropriate, and were assessed based on life cycle cost analysis, and are compatible with local conditions and capabilities.

B. Economic and Financial Analysis

21. **Economic analysis.** The economic rationale for the government's intervention is sound, as the second tranche project aims to provide more sustainable basic urban services in Guwahati and Dibrugarh. Economic viability was assessed for three major components under the second tranche project: (i) water supply in southeast Guwahati, (ii) the urban drainage system in Guwahati, and (iii) the urban drainage system in Dibrugarh. The investments under the tranche 1 for water supply in Guwahati and drainage in Dibrugarh are also considered in the economic analysis as these components are an extension of the ongoing project and cover the same project beneficiaries. The estimated economic internal rates of return of these components range from 11.1% to 14.5%, while the combined economic internal rate of return was estimated at 12.4%, higher than the economic opportunity cost of capital estimated at 9.0%, indicating significant economic returns. Sensitivity analysis revealed that the results are also satisfactory, except under the scenario of all downside risks combined, i.e., a capital cost overrun of 20%, an overrun in O&M costs of 20%, a decline in estimated benefits of 20%, and a 1-year delay of implementation (Appendix 6).

22. **Financial analysis.** A financial analysis was conducted for the second tranche project to ensure that it is sustainable and to determine the extent to which its revenue-generating component will cover O&M costs. An incremental recurrent costs analysis was conducted for the water supply component since the water tariffs are expected to recover O&M costs only. The analysis concluded that the water supply component would generate sufficient revenues for full O&M cost recovery through the GJB's new tariff structure and state government financial support to cover revenue shortfall. For the drainage components, a municipal cash flow analysis was conducted as there is no user charge for the drainage services in both ULBs. The financial projections of project ULBs demonstrate that the revenue account will remain in surplus as long as collection efficiency improves, arrears are recovered with adequate provisioning for bad debts is made, operations and financial management are computerized, and there is continued state government financial support. Although the project is justified primarily on economic development and financial sustainability grounds, both the tranche projects of the investment program will help ULBs to improve financial sustainability (Appendix 7).

C. Governance

23. The governance arrangement under the investment program, including the Empowered Committee, is generally functioning well, and will improve further when the AUIDMA becomes fully operational. The GDD has committed to comply with policy targets agreed under the investment program. The financial management capacity of the GDD, PMU, and PIUs has been assessed *moderate*. ADB has provided technical support to PMU staff for training on ADB procurement and disbursement procedures. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the GDD.

24. All key project-related information (including the scope, financial expenditure, institutional arrangements, and safeguard reports such as initial environmental examinations) and procurement-related information will be disclosed to maximize transparency.

D. Poverty, Social, and Gender Dimensions

25. The investment program supports Sustainable Development Goal 6 (clean water and sanitation), Goal 11 (sustainable cities and communities), and Goal 13 (combat climate change). The GAP (Appendix 14) for the second tranche project will be implemented under the supervision of the PMU and PIUs, supported by NGOs and consultants in Guwahati and Dibrugarh. The GAP sets out the following: (i) 24-hour water supply will be provided to 350,000 residents (20% from low-income households and 11% from households headed by women); (ii) subsidized user charge plans for water supply will be introduced for 20% of low-income households and 11% of households headed by women; (iii) households headed by women and low-income households will be identified, and data maintained by PIUs; (iv) pre- and post-time-use survey of project effectiveness will be undertaken to assess average time saving (reduced time poverty) by women; (v) vocational training programs for community (30% women); (vi) a specific section in O&M manuals on drainage systems and their impact on health, specifically of women and children, awareness of and education on women's role in household drainage; (vii) O&M manual dissemination workshops (30% women); (viii) a gender strategy for UDD and an implementation capacity development plan based on the findings of the gender audit; (ix) capacity building for PMU and PIU staff on gender mainstreaming (33% female participation); (x) provision for a gender specialist and gender focal points in the PMU and PIU to provide technical support on GAP implementation: (xi) provision for an annual GAP budget and report on total expenditure on GAP activities; and (xii) a project performance monitoring system with gender indicators and updated annually with sex- and social-disaggregated data. Appendix 8 provides summary of poverty reduction and social strategy.

E. Safeguards

26. **Environment**. The environmental safeguards classification of the second tranche project is category B. The environmental assessment and review framework was updated to provide guidance in screening, categorizing, and preparing subprojects, and for impact mitigation planning in the event unanticipated environmental impacts arise during implementation. The draft IEEs prepared for the Guwahati water supply, Dibrugarh drainage, and Guwahati drainage goods packages confirmed that there were no significant environmental impacts. The IEEs for the Guwahati drainage works will be prepared upon completion of the design, and disclosure and consultation requirements will be met. Subproject sites are located outside sensitive areas, and any impacts during construction and operation can be avoided and/or mitigated through proper design, high-quality construction, and O&M practices. IEEs form part of the bidding and contract documents. Operations impacts will not be significant and will be mitigated through measures

identified in the EMP and O&M manual to be developed during project implementation. Disclosure of the draft IEEs should be in a language and form understandable by stakeholders and affected people. Consultations will be conducted with the stakeholders and affected people throughout project implementation to ensure their views are considered and issues are addressed. Implementation and monitoring of environmental safeguards will be reported to ADB on a semiannual basis (Appendix 9 and 10).

27. **Increased climate change adaptation and climate resilience.** The climate risk rating for the investment program is high and derived from the AWARE tool for climate risk screening.¹⁶ The project areas are prone to flooding, lightning, and tropical cyclone wind hazard. Monsoon intensity is projected to increase in the future and therefore risks of river flooding are projected to increase. Climate-resilient design is being incorporated in urban drainage design to provide adequate capacity to avoid overflows. Electro-mechanical equipment for water supply systems in Guwahati will be installed in elevated locations to avoid flood risk.¹⁷

28. **Social**. The second tranche project is assessed category B for involuntary resettlement impacts and category C for indigenous peoples. The draft due diligence reports for the Guwahati water supply works and the resettlement plan for the Dibrugarh drainage works were prepared. No impacts on indigenous peoples are expected, since the locations of the proposed activities are mainly in urban areas (Appendix 12).¹⁸ Social safeguards impacts have been assessed and the mitigation measures proposed are adequate. The key involuntary resettlement impacts are as follows: (i) acquisition of a small piece of private land from two titleholders; (ii) temporary impacts to 97 shop owners;¹⁹ (iii) five residential-cum-commercial shops and four houses will face temporary access restrictions during construction and/or partial loss of structure (<10%); (iv) structure loss and access restrictions for three encroachers; (v) permanent partial structure loss for three titleholders; and (vi) temporary access restrictions during construction to one bamboo footbridge. The total affected population is 679, of which 667 face temporary impacts and 12 face partial structure and land loss (Appendix 11, 13 and Supplementary Appendix C). No household faces permanent displacement or permanent loss of livelihood. The resettlement plan for the Guwahati drainage works will be submitted and disclosed upon completion of the design.²⁰ All the social safeguards documents will be disclosed and translated into a language and form understandable to all stakeholders and affected people. The project's GRM is being strengthened by the provision of information on each of the construction sites and the appointment of a designated staff to receive any complaints. At least one safeguard officer is assigned for the PMU and PIUs to strengthen the project's institutional capacity on safeguards management.

¹⁶ AWARE is an online, climate risk screening tool, designed to help identify and understand the potential risks from climate change.

¹⁷ Climate risk assessment and management reporting is updated and attached in Supplementary Appendix A. Climate adaptation is estimated to cost \$83 million. ADB will finance 70% of adaptation costs.

¹⁸ In the event, any indigenous people issues are identified during project implementation, the required mitigation will follow the requirements under the Safeguard Policy Statement (2009) and the approved indigenous peoples planning framework of the multitranche financing facility.

¹⁹ Out of 97 shop-owners, 93 will be assisted to temporarily shift to the other side of the road during construction and four will face temporary access restrictions during construction, for which temporary income loss of a maximum of 15 days is anticipated.

²⁰ Any resettlement impacts will be addressed through a resettlement plan and following the resettlement framework (Appendix 11 and Appendix 13).

F. Risks and Mitigating Measures

29. Major risks and mitigating measures are summarized in Table 4 and described in detail in the updated risk assessment and risk management plan (Appendix 15). Integrated benefits and impacts from the second tranche project are expected to outweigh the costs.

Table 4. Summary of RISKS and Willgaling Measures		
Risks	Mitigating Measures	
Delay in adoption of institutional reforms could negatively impact on the capacity of urban institutions to manage the assets in a sustainable manner.	Capacity development consultants will be engaged to prepare a plan for institutional reforms, tariff setting, and cost recovery, in addition to institutional reforms being implemented under national flagship programs.	
Climate change risks and extreme weather delay project implementation.	Climate risk assessment is done to inform the project design in building climate resilience. The construction activities will be properly planned considering rainy seasons. Trenchless technology and prefabricated material will speed up construction.	
Delays in completion because of poor performance of contractors, causing	The executing agency has been successful in engaging competent and qualified contractors through a successful	
time and cost overruns.	bidding process.	
Source: Asian Development Bank		

Table 4: Summary of Risks and Mitigating Measures

Source: Asian Development Bank.

G. Risk Categorization

30. The categorization of the second tranche project is low risk, as it fulfills all the required features.²¹

V. ASSURANCES AND CONDITIONS

31. The Government of India and the executing agency have 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 project administration manual (Appendix 4) and loan documents.

32. The Government of India and the executing agency have agreed with ADB on certain covenants for the project, which are set forth in the loan agreement and project agreement.

VI. RECOMMENDATION

33. On the basis of the approval by ADB's Board of Directors for the provision of loans under the multitranche financing facility in an aggregate principal amount not exceeding \$200,000,000 to India for the Assam Urban Infrastructure Investment Program, it is recommended that the President approve the proposed tranche as described in para. 14 and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements for the proposed tranche.

²¹ Project features include (i) a loan amount not exceeding \$200 million, (ii) a sound record of previous ADB experience in the sector for Assam, (iii) reasonable executing agency capacity in terms of externally financed project administration, and (iv) safeguard categorization other than A.