



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

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Project Number: 52320-002  
August 2021

## Proposed Loans Democratic Republic of Timor-Leste: Presidente Nicolau Lobato International Airport Expansion Project

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Asian Development Bank

## CURRENCY EQUIVALENTS

The currency of Timor-Leste is the United States dollar.

## ABBREVIATIONS

AACTL	–	Autoridade de Aviação Civil de Timor-Leste (Civil Aviation Authority of Timor-Leste)
ADB	–	Asian Development Bank
ANATL	–	Administração de Aeroportos e Navegação Aérea de Timor-Leste (Air Navigation Administration of Timor-Leste)
ATCT	–	air traffic control tower
CAFI	–	Conselho de Administração do Fundo Infraestrutura (Council for the Administration of the Infrastructure Fund)
COVID-19	–	coronavirus disease
EMP	–	environmental management plan
GBV	–	gender-based violence
ICAO	–	International Civil Aviation Organization
IFC	–	International Finance Corporation
IPMU	–	integrated project management unit
JICA	–	Japan International Cooperation Agency
LACSP	–	land acquisition, compensation, and support plan
LAR	–	land acquisition and resettlement
LIBOR	–	London interbank offered rate
m	–	meter
MOTC	–	Ministry of Transport and Communications
O&M	–	operation and maintenance
PAM	–	project administration manual
PNLIA	–	Presidente Nicolau Lobato International Airport
PPP	–	public–private partnership
RESA	–	runway end safety area
SEAH	–	sexual exploitation, abuse, and sexual harassment

## NOTE

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

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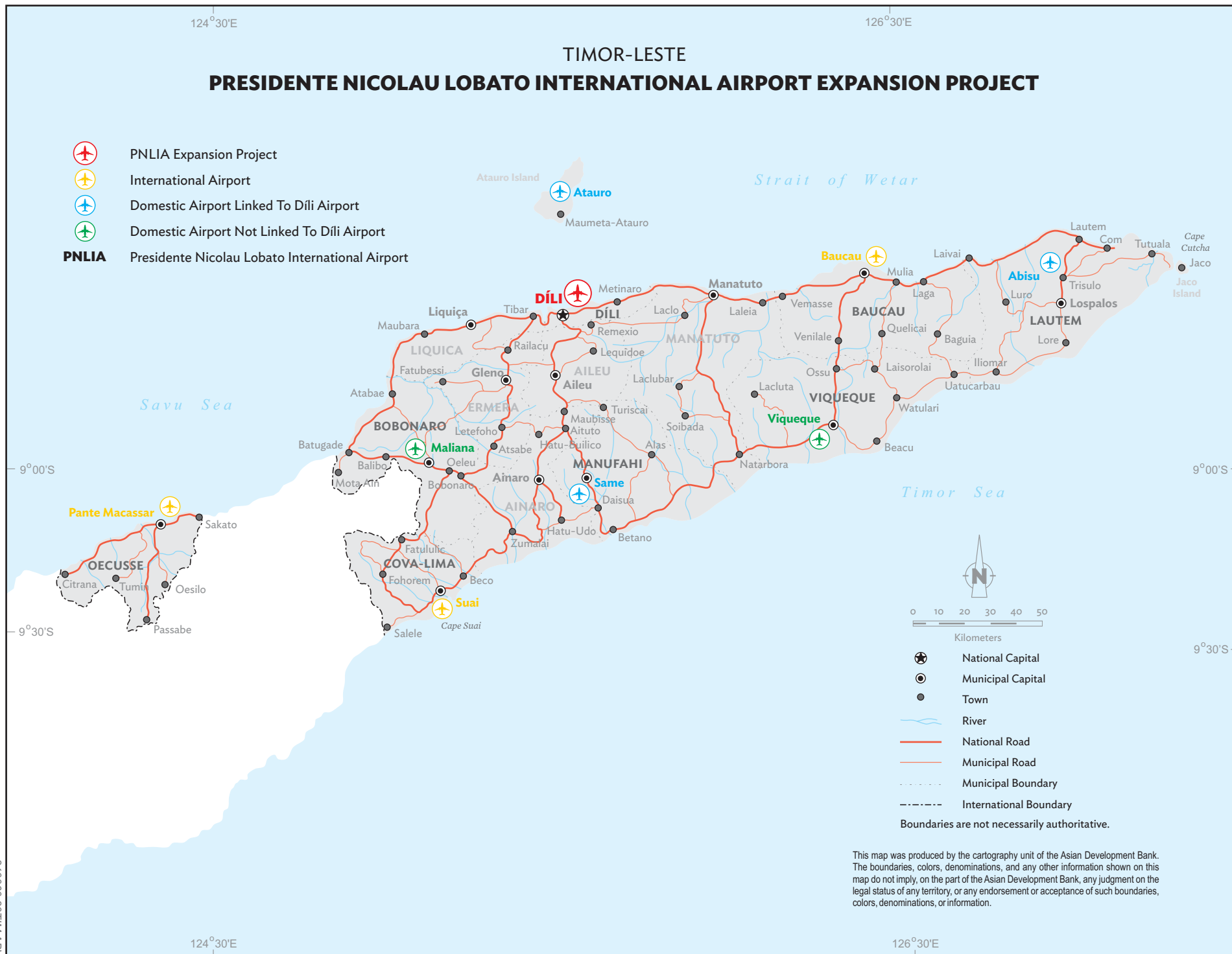
## PROJECT AT A GLANCE

1. Basic Data		Project Number: 52320-002	
Project Name	Presidente Nicolau Lobato International Airport Expansion Project	Department/Division	SERD/SETC
Country Borrower	Timor-Leste, The Democratic Republic of Timor-Leste, The Democratic Republic of	Executing Agency	Council for Administration of the Infrastructure Fund (also Conselho Administrativo do Fundo Infraestrutura)
Country Economic Indicators	<a href="https://www.adb.org/Documents/LinkedDocs/?id=52320-002-CEI">https://www.adb.org/Documents/LinkedDocs/?id=52320-002-CEI</a>		
Portfolio at a Glance	<a href="https://www.adb.org/Documents/LinkedDocs/?id=52320-002-PortAtaGlance">https://www.adb.org/Documents/LinkedDocs/?id=52320-002-PortAtaGlance</a>		
2. Sector		ADB Financing (\$ million)	
✓ Transport	Air transport		135.00
		Total	135.00
3. Operational Priorities		Climate Change Information	
✓ Accelerating progress in gender equality		GHG reductions (tons per annum)	0.000
✓ Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability		Climate Change impact on the Project	High
✓ Strengthening governance and institutional capacity			
✓ Fostering regional cooperation and integration			
		ADB Financing	
		Adaptation (\$ million)	1.81
		Mitigation (\$ million)	0.00
		Cofinancing	
		Adaptation (\$ million)	0.00
		Mitigation (\$ million)	0.00
Sustainable Development Goals		Gender Equity and Mainstreaming	
SDG 9.1		Some gender elements (SGE)	✓
SDG 13.a			
		Poverty Targeting	
		General Intervention on Poverty	✓
4. Risk Categorization:		Complex	
5. Safeguard Categorization		Environment: A Involuntary Resettlement: A Indigenous Peoples: C	
6. Financing			
Modality and Sources		Amount (\$ million)	
ADB		135.00	
Sovereign Project (Concessional Loan): Ordinary capital resources		50.00	
Sovereign Project (Regular Loan): Ordinary capital resources		85.00	
Cofinancing		44.00	
Japan International Cooperation Agency - Project grant (Not ADB Administered)		44.00	
Counterpart		30.00	
Government		30.00	
Total		209.00	
Currency of ADB Financing: US Dollar			

# TIMOR-LESTE

## PRESIDENTE NICOLAU LOBATO INTERNATIONAL AIRPORT EXPANSION PROJECT

-  PNLIA Expansion Project
-  International Airport
-  Domestic Airport Linked To Díli Airport
-  Domestic Airport Not Linked To Díli Airport
- PNLIA** Presidente Nicolau Lobato International Airport



## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on proposed loans to the Democratic Republic of Timor-Leste for the Presidente Nicolau Lobato International Airport Expansion Project.

2. The project will improve facilities at Presidente Nicolau Lobato International Airport (PNLIA) in Dili, the main gateway airport to Timor-Leste, with the extension of the airport runway to meet international safety standards and construction of a new air traffic control tower (ATCT), taxiways, aprons, and an aeronautical ground lighting system to support the upgraded runway. The project will also enhance the organizational and management capacity of the Ministry of Transport and Communications (MOTC), the Air Navigation Administration of Timor-Leste (ANATL), and the Civil Aviation Authority of Timor-Leste (AACTL) to ensure the long-term sustainability of the airport facility and operation. The project will help to establish better air connectivity within and outside the country by enhancing the efficiency and safety of air transport of passengers and goods. Private sector participation is envisaged for the operation and maintenance (O&M) of the airport, and the government has already appointed the International Finance Corporation (IFC) as its transaction advisor.

## II. THE PROJECT

### A. Rationale

3. **Macroeconomic context.** In 2019, Timor-Leste's non-oil gross domestic product was \$1.7 billion while its oil gross domestic product was \$2.0 billion. With production from the current oil fields forecast to end in 2022–2023, there is an urgent need for economic diversification. Developing a sustainable non-oil economy, however, has been a challenge for Timor-Leste. In 2020, the non-oil economy was (i) estimated to have contracted by 7.9% (the third year of contractions since 2017), and (ii) at its lowest level since 2009, after limited recovery of 1.8% in 2019.<sup>1</sup> The severe economic downturn in 2020 was because of (i) the global economic slowdown; (ii) the state-of-emergency measures, including the almost complete lockdown of the country and the closure of PNLIA, as part of various measures to contain the coronavirus disease (COVID-19); and (iii) the political uncertainties that led to the rejection of the 2020 budget, which curtailed government spending in the first three quarters of the year (footnote 1). Poor quality infrastructure is one of the key constraints to private sector development and a broader structural transformation of the economy. Well-targeted investments in infrastructure are considered essential to achieve sustainable and inclusive growth in the country and to accelerate economic recovery in the post-COVID-19 era. The government has identified tourism, agriculture, and petrochemicals as the leading sectors in its strategy for economic growth and diversification.<sup>2</sup> Developing tourism requires focused investments aimed at increasing easy access to the country, especially given the stiff competition with established tourist destinations in neighboring countries.<sup>3</sup>

4. **Importance of air transport to the economy.** The government is seeking accession to the World Trade Organization as well as full membership in the Association of Southeast Asian Nations and hopes to reap direct benefits through closer trade, investment, and labor market

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<sup>1</sup> Asian Development Bank (ADB). *Asian Development Outlook 2021*. Manila.

<sup>2</sup> Government of Timor-Leste. 2020. *Economic Recovery Plan*. Dili.

<sup>3</sup> ADB. 2016. *Country Partnership Strategy: Timor-Leste, 2016–2020*. Manila; ADB. 2020. *Country Operations Business Plan: Timor-Leste, 2021–2023*. Manila. The country operations business plan, 2021–2023 extended the country partnership strategy, 2016–2020 to cover up to 2022. The country partnership strategy for Timor-Leste, 2023–2027 will be prepared for the approval of the ADB Board of Directors in 2022.

linkages. To make the most of these opportunities, the government will require further investments in infrastructure and improved connectivity, both international and domestic, which will contribute to more efficient movement of goods and people.

5. **Air transport sector in Timor-Leste.** Timor-Leste has four international airports (including PNLIA) and five domestic airports.<sup>4</sup> ANATL operates all airports and AACTL functions as the regulator for the air transport sector. Both ANATL and AACTL are under the MOTC. PNLIA plays the role of the gateway airport to Timor-Leste and handled 0.17 million passengers in 2019, of which 90% were international. Even prior to the COVID-19 pandemic, the PNLIA connected to only three countries (Australia, Indonesia, and Singapore), which posed challenges for Timor-Leste in establishing strong linkages with a broader market.<sup>5</sup> The limited air connectivity is caused by, among others, serious concerns with aviation safety in Timor-Leste. On the policy and regulatory side, the government introduced laws and regulations to certify aerodromes in the country only in 2019 with support from the Government of Australia. Such certification is a safety requirement under the International Civil Aviation Organization (ICAO) standards.<sup>6</sup>

6. **Constraints of the Presidente Nicolau Lobato International Airport.** Even though PNLIA is the main airport of Timor-Leste, its substandard airside facilities have been a serious challenge to national aviation safety.<sup>7</sup> PNLIA's runway is 1,850 meters (m) in length and 30 m in pavement width. From a safety perspective, the runway can accommodate practically only up to Code C aircrafts, and with significant restrictions on payload because of the short runway.<sup>8</sup> The runway also does not have adequate measures for safe aerodrome operation. For example, ICAO standards specify that runway end safety areas (RESAs) shall be at least 90 m long for safe aerodrome operation; however, PNLIA's runway does not have any RESAs. These issues pose challenges to PNLIA's route development and better air connectivity, because airlines are subject to commercial penalties from having to operate with reduced payloads (i.e., fewer passenger seats occupied) and extra safety measures. The ATCT is also in poor condition and does not fully meet the minimum response time requirement specified by ICAO standards.<sup>9</sup> The critical investment requirements to address these deficiencies and meet the challenges to aviation safety and economic diversification are best met through public investments because of the long gestation investment requirements, with private sector participation scoped out for O&M.

7. **Relevant government policy and program.** The Timor-Leste Strategic Development Plan, 2011–2030 identified reforms to upgrade infrastructure, with an emphasis on achieving rapid

<sup>4</sup> The other three international airports are (i) the Baucau airport in the Baucau Municipality in eastern Timor-Leste, (ii) the Suai airport in the Cova Lima Municipality in southern Timor-Leste, and (iii) the Oecusse airport in the East Timorese Oecusse Special Administrative Region.

<sup>5</sup> Since the outbreak of the COVID-19 pandemic, PNLIA has served only one direct route to Darwin, Australia.

<sup>6</sup> AACTL issued decree-law no. 32 for aerodrome certification in December 2019. ANATL applied for an aerodrome certificate for PNLIA in 2019, but the certification procedure has not been finalized yet.

<sup>7</sup> Sector Assessment (Summary): Transport (Air Transport) (accessible from the list of linked documents in Appendix 2).

<sup>8</sup> Aircraft codes are based on a combination of the aircraft wingspan and the outer main gear wheel span. According to the ICAO Aerodrome Design Manual, Code C aircrafts refer to those with a wingspan of 24–36 m and an outer main gear wheel span of 6–9 m, such as Boeing 737 and Airbus A320. Code E aircrafts refer to those with a wingspan of 52–65 m and an outer main gear wheel span of 9–14 m. The length of the runway at PNLIA warrants operation of Code C aircrafts only with significant payload restrictions. The payload restriction on Code E aircrafts is too prohibitive, preventing any such operation.

<sup>9</sup> The ICAO Standards and Recommended Practices recommend that the response time be kept below 4 seconds under all circumstances. Although the location of the ATCT satisfies the requirement for line-of-sight distances for the runway, it has a constrained view of the eastern part of the runway, failing to meet the minimum response time standard.



growth and ensuring that no part of the country is left behind.<sup>10</sup> The expansion of PNLIA, as Timor-Leste's gateway to the global economy, is one of the strategic priority projects of the Infrastructure Fund listed in the budget book of the country, managed by the Council for the Administration of the Infrastructure Fund (CAFI).<sup>11</sup> The expansion of PNLIA aims to improve the country's connectivity and productivity, underpinned by detailed plans and targets for progress and underscored by the country's aspiration to become a full member of the Association of Southeast Asian Nations. The PNLIA is planned to become a modern international airport compliant with globally accepted safety standards and with the capacity to handle more than 1 million passengers annually by 2050. With support from IFC, the government prepared the PNLIA master plan in October 2019.<sup>12</sup> The airport development program incorporated in the PNLIA master plan will be implemented in a staged manner, and this project supports the first stage. O&M of the airport is expected to engage the private sector, and the government is exploring options, assisted by IFC.

8. The government's aspiration is also reflected in its policies and civil aviation sector master plan: the National Policy for Civil Aviation (2017) aims to promote national tourism by strengthening air transport infrastructure and services, and the Transport Sector Master Plan (2018) recommends safety and services in public air transport to be improved. ADB provided technical assistance to support the government in exploring options for upgrading PNLIA's runway.<sup>13</sup>

9. **Strategic alignment.** As highlighted in Table 1, the project is aligned with the following operational priorities of ADB's Strategy 2030 (i) accelerating progress in gender equality; (ii) tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability; (iii) strengthening governance and institutional capacity; and (iv) fostering regional cooperation and integration.<sup>14</sup> The project also supports ADB's country partnership strategy for Timor-Leste, 2016–2020, which aims to promote economic growth and diversification by removing infrastructure bottlenecks and institutional constraints (footnote 3).

**Table 1: Alignment with Strategy 2030**

Operational Priorities	Project Contributions
Accelerating progress in gender equality	<p><b>Scale up support for gender equality.</b> The project will improve women's access to basic services through women-friendly facilities at PNLIA, such as building separate shower rooms and toilets to provide a safe working environment for female PNLIA employees. The project will also apply gender-sensitive customer service protocols.</p> <p><b>Pursue gender equality in human development.</b> The project will provide gender mainstreaming support and capacity building to the IPMU, including training on GBV-SEAH to all contracted employees and providing a grievance redress mechanism through which employees and members of the surrounding community may report GBV-SEAH and other concerns and infractions anonymously.</p>
Tackling climate change, building climate and disaster	<p><b>Support a comprehensive approach to building climate and disaster resilience.</b> The project supports the implementation of climate-</p>

<sup>10</sup> Government of Timor-Leste. 2011. [Timor-Leste Strategic Development Plan, 2011–2030](#). Dili.

<sup>11</sup> The Infrastructure Fund was established by the government in 2011 to finance core infrastructure and critical capital development projects to support the implementation of the Strategic Development Plan of Timor-Leste.

<sup>12</sup> Sector Assessment (Summary): Transport (Air Transport) (accessible from the list of linked documents in Appendix 2).

<sup>13</sup> ADB. [Timor-Leste: Preliminary Assessment for Dili Airport Runway Upgrading Project](#).

<sup>14</sup> ADB. 2018. [Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific](#). Manila.

Operational Priorities	Project Contributions
resilience, and enhancing environmental sustainability	resilient infrastructure, with designs addressing sea level rise and flooding risks during strong rainfalls, wave conditions, and storm surges.
Strengthening governance and institutional capacity	<b>Strengthen capacity and standards.</b> The project will provide capacity development support to the IPMU and the Ministry of Transport and Communications to uphold environmental and social safeguards and adhere to procurement and financial management standards.
Fostering regional cooperation and integration	<b>Enhance connectivity and competitiveness.</b> The project will improve connectivity and enhance competitiveness by addressing cross-border infrastructure needs.

GBV-SEAH = gender-based violence – sexual exploitation, abuse, and sexual harassment; IPMU = integrated project management unit; PNLIA = Presidente Nicolau Lobato International Airport.

Source: Asian Development Bank.

10. **ADB’s earlier air transport projects and lessons learned.** ADB has supported air transport infrastructure development of its developing member countries to boost economic growth through improved connectivity. As an example, the Tribhuvan International Airport improvement project in Nepal aimed at safety and capacity improvement, and it showed the importance of sustained institutional capacity building to ensure successful contract management and implementation of the project.<sup>15</sup> The project addresses these lessons by incorporating integrated institutional arrangements for implementation and providing capacity development components.

## B. Project Description

11. The project is aligned with the following impact: economic diversification and national productivity improved by ensuring better connectivity within and outside of the country (footnote 10). The project will have the following outcome: efficiency and safety of goods’ and people’s movements improved.<sup>16</sup>

12. **Output 1: Presidente Nicolau Lobato International Airport runway, air traffic control tower, and other key airport facilities improved.** The project will extend the existing 1,850 m runway westward to a 2,100 m runway, including a 166 m seaward extension, which will remove the payload restrictions on Code C aircrafts and ensure that the runway fully complies with the minimum RESA length of 90 m required under the ICAO standards for safe airfield operation.<sup>17</sup> The project will also construct new taxiways, including a partially parallel taxiway with dimensions (such as the length and distance from the runway centerline) to accommodate Code C and Code E aircrafts. The aprons will also be reconfigured to complement these airside improvements. In addition, the ATCT will be relocated to ensure that (i) its new location fully meets the threshold response time recommended by the ICAO standards in detecting aircraft movements, and (ii) its height covers the line of sight of aircraft movement areas such as the runway and taxiway.

<sup>15</sup> ADB. 2009. [Report and Recommendation of the President to the Board of Directors: Proposed Loan and Asian Development Fund Grant to Nepal for the Air Transport Capacity Enhancement Project](#). Manila; ADB. 2020. [Completion Report: Air Transport Capacity Enhancement Project in Nepal](#). Manila; and ADB. 2017. [Lessons from ADB Transport Projects: Moving Goods, Connecting People, and Disseminating Knowledge](#). Manila.

<sup>16</sup> The design and monitoring framework is in Appendix 1.

<sup>17</sup> The runway will also be widened from 30 m to 45 m and the runway strip protection from 150 m to 280 m to meet the ICAO requirements. These improvements will also allow the operation of Code E aircrafts, albeit with payload restrictions. The government’s PNLIA master plan suggests that PNLIA’s runway will be further extended in the medium term for the potential full operation of Code E aircrafts without any payload restrictions.

13. **Output 2: Organizational and management capacity of the integrated project management unit and the Ministry of Transport and Communications (Air Navigation Administration of Timor-Leste and Civil Aviation Authority of Timor-Leste) enhanced.** The government is working on forming an integrated project management unit (IPMU), an interministerial body comprising staff from the MOTC (ANATL and AACTL) and Ministry of Finance. The IPMU will have a technical working group, which will be responsible for day-to-day project management activities.<sup>18</sup> This output will focus on developing the capacity of the IPMU on procurement, contract and project management, financial management and accounting, and safeguards monitoring. The capacity development support is meant to achieve long-term sustainability of the airport beyond the project implementation period, so that capacity can be maintained within the IPMU and relevant ministries. A complementary technical assistance will also be provided to support capacity development of the IPMU member ministries, including particularly MOTC, and agencies for the long-term retention of knowledge and skills in safeguards.

### C. Value Added by ADB

14. ADB will work with the government and other development partners such as the Japan International Cooperation Agency (JICA), and IFC to ensure that the new infrastructure for the PNLIA is targeted with appropriate scale and leverage, and that services are delivered with improved efficiency, cost recovery, and sustainable O&M. The PNLIA is expected to be developed under a hybrid public–private partnership (PPP) modality, where ADB will finance key airport facilities, except for the new international terminal, which is under consideration to be financed by JICA, while the O&M of the project facilities will be managed by the private sector.<sup>19</sup> ADB's involvement will help the government in leveraging private sector participation in the O&M PPP transaction for the PNLIA and it will closely coordinate with JICA for better interface management during implementation. ADB will help the government in establishing institutional capacity during implementation.

#### Box: Noteworthy Features of the Project

(i) Enable Presidente Nicolau Lobato International Airport (PNLIA) to meet the International Civil Aviation Organization design and safety standards, so that more airlines can establish diverse international routes to and from Timor-Leste without payload restrictions.

(ii) Contribute to increasing PNLIA's capacity to handle potential traffic growth gradually up to 1 million passengers by 2050, which will promote tourism and economic diversification, in addition to enhancing the country's connectivity and closer economic ties with neighboring countries in the Asia and Pacific region and beyond.

(iii) Explore a public–private partnership arrangement for operation and maintenance assisted by the International Finance Corporation Transaction Advisory Services, with capital expenditure for upgrading PNLIA from the government, the Asian Development Bank, and the Japan International Cooperation Agency. The Japan International Cooperation Agency is expected to finance the new international terminal on a parallel collaborative basis.

(iv) Provide hands-on capacity building assistance to the integrated project management unit and the Ministry of Transport and Communications to help retain experience gained through the project within

<sup>18</sup> The members of the technical working group will be mostly from ANATL, the asset owner; MOTC; and other relevant ministries. The government's Interministerial Working Group will perform the functions of the IPMU until the IPMU is established.

<sup>19</sup> The government considers hybrid PPP as a transaction structure where capital investment is led by a sovereign and the O&M of the asset is led by a private sector partner.

the government; this will require close coordination to manage interfaces among relevant agencies and development partners. The government will establish the integrated project management unit with representatives from all relevant ministries and agencies to oversee the PNLIA development program.

(v) Pave the way for Timor-Leste's accession to global and regional bodies such as the World Trade Organization and the Association of Southeast Asian Nations through greater connectivity and enhanced harmonization with internationally accepted safety norms and airport management practices.

Source: Asian Development Bank.

## D. Summary Cost Estimates and Financing Plan

15. The project is estimated to cost \$165 million (Table 2). Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).<sup>20</sup>

**Table 2: Summary Cost Estimates**  
(\$ million)

Item	Amount <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>	
1. PNLIA runway, air traffic control tower, and other key airport facilities improved	124.24
2. Organizational and management capacity of the IPMU and MOTC (ANATL and AACTL) enhanced	11.30
<b>Subtotal (A)</b>	<b>135.55<sup>c</sup></b>
<b>B. Contingencies<sup>d</sup></b>	<b>25.20</b>
<b>C. Financing Charges<sup>e</sup></b>	<b>4.25</b>
<b>Total (A+B+C)</b>	<b>165.00</b>

AACTL = Autoridade de Aviação Civil de Timor-Leste (Civil Aviation Authority of Timor-Leste), ANATL = Administração de Aeroportos e Navegação Aérea de Timor-Leste (Air Navigation Administration of Timor-Leste), IPMU = integrated project management unit, MOTC = Ministry of Transport and Communications, PNLIA = Presidente Nicolau Lobato International Airport.

<sup>a</sup> Includes taxes and duties of \$2.64 million. Such amount does not represent an excessive share of the project cost. Taxes and duties will be financed by the Asian Development Bank loan proceeds (\$2.34 million) and counterpart funds (\$0.3 million), proportionally to their shares in civil works financing. The counterpart funds will be in cash.

<sup>b</sup> In early-2021 prices.

<sup>c</sup> Numbers may not sum precisely because of rounding.

<sup>d</sup> Physical and price contingencies, and a provision for exchange rate fluctuation are included.

<sup>e</sup> Includes interest, commitment, and other charges on all sources of financing.

Source: Asian Development Bank estimates.

16. The government has requested (i) a regular loan of \$85 million, and (ii) a concessional loan of \$50 million, both from ADB's ordinary capital resources, to help finance the project. The regular loan will have a 26.5-year term, including a grace period of 5 years; an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year (the interest and other charges during construction to be capitalized in the loan); and such other terms and conditions set forth in the draft regular ordinary capital resources loan agreement.<sup>21</sup> Based on the straight-line repayment method, the average loan maturity is 16 years and the maturity premium payable to ADB is 0.10% per year. The concessional loan will have a 25-year term, including a grace period of 5 years; an interest rate of 2.0% per year during the grace period and thereafter; and such other terms and conditions set forth in the draft concessional ordinary capital resources loan agreement.

<sup>20</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2).

<sup>21</sup> The United Kingdom's Financial Conduct Authority has indicated that all global market participants should assume that there will be no LIBOR publication after 2021. Therefore, ADB and other global market participants with LIBOR-linked financial products are preparing to shift to alternative reference rates by 31 December 2021.

17. The ADB loans will finance the civil works for the extension and expansion of the runway, apron, taxiway, ATCT, and aeronautical ground lighting system; and capacity development of the MOTC (ANATL and AACTL) and IPMU. The government counterpart funds will cover the civil works, land acquisition and resettlement costs, project management consultancy, and recurrent costs. JICA is planning to finance a new airport terminal on a parallel collaborative basis (not administered by ADB) with a grant in the amount of \$44 million. The summary financing plan is in Table 3.

**Table 3: Summary Financing Plan**

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (regular loan)	85.0	51.5
Ordinary capital resources (concessional loan)	50.0	30.3
Government of Timor-Leste	30.0	18.2
<b>Total</b>	<b>165.0</b>	<b>100.0</b>

Source: Asian Development Bank estimates.

18. Climate adaptation is estimated to cost \$1.81 million. ADB will finance 89% of the adaptation costs, and the remainder (11%) will be financed by the government. Details are in the PAM (footnote 21).

## **E. Implementation Arrangements**

19. The executing agency will be the CAFI, and the implementing agency will be the MOTC. The Interministerial Commission will provide oversight of the entire PNLIA development program, and the IPMU to be established under the Interministerial Commission will assist the National Procurement Commission with the preparation of bidding documents for civil works and terms of reference for consultants' services.

20. The design-and-build approach will be adopted for the project. There will be one package procured through open competitive bidding with prequalification, which is planned to be advertised in the third quarter of 2021. For consulting services contracts, there will be one package for a firm to be engaged in project management consultancy services, and four individual consultants for capacity building of the MOTC (ANATL and AACTL) and IPMU for (i) a procurement/contract management expert, (ii) a financial management expert, (iii) an environmental safeguards expert, and (iv) a social safeguards expert. Implementation arrangements are summarized in Table 4 and described in detail in the PAM (footnote 21).

**Table 4: Implementation Arrangements**

Aspects	Arrangements
Implementation period	September 2021–May 2026
Estimated completion date	31 May 2026
Estimated loan closing date	30 November 2026
<b>Management</b>	
(i) Oversight body	Interministerial Commission Chair: Minister of Planning and Territory Members: Minister of Finance, Minister of Transport and Communications, Minister of Public Works, and Minister of Foreign Affairs
(ii) Executing agency	Council for the Administration of the Infrastructure Fund
(iii) Key implementing agency	Ministry of Transport and Communications
(iv) Implementation unit	Integrated project management unit

Aspects	Arrangements		
Procurement	Open competitive bidding	Design-and-build with one package for output 1	\$115.62 million
Consulting services	QCBS	494.5 person-months construction supervision consultancy services	\$5.06 million
	ICS	24 person-months	\$0.87 million
Advance contracting	Construction supervision consultant and design-and-build package		
Disbursement	Disbursement of the loan proceeds will follow ADB's <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank, ICS = individual consultant selection, QCBS = quality- and cost-based selection.  
Sources: ADB and Government of Timor-Leste.

### III. DUE DILIGENCE

#### A. Technical

21. The feasibility study confirmed the project's technical viability.<sup>22</sup> PNLIA is locked by the Banda Sea to the west and the Comoro River to the east. The design of the runway extension will consider (i) the flood levels of the Comoro River and their impact on the proposed river crossing and their potential for flooding the airport compound; and (ii) the regional mean sea level rise, as the runway will be extended to the west into the sea after land reclamation. The project will also provide improved drainage systems to ensure safe operation of the airport during the monsoon season. The O&M of the project asset will likely be undertaken by a private sector partner to be selected through a PPP tender to be launched in the fourth quarter of 2021.

#### B. Economic and Financial Viability

22. Economic and financial analyses concluded that the project is economically viable and financially sustainable. Passenger traffic forecasts were prepared from historical passenger traffic records with relevant socioeconomic parameters. The project's economic internal rate of return is 16.0% with a net present value of \$113.3 million at a 9% discount rate. The economic analysis compared the benefits and costs of the with- and without-project scenarios. The main benefits relate to (i) international flight ticket price savings, (ii) an increase in value added derived from additional foreign tourist spending, (iii) value added effects to local industries resulting from an increase in air cargo exports, and (iv) an increase in aeronautical and non-aeronautical revenues. Sensitivity analysis indicated that the project's economic viability would remain satisfactory even under adverse scenarios.

23. The project will generate revenue from charged tariffs with increased traffic volumes. Although the expected revenue will not be sufficient to cover the capital investments, and thus both the financial net present value and financial internal rate of return for the project are negative, incremental revenues will meet O&M costs from 2031 onward, provided that the tariff structure is revised by 2026. O&M shortfall in the initial years from 2026 to 2030 will be met by the overall revenues of ANATL, the operating agency. The government is committed to provide any balance through subsidies to fully meet the O&M expenditures.

<sup>22</sup> Preparation of the project was supported by a transaction technical assistance project. ADB. 2019. [Technical Assistance for Southeast Asia Transport Project Preparatory Facility Phase 2](#). Manila.

## C. Sustainability

24. ANATL will be responsible for O&M of the assets created under the project through its overall revenues and subsidies from the government. The O&M of the airport is planned to be transferred to a private sector partner under the hybrid PPP modality, subject to financial structure acceptable to the market (para. 14). The current tariff structure for airport services does not assure full cost recovery. Analysis has confirmed the long-term financial sustainability of the project assets, provided that the tariff structure is revised by 2026.

## D. Governance

25. **Financial management.** The pre-mitigation financial management risk is assessed as *substantial* mainly because of the complex implementation arrangements. The CAFI and the MOTC have agreed to implement an action plan to address the risks identified in financial management. The IPMU will be created under the Interministerial Commission and will be responsible for day-to-day management of the project's financial management arrangements, including implementation of the project-specific risk-mitigating activities. The project will support the IPMU staff with capacity enhancement in procurement, contract and project management, financial management and accounting, and safeguards monitoring to manage project implementation and to promote long-term sustainability.

26. **Procurement.** The procurement risk is rated *high* since the MOTC and IPMU have no experience in ADB-financed projects and will depend on international consultants for project implementation. Based on strategic procurement planning, the design-and-build contract will help deliver value for money, as it minimizes interfaces and organizational complexity, allowing for more efficient delivery. The design-and-build contract will also improve project innovation and attractiveness for international contractors. A project management consultant and a construction supervision consultant will be recruited to assist the IPMU. All procurement will be undertaken in accordance with the ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

27. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and CAFI. The specific policy requirements and supplementary measures are described in the PAM (footnote 21).

## E. Poverty, Social, and Gender

28. As of 2014, 41.8% of Timor-Leste's population still lived below the national poverty line, and limited employment was a major contributor to high poverty levels in the country.<sup>23</sup> The project will contribute to creating job opportunities for the local population during construction and O&M, which will increase their access to income-generating opportunities. Only 27% of women are represented in the labor force or deemed economically active in Timor-Leste, compared with 56% of men. In response, the project has set a target for increasing the female workforce of the contractor, which will contribute to women's economic empowerment. While the MOTC (ANATL and AACTL) has relatively few female employees, especially in decision-making positions, it is working to narrow the gender gap. Gender-based violence – sexual exploitation, abuse, and sexual harassment (GBV-SEAH) is deeply entrenched in all facets of society in Timor-Leste.

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<sup>23</sup> ADB. 2021. [Basic Statistics, Asia and the Pacific](#). Manila.



Among ever-partnered women aged 15–49 years, 59% have experienced intimate partner physical and/or sexual violence at least once in their lifetime.<sup>24</sup>

29. The project is categorized as having *some gender elements* and will promote gender equality through the following key actions: (i) provide access to employment by requiring the contractor to hire local labor, with targets for female participation and equal pay for equal work in alignment with core labor standards under the national labor law; (ii) ensure the delivery of training on GBV-SEAH to all contracted employees, in recognition of the high rates of GBV-SEAH in Timor-Leste; (iii) provide a grievance redress mechanism through which employees and members of the surrounding community may report GBV-SEAH and other concerns and infractions anonymously; (iv) strengthen the gender capacity of the MOTC (ANATL and AACTL) by supporting the creation of an inclusive human resources development plan; and (v) support the development of airport facilities that are access-friendly with gender-sensitive design features.

## F. Safeguards

30. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.<sup>25</sup>

31. **Environment (category A).** The MOTC prepared an environmental impact assessment including (i) an environmental and social audit of the existing airport facilities, and (ii) an environmental management plan (EMP), in accordance with ADB's Safeguard Policy Statement (2009). The draft environmental impact assessment was disclosed on ADB's website on 25 March 2021.<sup>26</sup> The environmental and social audit has identified a number of areas where environmental and social safeguard performance could be improved at PNLIA, including waste management and environmental monitoring.

32. During construction, significant negative environmental impacts are anticipated on air quality, water quality (surface water, groundwater, and coastal water), soils, biodiversity, land use, noise, hazardous and nonhazardous waste, spoil disposal, local utilities and infrastructure, occupational health and safety, and community health and safety, without mitigation in place. The project is not anticipated to result in transboundary impacts. There is a potential for significant cumulative impacts if works under the project are undertaken concurrently with works for the new airport terminal to be financed by JICA and a road upgrade project linking the airport to Tasitolu under consideration by the government. The project design and the EMP include relevant mitigation measures such as temporary noise screens, silt curtains around work zones and spillways, and watering access roads. Coastal geohazards and rising sea levels due to climate change may affect the project. Several adaptation measures have been integrated into the project design to limit such impacts, including raising the height of the revetment to avoid overtopping during storm surges and to protect against tsunamis.

33. The conceptual modeling of longshore sediment transportation indicates that significant adverse environmental impacts on coastal geomorphology and biodiversity may be expected in the long term. The magnitude of the impacts will be reassessed using the primary data collected during the detailed design, and mitigation measures, such as installation of a box culvert, will be adjusted as appropriate before construction works begin.

<sup>24</sup> The Asia Foundation. 2016. [Understanding Violence against Women and Children in Timor-Leste: Findings from the Nabilan Baseline Study \(Main Report\)](#). Dili.

<sup>25</sup> ADB. [Safeguard Categories](#).

<sup>26</sup> Environmental Impact Assessment (accessible from the list of linked documents in Appendix 2).



34. **Involuntary resettlement (category A).** A total area of 201,893 square meters of land will be permanently acquired by the project, and safeguards due diligence has identified about 248 affected households (1,437 affected persons). Of these, 203 affected households are expected to be severely affected (1,226 severely affected persons), with 37 affected households (194 affected persons) losing 10% or more of their total productive land and 166 affected households (1,015 affected persons) physically displaced.<sup>27</sup> A draft land acquisition, compensation, and support plan (LACSP) has been prepared to address the project's land acquisition and resettlement (LAR) impacts, in consultation with local communities and in accordance with ADB's Safeguard Policy Statement (2009) and relevant government laws and regulations. Project information has been disclosed to affected persons throughout project preparation, and the draft LACSP was disclosed on ADB's website on 23 March 2021.<sup>28</sup> The LAR costs are estimated to be \$8.6 million to be financed by the government. The draft LACSP will be updated based on the replacement cost study and detailed engineering design and in consultation with affected households and other stakeholders. All involuntary resettlement impacts will have been mitigated in full prior to the start of civil works. A grievance redress mechanism will help resolution of any complaints during project implementation. Effective internal and external monitoring of LAR progress will be pursued at all stages of project implementation.

35. **Indigenous peoples (category C).** Due diligence did not identify any indigenous peoples or ethnic minorities in the project area. No indigenous peoples impacts are expected.

## **G. Summary of Risk Assessment and Risk Management Plan**

36. Significant risks and mitigating measures are summarized in Table 5 and described in detail in the risk assessment and risk management plan.<sup>29</sup>

**Table 5: Summary of Risks and Mitigating Measures**

<b>Risks</b>	<b>Mitigation Measures</b>
Lack of experience of the MOTC in developing design-and-build infrastructure projects	The procurement packaging has been simplified. A construction supervision consultant, together with a PMC, will be recruited. Individual consultants will also be recruited for capacity building of the MOTC and IPMU.
Complex implementation arrangements	The IPMU, supported by the PMC, will be the main entity responsible for project implementation and airport development. Each of the entities involved in project management will be provided clear roles and responsibilities. The TORs of the PMC and the construction supervision consultant will be harmonized to eliminate any gaps.
Lack of an established and well-functioning financial management system of the MOTC	The government will implement the agreed actions, including providing financial management and disbursement training to the IPMU and MOTC, as outlined in the project administration manual. The project will provide capacity building support with ADB's close monitoring.
Adverse impact of the COVID-19 pandemic lasts longer than the 5 years (since 2019) anticipated before full recovery.	The government will explore alternative ways to address financial sustainability with support from the private sector.
Project implementation is hampered by nondelivery or delay of (i) the new international terminal, or (ii) the financial close	The government will ensure timely delivery of other components of the airport development. In case any component is not carried out, the government will explore alternative arrangements to bridge the gap as required.

<sup>27</sup> The main income-generating activity of these households is farming.

<sup>28</sup> Resettlement Plan (accessible from the list of linked documents in Appendix 2).

<sup>29</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Risks	Mitigation Measures
of the operation and maintenance PPP transaction	

ADB = Asian Development Bank, COVID-19 = coronavirus disease, IPMU = integrated project management unit, JICA = Japan International Cooperation Agency, MOTC = Ministry of Transport and Communications, PMC = project management consultant, PPP = public-private partnership, TOR = terms of reference.

Source: ADB.

#### IV. ASSURANCES

37. The government and the CAFI have assured ADB that implementation of the project shall conform to all applicable ADB requirements, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, financial management, and disbursement as described in detail in the PAM and loan documents.

38. The government and the CAFI have agreed with ADB on certain covenants for the project, which are set forth in the draft loan agreements.

#### V. RECOMMENDATION

39. I am satisfied that the proposed loans would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve

- (i) the loan of \$85,000,000 to the Democratic Republic of Timor-Leste for the Presidente Nicolau Lobato International Airport Expansion Project, from ADB's ordinary capital resources, in regular terms, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 26.5 years, including a grace period of 5 years; and such other terms and conditions are substantially in accordance with those set forth in the draft regular ordinary capital resources loan agreement presented to the Board; and
- (ii) the loan of \$50,000,000 to the Democratic Republic of Timor-Leste for the Presidente Nicolau Lobato International Airport Expansion Project, from ADB's ordinary capital resources, in concessional terms, with an interest charge at the rate of 2.0% per year during the grace period and thereafter; for a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft concessional ordinary capital resources loan agreement presented to the Board.

Masatsugu Asakawa  
President

12 August 2021

## DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with			
Economic diversification and national productivity improved by ensuring better connectivity within and outside of the country (Timor-Leste Strategic Development Plan, 2011-2030) <sup>a</sup>			
Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
<b>Outcome</b> Efficiency and safety of goods' and people's movements improved	By 2026: a. Average annual aircraft movements decreased to 6,534 <sup>b</sup> (2019 baseline: 6,726) (OP 6.2.1)  b. Number of annual international passengers increased to 0.32 million (2019 baseline: 0.17 million) (OP 7.1.1)  c. PNLIA improved to support Code C aircraft operations without payload restrictions <sup>c</sup> (2019 baseline: Significant payload restrictions of 68%) (OP 6.2.1)	a–c. ANATL annual reports	R: Adverse impacts of the COVID-19 pandemic last longer than the 5 years (since 2019) anticipated before full recovery (according to industry forecasts)
<b>Outputs</b> 1. PNLIA runway, air traffic control tower, and other key airport facilities improved	By 2026: 1a. Airport safety level improved to meet international standards <sup>d</sup> (2020 baseline: Not fully in compliance) (OP 6.2.1)  1b. Airport runway extended to 2,100 m, including a RESA of 90 m (2020 baseline: runway length: 1,850 m; RESA: none) (OP 6.2.1)  1c. Airport facilities reconfigured to conform to the upgraded runway with climate-resilient, accessible to people with disabilities, and gender-sensitive design features <sup>e</sup> (2020 baseline: Not applicable) (OP 2.4.1; OP 3.1.1; OP 3.2.1; OP 3.2.5)  1d. At least 5% of the contractor's total local work force in skilled (administrative) positions at	1a–b. ICAO safety oversight audit program report and AACTL's audit report on ANATL's PNLIA operation  1c. Contractor's quarterly progress reports  1d. Contractor's reports on employee hiring and retention related to the project, disaggregated by sex and job category  1e. Contractor's quarterly progress reports	R: Project implementation is hampered by nondelivery or delay of (i) the new international terminal, or (ii) the financial close of the operation and maintenance public–private partnership transaction

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
2. Organizational and management capacity of the IPMU and the MOTC (ANATL and AACTL) enhanced	<p>all stages of civil works is female (2020 baseline: Not applicable) (OP 2.1)<sup>f</sup></p> <p>1e. GBV-SEAH grievance redress mechanism for civil works personnel and community members developed and adopted (2020 baseline: 0) (OP 2.2.3)</p> <p>2a. A socially and gender-inclusive human resources development plan with staff training policy and program prepared and approved by the IPMU<sup>g</sup>(2020 baseline: None) (OP 2.3.2; OP 3.2.2; OP 6.1.1)</p> <p>2b. Financial management and accounting system of the IPMU and MOTC established for implementation and monitoring of the project (2020 baseline: None) (OP 6.1.4)</p> <p>2c. An operations manual for monitoring and reporting prepared and approved by the IPMU (2020 baseline: None) (OP 6.1.1)</p>	2a–c. Capacity development performance report prepared by the capacity development consultants	
<b>Key Activities with Milestones</b> <b>1. PNLIA runway, air traffic control tower, and other key airport facilities improved</b> 1.1 Engage construction supervision consultant by August 2022. 1.2 Engage design-and-build contractor by August 2022. 1.3 Complete resettlement plan implementation by September 2023. 1.4 Complete civil works by May 2026. <sup>h</sup>  <b>2. Organizational and management capacity of the IPMU and the MOTC (ANATL and AACTL) enhanced</b> 2.1 Engage capacity development consultant by March 2022. 2.2 Prepare IPMU staff training program by June 2022. 2.3 Install financial management and accounting system of the IPMU and MOTC by June 2022. 2.4 Prepare an operations manual for monitoring and reporting by September 2022. 2.5 Complete staff training in the IPMU by December 2022.			
<b>Inputs</b> Asian Development Bank: \$135 million (loans) Government: \$30 million			

AACTL = Autoridade de Aviação Civil de Timor-Leste (Civil Aviation Authority of Timor-Leste); ANATL = Administração de Aeroportos e Navegação Aérea de Timor-Leste (Air Navigation Administration of Timor-Leste); COVID-19 = coronavirus disease; ICAO = International Civil Aviation Organization; GBV-SEAH = gender-based violence – sexual exploitation, abuse, and sexual harassment; IPMU = integrated project management unit; m = meter; MOTC = Ministry of Transport and Communications; OP = operational priority; PNLIA = Presidente Nicolau Lobato International Airport; R = risk; RESA = runway end safety area.

<sup>a</sup> Government of Timor-Leste. 2011. [Timor-Leste Strategic Development Plan, 2011–2030](#). Dili.

<sup>b</sup> The number of aircraft movements will decrease as larger aircrafts start using the airport. This indicator is used as a proxy for air cargo performance because movements of cargos are managed by belly cargo.

<sup>c</sup> According to the ICAO Aerodrome Design Manual, Code C aircraft refers to an aircraft with a wingspan of 24–36 meters and an outer main gear wheel span of 6–9 meters, such as Boeing 737 and Airbus A320.

<sup>d</sup> Output 1 aims to make PNLIA fully compliant with Annex 14 of the ICAO's Standards and Recommended Practices.

<sup>e</sup> Examples of gender-sensitive airport facility design features include gender-sensitive customer service protocols and signage, separate toilets for men and women, considerations for parents with strollers, and adequate lighting and perimeter fencing to ensure safety of female airport users and employees.

<sup>f</sup> Based on the social factors in the areas surrounding the airport, the government assumes that local women would not be interested in unskilled labor. Women, albeit few, are more likely to be interested in administrative positions.

<sup>g</sup> Elements of an inclusive human resources development plan may include the following: equal employment opportunities; equal pay for equal work; adequate parental (both maternity and paternity) leave; targeted recruitment, retention, and promotion of women in managerial and technical positions; organizational mentorship programs for young female employees; and prevention and response policy for GBV-SEAH.

<sup>h</sup> This includes a 1-year defect liability period.

Source: Asian Development Bank.

### **LIST OF LINKED DOCUMENTS**

<http://www.adb.org/Documents/RRPs/?id=52320-002-3>

1. Loan Agreement: Concessional Ordinary Capital Resources
2. Loan Agreement: Regular Ordinary Capital Resources
3. Sector Assessment (Summary): Transport (Air Transport)
4. Project Administration Manual
5. Financial Analysis
6. Economic Analysis
7. Summary Poverty Reduction and Social Strategy
8. Risk Assessment and Risk Management Plan
9. Contribution to Strategy 2030 Operational Priorities
10. Climate Change Assessment
11. Resettlement Plan
12. Environmental Impact Assessment

### **Supplementary Document**

13. Climate Risk and Vulnerability Assessment