

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

SURINAME

**ESSENTIAL AIR TRANSPORT SERVICE FOR REMOTE COMMUNITIES IN
SURINAME**

(SU-L1071)

PROJECT PROFILE

This document was prepared by the project team consisting of: Raphael Dewez (INE/TSP), Team Leader; Pablo Guerrero (INE/TSP), Alternate Team Leader; Christopher Persaud, Esteban Diez, Mariano Ansaldo, Emilia Monteiro and Seungyeon Kim (INE/TSP); Diana Sandoval (INE/INE); Natalie Bethel (CCB/CBH); Moreno Jackson (CCB/CSU); Anaitee Mills (CSD/CCS); Cleide Berlanda and Veerle Combee (VPC/FMP); Horacio Mendoza (LEG/SGO); Edoardo Brovero, María Burbano, and Roberto Leal (VPC/ESG); Santiago Bucaram (CSD/RND); Cynthia Hobbs (SCL/EDU); Ian Ho-A-Shu (SCL/SPH); Adam Mehl and Veronica Tejerina (CSD/ACU); Nadin Medellin (SCL/GDI).

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PROJECT PROFILE

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I. BASIC DATA

Project Name:	Essential Air Transport Service for remote communities in Suriname	
Project Number:	SU-L1071	
Project Team:	Raphael Dewez (INE/TSP), Team Leader; Pablo Guerrero (INE/TSP), Alternate Team Leader; Christopher Persaud, Esteban Diez, Mariano Ansaldo, Emilia Monteiro and Seungyeon Kim (INE/TSP); Diana Sandoval (INE/INE); Natalie Bethel (CCB/CBH); Moreno Jackson (CCB/CSU); Anaitee Mills (CSD/CCS); Cleide Berlanda and Veerle Combee (VPC/FMP); Horacio Mendoza (LEG/SGO); Edoardo Brovero, María Burbano, and Roberto Leal (VPC/ESG); Santiago Bucaram (CSD/RND); Cynthia Hobbs (SCL/EDU); Ian Ho-A-Shu (SCL/SPH); Adam Mehl and Veronica Tejerina (CSD/ACU); Nadin Medellin (SCL/GDI).	
Borrower:	Republic of Suriname	
Executing Agency:	Ministry of Transport, Communication and Tourism (MTCT) through the N.V. Luchthavenbeheer ¹	
Financial Plan:	IDB (OC):	US\$ 20,000,000
	Total:	US\$ 20,000,000
Safeguards:	Policies triggered: ESPS1; ESPS2; ESPS3; ESPS4; ESPS5; ESPS6; ESPS7; ESPS8; ESPS9; ESPS10	
	Classification:	B

II. GENERAL JUSTIFICATION AND OBJECTIVES

- 2.1. **National Context.** Suriname is a small, open, commodity-based economy in the Amazonia that is vulnerable to external shocks and natural disasters. Although having an area of 164,000 km², 93% of all population² and infrastructure assets are concentrated along the Great Paramaribo and Coastal regions, leaving isolated rural communities in the country's interior with scarce means of access to medical supplies, food, and essential services. Much of the country farther from the coastline is only accessible by boat or aircraft. Suriname plays a significant

¹ N.V. Luchthavenbeheer (or LHB) is a parastatal organization of the MTCT, with budgetary independence, whose purpose is to maintain and operate Suriname's J.A Pengel international airport located in Paramaribo. The government ownership of LHB is held by the National Development Bank.

² Estimated in 618,040 people (World Bank Databank, 2022) with 72% of the population between 15 and 64 years old and 23% is 14 years old or younger.

role in connecting South America, the Caribbean, Europe, and other countries in Asia and Africa,³ due to its geographical location, and cultural and historical ties.

- 2.2. **Main problem.** The main problems the program will address are: (i) the low level of socio-economic development of the country's isolated southern regions, which are sparsely populated and lagging in terms of access to basic services and economic opportunities; (ii) the poor quality of air transport infrastructure, the main link with these regions, and its widespread lack of investment and maintenance; (iii) an outdated air transport legislative framework, not well-adapted to the current needs of the country and its isolated regions in particular.
- 2.3. **Essential air transport.** Transport plays a multifaceted role in facilitating access to basic services such as healthcare, education, employment, and essential goods. By connecting communities and enabling the movement of people and resources, transport systems contribute significantly to societal well-being and development. Air transport is the most critical infrastructure mode for remote communities representing the primary connectivity and accessibility link to isolated regions in Suriname. The country's dry season⁴ causes unreliable river transport and the lack of road infrastructure in the interior makes air transport the only transport mode available. Most interior aerodromes have only fair-weather runways, little or no facilities to accommodate passengers and many are inaccessible during the rainy season, limiting access to essential services, such as emergency health care and economic opportunities.
- 2.4. According to the latest Suriname Survey of Living Conditions (SSLV 2022), communities in the interior of the country enveloped by the Amazon Forest exhibit elevated levels of poverty, increased food insecurity, and diminished educational, labor, and health indicators compared to the Great Paramaribo and Coastal regions; moreover, multidimensional poverty in the interior regions affect 59%⁵ while consumption poverty impacts 38% of the population. The interior region is home to remote communities where 99% identify as Maroon (afro-descendent) or Amerindian (indigenous).⁶
- 2.5. Education gaps in school attendance in the interior regions start at the secondary level where the net attendance rate is 46% in comparison to 72% in the rest of the country. A 2019 study emphasizes the challenge of satisfying the demand for education in the interior region, where educators face difficult access to communities, low population density, and greater cultural barriers.⁷ The SSLV

³ Multi-Annual Development Plan 2022-2026 of the Republic Suriname, pg. 96.

⁴ The long dry season runs from August to December with less than 100 mm of rainfall per month. During the major wet season, between May and July, most of the country receives 250 - 400 mm per month.

⁵ Key drivers of multidimensional poverty are chronic illnesses, disability, low education, and ICT skills as well as lack of medical insurance.

⁶ Maroon and Amerindian populations, forming 21% and 3% of Suriname's total, face notable socioeconomic gaps, with 46% and 43% respectively residing in the interior region. For instance, elementary school attendance is 61% and 56% for Amerindian and maroons respectively compared to 78% among Creole, Javanese and Mixed ethnicity. Furthermore, both Maroons and Amerindians exhibit the lowest employment rates at 48% and 51%, respectively, along with the lowest income levels across different ethnic groups, averaging around SRD 4,000 – 5,300 (equivalent to an estimate US \$110 - \$150) per month.

⁷ The study, from 2019, "Barriers to Learning in Communities in the Interior" is from a consultancy for the support to increase access to inclusive quality education in Suriname in the operation SU-T1115.

2022 indicates that the average time of schooling in the interior region is 4.1 years, in comparison with 8.4 years in the rest of the country. Regarding employment, the remote communities face elevated unemployment rates and salaries are 75% lower compared to coastal regions. Only 25% of the residents of the interior declared having a medical check-up in the last year in comparison to 51% in the rest of the country.

- 2.6. The Bank is supporting the socio-economic development of villages in the Amazon rural areas of Suriname through the Bio-SWEET which targets the empowerment of 10 communities across the territory through access to water, energy, and telecommunications.⁸
- 2.7. Regular domestic flights are offered mainly by three local airline companies⁹ departing from Zorg en Hoop Airport (ORG) in downtown Paramaribo, with fares ranging between US\$75 to US\$165 one way per person.¹⁰ Given the low quality of the infrastructure, airlines do not provide scheduled service to remote regions. On average, 55,000 passengers and over 3,500 tons of cargo are transported on 12,700 flights every year.¹¹ Although there is no official passenger record,¹² according to airlines, the main purposes of travel are medical assistance, government support, and disaster relief. Charters or scheduled flights are also used for eco-tourism to select destinations.
- 2.8. The MTCT, through the Civil Aviation Department of Suriname (CADSUR), is responsible for 53 official domestic aerodromes.¹³ The length of the runways varies from 400 m to 700 m. Runway surfaces are made up of laterite, sand, clay, or grass. Most airfields are equipped with station buildings and the conditions of these structures tend to be poor. Deep ruts, potholes, and rough surfaces make it impossible for some types of airplanes to use many airfields, and safety conditions are exacerbated by the lack of minimal equipment such as windsocks or airstrip edge markers.
- 2.9. Currently, the aeronautical services provided by CADSUR generate approximately US\$12 million a year in revenue for all aeronautical services rendered. Still, the entity cannot use any of these revenues, to re-invest in equipment or provide better

⁸ Bioeconomy empowerment in Suriname through access to Water, Energy, and Telecommunications (SU-L1076 [in preparation]).

⁹ The main airline operators for scheduled and charter flights are the privately owned "Gum Air", with a fleet of 11 airplanes of three different types (capacity of 5 to 18 passengers, with 46 weekly flights to 9 localities) and "Blue Wing Airlines", with a fleet of 8 airplanes of four different types (capacity of 5 to 20 passengers, with 54 weekly flights to 14 localities), as well as a non-profit airline operating mostly to provide medical and community assistance, "MAF (Mission Aviation Fellowship) Suriname", with a fleet of 3 airplanes of the same type (capacity of 8 passengers, in the vast majority deservng indigenous communities in the south of the country). In addition, there are many other smaller privately owned companies that fly into the interior in response to specific tourism or business requests (ie. Aero Club Suriname, Eagle Air Services, Meindertsma Suriname, Pegasus Air Services, Vortex Air Services, etc.).

¹⁰ With Surinam Airways discontinuing its interior flights, there is no publicly owned company who provides domestic flights in the country.

¹¹ Feasibility Study for Upgrading of Interior Airports, Suriname Air Transport Support Project (IOS Partners, 2012).

¹² To address this gap, a new study, including a quantitative market survey among air travelers and a survey to pilots of the two main domestic airlines, is about to start during the preparation of this PP.

¹³ According to ICAO (Annex 14), an aerodrome is a defined area on land or water intended to be used either wholly or in part for the arrival, departure, and surface movement of aircraft.

services since these have been generally assigned to respond to other government priorities. The 20 most trafficked interior airfields have an annual net operating cost (expenses minus revenue) of around US\$500,000¹⁴ and for Zorg-en-Hoop's airport, the net operating cost is US\$170,000,¹⁵ both of which are subsidized by the Government. In addition, the Civil Aviation Safety Authority of Suriname (CASAS) lacks a sustainable fee collection mechanism that would allow it to perform its mandated functions such as the regulation of domestic aerodromes, electronic passenger and cargo manifest, operations and regulations, licensing, and permitting. In summary, while the air transport sector generates an overall surplus from air navigation revenues, those revenues collected from interior airfield operations and regulatory services are not sufficient to cover the cost generated by these operations, therefore, a cross-subsidization mechanism is needed for the overall support of the sector.

- 2.10. In recent years, the Government of Suriname (GOS) has explored possible ways to formalize and privatize maintenance. Additionally, the MTCT launched a call for Expressions of Interest, twice, to maintain and upgrade four existing airstrips and to build a new one, but these processes were unsuccessful.
- 2.11. **Air transport & the government's vision.** The GOS's plan is for rural aerodromes to be preserved in a condition that allows for an integrated, efficient, cost-effective, and sustainable air transport system, responsive to the needs of society, and supportive of economic growth and poverty reduction while respecting safety standards and the environment.¹⁶ According to the [2022-2026 Multi-Annual Development Plan](#), current legislation is outdated, resulting in stakeholders within the aviation industry being unable to act quickly, efficiently, and purposefully. Furthermore, two specific strategic actions for air transport improvement have been identified: (i) all-weather runways for strategic aerodromes; and (ii) improving flight safety facilities. The GOS has entered agreements with countries in the region and beyond, most recently the Dominican Republic in October 2023 and Qatar in June 2023, to strengthen air transport to facilitate the export of goods and services.
- 2.12. **Air transport institutional challenges.** The current general aviation legal framework consists of the 1935 Aviation Decree (SGAL)¹⁷ which focuses on public safety and public order for flying operations. This legislation addresses the registration and nationality of aircraft, certificates of airworthiness and competency, requirements for aircraft operated internationally, airports, airlines, and offenses. The SGAL does not cover however key elements of modern regulation such as aviation security, operation of aircraft, search and rescue, accident investigation, airport zoning, and relevant ministerial authority. The Suriname Civil Aviation Safety and Security Act of 2002 was intended to modernize the legal provisions and institutional arrangements governing civil aviation; however, it did not replace the SGAL and has shortcomings concerning the requirements of the International Civil Aviation Organization (ICAO) Annexes. The

¹⁴ See Footnote 11.

¹⁵ Support for the Implementation of a Modernized Legal and Institutional Framework for Civil Aviation in Suriname, CAA, 2017.

¹⁶ Attachment 2 to Final Report for Suriname Air Transport Support Project (IOS Partners, 2012).

¹⁷ Organization of the National Air Transport Sector (IOS Partners Inc, 2012).

last Universal Safety Oversight Audit Program¹⁸ undertaken by ICAO identified weaknesses in the areas of Legislation, Organization, Aerodromes, Air Navigation Services, and Accident Investigations. In addition, the CASAS does not have staff to adequately execute oversight activities. In response, the GOS has established a Working Committee to address institutional strengthening and to improve the governance and oversight of the sector.

- 2.13. **Vulnerability to Climate Change (CC).** According to the fifth assessment report of the Intergovernmental Panel on Climate Change (IPCC),¹⁹ Suriname is in an area with high vulnerability to expected anomalies in climate stressors (sea level rise, temperature, and precipitation) for the period 2019-2050. The country is heavily exposed to significant changes in the duration, intensity, and frequency of rainfall ([IPCC, 2014](#)). The country is already experiencing extensive coastal erosion and continues to suffer damage from heavy rainfall during wet seasons, flooding, and higher temperatures during dry seasons. Suriname is anticipated to be one of the developing economies in the Caribbean to suffer the greatest economic losses because of its exposure to CC, it is estimated that the country will have to invest a total of US\$247 million annually in capital maintenance under an optimistic scenario, roughly US\$600 million under a moderate scenario, and more than US\$1 billion under the most critical scenario ([UNDP, 2010](#)). According to the IPCC, flood management practices, early warning systems, land use management, and flood hazard assessment need to be followed to guarantee climate resilience to vulnerabilities related to hydrologic extremes. Furthermore, the [2022-2026 Multi-Annual Development Plan](#) considers transport and infrastructure key for the development of other sectors, emphasizing making future infrastructure more resilient to climate change and incorporating measures to reduce greenhouse gas emissions.
- 2.14. **Gender, diversity and inclusion.** Surinamese women surpass men in education, with 14% attending higher education compared to 8% of men.²⁰ However, their labor force participation is 45%, which is 20 percentage points lower than men, while men earn 28% more.²¹ The transport, maritime, and logistics sectors are predominantly run by men, and only 18% of employees are women.²² In technical training related to mechanics, machinery, construction, and welding, over 95% of students are men. People with Disabilities (PwD) represent about 12% of the population in Suriname and around 10% of the population in the interior. The percentage of PwD who do not participate in the labor market (57.7%) is higher than those without a disability (42.1%).²³ There is no binding regulation for the labor inclusion of PwD in the country, however, there are private good practices of PwD labor inclusion.

¹⁸ Safety Audit Results: USOAP interactive viewer.

¹⁹ The IPCC is an organization that presents scientific evidence on CC, as well as guidelines to address mitigation and adaptation needs. Its main publication, the Assessment Report, presents considerations on climate stressors (precipitation, temperature, and sea level rise) for different countries. The consideration of climate adaptation is consistent with what is presented in Suriname's First [NDC](#).

²⁰ Suriname Multiple Indicator Cluster Survey, 2018.

²¹ World Bank Data, 2022.

²² Final report that includes the diagnosis, the Gender and PwD inclusion strategy and action plan, and booklet with the main finding of the diagnosis. (MPW, 2023).

²³ [ILO, 2020](#).

- 2.15. **Challenges.** The challenges the program seeks to address are to: (i) improve the country's capacity for oversight of the air transport sector; (ii) help reduce accessibility gaps of the population, including indigenous and maroon or afro-descendant communities, improving their access to basic services and economic opportunities; (iii) better integrate the national territory; (iv) enhance the sustainability of the airstrip infrastructure by developing new maintenance models; (v) ensure that new investments do not encourage illegal activities around these airstrips but, on the contrary, restrict them by increasing their remote surveillance using cameras.
- 2.16. **Strategic alignment.** The Program is consistent with the IDB Group Institutional Strategy: Transforming for Scale and Impact (CA-631) and is aligned with every objective. It is aligned with: (i) Reducing poverty and inequality by improving the accessibility of remote communities such as Maroon and indigenous populations to essential social and economic services and opportunities and by promoting labor/internships inclusion of PwD at the N.V. Luchthavenbeheer;²⁴ (ii) Addressing climate change by improving the current conditions, sustainability, and climate adaptation of existing airstrips; and (iii) Bolstering sustainable regional growth by assisting the government into updating the current General Aviation Legislation to modernize and strengthen the sector so that it becomes secure, safe, and self-sustainable.
- 2.17. The program is also aligned with the key priorities of Climate adaptation, disaster risk management, and resilience of *One Caribbean (Partnering for Caribbean Development Framework)* ([GN-3201-5](#)) by improving the current conditions, sustainability, and climate adaptation of existing airstrips. It is also aligned with the One Caribbean cross-cutting area of institutional strengthening by assisting the government in updating the current General Aviation Legislation. Further, the program is aligned with one of the strategic objectives of the IDB Group Country Strategy with Suriname 2021-2025 ([GN-3065](#)), namely the objective "Strengthening transportation connectivity and resilient infrastructure".
- 2.18. The program aligns with the pillars of "Sustainable Infrastructure, Cities and Connectivity" and "Local people" of the [Amazonia Forever Initiative](#), as it aims to enhance the availability of social and essential economic services from regional markets to the residents living in remote areas of the Amazon in Suriname, thus improving quality of life of the local population and economic activity. Also, it relates to the Transversal Areas of the Program "Women, Indigenous Peoples, Afro-descendants & Local Communities" since it will benefit indigenous populations and Maroons that live in isolated localities, and "Institutional Capacities & Rule of Law" through the component of institutional strengthening by providing training and capacitation for civil servants.
- 2.19. **Program strategy.** The proposed strategy aims not only to finance specific infrastructure investments for prioritized airstrips, but also on a much broader scale to support the GOS' efforts to update the Suriname General Aviation Legislation that aims to modernize and strengthen the air transport sector laying the

²⁴ For these internships contact with the Ministries of Labor, and Disability NGO's will be required. Additionally, the description of the job positions available for PwD.

foundation to become secure, safe, and self-sustainable. A recent study²⁵ has been conducted to prioritize the airstrips to be intervened by this program, according to a multicriteria analysis, to define the type of interventions required for routine maintenance or rehabilitation works.²⁶ Particular emphasis was placed on criteria such as the main communities currently served by air, the presence of essential health or education services, or the presence of local traditional authorities (*granman*).²⁷ Airstrips located close to mining or logging areas were deliberately restrained in this prioritization, as these already benefit from private sector investment. As a result of this exercise, the airstrips that have been prioritized are scattered across the isolated southern regions of the country, with no sub-region being favored.²⁸ Preliminary costs of intervention were also determined for each airstrip, according to the three different types of interventions defined according to the airstrip's strategic importance: (i) Type "A": strategic all-weather airstrips, allowing for resilient air infrastructure with all-weather surface for landing that would facilitate access to these remote communities all year-round; (ii) Type "B": other strategic airstrips with lower investments required; and (iii) Type "C": airstrips that only require basic interventions.²⁹ All these airstrips would benefit from the facilities and tools required for sustainable operations and also from surveillance cameras to improve their remote monitoring and increase their level of security.³⁰

- 2.20. **Objective.** The program's general objective is to contribute to a safe, secure, and self-sustaining air transport sector for Suriname that delivers essential air transport services for remote communities. The specific objectives are to: (i) improve the current conditions, efficiency, and sustainability of existing airstrips used to provide essential air transport services to remote areas; (ii) modernize Suriname's air transport sector's regulations and management; and (iii) improve Suriname's air transport operations.
- 2.21. **Component 1: Airstrips rehabilitation. (US\$ 17,200,000).** This component will finance: (i) works for the rehabilitation of the prioritized aerodromes³¹ to optimize operations for safe and efficient transport services, using climate-smart materials that are lightweight, easy to implement, and that have proven their worth providing all-weather surface for landing in similar contexts; (ii) the definition of an

²⁵ *Identification of required maintenance and repair actions on grasshopper airstrips* (ILACO, 2024), financed through SU-T1152 (Support for the Design and Implementation of Innovative Mechanisms for the Management of Works Contracts in Suriname).

²⁶ Through the Technical Cooperation "Support for the Design and Implementation of Innovative Mechanisms for the Management of Works Contracts in Suriname" ([ATN/OC-19648-SU](#)).

²⁷ The criteria used for this prioritization included the following, among others: number of flight movements, number of inhabitants, presence of health/education/commercial facilities, presence of sites of tourism potential, presence of a local authority (*Granman*), travel times using alternative modes (road and boat).

²⁸ Even though certain localities seem to be concentrated in specific sub-regions of the country, travel time between these communities can take a whole day, depending on the mode of transport used (on average, a day's journey through the jungle corresponds to approximatively 15 km).

²⁹ Such as mowing the runway, clearing vegetation within the obstacle-restricted zone, and providing basic facilities and tools.

³⁰ Such as windsock, radio, rain gauge, airstrip diagram, maintenance tools, storage room, and in some cases solar panels and batteries, lighting systems, etc.

³¹ The prioritization study identified 27 aerodromes that could be intervened by this program: 5 of Type "A" (strategic all-weather airstrips), 7 of Type "B" (strategic airstrips) and 15 of Type "C" (basic interventions). Given its importance in serving all these airfields, interventions at Paramaribo's Zorg en Hoop domestic airport could also be considered.

international standard-based fee structure and collection mechanism using new digital tools, and the identification of additional revenue sources in the sector to cover operations and maintenance of airstrips.³²

- 2.22. **Component 2: Improve institutional and legal framework (US\$1,000,000).** This component will finance: (i) a new proposal of draft legislation for tabling and adoption to improve the current country's institutional and legal framework for air transport, including updated regulations for local aerodromes amongst others,³³ a new independent Air Navigation Service Provider (ANSP) that is financially self-sufficient, and a new accident investigation body; (ii) updated license and permit fees and collection mechanisms using new digital tools for reinvestment in the regulatory institution; (iii) improvements in air navigation surveillance;³⁴ and (iv) the development of updated flight manifests for domestic passengers and cargo.³⁵
- 2.23. **Component 3: Improve air transport operations (US\$850,000).** This component will finance: (i) energy-efficient air navigation equipment for airstrips along with surveillance cameras; (ii) training and capacity building, including capacity building of local communities³⁶ for maintenance; and (iii) labor/internships inclusion of PwD in the N.V. Luchthavenbeheer and women employment in the air transport sector.
- 2.24. **Administration and monitoring. (US\$950,000).** This component will finance management costs, including supervision and technical support for the Project Implementation Unit (PIU), as well as audits and project evaluation.
- 2.25. **Beneficiaries of the program.** Air transport users and indigenous and Maroon (afro-descendant) communities (3% and 21% of Suriname's total population, respectively), to a greater extent, will benefit from these interventions which will ensure sustainable accessibility to very isolated regions of the country, improving safety conditions for operations and reducing the time and cost of transporting people and goods, which currently must be done by other modes of transport. Expected results from the construction of airstrips include narrowing gaps in essential services such as education and healthcare in remote areas by facilitating the efficient delivery of medical and food supplies, as well as enabling the transportation of teachers to schools or medical staff and patients to hospitals. Additionally, employment opportunities may be increased for women, PwDs, Maroon, and indigenous groups through internships and capacity building for maintenance roles.

³² A study is needed based on the types of airport and passenger charges and fee structures recommended by the international agencies ICAO and IATA. A collection mechanism must be designed that would allow the charges and fees to go directly to the aviation agencies rather than to the government. Additional sources could be allowing some commercial activities on the land side of the airstrips.

³³ The regulations for local aerodrome infrastructure will be updated as part of the Program, following ICAO international standards whenever possible. The South American Organization Regional Cooperation System for Operational Safety Surveillance has a set of regulations that will be applied to the program.

³⁴ This could include communication equipment, surveillance cameras and digital air manifests.

³⁵ These flight manifests will allow tracking of essential air transport as medical supplies and passenger trips for teachers and patients.

³⁶ Including maroons and/or indigenous populations.

III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1. **The Bank's experience.** The Bank is the principal source of external financing and provider of technical knowledge for Suriname. IDB's support has set the basis for the modernization of the public sector, to increase productivity and has established a framework for strengthening human capital. IDB has retained a deep understanding of local project execution considerations as well as long-haul air sector analyses since 2008.³⁷ The Bank also has a proven track record of supporting similar projects across other countries of the region.³⁸ Synergies will be sought with other Bank's sector interventions in the country, such as the Bio-SWEET program which targets the empowerment of 10 communities across the territory through access to water, energy, and telecommunications. Various sources of data from the health and education sectors will also be considered in preparing the program, such as the "Barriers to Learning in the Interior of Suriname" study developed by EDU ([ATN/OC-17392-SU](#)).
- 3.2. **Lessons learned.** The lessons learned from IDB's financing and involvement in the Meerzorg-Albina Corridor Rehabilitation Project ([2062/BL-SU,2063/OC-SU](#)), the Meerzorg-Albina Integration Corridor Rehabilitation Project ([2887/OC-SU](#)), and Improving Transport Logistics and Competitiveness in Suriname ([4828/OC-SU](#)), stresses: (i) the importance of good coordination between multiple institutional stakeholders to avoid any impacts on the timing and costs of the project; and (ii) the need for a Project Implementation Unit with dedicated and stable staff housed in a single location for the management and execution of civil works projects. In cases where the PIU consists of staff from stakeholder Ministries, these personnel should relocate to the PIU facility and cooperate with other members daily.
- 3.3. **Borrower and Executing Agency.** The borrower will be the Republic of Suriname and the Execution Agency will be the Ministry of Transport, Communication, and Tourism, acting through the N.V. Luchthavenbeheer. The program will be implemented through a dedicated PIU at the N.V. Luchthavenbeheer or a new subsidiary.³⁹ The PIU will be responsible for general and technical coordination; planning, monitoring, and evaluation; financial management; procurement administration; environmental, health, and safety management; and communications activities. This PIU will be financed by the project and should be comprised of at least: a project manager, an air transport infrastructure specialist, a legal advisor, an environmental and social specialist, a procurement specialist, and a financial specialist.
- 3.4. **Type of instrument: Multiple Works Program (MWP).** This operation will be financed through an IDB loan of US\$20 million from the Bank's Ordinary Capital, with a 60-month disbursement period. Given the type of interventions targeted by this program, a wide geographical spread of small-scale investments that are physically similar but independent of each other, the instrument favored is the

³⁷ [ATN/SF-11963-SU](#); ATMPC-2015, ATMPC2-2015 and [ATN/OC-14221-SU](#).

³⁸ Support for the Implementation of Air Transport Reforms ([ATN/MR-17541-RG,ATN/OC-17540-RG](#)).

³⁹ An Institutional Capacity Assessment is about to be performed, both at the level of the MTCT and of the N.V. Luchthavenbeheer. The need to create a new subsidiary will be evaluated based on the recommendations of this assessment.

MWP. Also, their feasibility does not depend on the execution of any number of the works projects and their size does not warrant direct Bank management. It will finance improvement works on airstrips located in different regions of the country prioritized based on a multi-criteria analysis. The representative sample of the program will be fully designed before loan approval and made up of a limited number of airstrips which will have detailed studies amounting to approximately 30%, by value, of the total cost of the program.⁴⁰ Several additional potential airstrips, like those in the sample, requiring smaller-scale works, have also been identified and will have to meet the eligibility criteria to be included in the program.⁴¹

- 3.5. In terms of diversity, as this program seeks to provide essential air transport services to several remote areas of the country, it will benefit diverse populations, including PwD, in terms of labor inclusion. Most of the population in this area identify as Maroon (afro-descendants) or indigenous and priority consideration will be given to localities that host traditional authorities (e.g. *Granman*).

IV. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1. **Environmental and Social Safeguards.** According to the Bank's Environmental and Social Policy Framework (ESPF) and the currently available information, the Program is classified as Category B, considering the potential environmental and social impacts associated with the rehabilitation of aerodromes and prioritized airstrips for transport infrastructure. These impacts are likely to be localized, temporary, and moderate, as the works will be conducted within existing airstrips, for which mitigation options are available. During construction, the main expected impacts are related to air emissions, dust, noise, and increased traffic due to heavy machinery. Some airstrips might be located within protected areas or Key Biodiversity Areas (KBA); therefore, impacts on critical, natural, and modified habitats will be assessed during the due diligence process. Works will be carried out mostly in rural contexts; based on the type of infrastructure, potential locations, and currently available data, it is expected that there will be minor to moderate impacts related to physical and economic displacement. In the case of economic displacement, these impacts could be on informal businesses and vendors or people occupying offices or buildings in the airstrips and aerodrome facilities. Nevertheless, impacts related to both physical and economic displacement will be verified during the due diligence.
- 4.2. The Environmental and Social Risk Rating (ESRR) is substantial due to (i) the increased risk of worker accidents, (ii) the rural context where the works will be developed, (iii) the complex context (legal and institutional framework), and (iv) the limited capacity of the Executing Agency (EA) and challenges for contractors

⁴⁰ The actual representative sample of the program includes a total of 7 aerodromes: all five airstrips defined as Type "A" (ref. Par. 2.15 and Footnote 28), one of Type "C" and Paramaribo's Zorg en Hoop domestic aerodrome.

⁴¹ The additional airstrips eligibility criteria are: (i) to be part of the 27 airstrips prioritized by the multicriteria analysis; (ii) to have finalized engineering designs and Environmental and Social Impact Assessment (ESIA) and mitigation; (iv) to have minimal social and environmental impact, being classified as "B" or "C" in the Bank's environmental and social risk classification; and (v) to have an economic evaluation with favorable results and a minimal EIRR of 12%.

complying with the ESPF requirements (this will be the first time that the Executing Agency will be working with the implementation of the ESPF).

- 4.3. The Disaster and Climate Change Risk Classification is moderate, as the areas are exposed to flooding, and the estimated criticalness and vulnerability for the infrastructure interventions are moderate due to the potential negative impacts of service failure given the importance of the airstrips as a connection point for community access to services. Increments in flood occurrence and magnitude are expected due to climate change. The exacerbation of disaster risks by the improvement of the airstrips will be analyzed during the due diligence.
- 4.4. An Environmental and Social Assessment (ESA) and an Environmental and Social Management Plan (ESMP) - including a Resettlement and/or Livelihood Restoration Plan (if applicable) and a Stakeholder Engagement Plan (SEP) - will be prepared for the representative sample of the Program. An Environmental and Social Framework (ESMF) will be prepared for the Program to guide the preparation of projects outside the sample. These documents will be disclosed on the Bank's website around July 2024. The ESA/ESMP and ESMF will be part of the Program's Environmental and Social Management System (ESMS). General consultations on the ESA/ESMP will be carried out, specifically with people potentially affected by resettlement and/or economic displacement (if required). Updated versions of the ESA/ESMP, ESMF, SEP, and the results of the consultation will be disclosed around August 2024.
- 4.5. **Risks.** The risks identified are: (i) preparation: data scarcity, particularly in terms of demand for air transport; (ii) eligibility - delays in the approval of an updated air transport legislation; (iii) execution - agreement from the government regarding the project implementation mechanism; (iv) sustainability - the need for updated air transport legislation to establish a new mechanism for fee collection and re-investment for the airstrips; (v) illegal activities; and (vi) lack of ownership and use by the authorities of the measures implemented under the program.
- 4.6. **Fiduciary Screening.** Procurement financed through the project will be carried out under the Procurement Policies GN-2349-15 and GN-2350-15. The financial management of the program will follow provisions of Guide OP-273-12. Once the financing instrument is defined, considering the institutional analysis and the risk matrix, the loan proposal annex (regarding fiduciary arrangements and requirements for the operation) will be prepared.

V. RESOURCES AND TIMETABLE

- 5.1. Annex V details the costs and schedule for preparing the loan operation. The POD Due Date will be June 24th, 2024, with the approval of the Draft Loan Proposal by the Operational Policies Committee on August 2nd, 2024, and the consideration for approval by the IDB Board of Executive Directors on September 25th, 2024. An estimated budget of US\$348,440 from the Bank's administrative budget will be

needed to support the preparation process for the operation. Out of this budget, US\$190,000 will be financed by non-refundable Technical Cooperation funds.⁴²

⁴² This will be funded by SU-T1171 (Support to the Design and Execution of Transport Projects in Suriname) under preparation, that will include the following activities: preparation of the Program Operation Manual; complementary socio-environmental studies; economic evaluation of the Program; engineering studies and adaptation assessment to climate change; diagnosis of the accessibility to the areas located within the influence of the program; strategy to promote the inclusion of gender and diversity issues, dissemination activities of results and experiences , intraregional events and exchange of experiences with experts on the topics addressed by the Program.

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.

Operation Information

Operation Name	
Essential Air Transport Service for remote communities in Suriname	
Operation Number	SU-L1071

Operation Details

Organizational Unit	IDB Sector/Subsector
INE/TSP	SECURITY, NAVIGATION AND AIR TRAFFIC
Type of Operation & Modality	Original IDB Amount
LON / GOM	\$20,000,000.00
Executing Agency	Borrower
SU-MPWTC	REPUBLIC OF SURINAME
ESG Primary Team Member	Team Leader
Roberto Leal Rosillo	Raphael Dewez
Toolkit Completion Date	Author
03/04/2024	Leal Rosillo, Roberto
Applicable ESPs with requirements	
ESPS 1; ESPS 2; ESPS 3; ESPS 4; ESPS 5; ESPS 6; ESPS 7; ESPS 8; ESPS 9; ESPS 10	

Operation E&S Classification Summary

Environmental and Social Impact Categorization (ESIC)	B
Disaster and Climate Change Risk Classification (DCCRC)	Moderate
Environmental and Social Risk Rating (ESRR)	Substantial

Summary of Impacts / Risks and Potential Solutions

The operation will not have direct impacts associated with child labor or forced labor in the workforce.

The operation will not have significant indirect and/or cumulative impacts associated with child labor or forced labor in the workforce.

The Executing Agency or other relevant entity (in relation to the operation) has a proven track record to respect and protect the fundamental principles and rights of workers (including fair treatment,



E&S Screening Filter

commitment to non-discrimination, equal opportunity, protection of workers including workers in vulnerable situations, work accommodations, migrant workers' rights, collective bargaining and rights of association) and compliance with national employment and labor laws.

The operation will not result in the direct loss of employment (i.e. retrenchment).

The operation will not result in the indirect and/or cumulative loss of employment (i.e. retrenchment).

The Borrower will prepare and operate a Grievance Redress Mechanism for all workers (direct and contracted).

The operation will not cause indirect and/or cumulative impacts associated with accidents, injury, and disease arising from, associated with, or occurring in the course of work.

The operation will promote a sustainable use of resources including energy, water and raw materials.

The operation will not have direct adverse impacts on human health and the environment due to pollution from project activities.

The operation will not have indirect and/or cumulative adverse impacts on human health and the environment due to pollution from project activities.

The operation will not generate indirect and/or cumulative impacts generated by solid waste (hazardous and/or non-hazardous).

The operation will not have direct negative impacts to the environment and human health and safety due to the production, procurement, use, and disposal of hazardous materials such as PCBs, Radiological Waste, Mercury, CFCs, etc.

The operation will not have indirect and/or cumulative negative impacts to the environment and human health and safety due to the production, procurement, use, and disposal of hazardous materials such as PCBs, Radiological Waste, Mercury, CFCs, etc.

The operation will not have direct negative impacts to the environment and human health and safety due to the production, procurement, use, and disposal of pesticides.

The operation will not have indirect and/or cumulative negative impacts to the environment and human health and safety due to the production, procurement, use, and disposal of pesticides.

The operation is considering alternatives to implement technically and financially feasible and cost-effective options to avoid or minimize project-related GHG emissions during the design and operation of the project.

The operation has no exposure to climate transition risks related with a loss of value of a project driven by the transition to a lower-carbon economy, result from extensive policy, legal, technology, and/or market changes to address climate change.

The project will not directly affect the public (including workers and their families) by exposing them to hazardous materials released by the project, particularly those that may be life threatening.

The project will not indirectly-cumulatively affect the public (including workers and their families) by exposing them to hazardous materials released by the project, particularly those that may be life threatening.



E&S Screening Filter

There is no potential for the project or project-related activities (e.g. the influx of temporary or permanent project labor, among others) to directly result in or exacerbate community exposure to water-related (i.e., waterborne, water-based, and vector-borne diseases) and/or communicable diseases (e.g. COVID).

The project's direct impacts on priority ecosystem services will not result in adverse health and safety risks and impacts to the project-affected people.

There is no potential for an emergency or unanticipated event to occur in the project area of influence that demands immediate action to prevent or reduce harm to people, property, and/or the environment.

There is no potential direct impacts to workers and project-affected people related to the use or arrangement of security services to safeguard personnel and/or property.

There is no potential indirect and/or cumulative impacts to workers and project-affected people related to the use or arrangement of security services to safeguard personnel and/or property.

The project will not lead to indirect and/or cumulative impacts related to physical, and/or economic displacement - Impacts include, and are not limited to, relocation; expropriation; loss of shelter; loss of land; loss of assets; restrictions on land and natural resources; loss of income; loss of livelihoods; loss of social safety net.

Vulnerable people will not be disproportionately affected by direct impacts related to land acquisition - people may be considered vulnerable by virtue of disability, state of health, indigenous status, gender identity, sexual orientation, religion, race, color, ethnicity, age, language, political or other opinion, national or social origin, property, birth, economic disadvantage, or social condition. Other vulnerable people include the elderly, children, single-headed households, refugees, internally displaced persons, natural resource dependent communities.

Vulnerable people will not be disproportionately affected by indirect and/or cumulative impacts related to land acquisition - people may be considered vulnerable by virtue of disability, state of health, indigenous status, gender identity, sexual orientation, religion, race, color, ethnicity, age, language, political or other opinion, national or social origin, property, birth, economic disadvantage, or social condition. Other vulnerable people include the elderly, children, single-headed households, refugees, internally displaced persons, natural resource dependent communities.

The operation doesn't have the potential to directly impact modified habitat that include significant biodiversity value.

The operation doesn't have the potential to directly convert or degrade natural habitat.

The operation doesn't have the direct potential to implement project activities in critical natural habitat.

The operation doesn't have the indirect and/or cumulative potential, including through the supply chain, to implement project activities in critical natural habitat.

The operation is not expected to directly impact a legally protected area or an internationally recognized area.

The project will not directly introduce (intentionally or accidentally) alien, or non-native, species of flora and fauna that have the potential for invasive behavior in areas where they are not normally found.

The project will not indirectly-cumulatively, including through the supply chain, introduce (intentionally or



accidentally) alien, or non-native, species of flora and fauna that have the potential for invasive behavior in areas where they are not normally found.

The project is not likely to adversely directly impact ecosystem services.

Indigenous Peoples are not expected to be adversely impacted by direct project related land-acquisition or access restrictions. Note that all impacts on lands and natural resources subject to traditional ownership or under customary law requires FPIC.

The project doesn't have the potential to cause adverse direct impacts on Indigenous Peoples who live in isolation and initial contact.

The project doesn't have the potential to cause adverse indirect and/or cumulative impacts on Indigenous Peoples who live in isolation and initial contact.

The project is not expected to directly damage or negatively impact cultural heritage.

The project is not expected to directly damage or negatively impact critical cultural heritage.

The project is not expected to indirectly-cumulatively damage or negatively impact critical cultural heritage.

The project will not negatively directly affect people due to their gender, sexual orientation or gender identity.

The project will not negatively indirectly-cumulatively affect people due to their gender, sexual orientation or gender identity.

The project is not expected to lead to direct risks and impacts associated with Sexual and Gender-based Violence.

The project is not expected to lead to indirect and/or cumulative risks and impacts associated with Sexual and Gender-based Violence.

The project will not potentially face direct barriers to equitable gender-based participation.

The project will not potentially face indirect and/or cumulative barriers to equitable gender-based participation.

The project will not deal with a subject matter and/or be implemented in an area where the manipulation, interference, coercion, discrimination, and intimidation of stakeholders has been documented.

ESPS 1 - Assessment and Management of Environmental and Social Risks and Impacts

The Executing Agency will conduct an Environmental and Social Assessment (ESA) or Environmental and Social Impact Assessment (ESIA) process for the project during preparation.

The Executing Agency will prepare and maintain an Environmental and Social Management System (ESMS) for the operation as defined under ESPS 1.

The Borrower/Executing Agency's has limited organizational capacity and competency for managing environmental and social issues.

The project will involve Associated Facilities and/or cumulative impacts that will lead to moderate risks or impacts.

There are substantial levels of contextual risks associated with the project (e.g. political instability, oppression of communities, armed forces in the project area).

ESPS 2 - Labor and Working Conditions

The Executing Agency will prepare and maintain an Environmental and Social Management System (ESMS) for the operation with specific elements related to Labor and Working Conditions under ESPS 2.

The operation has the potential to cause minor direct impacts associated with accidents, injury, and disease arising from, associated with, or occurring in the course of work.

ESPS 3 - Resource Efficiency and Pollution Prevention

The operation will generate minor direct impacts generated by solid waste (hazardous and/or non-hazardous).

The operation is expected to or currently produce directly GHG emissions (less than 25,000 tons of CO₂ equivalent per year).

The operation is expected to or currently produce indirectly-cumulatively GHG emissions (less than 25,000 tons of CO₂ equivalent per year).

ESPS 4 - Community Health, Safety, and Security

There are minor direct health and safety risks associated with the design of structural elements or components of the operation (e.g. existing or new buildings, earthworks, bridges, drainage, roadways, power stations, transmission and distribution poles, underground utilities, and dams), and/or road transport activities (e.g. transport of heavy or over-sized equipment) which could result in health and safety impacts to third parties and project-affected people.

There are minor indirect and/or cumulative health and safety risks associated with the design of structural elements or components of the operation (e.g. existing or new buildings, earthworks, bridges, drainage, roadways, power stations, transmission and distribution poles, underground utilities, and dams), and/or road transport activities (e.g. transport of heavy or over-sized equipment) which could result in health and safety impacts to third parties and project-affected people.

There is minor potential for the project or project-related activities (e.g. the influx of temporary or permanent project labor, among others) to indirectly-cumulatively result in or exacerbate community exposure to water-related (i.e., waterborne, water-based, and vector-borne diseases) and/or communicable diseases (e.g. COVID).

The project's indirect and/or cumulative impacts on priority ecosystem services may result in minor adverse health and safety risks and impacts to the project-affected people.

Natural hazards, such as earthquakes, droughts, landslides, floods, wildfires, or others, including those caused or exacerbated by climate change, are likely to occur in the project area, and these may moderately impact the project, and/or the project may moderately exacerbate the risk from natural hazards to human life, property, and/or the environment.

ESPS 5 - Land Acquisition and Involuntary Resettlement



E&S Screening Filter

The project will lead to minor direct impacts related to physical, and/or economic displacement - Impacts include, and are not limited to, relocation; expropriation; loss of shelter; loss of land; loss of assets; restrictions on land and natural resources; loss of income; loss of livelihoods; loss of social safety net.

ESPS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources

The operation has the potential, including through the supply chain, to minorly indirectly-cumulatively impact modified habitat that include significant biodiversity value.

The operation has the potential, including through the supply chain, to minorly indirectly-cumulatively convert or degrade natural habitat.

The operation has the potential, including through the supply chain, to minorly indirectly-cumulatively impact a legally protected area or an internationally recognized area.

The project is likely to adversely indirectly-cumulatively minorly, including through the supply chain, impact ecosystem services.

ESPS 7 - Indigenous Peoples

The project has the potential to cause minor adverse direct impact on Indigenous Peoples. FPIC is required when there will be (i) impacts on lands and natural resources subject to traditional ownership or under customary use; (ii) Relocation of Indigenous Peoples from lands and natural resources subject to traditional ownership or under customary use; or (iii) significant impact on Cultural Heritage.

The project has the potential to cause minor adverse indirect/cumulative impact on Indigenous Peoples.

Indigenous Peoples will be adversely minorly impacted by indirect/cumulative project related land-acquisition or access restrictions. Note that all impacts on lands and natural resources subject to traditional ownership or under customary law requires FPIC.

ESPS 8 - Cultural Heritage

The project has the potential to minorly indirectly-cumulatively damage or negatively impact cultural heritage.

ESPS 10 - Stakeholder Engagement and Information Disclosure

The Borrower will prepare a stakeholder engagement framework/plan for the lifetime of the program (including the equal participation of women and men and also take into account Indigenous Peoples, vulnerable groups when relevant).

The Borrower will engage in meaningful consultations and engagement with stakeholders which is free of manipulation, interference, coercion, discrimination, and intimidation.

The Borrower will operate a Grievance Redress Mechanism at the Project level (direct and contracted).

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SURINAME

ESSENTIAL AIR TRANSPORT SERVICE FOR REMOTE COMMUNITIES IN SURINAME

SU-L1071

INITIAL ENVIRONMENTAL AND SOCIAL REVIEW SUMMARY (ESRS)
04/03/2024

This document was prepared by:
Roberto Leal Rosillo, Maria Amelia Viteri and Edoardo Brovero (VPS/ESG)
With the support of the Project team:
Raphael Dewez and Maria Emilia Monteiro (INE/TSP)

Initial Environmental and Social Review Summary	
Operation Data	
Operation Number	SU-L1071
IDB Sector/Subsector	Transport/Rural Roads (INE/TSP)
Type of Operation & Modality	Multiple Works Operation (LON/GOM)
Initial E&S Impact Classification (ESIC)	B
Initial E&S Risk Rating (ESRR)	Substantial
Initial Disaster and Climate Change Risk Classification (DCCRC)	Moderate
Borrower	Republic of Suriname
Executing Agency	Ministry of Transport, Communication and Tourism (MTCT) through the N.V. Luchthavenbeheer
IDB Loan Amount (and total project cost)	\$20,000,000.00 (\$20,000,000.00)
Applicable ESPS's with requirements	ESPS 1; ESPS 2; ESPS 3; ESPS 4; ESPS5 ; ESPS 6; ESPS 7; ESPS 8; ESPS 9; ESPS 10
Executive Summary	
<p>According to the Bank's Environmental and Social Policy Framework (ESPF) and the current available information, the Program is classified as Category B, considering the potential environmental and social impacts associated with the rehabilitation of aerodromes and prioritized airstrips for transport infrastructure. These impacts will likely be localized, temporary, and moderate, as the works will be conducted within existing airstrips, for which mitigation options are available. During construction, the main expected impacts are related to air emissions, dust, noise and increased traffic due to heavy machinery, nuisances to the community and waste management. Some airstrips might be located within protected areas or Key Biodiversity Areas (KBA); therefore impacts on critical, natural, and modified habitats will be assessed during the due diligence.</p> <p>Works will be carried out mostly in rural contexts; based on the type of infrastructure, potential locations, and currently available data, it is expected that there would be minor to moderate impacts related to physical and economic displacement. In the case of economic displacement, these impacts could be on informal businesses and vendors or people occupying offices or buildings in the airstrips and aerodrome facilities. Nevertheless, impacts related to both physical and economic displacement will be verified during due diligence.</p> <p>The Environmental and Social Risk Rating (ESRR) is substantial due to the increased risk of worker accidents, the rural context where the works will be developed, the complex context (legal and institutional framework), and the limited capacity of the Executing Agency (EA) and challenges for contractors complying with the ESPF requirements. This will be the first time that the EA will be working with the ESPF.</p>	

The Disaster and Climate Change Risk Classification is moderate, as the areas are exposed to flooding, and the estimated criticality and vulnerability for the infrastructure interventions are moderate due to the potential negative impacts of service failure given the importance of the airstrips as a connection point for community access to services. Increments in flood occurrence and magnitude are expected due to climate change. Exacerbation of disaster risks by the improvement of the airstrips will be analyzed during the due diligence.

An Environmental and Social Assessment (ESA) and an Environmental and Social Management Plan (ESMP) - including a Resettlement and/or Livelihood Restoration Plan (if applicable) and a Stakeholder Engagement Plan (SEP) - will be prepared for the representative sample of the Program. An Environmental and Social Framework (ESMF) will be prepared for the Program to guide the preparation of projects outside the sample. These documents will be disclosed on the Bank's website around June 2024. The ESA/ESMP and ESMF will be part of the Program's Environmental and Social Management System (ESMS). Consultations on the ESA/ESMP will be carried out as well as specific consultation with potentially affected people by physical and/or economic displacement (if required). Updated versions of the ESA/ESMP, ESMF, SEP, and the results of the consultation will be disclosed around in August 2024.

Operation Description

The program's general objective is to contribute to a safe, secure, and self-sustaining air transport sector for Suriname that delivers essential air transport services for remote communities. The specific objectives are to: (i) improve the current conditions, efficiency, and the sustainability of existing airstrips used to provide essential air transport services to remote areas; (ii) modernize, by updating the current legislation, Suriname's air transport sector's regulations and management and laying the foundations for the sector to become self-sustainable.

Component 1: Airstrips rehabilitation. (US\$ 17,200,000). This component will finance: (i) works for rehabilitation of aerodrome to optimize operations for safe and efficient transport services; (ii) definition of an international standard-based fee structure and collection mechanism, and identification of additional revenue sources to cover operations and maintenance.

Component 2: Improve institutional and legal framework (US\$1,000,000). This component will finance: (i) improve institutional and legal framework including updated regulations, a new independent ANSP, and a new accident investigation body; (ii) updated license and permits fees and collection mechanism for reinvestment in the sector; (iii) improve air navigation surveillance; and (iv) development of updated flight manifests for domestic passengers and cargo.

Component 3: Improve air transport operations (US\$850,000). This component will finance: (i) energy-efficient air navigation equipment for airstrips; (ii) training and capacity building, including capacity building of local communities for maintenance; and (iii) labor/internships inclusion of PwD in the N.V. Luchthavenbeheer and women employment in the air transport sector.

Administration and monitoring. (US\$950,000). This component will finance management costs, including supervision and technical support for the Project Implementation Unit (PIU), as well as audits and project evaluation.

The main beneficiaries of the program will be air transport users. Indigenous and Afro-descendant communities, to a greater extent, will benefit from these interventions which will ensure sustainable accessibility to very isolated regions of the country, improving safety conditions for operations and

reducing the time and cost of transporting people and goods, which currently must be done by other means of transport.

The sample of projects has not been decided yet and depends on the prioritization of the airstrips which is in progress of being decided based on airstrips all along the country (see Annex 1 for a map of possible prioritized airstrips). The sample projects will be representative and include the different types of infrastructure works described in the components of the Program (and its respective risks and impacts) and areas where interventions could take place. The sample projects will include projects with moderate environmental and social impacts (category B) to ensure that they are representative. Projects with significant social, environmental, and economic benefits, and those with the highest potential for improvements in accessibility, will be prioritized. It is worth mentioning that there will not be construction of new airstrips, as all the renovations and improvements will be performed on existing airstrips. Moreover, areas and airstrips that serve gold mining will not be prioritized as part of this program. Airstrips that could potentially exacerbate deforestation will be analyzed. The type of aircraft that the airstrips will serve averages small planes that can only fit 5 passengers.

The Bank’s experience in similar programs in Suriname has generated lessons learned that will be incorporated into the program, such as: (i) a strong emphasis on strengthening the capacity of the Executing Agency (EA); (ii) creating dedicated execution units for program implementation; (iii) creating program steering committees where there is overlapping authority for the interventions; (iv) carefully assessing the cost and implementation time for the interventions; and (v) managing the designs to reduce the need for utility relocation and land acquisition. The lessons learned from IDB’s financing and involvement in the Meerzorg-Albina Corridor Rehabilitation Project (2062/BL-SU,2063/OC-SU), the Meerzorg-Albina Integration Corridor Rehabilitation Project (2887/OC-SU), and ITLCS (4828/OC-SU), stress the importance of good coordination between multiple institutional stakeholders to avoid any impacts on the project timing and costs.

Rationale for Classifications/Rating

<p><i>E&S Impact Classification</i></p>	<p><i>Category B</i></p> <p>Potential negative environmental and social impacts associated with the rehabilitation of airstrips and aerodromes. These impacts are expected to be localized, temporary, and moderate, as the works will be conducted within the existing Right of Way (RoW) of the existing airstrips, and mitigation options are available. During construction, the main expected impacts are related to air emissions, dust, noise, increased traffic due to heavy machinery, and nuisances to the community. Management of solid waste will be looked at closely, given the rural location of the airstrips. There could be impacts related to physical and/or economic displacement although they are expected to be minor to moderate. There could be minor impacts on critical and natural habitats, but this will be confirmed during due diligence.</p>
<p><i>E&S Risk Rating</i></p>	<p><i>Substantial</i></p> <p>The ESRR is substantial due to increased risk of worker accidents, the rural context where the works will be developed, the complex context (legal and institutional framework), and the limited capacity of the Executing Agency</p>

	(EA) and challenges for contractors complying with the ESPF requirements. This will be the first time that the EA will be working with the ESPF.
<i>DCC Risk Classification</i>	Moderate The Disaster and Climate Change Risk Classification is Moderate, as the area is exposed and prone to flooding, and the estimated criticality and vulnerability for the infrastructure interventions are moderate due to the potential negative impacts of service failure given the importance of the airstrips as a connection point for community access to services. Increments in flood occurrence and magnitude are expected due to climate change. Exacerbation of disaster by the improvement of the airstrips is not expected, nevertheless, this will be analyzed during the due diligence.
Use of Borrower E&S Framework	<i>No</i>
The Program will not use the Borrower framework and will comply with the requirements of the ESPF.	
Is a framework approach applied?	<i>No</i>
The Program will not use a framework approach.	
Will the operation be co-financed or is there a possibility of being co-financed?	<i>No</i>
The Program will not be co-financed.	
Environmental and Social Performance Standards (ESPSs) that apply to the proposed project	
ESPS-1. Assessment and Management of E&S Risks and Impacts	<i>Yes</i>
<p>An Environmental and Social Management System (ESMS) comprising the following seven elements will be prepared for this Program: (i) project specific framework; (ii) identification of risks and impacts; (iii) management plans; (iv) organizational capacity and competency; (v) emergency preparedness and response; (vi) stakeholder engagement; and (vii) monitoring and review. During the Due Diligence, an ESA will be prepared for the representative sample of projects, which will identify risks and impacts according to the requirements of ESPS 1 to 10, confirming the scope and magnitude of the negative environmental and social risks and impacts. An ESMP will be prepared, containing mitigation measures for the sample projects, including a Resettlement Action Plan (RAP) and/or Livelihood Restoration Plan (LRP) in case these impacts are identified in the ESA. An ESMF will be developed as part of the ESMS and will include the eligibility criteria to exclude category A projects and the procedures to obtain the Non-Objection of the Bank for inclusion of projects outside of the sample during the execution of the program. The ESMF will also contain a Resettlement and/or Livelihood Restoration Framework with guidelines for the development of specific RAPs and/or LRP, if applicable.</p> <p>The program will be executed by the - Ministry of Transport, Communication and Tourism (MTCT) through the N.V. Luchthavenbeheer, which is a Parastatal organization of the MTCT whose purpose is to maintain and operate Suriname’s international airport. One of the main concerns related to the MTCT is its implementation capacity and the volume of tasks and activities assigned to it, as well as its ability to manage and create public awareness. The substantial increase in the volume of investment has created the need to substantially improve capacity. An assessment of the EA’s capacity to manage environmental</p>	

and social risks and impacts will be conducted during program preparation as part of the preparation of the ESMS. This is the MTCT 's first operation with the Bank; as a result, it has no experience with the ESPF, which could affect its capacity to manage environmental and social risks and impacts.

During construction, the main expected impacts are related to air emissions, dust, noise and the production of solid waste. In addition, there can be potential impacts on the livelihoods in case communities live next to the airstrip. Physical and economic displacement will be verified during the DD. Based on an initial screening, there are Indigenous territories or communities within the area of the program (see Annex 1 for intersection map). For projects of the sample with these communities within their area of influence, a Socio-cultural Analysis (SCA) will be carried out to identify the risks and impacts, including mitigation measures and opportunities to benefit them. Free, prior, and informed consent (FPIC) in accordance with the ESPS 7 should be obtained if the projects are located within Indigenous communities or territories. If projects with these impacts are part of the final list of prioritized areas, some of these should be part of the sample.

There could be impacts on critical and natural habitats. since two airstrips are located within KBAs and one in a protected area, but the aim is to potentialize their use for community connection and for ecotourism projects. If impacts are confirmed on critical habitats a biodiversity action plan will be developed. Risks and impacts on critical, natural and modified habitats will be assessed during due diligence. In case these airports are prioritized they will be part of the representative sample.

All these risks and direct impacts, as well as indirect and cumulative impacts, will be assessed in the ESA/ESMP. The ESMS will include a Grievance Redress Mechanism (GRM) for the project level and the Program.

A consulting firm or consultant will be hired to support the EA in the preparation of the ESMS, the ESA/ESMP for the sample of projects, including RAPs and/or LRPs, if applicable, a Stakeholder Engagement Plan (SEP) for the sample and respective consultation processes, and the ESMF for projects outside of the sample, that will include a SEP for the Program. The fit-for-disclosure version of ESA/ESMP, SEP, and ESMF will be disclosed around June 2024. Consultations on the ESA/ESMP of the sample will be carried out, as well as specific consultations with those potentially affected by resettlement (if any). Updated versions of the ESA/ESMP and ESMF and the consultation reports will be disclosed around August 2024.

The Executing Agency must submit a semi-annual progress report that will assess and provide evidence on the environmental and social performance of the Program to the Bank. This process for supervision and reporting will be defined as part of the ESMS.

ESPS-2. Labor and Working Conditions	Yes
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Physical activities for this Program involve minor to moderate occupational health and safety risks. These include accidents, occupational risks, noise and vibrations, and poor air quality, among others. Additionally, there could be a risk of handling hazardous materials such as fuel, oil, and lubricants that will be used during construction. As such, the Executing Agency together with potential contractor's labor practices and supply chain factors will be assessed through the ESA to identify potential risks and impacts following ESPS 2 requirements and national legislation and the ESMP will have the measures to manage such impacts and risks. Suriname laws will be assessed as per the requirements of ESPS 2. The Labor Management Procedures that should be part of ESA/ESMP and ESMF will address any gaps identified during due diligence, including mitigation measures for construction camps if this is the case.

Civil works entail processes of construction and mobilization of personnel which present risks and impacts associated with labor and working conditions. The ESA will analyze the labor conditions in Suriname and labor practices of the EA, including a risk analysis on child labor. The ESMP will include required measures to address any risks identified through a series of Labor Management Procedures (LMP). The LMP will prohibit child labor and give clear conditions for ensuring that workers' human rights and occupational health and safety will be guaranteed, which will be part of any contractor bidding documents. The ESMP for the sample will include an Occupational Health and Safety Management Plan and an Emergency Response Plan. The requirements included in the LMP will be integrated into the Project's legal requirements, bidding documents, and contractor and supplier contracts. In addition, a Grievance Redress Mechanism for workers will be developed, as well as a Code of Conduct including addressing and preventing gender-based violence. The ESMP will include guidelines for the contingency plan and biosafety protocols which refer to human waste, medical equipment, medicines, blood, vaccines, etc., where applicable.

The ESMF will include procedures to prepare Occupational Health and Safety Management Plans and an Emergency Response Plans as well as LMPs for projects outside the sample.

The Project does not consider the use of solar panels, but this will be confirmed during due diligence.

ESPS-3. Resource Efficiency and Pollution Prevention

Yes

Anticipated risks and negative environmental and social impacts are expected primarily during the construction phase and will be those typically associated with the rehabilitation of airstrips. The main impacts are associated with the generation of noise and vibrations, air emissions (e.g., dust, gases from heavy machinery/increased vehicular activity), and waste generation (solid, liquid, and hazardous via fuels, oils, batteries, etc.), as well as potential final disposal of waste given the rural location of some of the airstrips. Potential contamination of soil and waterbodies will be analyzed in detail during the due diligence. Notwithstanding, the identified impacts are moderate, localized, and short-term, and there are effective, and available mitigation measures to address them during project execution. The ESMP will outline explicit measures for the management of waste (solid, liquid, and hazardous), noise, and dust along with drainage for the projects in the sample.

During Due Diligence, the type and source of materials and processes to be utilized for the improvement of the airstrips will be identified and analyzed, along with details and potential impacts pertaining to any associated facilities for which mitigation measures will be necessary – these will be outlined as applicable in the ESMP.

Minor greenhouse gas emissions (GHG) are expected during construction and are likely to increase once the work is completed due to increased flights, the Bank will calculate estimated expected gross GHG emissions for both the construction and operation phases to help determine the level of intervention. The project is expected to produce less than 25,000 tons of equivalent CO₂ per year.

The ESA will evaluate all direct, indirect, and cumulative environmental and social impacts and risks and identify appropriate mitigation measures which will be included in the ESMP using the mitigation hierarchy. Measures will be identified to reduce GHG emissions and promote the efficient use of energy in both the construction and operation phases of the project.

The ESMF will contain the guidelines and procedures for all projects outside the sample related to these risks and impacts and their respective preventive and mitigation measures. The project does not include the usage of fertilizers or pesticides.

ESPS-4. Community Health, Safety, and Security	Yes
<p>The anticipated impacts and risks to the communities located in remote areas within the immediate area of influence are expected to be those typically associated with the improvement of infrastructure, which include: nuisances due to noise, vibrations, dust, emissions, traffic, presence of heavy machinery, temporary blockage of access to residences, businesses and/or public infrastructure, risk of accidents, risk of disease transmission like waterborne and water-related diseases, and contagious diseases, and possible conflicts between construction personnel and the communities. Community health risks will be assessed under the ESA of the sample projects and the ESMP will include mitigation measures to address the risks/impacts identified (the ESMP will for instance include a Community Health and Safety Plan). Indirect impacts to communities are expected to be primarily regarding waste materials not properly managed and disposed properly, given the lack of proper disposal sites in remote and rural regions. Mitigation measures will therefore be proposed as part of the ESMP to address these risks/impacts and will include a community Safety Management Plan outlining requirements during work activities to safeguard the community. This plan will include safety measures, such as proper construction signaling and engagement with the community during construction works, to avoid or minimize accidents and disruptions to the community.</p> <p>In addition there is the risk of more accidents associated with the increasing air traffic and accidents due to boosting minor aviation operations. This will be looked at during the due diligence.</p> <p>The borrower will carry out a more detailed risk assessment for a more disability-friendly infrastructure as applicable, compatibly with the context, following ESPS 4 guidelines.</p> <p>The Disaster and Climate Change Risk Classification (DCCRC) is moderate given the moderate exposure to natural hazards such as pluvial flooding, riverine flooding, drought, and heat waves, with a foreseen noticeable impact of climate change. The criticality and vulnerability classification are moderate given that the airstrips will be crucial to guarantee basic services access for the local communities and to foster ecotourism. Risk exacerbation may occur locally; therefore, disaster risk must be duly and proactively managed as works are to be implemented in rural areas that are prone to floods during the rainy seasons. Exacerbation of disaster risk by the project will be further analyzed during the due diligence. A Disaster Risk analysis will be a crucial input for the ESA and for developing a Disaster Risk narrative (that will be done as Step 3 of the DCCR methodology). In case further analysis is needed and identified during the DD, Step 4 of the DCCR methodology will be analyzed.</p> <p>No direct impacts on ecosystem services have been identified but this will be confirmed during the due diligence.</p> <p>The ESMF will include specific procedure and guidelines for the projects outside the sample in regards to community health, safety, and security.</p>	
ESPS-5. Land Acquisition and Involuntary Resettlement	Yes
<p>According to the information available to date, the Program's interventions might cause physical and/or economic displacement of informal businesses and vendors, considering that rehabilitation work will be conducted within the existing RoW airstrips, and mitigation options are available.</p>	

However, these are expected to be low to moderate due to the type of civil works to be carried out. This will be confirmed during Due Diligence. If such impacts are identified in the sample projects, a Resettlement Action Plan (RAP) and/or a Livelihood Restoration Plan (LRP) will be prepared as needed, and specific consultations will be held with those affected by resettlement.

For projects outside the sample, the ESMF will include a Resettlement and/or Livelihood Restoration Framework with guidelines for the development of specific RAPs and LRPs in case physical or economic displacement is confirmed during execution, following the requirements of ESPS 5. The EA will also be required to submit these plans for Bank approval prior to obtaining the Non-Objection of the Bank for inclusion of works outside the sample in the Program, as well as evidence of having carried out the specific consultations with affected people and the livelihood restoration process per ESPS 5. No land acquisition is anticipated for the implementation of the Program. The ESMS will include exclusion criteria to ensure that projects that are determined by the Bank to be Category A (including those that have the potential to cause significant negative physical and/or economic displacement impacts) are not financed. Activities that require acquisition of land will not be financed.

ESPS-6. Biodiversity Conservation and Sustainable Management of Living Natural Resources	Yes
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Given the rural context of the Program, some of the prioritized airstrips for the Program are in Protected Areas and Key Biodiversity Areas (KBA). These airstrips primarily serve established communities and secondarily provide access for ecotourism to these high biodiversity value areas. Amongst the proposed airstrips located in KBAs are Lelygebergte Airstrip within Lely Gebergte KBA and Amatopo Airstrip y Coeroenie Airstrip within Kabalebo / Arapahu KBA. As for the protected areas, the airstrip of Raleigh Vallen Airstip is located within Centraal Suriname Natuurreservaat. See Annex 1 for maps of the location of these KBAs, protected areas, and proposed airstrips.

It is worth mentioning that there will not be construction of new airstrips, as all the renovations and improvements will be carried out on existing airstrips. Moreover, areas and airstrips that serve gold mining will not be prioritized as part of this program.

Minimal to no deforestation is expected. Should the ESA identify the need to clear vegetation, the assessment will include baseline data on the classification, type (species identification, etc.), and identification of Natural Habitat or Critical Habitat as well as and prevalence of this vegetation, and the ESMP will propose mitigation measures commensurate with the local regulations and the level of risk for the necessary clearance (if impacts are identified in critical habitats, a biodiversity action plan will be developed). In addition, if revegetation activities of the impacted site are required after the intervention, invasive species shall not be used. The ESA will determine risks and direct, indirect, and cumulative impacts on critical, natural, and modified habitats of the sample projects and apply the requirements of ESPS 6 as needed.

The ESMF will include the guidelines and procedures accordingly for projects outside of the sample. Based on those results, the ESMS will include eligibility criteria to exclude activities that are classified as Category A by the Bank, ensuring compliance with ESPS 6.

The Program will encourage the use of native species in its activities.

ESPS-7. Indigenous Peoples	Yes
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<p>Based on an initial screening, there are Indigenous territories or communities, and Maroon communities, within the area of the Program. For projects of the sample with these communities within their area of influence, a Socio-cultural Analysis (SCA) will be carried out to identify the risks and impacts, including mitigation measures and opportunities to benefit these communities. A process to obtain free, prior, and informed consent (FPIC) in accordance with the ESPS 7 should be required if works are done within these territories and communities. The SCA, that includes a vulnerability analysis, should also be carried out for each of the Indigenous and Maroon community with its respective specific consultation process. It should be assessed if a specific plan should be developed or inclusion of specific measures in management plans is needed. The ESMF will include guidelines for carrying out this process for all future projects that may require it.</p> <p>Projects with significant negative impacts on Indigenous Peoples will not be financed.</p>	
ESPS-8. Cultural Heritage	Yes
<p>Based on the information available to date, there are no expected risks or impacts on archaeological and/or cultural sites of interest, as no such sites are identified in the Program’s areas. However, this will be confirmed during due diligence for tangible and intangible cultural heritage. The ESMP of the sample projects will include a chance find procedure that should be included in the inductions for site personnel. The ESMF will include guidelines to prepare chance find procedure for the projects outside the sample.</p>	
ESPS-9. Gender Equality	Yes
<p>In compliance with ESPS 9, the Project considers a cross-cutting gender approach. Potential gender risks and impacts will be identified in the ESA to include effective measures to avoid, prevent, or mitigate these in management plans. These matters will also be part of the SEP, to promote equal participation in the process.</p> <p>During construction works on the airstrips, there could be risks of gender-based violence among workers and within the community. These will be assessed through the ESA and mitigated through specific measures defined in ESPS 2 and ESPS 9. The ESMP of the sample projects will include: (i) a grievance mechanism for workers and a grievance mechanism for the community that can channel grievances related to sexual and gender-based violence including sexual and reproductive health and human trafficking; (ii) a code of conduct for workers and contractors that promotes gender equity within the workforce and toward the community, prohibiting sexual and gender-based violence, and the necessary steps to help potential victims; (iii) training programs to raise awareness and prevent sexual and gender-based violence addressed to project employees and contractors.</p> <p>The ESMF will include the corresponding guidelines and procedures for the projects outside the sample. If an RAP and/or LRP is required, it will contain measures to ensure equitable access to compensation for women or any other vulnerable group.</p>	
ESPS-10. Stakeholder Engagement and Information Disclosure	Yes
<p>A stakeholder engagement and information disclosure process will be required throughout the life cycle of the Project. In compliance with ESPS 1 and 10, a Stakeholder Engagement Plan (SEP) will be developed and disclosed around June 2024.</p> <p>The SEP will include the following elements:</p> <ul style="list-style-type: none"> - Stakeholder identification and analysis. - Information Disclosure. - Consultation with stakeholders. - Grievance mechanisms. - Information reporting to stakeholders. 	

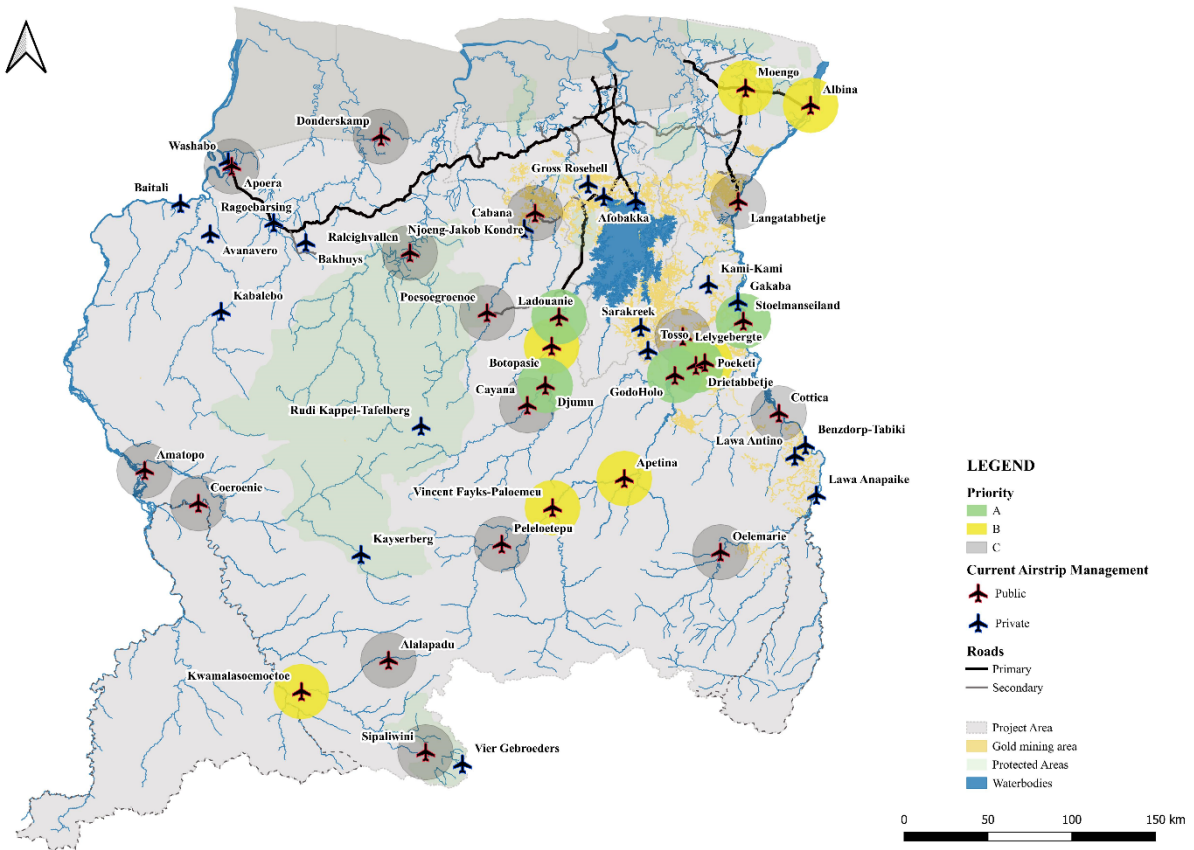
<p>For projects within the sample, a specific consultation process will be carried out on involuntary resettlement with the informed participation of the affected people. A specified consultation process will also be carried out with Indigenous communities and Maroons. The ESMF will include guidelines for carrying out this process for all future projects that may require it.</p> <p>The SEP will guide consultations during the preparation phase, as well as engagement with stakeholders during project execution. The SEP will include an appropriate Grievance Redress Mechanism. Around June 2024, the "fit for disclosure" version of the ESA/ESMP (including the SEP) and the ESMF will be disclosed on the Bank's website. The updated version of the documents, including the consultation report, will be disclosed on the Bank's website around August 2024.</p>			
IDB Environmental and Social Due Diligence			
Strategy for Due Diligence			
<i>E&S Assessment requirement</i>	<i>Status of development</i>	<i>Estimated resources to finalize (specify Bank or Borrower cost)</i>	<i>Estimated timeline to finalize (inc. consultation)</i>
Environmental and Social Management System	An ESMS will be developed. An assessment of current ESMS in place by the EA will be analysed	USD\$40,000 covered by the Bank	Execution: 2-3 months Intended start: Mid-April 2024 Consultation: End of August
Environmental and Social Assessment (ESA) and Environmental and Social Management Plan (ESMP), that includes a SEP, for the sample projects	An ESA/ ESMP will be developed.	Included on the ESMS cost	Execution: 2-3 months Intended start: Mid-April 2024 Consultation: End of August
Environmental and Social Management Framework (ESMF) for the Program, which includes a SEP	An ESMF will be developed given the project is a multiple works.	Included on the ESMS cost	Execution: 2-3 months Intended start: Mid-April 2024 Consultation: End of August
Biodiversity Action Plan	A BAP will be developed only if there is identification during the initial DD that there are impacts to KBAs and Critical Habitat	Included on the ESMS cost	Execution: 2-3 months Intended start: Mid-April 2024 Consultation: End of August

Disaster Risk Assessment and Disaster Risk Management Plan	A DRA and DRMP will be developed if a step 4 is deemed as necessary during the DD process.	\$10,000	Execution: 2-3 months Intended start: Mid-April 2024 Consultation: End of August
Annexes			
Annex A.	E&S Maps		

Annex A. E&S Maps

- Image 1. Prioritization of airstrips
- Image 2. Current images of Albina airstrip
- Image 3. Moengo airstrip
- Map 1. Indigenous Territories
- Map 2. Afro-descendant Territories
- Map 3. Key Biodiversity Areas
- Map 4. Protected Areas
- Map 5. Drought Hazard with Climate Change
- Map 6. Heatwave Hazard with Climate Change _ RCP 45
- Map 7. Heatwave Hazard with Climate Change _ RCP 85
- Map 8. Precipitation MIROC_ESM_CHEM
- Map 9. Precipitation MIROC5
- Map 10. Riverine Flooding Hazard with Climate Change
- Map 11. Sea Level Rise
- Map 12. Tsunami Hazard
- Map 13. Water Supply Scarcity
- Map 14. Godo Holo Airstrip (Cat.A on prioritization)
- Map 15. Ladouanie Airstrip (Cat.A on prioritization)
- Map 16. Poeketi - Drietabbetje Airstrip (Cat.A on prioritization)
- Map 17. Stoelmans Eiland Airstrip (Cat.A on prioritization)
- Map 18. Djoemoe Airstrip (Cat.A on prioritization)

Image 1. Prioritization of airstrips



Source: Internal data.

Images 2 – Albina airstrip



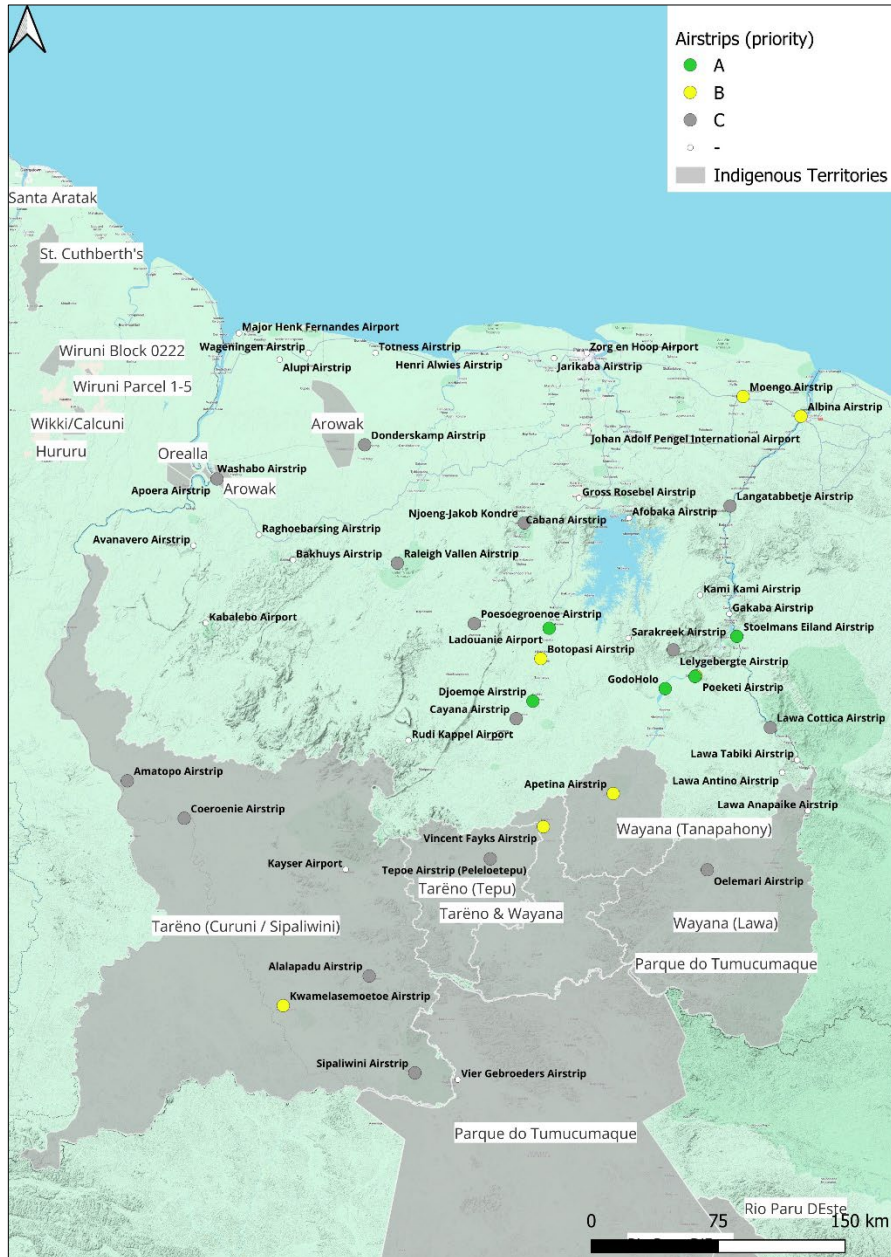
Source: ESG field visit.

Image 3 – Moengo airstrip



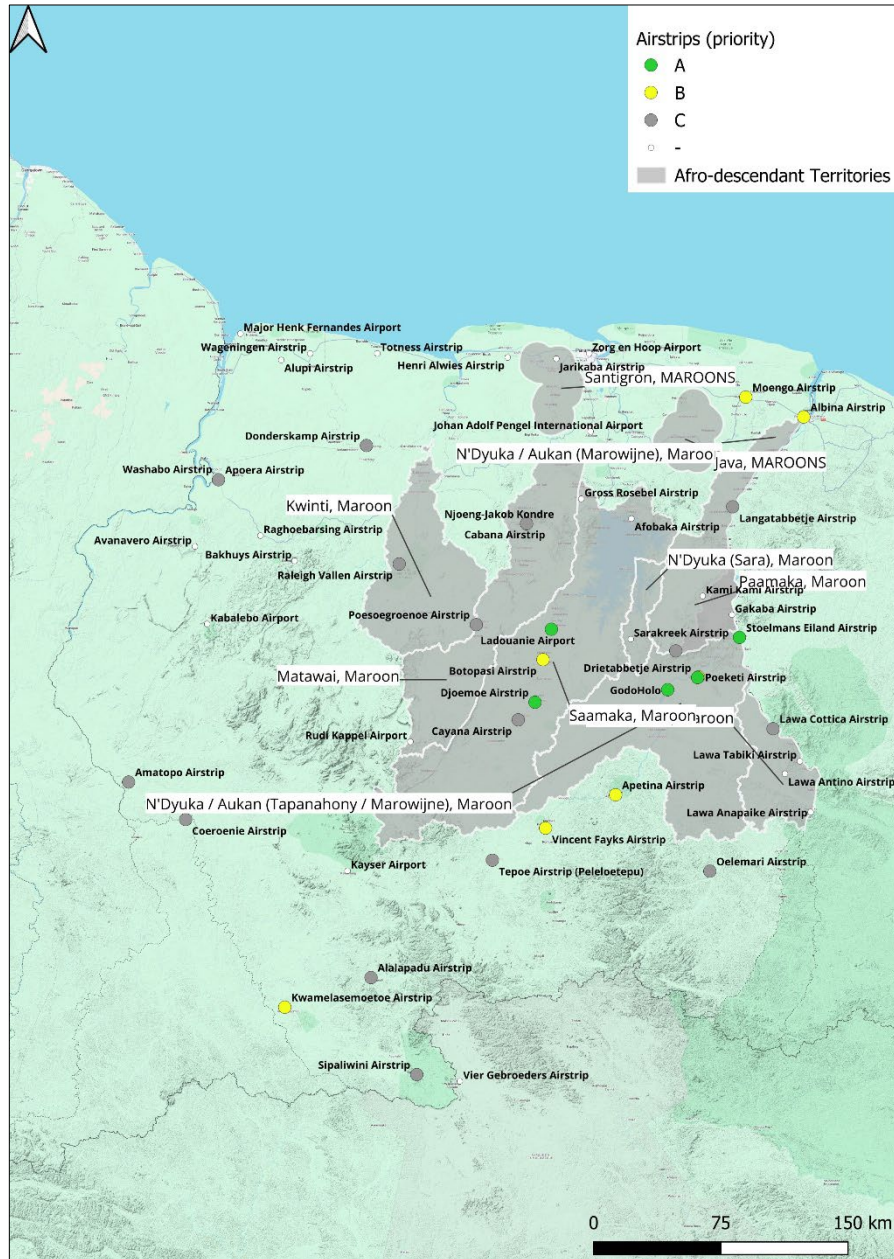
Source: ESG field visit.

Map 1. Indigenous Territories



Source: Internal data, Screening App IDB, QGIS.

Map 2. Afro-descendant Territories



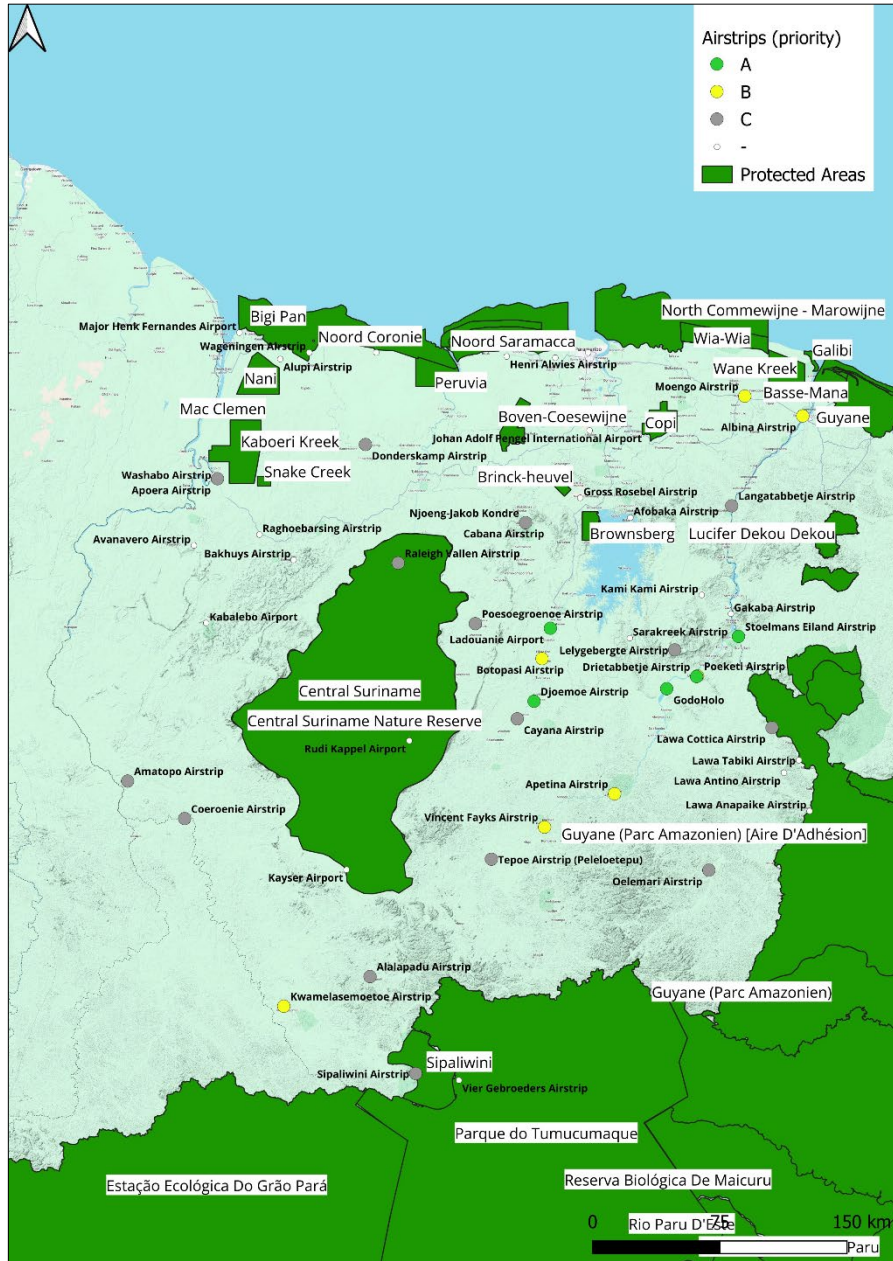
Source: Internal data, Screening App IDB, QGIS.

Map 3. Key Biodiversity Areas



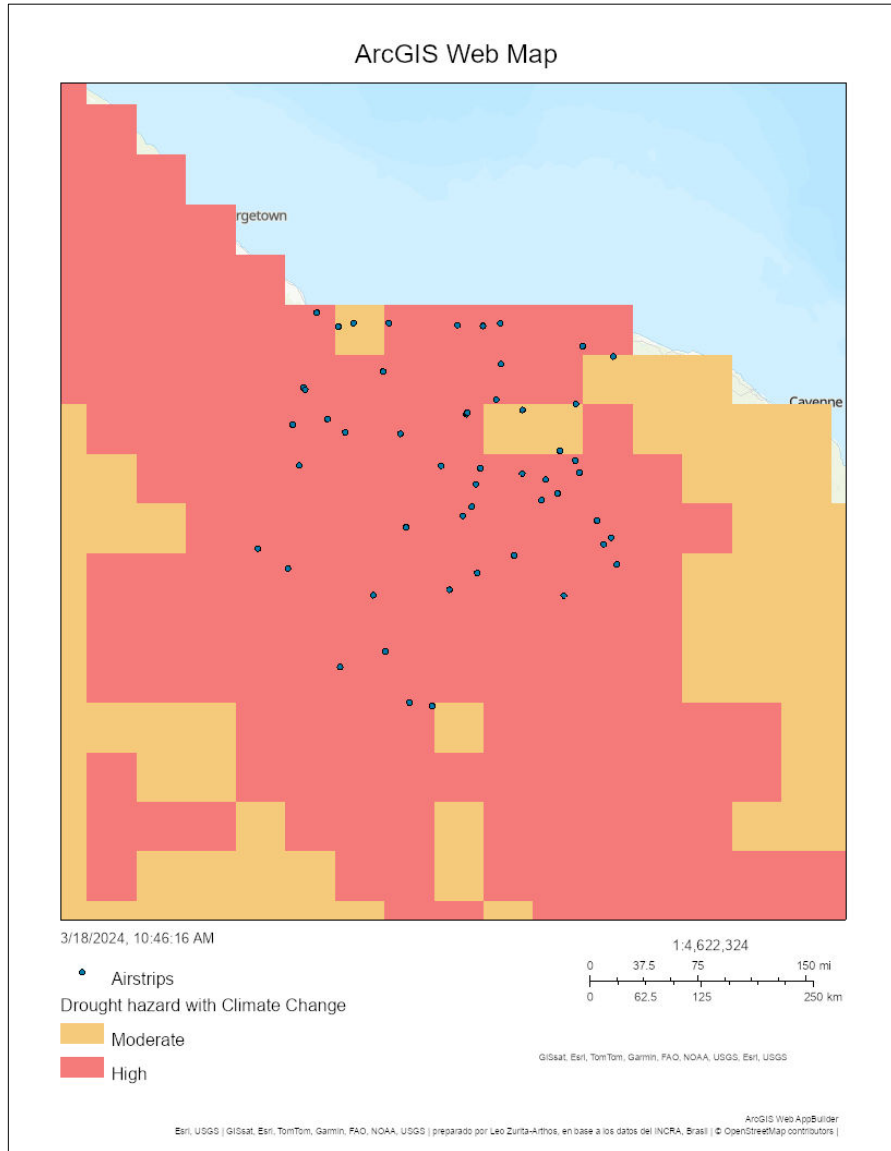
Source: Internal data, Screening App IDB, QGIS.

Map 4. Protected Areas



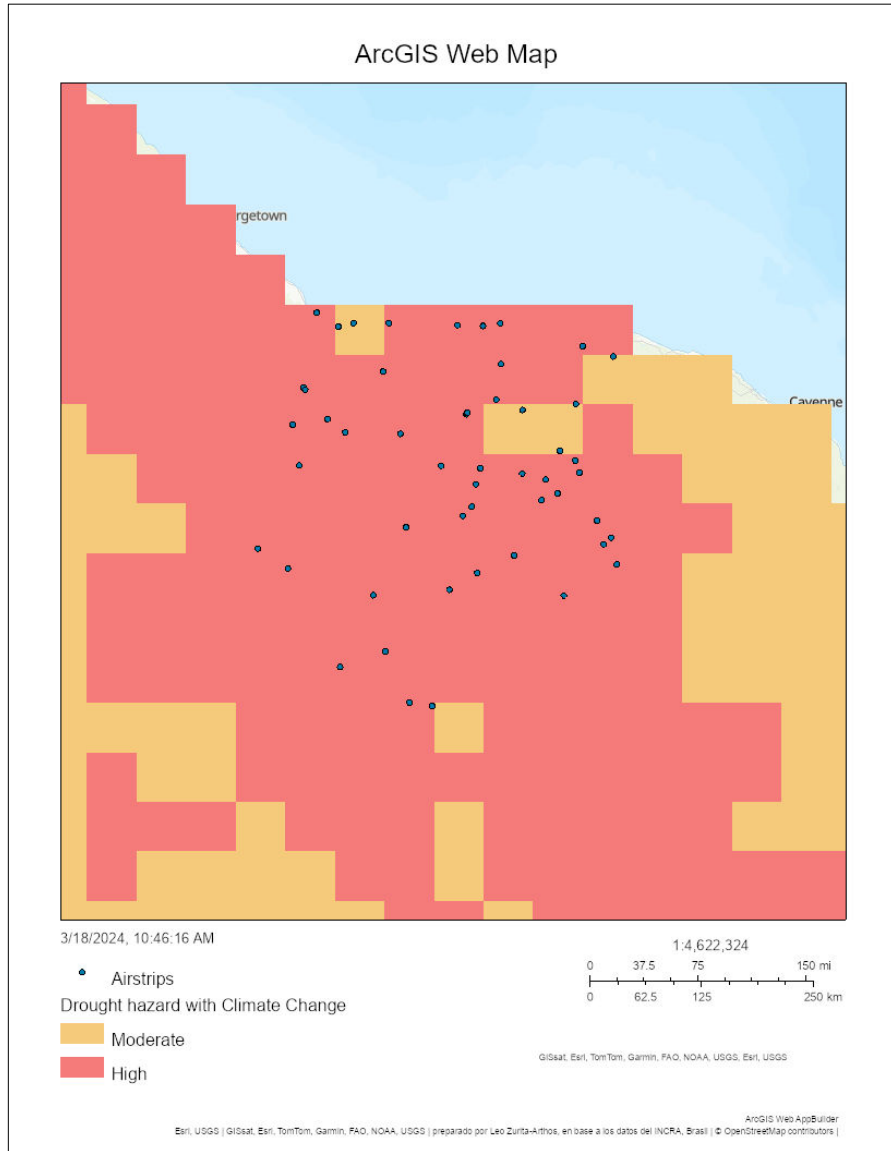
Source: Internal data, Screening App IDB, QGIS.

Map 5. Drought Hazard with Climate Change



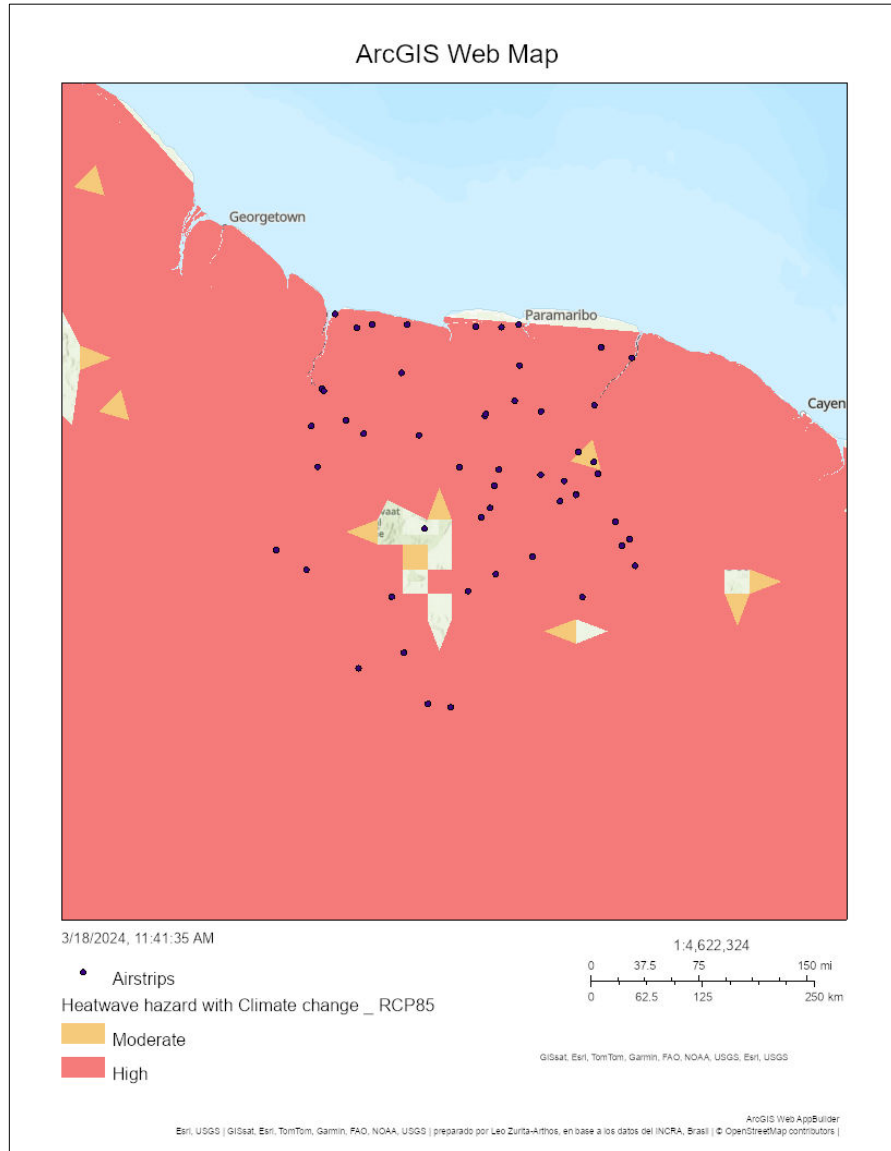
Source: Screening App IDB.

Map 6. Heatwave Hazard with Climate Change _ RCP 45



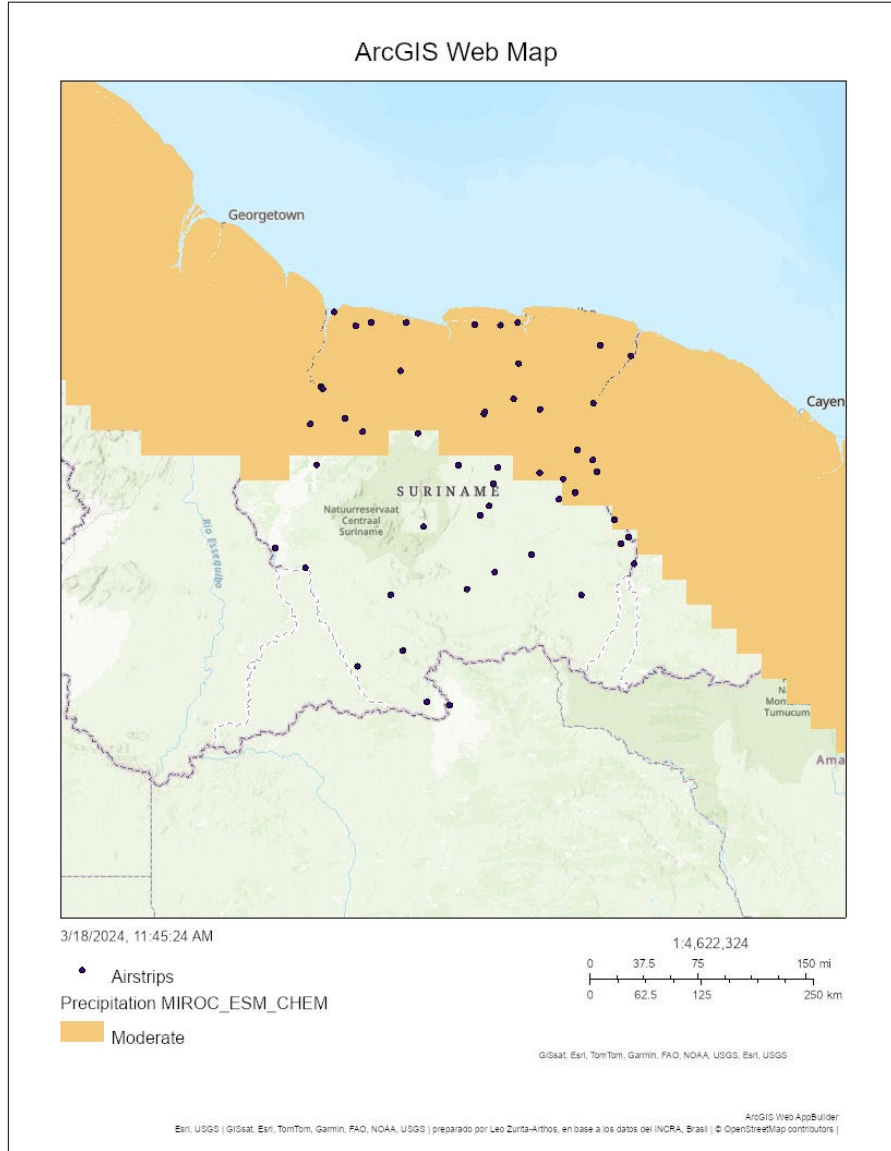
Source: Screening App IDB.

Map 7. Heatwave Hazard with Climate Change _ RCP 85



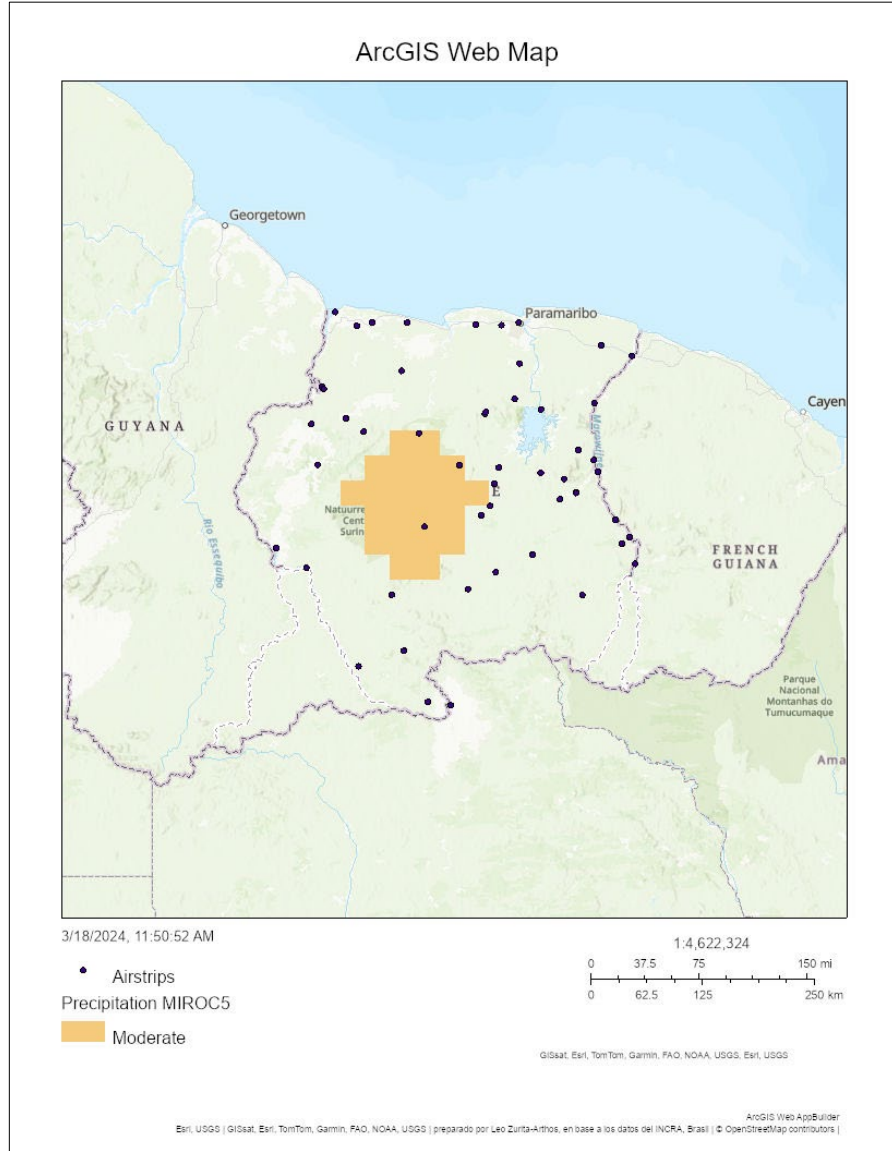
Source: Screening App IDB.

Map 8. Precipitation MIROC_ESM_CHEM



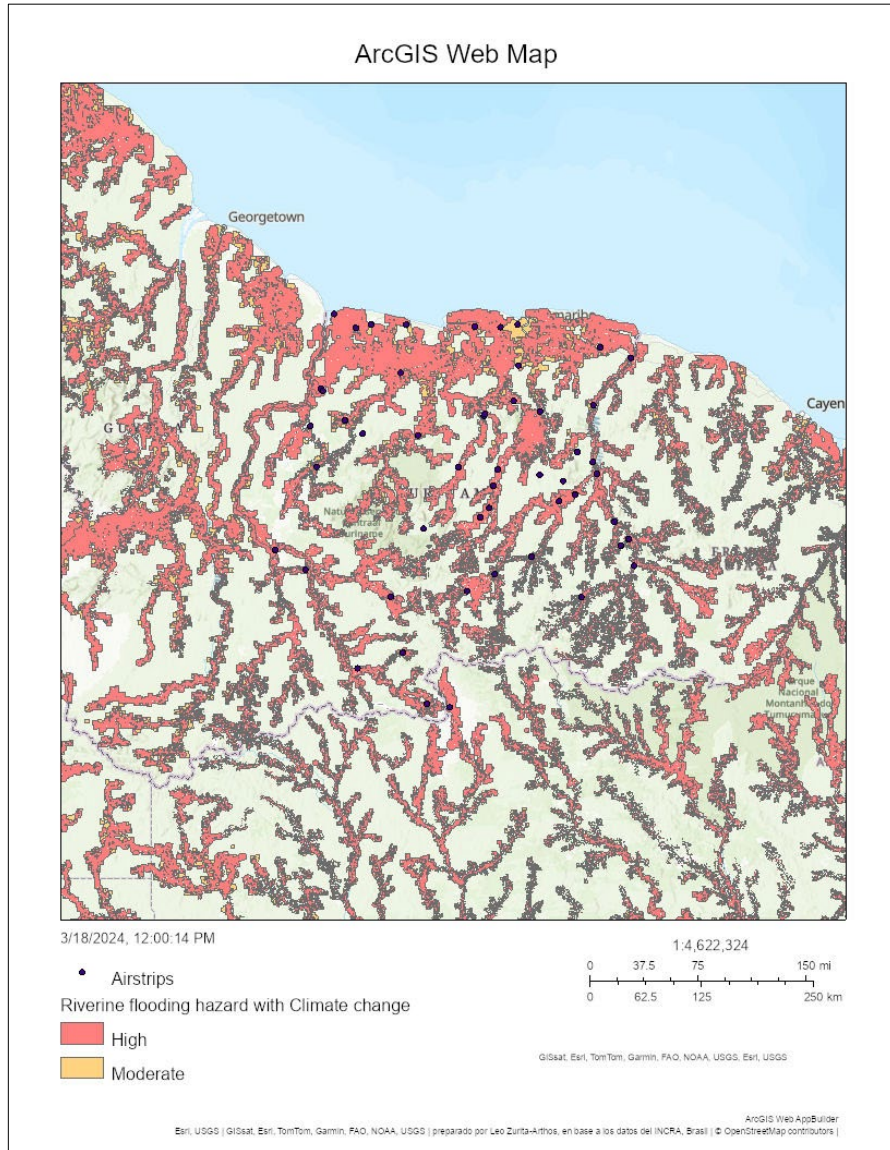
Source: Screening App IDB.

Map 9. Precipitation MIROC5



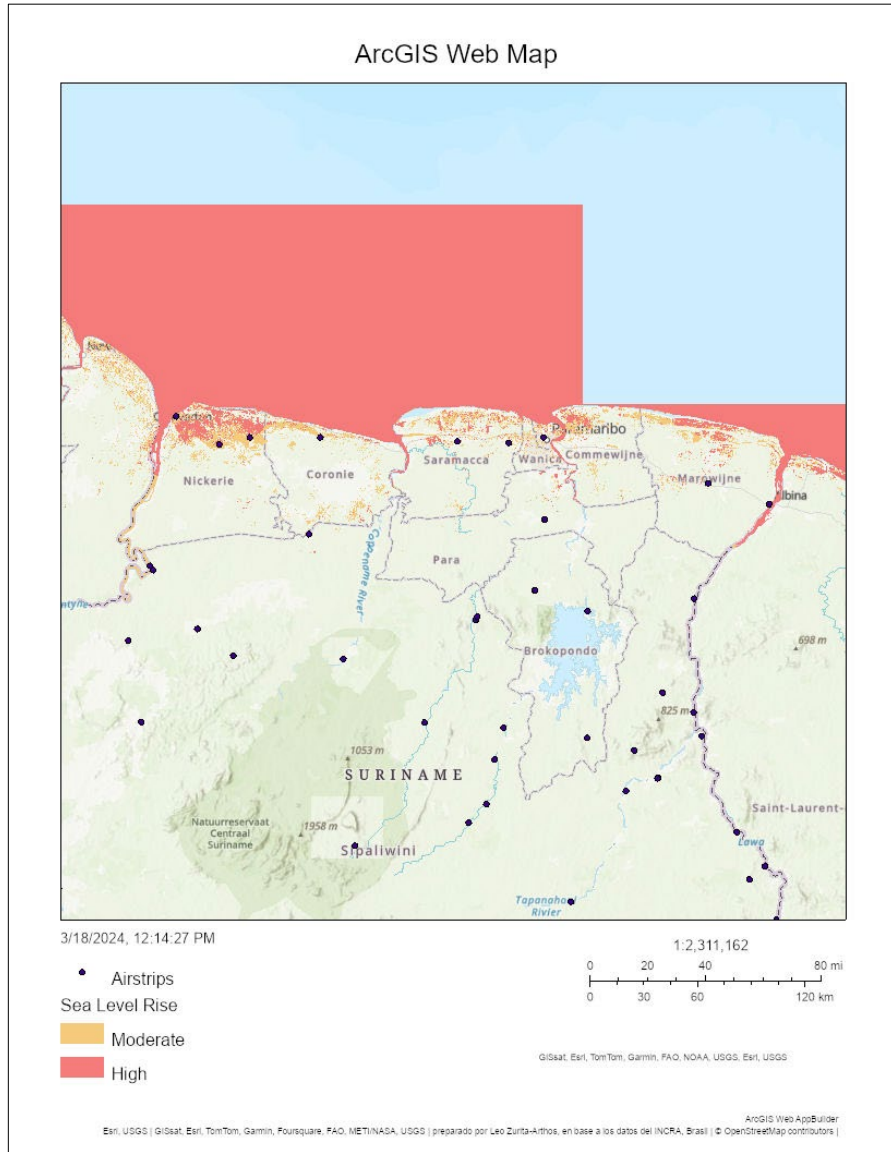
Source: Screening App IDB.

Map 10. Riverine Flooding Hazard with Climate Change



Source: Screening App IDB.

Map 11. Sea Level Rise



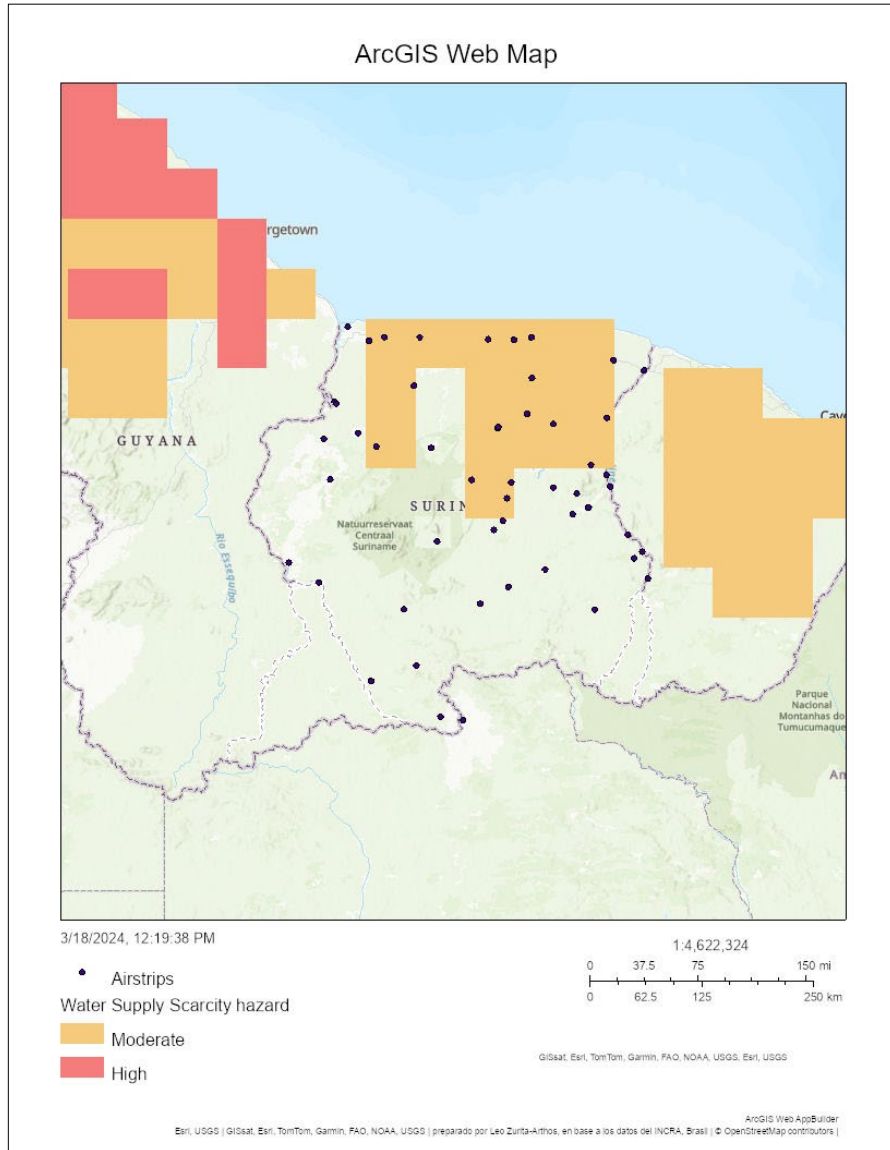
Source: Screening App IDB.

Map 12. Tsunami Hazard



Source: Screening App IDB.

Map 13. Water Supply Scarcity



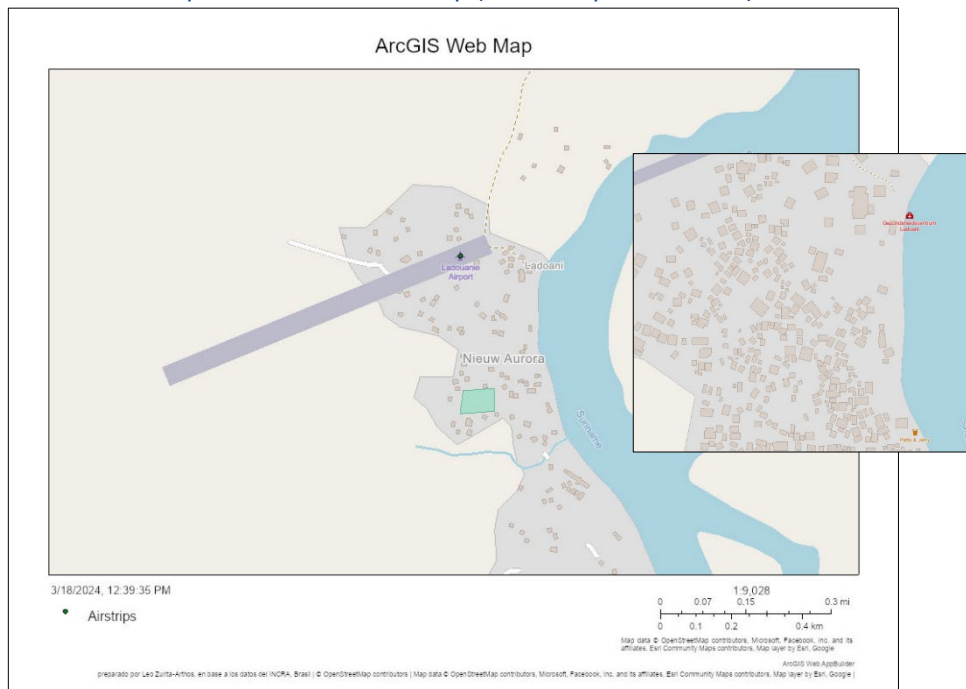
Source: Screening App IDB.

Map 14. Godo Holo Airstrip (Cat.A on prioritization)



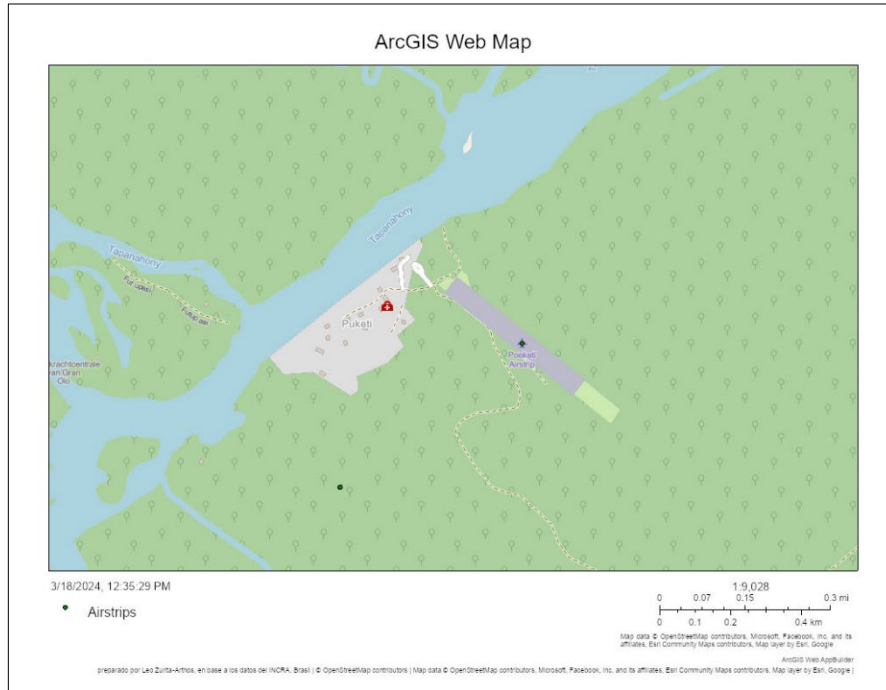
Source: Internal data, OpenStreetMap.

Map 15. Ladouanie Airstrip (Cat.A on prioritization)



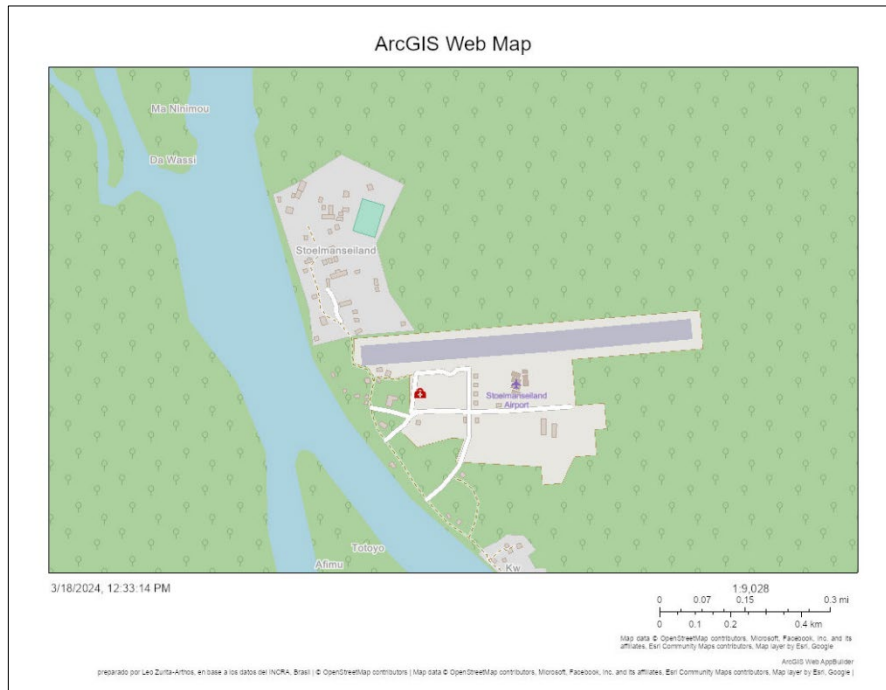
Source: Internal data, OpenStreetMap.

Map 16. Poeketi - Drietabbetje Airstrip (Cat.A on prioritization)



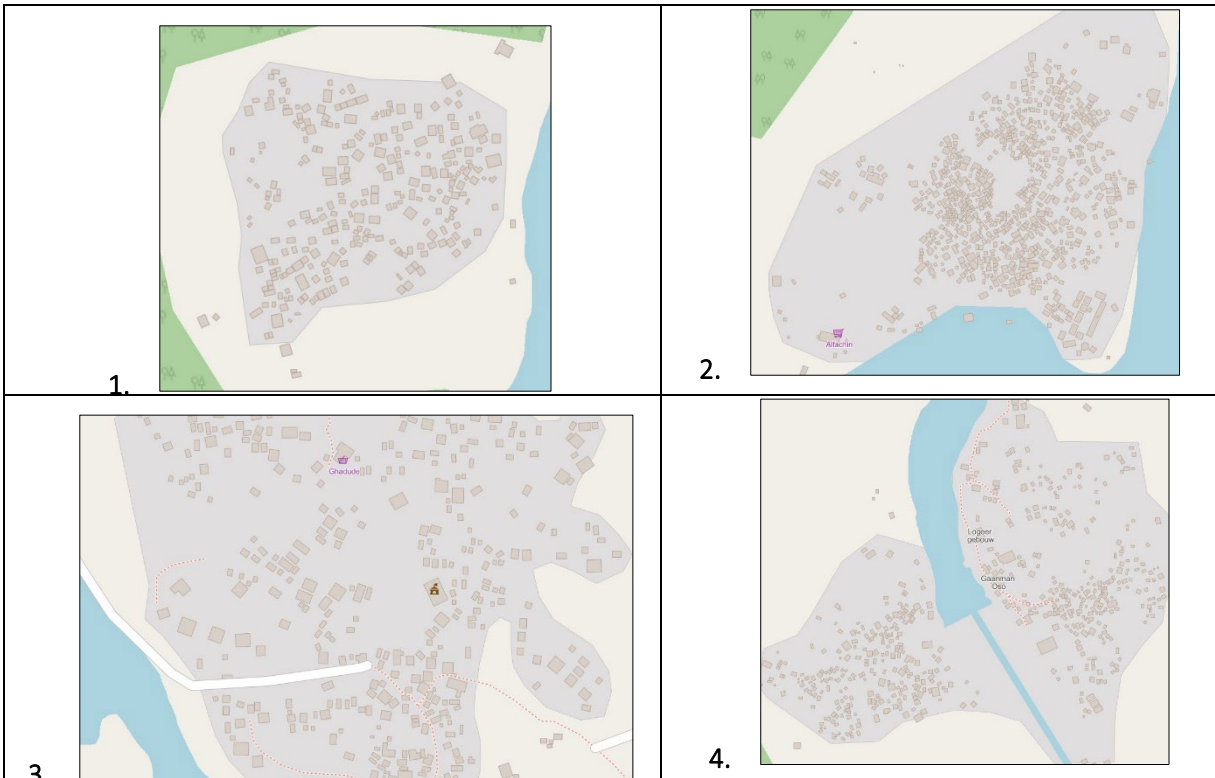
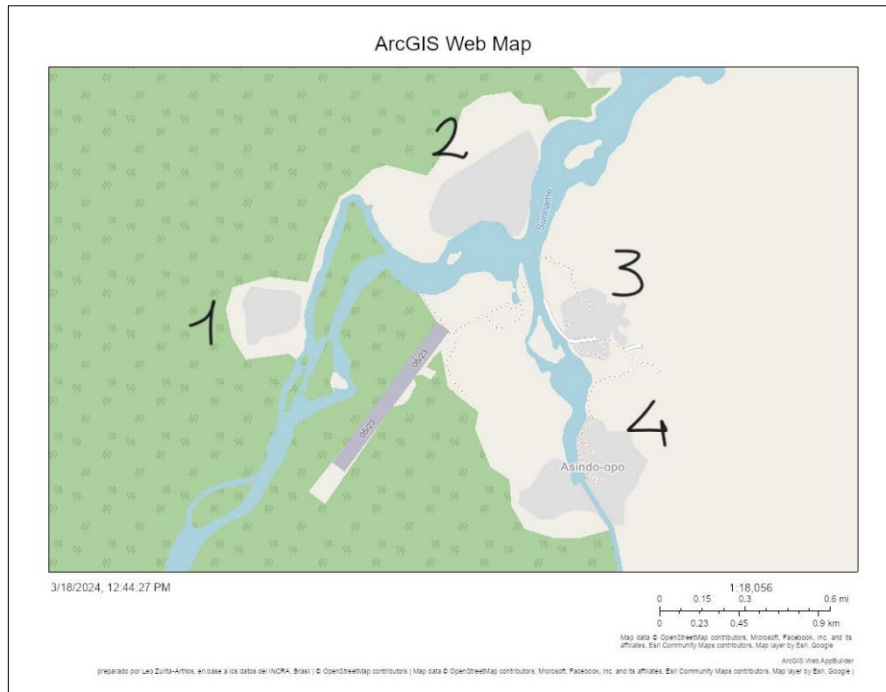
Source: Internal data, OpenStreetMap.

Map 17. Stoelmans Eiland Airstrip (Cat.A on prioritization)



Source: Internal data, OpenStreetMap.

Map 18. Djoemoe Airstrip (Cat.A on prioritization)



Source: Internal data, OpenStreetMap.

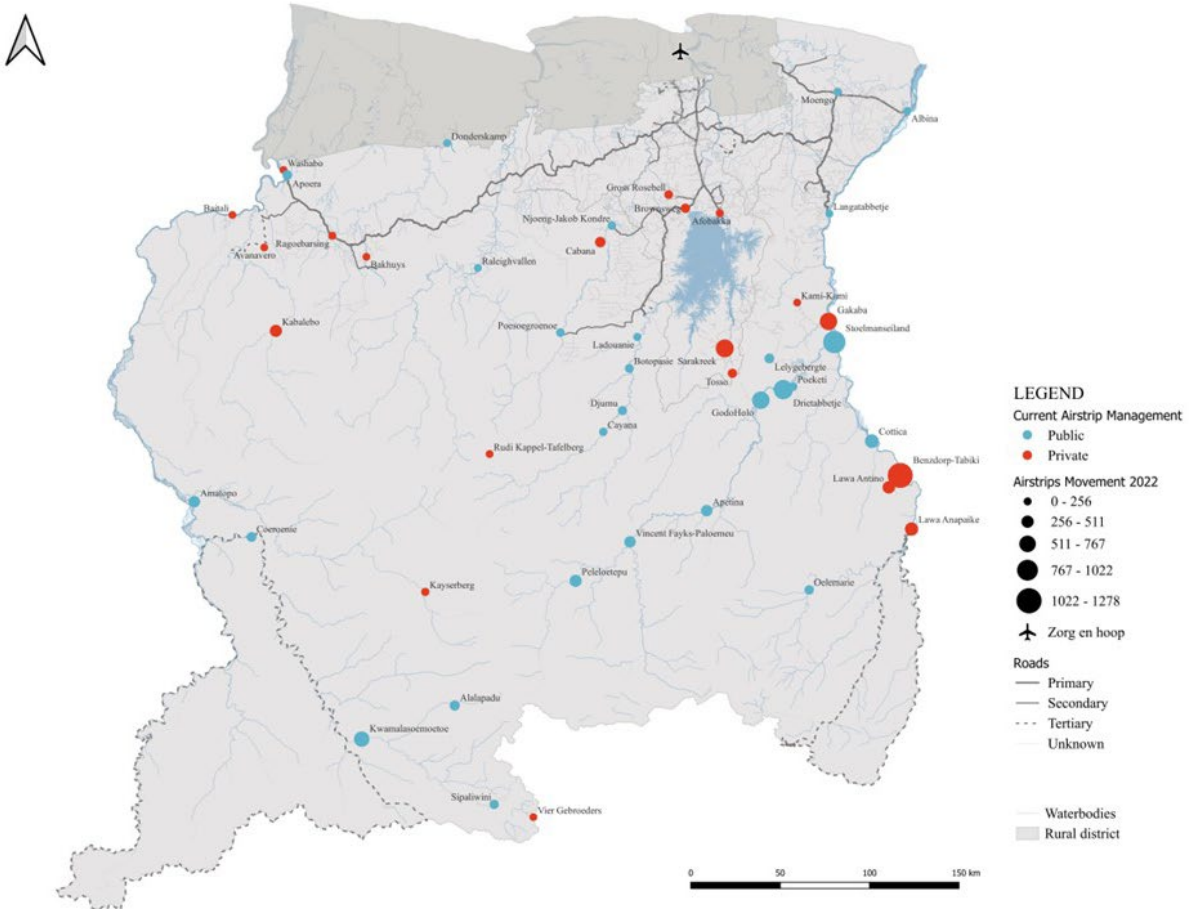
INDEX OF COMPLETED AND PROPOSED SECTOR WORK

Theme	Description	Status / Estimated date	Electronics references
Country Strategy	IDB Group Country Strategy with Suriname 2021-2025	Finished	Link
Sector Framework	Transportation Sector Framework Document (GN-2740-12)	July 2024	Link
Regional Framework	One Caribbean (Partnering for Caribbean Development Framework) and Establishment of the Ordinary Capital Strategic Development Program Transitory Emerging Need for Sustainable Development in the Caribbean (GN-3201)	Under development	Link
Technical Aspects	Gender and PwD Analysis	April 2024	
	Engineering Designs for Flood prevention interventions (bioengineering, nature-based solutions, sustainable drainage systems)	May 2024	
	Structure for the Grasshopper airstrips improvements	May 2024	
	Asset Management System for airstrips and ground equipment	May 2024	
	Support to develop tender documents	August 2024	
	Financial feasibility study for Public-Private Partnerships for the operation and maintenance of airstrips.	July 2024	
Analysis of cost and economic viability	Conduct the required cost-benefit analysis of the program	July 2024	
Financial management/fiduciary issues and control environment	Assessment of Institutional Capacity (PACI)	April 2024	
Social and environmental safeguards	Social and Environmental Strategy developed by ESG as part of project preparation	April 2024	

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.

AIRSTRIPS' LOCATION, MANAGEMENT, AND MOVEMENTS (2024).¹



¹ Private management of airstrips: circumstantial arrangement where mining companies and other sectors maintain airstrips.