

**MAINSTREAMING CLIMATE CHANGE IN SUSTAINABLE DECISION-MAKING TOOLS**

**SU-T1117**

**CERTIFICATION**

I hereby certify that this operation was approved for financing under the **Ordinary Capital Strategic Development Program for Sustainability (SUS)**, and through a communication dated March 1, 2019 and signed by Jane Silva (ORP/GCM). Also, I certify that resources from said funds are available for a combined up to **US\$500,000** in order to finance the activities described and budgeted in this document. This certification reserves resource for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, representing a risk that will not be absorbed by the Fund.

Certified by:

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Original Signed  
Sonia M. Rivera  
Chief  
Grants and Co-Financing Management Unit  
ORP/GCM

6/11/2019

\_\_\_\_\_  
Date

Approved by:

\_\_\_\_\_  
Original Signed  
Amal Lee Amin  
Division Chief  
Climate Change Division  
CSD/CCS

6/12/2019

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Date

## Technical Cooperation Document

### I. Basic Project Data

▪ Country/Region:	SURINAME
▪ TC Name:	Mainstreaming Climate Change in Sustainable Decision-Making Tools
▪ TC Number:	SU-T1117
▪ Team Leader/Members:	Gerard Alleng (CSD/CCS) Team Leader; Alfred Hans Grunwaldt (CSD/CCS) Alternate Team Leader; Tanja Lieuw (CSD/CCS); Steven Romeo Hofwijks (CCB/CSU); Angelo Eduardo Angel Gomez (CSD/CCS); Louis-Francois Chretien (LEG/SGO); Michael Collins (CSD/RND), Mariska Chuquita Tjon A Loi (VPC/FMP), Vikash Bhagirath (VPC/FMP), Juan Carlos Gomez (CSD/CCS)
▪ Taxonomy:	Client Support
▪ Date of TC Abstract authorization:	January 20, 2019
▪ Beneficiary:	Republic of Suriname
▪ Executing Agency and contact name:	Inter-American Development Bank Gerard Alleng (CSD/CCS)
▪ Donors providing funding:	Ordinary Capital Strategic Development Program for Sustainability (SUS)
▪ IDB funding requested:	US\$500,000
▪ Local counterpart funding:	N/A
▪ Disbursement period:	24 months
▪ Required start date:	June 17, 2019
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	Climate Change Division (CSD/CCS)
▪ Unit of Disbursement Responsibility:	Country Office Suriname (CCB/CSU)
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Climate Change; Environmental sustainability

### II. Objective and Justification

- 2.1 Climate change (CC) is one of the greatest challenges for Suriname, especially with more than 90% of its population and much of its infrastructure and human activity located along the low-lying coastal strip, Suriname is particularly vulnerable to the impacts of climate change. It is expected that CC will have significant impacts on the sustainability of the economic and social well-being of Suriname, given the expected effects of sea level rise (1m rise y 2100), temperature increase (+0.8 to 2.°C by 2050) and changing precipitation patterns (22 to +14mm/month by 2050) to specific productive sectors like that of housing and infrastructure, agriculture, water availability, energy, tourism and health<sup>1</sup>.
- 2.2. Suriname has developed its current 5-year development plan, which outlines the development priorities of Suriname<sup>2</sup>. The Plan identified utilization and protection of the environment as one of its priority pillars and there is some consensus in Suriname on the concept of a 'Green Economy', but more studies and data are needed that support decision making. Similarly, the Final National Climate Change Policy, Strategy and

<sup>1</sup> GOS, 2014. Final National Climate Change Policy, Strategy and Action Plan for Suriname (2014-2021)

<sup>2</sup> GOS, 2017-2021 Policy Development Plan

Action Plan (FNCCPSAP) for Suriname (2014-2021) has identified the lack of climate change data as a limitation for effective planning and decision making.

- 2.3 The Second Communication to the United Nations Framework Convention on Climate Change (UNFCCC) indicates that Suriname is a negative net sink for global Greenhouse Gas (GHG) emissions<sup>3</sup>. The challenge however is to keep the GHG at a low level while striving for sustainable economic development, in line with the guidelines set forth in the Paris Agreement, which Suriname ratified in February 2019. During recent international dialogue on climate finance for High Forest Low Deforestation countries held in Suriname in February 2019, the countries, including Suriname, reiterated the recognition of climate change actions on sustainable development<sup>4</sup>. This declaration is in line with the strategies set forth in the 2017-2021 Policy Development Plan of Suriname, stating that there is wide consensus in Suriname on the Green Economy approach, but that further studies are required for decision making on concrete options for the development of the primary production of sectors such as agriculture and forestry<sup>2</sup>. Under Forestry, the Government of Suriname (GoS) is currently preparing the REDD+<sup>5</sup> Readiness Package under the Forest Carbon Partnership Facility partnership<sup>6</sup>. Suriname has a forest cover of 14.8M ha of forest cover (93% of its total area). Of this, 4.5M ha are designated as potential production forest. The most important part of this is issued as logging concessions (1.7 M ha) and community forest (0.6 M ha). Approximately 70% of the forest in Suriname is unaffected by forestry. Of this, 13% has a protected status; the remaining part is mostly situated south of 4° N latitude where no exploitation is allowed<sup>7</sup>. The present contribution of the forest-based industry to the gross domestic products is 1.7% and provides employment to 5,500 people<sup>8</sup>.
- 2.4 This TC will strengthen the efforts of Suriname to reach the goals of the Paris Agreement. Suriname has committed to update their Nationally Determined Contributions (NDCs) Report, an endeavor supported by the Bank. The expected timeline is to have an updated NDC by end of 2019. This TC will therefore also provide for scientific information and data analysis that will be used for Suriname's NDC. The current intended Nationally Determined Contribution (iNDC) report and the Development Plan highlight Renewable energy sector for mitigation of emissions, and to meet the energy demands of the country. The Inter-American Development Bank (IDB) has an extensive history of support to the Energy sector in Suriname: currently, a US\$ 35 million loan project is being prepared, "Consolidating a Sustainable Energy Sector". The "Development of Renewable Energy, Energy Efficiency and Electrification" (SU-G1001) seeks to support the development of a legal and regulatory framework to promote the use of Renewable Energy, especially for the electrification of the Hinterlands. The Energy sector is the main source of GHG emissions of 59% despite the Afobakka Hydropower Plant with an installed capacity of 189 MW, which is the backbone of Suriname's electricity supply<sup>9</sup>. Estimates in the iNDC report indicate that 115MW of the energy demand is derived from hydropower, versus 51.6 from diesel generation. The importance of energy for social economic development is highlighted in the Development Plan, with a growing demand that has already exceeded the current electricity production capacity.
- 2.5 The Water sector is also very vulnerable to the impacts of climate change. Effects on rainfall and prolonged dry spells will exert pressure to water availability for Agriculture,

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<sup>3</sup> Government of Suriname. 2016. Second National Communication to UNFCCC

<sup>4</sup> Krutu of Paramaribo joint declaration on HFLD Climate Finance Mobilization. <https://www.hfldclimatefinance.com/>

<sup>5</sup> Reducing Emissions from Deforestation and Forest Degradation and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in developing countries (REDD+).

<sup>6</sup> [www.surinamredd.org](http://www.surinamredd.org)

<sup>7</sup> NIMOS and SBB. 2016. Inception report: Background study for REDD+ Implementation: Multi-Perspective Analysis of Drivers of Deforestation, Forest Degradation and Barriers to REDD+ Activities (report prepared by UNIQUE Forestry and Land use)

<sup>8</sup> Stichting Bosbeheer en Bostoezicht (SBB), Bosbouwstatistieken (Forestry Statistics) 2014. June 2015

Energy (hydro power) and drink water. As most of the economic activities are located within the coastal strip, salt water intrusion will further increase due to extraction of groundwater for drinking water purposes<sup>9</sup>.

- 2.6 The objective of the operation is to support the mainstreaming of climate change in the National Development Plan of Suriname in order to enable evidenced-based decision-making that is inclusive and transparent, and that takes into consideration the impacts of climate variability in multiple sectors. The Agricultural sector is mentioned as the second largest economic cluster – after mining - to be developed for Suriname<sup>2</sup>. Currently, the agricultural sector accounts for 4% of total export earnings and 9% of total Gross Domestic Product (GDP) in 2015<sup>9</sup>. Climate change impacts on agricultural production are related to water availability and water use efficiency. Rice production is identified as one of the main sources of GHG Emissions in the agricultural sector<sup>10</sup>. The need for information and data to support decision making in this sector is highlighted in both the National Policy Development Plan of Suriname (2017-2021) and Suriname's 2<sup>nd</sup> Communication to UNFCCC.
- 2.7 The proposed TC contributes to the objectives of the Update to the IDB Institutional Strategy 2010-2020 (GN-2788-5) in addressing the economic and social impacts of climate change adaptation and mitigation, promoting gender equality and diversity and strengthening private sector involvement in sustainable development. It is also aligned with the IDB Integrated Strategy for Climate Change Adaptation and Mitigation (GN-2609-1) and its Action Plan (GN-2609-3) as well as the IDB Group Country Strategy with Suriname 2016-2020. The TC also targets the commitments made in April 2016 by the Boards of Governors of the IDB and IIC to increase the volume of climate-related financing to 30 percent of operational approvals by the end of 2020 and to access external sources of concessional financing and contributes to the objectives of the Strategic Development Program for Sustainability (SUS - OC Fund), GN-2819-1, as it relates to the reduction of GHG emissions and the mobilization of financial resources for climate change mitigation and adaptation. Furthermore, the project is aligned with the priorities of the "Sustainable Agricultural Productivity Program" (SU-L1052) that aims to improve the agricultural statistics and information.

### III. Description of Activities/Outputs and Budget

- 3.1 **Component I: Preparation of a 'State of the Environment' report with special emphasis on the impact of climate change and development related capacity building (US\$ 280,000).** The 'State of the Environment' report aims to develop various climate change modelling scenario's that will provide a more downscaled climate change projection for Suriname that is currently lacking in global models<sup>11</sup>. The report will be aligned with the National Development Plan of Suriname (2017-2021) to ensure practical relevance for policy makers on sustainable development of the key economic sectors. To ensure ownership within the different institutions, stakeholders will be consulted intensively during preparation of the report. The stakeholder engagement is also intended to build capacity among the different institutions on the climate change modelling of the different scenarios. This component will finance (i) determination of climate change scenarios, risks and impacts of climate change and climate variability on the priority sectors, in particular focusing on the coastal strip; (ii) Stakeholder workshop with the objective to solicit feedback on the draft report (iii) Develop and implement an awareness program on climate change for decision makers, focusing on the outcome of the State of the Environment report and (iv) Develop and implement technical training on modelling, projections and socio-economic assessments of climate

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<sup>9</sup> LVV and Suriname Bureau of Statistics. 2016.

<sup>10</sup> Office of the President of the Republic of Suriname. Second National Communication to UNFCCC 2016.

<sup>11</sup> Taylor, M.A., et al. 2013. The Precis Caribbean Story : Lessons and Legacies. <https://doi.org/10.1175/BAMS-D-11-00235.1>

change targeting technical modelling experts. The training will focus on a number of thematic areas of capacity building: Analysis of climate change related data and the interpretation of the impact of climate change on key economic sectors, as well as preparation of project proposals for climate finance. Some of the targeted institutions are: Anton de Kom University of Suriname, Bureau of Statistics, Meteorological Service of Suriname (MDS), National Planning Office and the Foundation for Forest Management and Production Control.

- 3.2 **Component II: Establishment of Institutional strengthening development (US\$ 150,000).** The Institutional strengthening relates to the newly established Environment Unit, that will need to lead and sustain the various outputs of this TC supported by the National Institute for Environment and Development in Suriname (NIMOS). This component will finance support for (i) Establish a national climate change knowledge database that would establish the national guidelines and format for reporting under the Paris Agreement (ii) Contract a technical advisor who will support the Environment Unit with providing technical support to this TC and other climate change related matters to support the Environment Unit; prepare and review relevant documents.
- 3.4 **Component III: Preparation of a strategy for adaptation measures along the coastal area (US\$ 50,000).** Based on the assessment of climate change scenarios, risks and impacts identified for Suriname’s coastal strip, an assessment will be conducted to identify the most effective management and intervention strategies to reduce the risks of climate change. This assessment will prioritize nature-based adaptation options – focusing on coastal wetlands and mangroves, and their resilience characteristics-, identifying coastal and/or riverine engineering adaptation options that would lead to increased resilience of the coastal wetlands and mangroves. These options will be identified for different risk reduction scenarios and build into a national decision-guidance framework for climate change risk reduction.
- 3.5 **Component IV: Development of climate financing project proposal (US\$ 20,000).** During the High Forest Low Deforestation conference held in Suriname in February 2019<sup>12</sup>, Suriname, along with the other signatories to the joint declaration, emphasized the need for an increase of climate finance for High Forest, Low Deforestation countries, especially like Suriname, being a net sink for global GHG emissions<sup>13</sup>. With the results of the ‘State of the Environment’ report that will be developed under component 1 and the identification of adaptation options in component 3, this TC will assist the government in developing climate financing project proposal(s). will be able to prioritize investment development plans.

**Indicative Budget**

<b>Component</b>	<b>IDB Funding</b>	<b>Counterpart Funding</b>	<b>Total Funding</b>
1. Preparation of a 'State of the Environment' report with special emphasis on the impact of climate change and development related capacity building.	\$ 280,000.00	0	\$ 280,000.00
2. Establishment of Institutional strengthening development.	\$ 150,000.00	0	\$ 150,000.00
3. Preparation of a strategy for adaptation measures along the coastal area.	\$ 50,000.00	0	\$ 50,000.00
4. Development of climate financing project proposal	\$ 20,000.00	0	\$ 20,000.00
<b>Total</b>	<b>\$ 500,000.00</b>	<b>0</b>	<b>\$ 500,000.00</b>

<sup>12</sup> <https://www.hfdclimatefinance.com/>

<sup>13</sup> GOS, 2014. "Final National Climate Change Policy, Strategy and Action Plan for Suriname (2014-2021)

#### **IV. Executing Agency and Execution Structure**

- 4.1 This operation will be executed by the IDB.
- 4.2 The Government of Suriname and the IDB have agreed that the IDB will be the executing agency for this TC. The IDB's Climate Change and Sustainable Development Division (CSD/CCS) will be responsible for the execution of this TC. Supervision of this TC will be the responsibility of the Project Team Leader assigned by CSD/CCS, with the support of the Chief of Operations in the IDB's country office in Suriname and the assigned Operations Analyst. CSD/CCS will be responsible for procurement of the required services. In accordance with Annex 10 of GN-2629 the justification for IDB execution is that the Beneficiary and the IDB agree that contracting by the IDB would enhance independence of the studies. Furthermore, the Government of Suriname has agreed that part of the TC budget will be assigned for the procurement of an Individual consultant, placed in the Coordination Environment of the Cabinet of the President, to act as technical advisor and support the oversight and management of this TC.
- 4.3 As an IDB Executed Operation (BEO), the activities to be executed are included in the Procurement Plan (Annex IV) and will be contracted in accordance with the Bank policies as follows: (i) AM-650 for Individual consultants; (ii) GN-2765-1 and Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature; and (iii) GN-2303-20 for logistics and other corporate procurements. Accordingly, the selection and contracting process will be done in the "Firm Procurement Module" within Convergence, which guides and documents the selection and contracting process of Consulting Firms for BEO Work.

#### **V. Project Risks and Issues**

- 5.1 The main risk is the lack of data to undertake the analysis and preparation for the state of the environment report. This will be mitigated through the involvement of the Environment Coordination Unit, Office of the Presidency, which will help with the access to data and interaction with relevant stakeholders.

#### **VI. Exceptions to Bank policy**

- 6.1 No exceptions to Bank policies are envisioned for this TC.

#### **VII. Environmental and Social Classification**

- 7.1 Given the nature of the project, there are no associated environmental or social risks. According to the Environment and Safeguards Compliance Policy of the Bank (OP-703), the operation has been classified as category "C", meaning that no environmental assessment studies or consultations are required for this category (see [Safeguard Policy Filter](#) and [Safeguard Screening Form](#)).

#### **Required Annexes**

Annex I: [Letter of Request](#)

Annex II: [Results Matrix](#)

Annex III: [Terms of Reference](#)

Annex IV: [Procurement Plan](#)