

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

SURINAME

MODERNIZATION OF AGRICULTURAL PUBLIC SERVICES

(SU-L1033)

LOAN PROPOSAL

This document was prepared by the project team consisting of: Pedro Martel (INE/RND) and Marisol Inurritegui (RND/CGY), co-Team Leaders; Cesar Falconi, Michele Lemay, M. Carmen Fernandez-Diez, and Lisa Sofia Restrepo (INE/RND); Steven R. Hofwijks and Musheer Kamau (CCB/CSU); and Guillermo A. Eschoyez (LEG/SGO).

Under the Access to Information Policy this document is subject to Public Disclosure.

CONTENT

PROJECT SUMMARY

I.	PROGRAM DESCRIPTION	2
A.	Background and Problem Addressed.....	2
1.	Macroeconomic outlook.....	2
2.	Main issues affecting Suriname's agricultural sector.....	3
3.	Recent government progress in the sector and remaining challenges	8
4.	Conceptual overview.....	8
B.	Consistency with GCI-9 and Country Strategy	9
II.	OBJECTIVES	10
A.	Program objectives and description.....	10
B.	Results matrix indicators	12
C.	Economic rationale and sustainability	13
III.	FINANCING STRUCTURE AND MAIN RISKS	13
A.	Financial instruments and contractual conditions.....	13
B.	Environmental and social safeguard risks	14
C.	Other key risks and issues.....	14
IV.	IMPLEMENTATION AND MANAGEMENT PLAN	15
A.	Implementation and management.....	15
B.	Supervision and evaluation of results	15
C.	Policy Letter.....	15

ANNEXES	
ANNEX I	Development Effectiveness Matrix- Summary
ANNEX II	Policy Matrix
ELECTRONIC LINKS	
REQUIRED	
1. Policy Letter	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38226891
2. Verification Matrix	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38146030
3. Results Matrix	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38146062
OPTIONAL	
1. Economic Analysis	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38146639
2. Environmental Assessment Strategy	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38143845
3. Monitoring and Impact Evaluation Plan	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38146562
4. Sustainable Management of Fisheries	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38149488
5. Report on Irrigation and Drainage	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38149515
6. Agricultural Services Study – Agricultural Statistics	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38149569
7. Agricultural Health and Food Safety System Analysis	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38149589
8. Agricultural Sector Diagnostics	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38149598
9. Diagnosis of agricultural research and extension in Suriname	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38149618
10. PSE Report	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38149800
11. ESR form	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37809316

ABBREVIATIONS

AIS	Agricultural Information System
ATPL	Agricultural Trade Policy Loan
CARTAC	Caribbean Regional Technical Assistance Centre
CBA	Cost-Benefit Analysis
CPI	Consumer Price Index
CPUE	Catch per Unit of Effort
CSU	Country Office in Suriname
DAS	Department of Agricultural Statistics
EU	European Union
FAO	Food and Agriculture Organization
FIS	Fisheries Information System
FMP	Fisheries Management Plan
FMS	Fisheries Monitoring, Control and Surveillance
GOS	Government of Suriname
GDP	Gross Domestic Product
GIR	Gross International Reserves
GSSE	General Services
I&D	Irrigation and Drainage
IDB	Inter-American Development Bank
IICA	Inter-American Institute for Cooperation in Agriculture
IMA	Independent Macroeconomic Assessment
IMF	International Monetary Fund
IMIDCWG	Inter-Ministerial Irrigation and Drainage Coordination Working Group
IMWGFS	Inter-Ministerial Working Group for Food Safety
IPPC	International Plant Protection Convention
IUU	Illegal Unregulated and Unreported
LAC	Latin America and the Caribbean
LVV	Ministry of Agriculture, Animal Husbandry and Fisheries
M&O	Maintenance and Operation
MOF	Ministry of Finance
NBSLME	North Brazil Shelf Large Marine Ecosystem
NPV	Net Present Value
OIE	World Organization for Animal Health
PBP	Policy Based Programmatic Loan
RND	Environment, Rural Development and Disaster Risk Management Division
SEA	Strategic Environmental Assessment
SCT	Single Commodity Transfers
SWF	Sovereign Wealth Fund
TFP	Total Factor Productivity
WB	Water Boards

PROJECT SUMMARY
SURINAME
MODERNIZATION OF AGRICULTURAL PUBLIC SERVICES
(SU-L1033)

Financial Terms and Conditions*			
Borrower: Republic of Suriname Executing Agency: Ministry of Finance (MOF)		Amortization period:	20 years
		Original WAL:	12.75 years
		Grace Period:	5.5 years
		Disbursement period:	12 months
Source (US\$)	Amount (US\$)	Supervision and Inspection Fee: **	
IDB (OC)	15,000,000	Interest rate:	Libor-Based
		Credit fee:	**
Total	15,000,000	Currency: US Dollars chargeable to the Bank's Ordinary Capital (OC).	
Project at a Glance			
Project Objective/Description: the general objective of the operation is to contribute to the growth of the agricultural sector, through an increase of the sector's productivity. The specific objectives are to develop institutional and policy reforms to enhance farmers' access to improved public agricultural services. The Policy Matrix establishes a series of commitments to policy, legal and institutional reforms for the entire program, structured in six components.			
Special contractual clauses: the single disbursement of the loan resources will be subject to presentation by the Government of Suriname (GOS) of evidence, satisfactory to the IDB, that the conditions described in Annex II (Policy Matrix) have been fulfilled (¶3.1).			
Exceptions to Bank policies: None			
Project consistent with Country Strategy:		Yes <input checked="" type="checkbox"/> [X]	No <input type="checkbox"/> []
Project qualifies for: SEQ <input checked="" type="checkbox"/> [X] PTI <input checked="" type="checkbox"/> [X] Sector <input checked="" type="checkbox"/> [X] Geographic <input type="checkbox"/> Headcount <input type="checkbox"/>			
Procurement: N/A			

*Under the Flexible Financing Facility (FN-655-1) the Borrower has the option to request modifications to the amortization schedule as well as currency and interest rate conversions, in all cases subject to the final amortization date and original WAL. In considering such requests, the Bank will take into account market conditions and operational and risk management considerations.

** The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable provision of the Bank's policy.

I. PROGRAM DESCRIPTION

A. Background and Problem Addressed

- 1.1 As part of its development strategy, the Government of Suriname (GOS) has prioritized interventions to contribute to a more productive and diversified agricultural sector that will contribute to improve food security, and provide opportunities for employment and income generation. The program is structured as a Programmatic Policy Based Loan (PBP) consisting of three individual operations in support of a series of institutional and policy reforms in the agriculture sector. The flexibility of the PBP instrument makes it best suited to implement the sequential measures required to reach the targets set forth in the program. The specific targets for each of the components of the program are defined in the Policy Matrix, supported by the GOS's Policy Letter, which envisions the proposed institutional and policy reforms as a long term framework to modernize agricultural public services and hence foster much needed sector investments.

1. Macroeconomic outlook

- 1.2 Suriname remains one of the fastest growing countries in the region, driven by strong activity in public investment, and the gold, wholesale and retail trade, transport, construction, communications, and financial services sectors. Even on the basis of lower gold prices, IMF projects the average medium term real GDP growth rate to be around 4.4%. Assuming no further decline in gold prices and the authorities are successful in improving the business climate to stimulate non-mineral sectors, the real growth performance could improve to 4.8% by 2018. Due to Suriname's recent economic performance and positive outlook, Moody's, Fitch, and S&P elevated the country's rating several times between 2011 and 2012, reaching Ba3, BB-, and BB-, respectively by August 2012. S&P further raised Suriname's outlook from stable to positive in April 2013.
- 1.3 Fiscal consolidation will occur following recent slippages, but slowly. Fiscal consolidation will be more effective as Suriname takes step to improve the institutional capacity for fiscal management, reduce its dependence on commodity-related revenues, and strike a delicate balance with expenditures as it seeks to overcome its historical underinvestment in public capital. The IMF notes the strong commitment of the authorities to institutionalize further fiscal management and following a consolidation path. The IDB is actively involved, since 2011, in the processes on both the revenue and expenditure fronts. While, GOS projected a fiscal deficit of 4.1 per cent of GDP for 2013, the IMF estimated that this could be lower at around 2.9 per cent of GDP. Nevertheless, both projections assume that the overall fiscal balance will be around 3 per cent over the medium term as the authorities balance their needs to sustain capital investment and modernize the fiscal management systems. The GOS projected, in its 2013 Financial Note, a gross financing gap of approximately US\$197 million, of which this operation will cover 8 percent in 2013.

- 1.4 The country's external current account has moved from positive territory to a projected deficit of 3.7% of GDP in 2013 on account of higher demand for capital imports (both public and private) and lower export value. The current account deficit is expected to widen further through to 2015, when it reaches 8.6% of GDP before improving dramatically by the end of the medium term as large-scale projects end. Gross international reserves recovered in the second quarter of 2013 to US\$903.8 million from its fall at the end of the first quarter to US\$861.4 million. Reserves are now 4.3 months of imports and are expected to grow over the medium term to US\$1.2 billion and 5.6 months of imports by 2018. The financial sector remains insulated mainly because of its limited external exposure to risky financial instruments and investments. The authorities continue to reform the financial sector with support from the IDB.
- 1.5 Based on the Independent Macroeconomic Assessment (IMA), the macroeconomic conditions are conducive for policy-based lending. The proposed PBP will contribute to establish a set of policy and institutional reforms to improve the delivery of agricultural public services, which in turn will help reinforce the sector's growth over the medium term.

2. Main issues affecting Suriname's agricultural sector

- 1.6 Notwithstanding the performance of the mining sector, Suriname needs to generate sustained growth of non-extractive sectors. Of particular importance is the agricultural sector,¹ which accounts for 10% of total export earnings, second to mining; 17% of the labor force, and almost 10% of the GDP in 2011 (Suriname Central Bank, 2012). Most agricultural production takes place along the coastal plains.² Despite its importance, the agricultural sector declined consistently between 1991 and 2002. A growth path was recovered from 2003 to 2010 and agricultural exports grew 67% from 2007 to 2011 (FAOSTAT), although cultivated area shrank by 33% since 1990, and total agricultural output is still below levels reached in 1991.³ Additionally, as a whole, the sector showed a 1% annual rate of growth in Total Factor Productivity (TFP) between 2001 and 2007, 41% below the average rate in Latin American and Caribbean (LAC).
- 1.7 The annual level of total supports⁴ to the Surinamese agricultural sector amounts to 1.31% of GDP, similar to the average among the countries of the LAC region. The share of support to agriculture in the form of general services considered public goods (e.g., infrastructure, research, extension, agricultural health), is about 40% of total transfers, higher than in most LAC countries, and close to the levels in Chile and USA. In the recent past (2009-2011), Suriname did not have significant levels of budgetary support paid to individual farmers (e.g., input subsidies, subsidies based on production or area planted). Nonetheless, in 2013 the Government implemented a one-time

¹ Agricultural sector includes: agriculture, livestock, and fisheries.

² More than 90% of total area under agricultural production lies along the Coastal Plains (Department of Agricultural Statistics of the Ministry of Agriculture of Suriname).

³ Further analysis of the evolution of the sector can be found in Roseboom (2012) and FAO (2013).

⁴ A Producer Support Estimate for agricultural sector of Suriname, using OECD methodology, was carried out by FAO in 2013.

transfer to rice farmers, based on levels of production, to help compensate for an increase in government taxes on fuel introduced in 2011.⁵ While the government's commitment to support general services is a good policy measure and should be sustained, the medium and long term challenge is to focus on the quality of the provision of those services.

- 1.8 A strategy to improve the agricultural sector's performance requires a set of well-defined policies geared towards promoting efficient factor and product markets. The GOS has made or already started making reforms in non-sector specific policies that have an impact on agricultural productivity such as trade, infrastructure, financial markets, and land issues. Additionally, the GOS has started a divestment strategy of state-owned enterprises (§1.23). The emphasis of the proposed PBP loan is to improve the performance of public agricultural services, which have not undergone substantial reforms in the recent past and comprise most of the government's development budget in the sector (more than 90% in the 2009-2011 period). The evidence shows that public expenditure on agriculture allocated towards the provision of public goods and services (e.g., rural infrastructure, innovation, agricultural health, market information) have greater returns and coverage than public expenditures allocated towards the provision of private goods (e.g., purchase and distribution of inputs, subsidies for production). Returns on investment in rural infrastructure, agricultural innovation and rural education tend to be higher than returns on subsidies of private goods, both in LAC as well as in other parts of the world (Fan et al., 2008; López, 2004; Foster et al., 2011). Along the same lines, a time series analysis of public agricultural expenditures in India between 1960 and 2000 found that investments in public goods and services were more effective in improving income or reducing rural poverty, than were subsidies for production inputs (Fan, 2008).
- 1.9 With regards to sector specific services, the emphasis of government interventions should be placed on improving the quality in the provision of public goods. The following paragraphs summarize the issues affecting the efficiency in the provision of the most relevant agricultural services in Suriname.
- 1.10 **Agricultural Statistics and Information.** The Department of Agricultural Statistics (DAS) of the Ministry of Agriculture, Animal Husbandry and Fisheries (LVV) is the official unit in charge of providing agricultural data in Suriname. With technical assistance from the Food and Agriculture Organization (FAO), LVV has identified areas that need reinforcement to improve the quality of statistical information. In brief, those areas are: (i) data collection methods and processes; (ii) improved analytical skills; and (iii) timely dissemination of information. Four years after the Fifth Agricultural Census of Suriname was conducted in 2009, official results remain to be released, thus impeding the update of the sampling frame, and the generation of more accurate information of the sector's structure. In 2013, DAS launched a pilot survey of crop production using, for the first time, the 2009 Census sampling frame. Up until the pilot survey was implemented, agricultural data were collected based on qualified

⁵ While the 2013 transfer was presented as a one-time program, compensation payments for high fuel costs were not new. From 2003 to 2006, rice farmers also received a reimbursement of government tax on fuel.

informants and not on statistical methods. Replacing the qualified informant method by probabilistic surveys will be a first step in modernizing the Agricultural Information System (AIS). Additionally, the GOS has not built a monitoring and analytical capacity to assess how its agricultural policy instruments translate into support for producers, failing to objectively understand the contribution of such policy instruments vis-à-vis the Government's objectives.

- 1.11 **Animal and Plant Health and Food Safety.** Suriname's agriculture and livestock are currently free of important economic pests and diseases like banana's black sigatoka, foot and mouth disease, and classical swine fever. However, the current status is extremely vulnerable because the norms and regulations needed to enforce a scientific risk-based surveillance and control system are not currently in effect. According to the World Organization for Animal Health (OIE) and the Inter-American Institute for Cooperation in Agriculture (IICA) assessments of the Surinamese Veterinary and Phytosanitary Services (OIE, 2012 and IICA, 2012), the "performance scores" are 42% and 30%, respectively -- among the lowest in the LAC region. These assessments concluded that Suriname lacks modern institutional and legal framework to support a technically-sound agricultural health system. In the case of food safety, a recent diagnostic (FAO 2013) indicates that there is: (i) lack of a legal framework and protocols to support an integrated food safety system with animal and plant health; (ii) a fragmentation of food safety programs across government departments; (iii) no clear and formal delineation of competencies among the government agencies; and (iv) no human resources and infrastructure plan for an integrated food safety system. This status undermines efforts to implement an integrated sector-wide approach "from the farm to the table," putting at risk the health of Surinamese consumers as well as that of consumers of trading partners.
- 1.12 The economic repercussions of non-adequate agricultural health and food safety services can be significant in Suriname. For instance, rice blasts affect 70% of rice production producing an average loss between 10-30% of yields, which could represent an economic loss of around US\$10 million annually (LVV, DAS 2012); an outbreak of foot mouth disease in Suriname would lead to a contraction of the livestock sector at an estimated loss of US\$8.0 million in a 15-year time (FAO 2013); and agrochemical and contamination of food exports puts in jeopardy US\$30 million of annual exports of fruits, vegetables and fish products, as evidenced by 15 alert notifications received by Suriname exports of such products to the European Union because of exceeding maximum residue level between 2008- 2011 (RASSF, 2012).
- 1.13 There is a comprehensive literature that shows that increase in international trade in products from this sector has led countries to reduce risks on natural assets and the health of their consumers, establishing regulations on health and safety measures for access to their markets. A compilation of studies analyzing the impact of different agricultural health and food safety systems financed by the Bank in Peru, Ecuador, Uruguay and Belize presents positive evidence of the impact that this kind of intervention has (OVE, 2009). In the case of Peru, the assessments conducted suggest that these interventions significantly reduced the prevalence of zoonotic diseases (for llamas) and reduced the presence of Fruit Flies. In the latter case, the

improvements translated into higher prices and better yields of agricultural products (GRADE, 2008a).

- 1.14 **Agricultural innovation system.** A recent analysis of Suriname's agricultural innovation system (Roseboom, 2013) highlights that while there is a history of a solid plant breeding program in rice, the system as a whole does not have a good record of collaborative research and extension activities, with limited linkages across national research entities and with international research centers. Moreover, apart from some past success in the rice breeding program, there are no records of recent publicly-funded widespread transfer of any technology. The overall level of investment in agricultural research in Suriname is 1.1% of Agricultural GDP (2011), similar to the LAC average ratio but slightly below the recommended norm of 1.5% (GFAR 2011). In addition, a significant proportion (40%) of LVV's research budget is allocated to ancillary laboratory services, not destined to provide short term technological results. As a consequence, Suriname shows yield gaps, vis-à-vis the region's best performer, of 103% for rice, 108% for beef production, 88% for milk, and 128% for fresh vegetables (2011).
- 1.15 As a result of the fragmentation of the agricultural innovation system in Suriname, and limited linkages, LVV has had only two agreements with international research entities in the last three years. In its recently drafted Agricultural Innovation Strategy, LVV puts emphasis on fostering closer interaction among the actors of the system, creating mechanisms to finance results-based innovation, and generating linkages with other national and international research institutions. This strategy is in line with the findings and recommendations of the World Bank (2012), which highlight the benefits for a small country of promoting an integrated innovation system perspective, closer interaction between research, extension and market development, and better linkages between public and private actors, both locally and internationally.
- 1.16 Additionally, as part of its commitment to implement the innovation strategy, the GOS envisions increasing the level of financing to the agricultural research to 2% of the Agricultural GDP. However, an increase in the level of investment must be complemented by an effective and efficient use of resources. Proper planning and monitoring & evaluation systems have been shown to help improve the performance of agricultural innovation systems (Gijsbergs et al, 2001, and World Bank, 2008). Finally, in Suriname, an increased level of financing will need to be complemented with improved human resources and infrastructure capacities, both in research and extension, which have proven to be critical assets to improve agricultural productivity (Pardey, P. et al., 2008).
- 1.17 **Sustainable Irrigation and Drainage (I&D).** In Suriname, agricultural productivity is very much related to an efficient management of the I&D systems. Due to poorly leveled plots, peak flow demands exceed standard levels by 25%. According to official budget figures, the GOS assigns approximately 80% of total agricultural budget to I&D systems. To improve the efficiency of I&D systems, both bottom-up and top-down approaches are needed, and in that sense the following issues have been identified as being especially relevant (Garrido, 2013): (i) suboptimal coordination at

the Ministerial level, both in running the systems, and planning and executing investments; (ii) low capacity in users' institutions (Water Boards [WB]); (iii) inadequate financial contributions by water users, and heavy reliance on Governments' budget for operation, maintenance and investments; (iv) within water perimeters, inefficient coordination in running the irrigation (water supply) and drainage operations, resulting in insufficient supply during periods of peak demand and wasted resources; and (v) insufficient training and commitment of WBs representatives and farmers. Currently, the GOS carries out most investment, and Maintenance and Operation (M&O) activities in the country's I&D systems. While it is expected that the private sector will take on more responsibilities in M&O, in its current strategy the Government will maintain and reinforce a coordinating role, and will lead and support a process of devolution of water management responsibilities to growers and their WB, with the ultimate goal of turning them into self-managed and self-financed organizations and having a more equitable distribution of water among users.

- 1.18 Having a healthy and dynamic irrigated agricultural sector has been associated with improvements in rural productivity. Specifically, large-scale public paddy-based irrigation systems, such as the ones in Suriname, are associated with having highly positive effects on rural employment (Faurès et al. 2007). Agricultural water management boosts total farm output, which may arise from improved yields, reduced crop loss, and increased cultivated area. Reliable access to water enhances the use of complementary inputs such as high-yielding varieties and agrochemicals, which also increases output levels (Smith 2004; Hussain and Hanjra, 2004; Huang et al. 2006; Lipton, et al. 2003). Nevertheless, the effectiveness of such investments depends on an appropriate scheme for the administration of irrigation systems. While irrigation systems under public administration tend to be operated and maintained inefficiently (Holden and Thobani, 1996), and to have inadequate cost recovery mechanisms ([World Bank, 1995](#)), the management of such systems through irrigation associations encourages efficient use of water (World Bank, 1995) and may increase economic activity in the regions of influence (IEG, 2009). Environmentally, access to water on a regular basis via irrigation systems reduces the seasonal and inter-annual variability of production (Wood, You and Zhang. 2004), although special attention to negative externalities, such as soil salinity, is necessary.
- 1.19 **Sustainable Fisheries Management.** In Suriname, fisheries account for just over 2% of GDP and 60% of agricultural exports, however data trends in catch per unit of effort (CPUE) for the species accounting for 85% of the export value suggest that some of the commercial fish stocks might be being harvested beyond sustainable levels (Seijo, 2013). Access rights are conferred by the Department of Fisheries, as established in the Annual Decree issued by the LVV, which specifies exclusive spatial fishing access rights to vessel owners to harvest species with pre-defined vessel capacity, fishing methods and gear. Concerning rights enforceability, the complexities associated with sharing shrimp and fish stocks with countries in the Brazil-Guianas ecosystem call for more robust mechanisms to mitigate the presence of Illegal Unregulated and Unreported (IUU) fishing. Many of the marine resources of commercial value in Suriname are comprised within the highly productive North

Brazil Shelf Large Marine Ecosystem (NBSLME). Its responsible use requires ecosystem considerations to fisheries management to deal with heterogeneous fleets harvesting shared stocks of a diversity of species (Phillips et al.2009; Chakalall *et al.* 2002; Seijo et al. 2000).

- 1.20 In that context, some of the pressing issues affecting Suriname's fisheries sustainability include: (i) lack of recent stock assessment of main Suriname fisheries including trans-boundary resources (particularly shrimp and groundfish); (ii) absence of a Fisheries Information System (FIS); (iii) IUU fishing; and (iv) piracy in fishing areas within Suriname Exclusive Economic Zone. To attend these issues, the Fisheries Management Plan (FMP) is currently being updated, and there are efforts underway to establish a Coast Guard system to mitigate the above mentioned enforcement and compliance issue. Additionally, Suriname has the potential to increase its aquaculture production of shrimp and fish, thus the GOS is embarking into the development of a National Aquaculture Plan that will help guide policies to achieve a competitive and environmentally sustainable aquaculture sub-sector.

3. Recent government progress in the sector and remaining challenges

- 1.21 The scope of the proposed PBP deals with the following interventions prioritized by GOS in its National Agricultural Strategy: (i) improving the provision of public services such as agricultural research and extension, agricultural health and food safety, and market information; (ii) modernizing D&I systems; and (iii) developing a sustainable fisheries sub-sector. In addition, the GOS is addressing the modernization of the country's land management system, and the redefinition of the government's role in productive activities. As a result of implementing the GOS strategy a more productive and diversified agricultural sector will contribute to improve food security, and to provide opportunities for employment and income generation that will help to alleviate poverty in rural areas.

4. Conceptual overview

- 1.22 The policy and institutional reforms envisioned in the proposed program will foster a sustainable growth of Suriname's agricultural sector, through measures that will contribute to increasing the sector's productivity while attending the vulnerability of its natural resource base, which affects the sector's environmental sustainability in the long-term. While all areas of intervention will deal with productivity and sustainability, tackling issues of agricultural health and food safety and agricultural innovation are more closely tied to the challenge of increasing productivity; and reforms in I&D and fisheries are more closely related to long term challenge of sustainable productivity. The strategy of the three individual operations of the PBP will focus on improving the delivery of public agricultural services, with the aim of implementing a stepwise approach to consolidating the services, which will trigger relevant investments and services and foster the improved private sector performance.
- 1.23 As part of the Government's long-term commitment to the sector's performance, the GOS made significant progress in agricultural trade policy as a result of the

implementation of the Agricultural Trade Policy Loan (ATPL – 1148/OC-SU).⁶ Additionally, as the institutional and policy reforms comprised in the proposed PBP are implemented, the GOS will need to deepen the trade reforms implemented in the early 2000s, continue the divestment strategy in the agricultural sector (e.g. the privatization of the Foundation for Mechanized Agriculture –SML; and of the Foundation for the Conservation of the Banana Sector - SBBS⁷), and consolidate a land-use planning system, conceived as a bottom-up planning process. Moreover, the current Bank’s portfolio includes operations destined to improve the performance of financial markets (2947-OC-SU) and the energy sector (3062/OC-SU and 3059/OC-SU), and to strengthen the country’s fiscal position and improve efficiency in tax and customs administration (SU-L1037). The operation also incorporates lessons learned from other sector policy loans (2160/OC-PE, 1148/OC-SU, 2731/GR-HA, 2978/OC-PE) such as: (i) institutional and policy reforms should accompany the reallocation of public agricultural expenditure towards an improved provision of public goods; and (ii) reforms should focus on those areas that have a proven potential to increase the sector’s sustainable productivity.

B. Consistency with GCI-9 and Country Strategy

- 1.24 The operation is aligned with the Bank’s Country Strategy with the Republic of Suriname 2011-2015 (GN-2637-3), contributing to increase food security by increasing productivity among agricultural producers; and is included in the 2013 Country Program Document. The operation is also aligned with the Bank’s institutional priority to “Protect the environment, respond to climate change and enhance food security,” as the proposed measures to improve the performance of agricultural innovation services and I&D systems factor in climate change aspects (¶3.2 and ¶3.3). The program is also consistent with the Agriculture and Natural Resources Management Sector Framework Document ([GN-2709-2](#)).
- 1.25 The program contributes to the four lending program priority targets outlined in the Report on the Bank’s Ninth General Increase in Resources GCI-9 (AB-2764) and its Results Framework: (i) small and vulnerable countries; (ii) poverty reduction and equity enhancement, as beneficiaries are mainly small farmers; (iii) support climate change initiatives, renewable energy and environmental sustainability, by promoting the adoption of agricultural technologies and improving the use of water resources, to strengthen adaptation to climate change; and (iv) support regional cooperation and integration through reforms included in agricultural innovation, in animal and plant health and food safety, and in fisheries⁸. It is consistent with the strategic priority “Protect the environment, respond to climate change and enhance food security,” and will contribute to its Regional Development Goal “Annual growth rate of agricultural

⁶ During the execution of the Agriculture Trade and Policy Loan (ATPL), government interventions in the sector included requirements to surrender foreign exchange, export taxes, and cumbersome processing of export permits diminished.

⁷ The EU has provided technical and financial assistance to help finalize the divestment process of SBBS, the largest state-owned agricultural enterprise in Suriname.

⁸ The proposed reforms are classified as cross-country focus (i.e., agricultural innovation) and national subsidiarity (i.e., animal plant health and foods safety, and fisheries) as categorized in “Guidelines for the classification and validation of operations eligible for the GCI-9 regional cooperation and integration lending priority” (GN-2733).

GDP” and its output “Farmers given access to improved agricultural services and investments.”

II. OBJECTIVES

A. Program objectives and description

- 2.1 **Program Objectives.** The general objective of the operation is to contribute to the growth of the agricultural sector, through an increase of the sector’s productivity. The specific objectives are to develop institutional and policy reforms to enhance farmers’ access to improved public agricultural services. The [Policy Matrix](#) establishes a series of commitments to policy, legal and institutional reforms for the entire program, structured in six components:
- 2.2 **Component 1. Macroeconomic Stability.** This component seeks to ensure that the GOS maintains a solid macroeconomic framework that is consistent with the objectives of the proposed operation and the policy letter referred to in ¶1.1.
- 2.3 **Component 2. Modernization of Agricultural Statistics.** This component seeks to improve LVV’s data collection and analysis, to contribute to improved planning, programing, monitoring and evaluation of agricultural policies. LVV will implement a comprehensive institutional reform to improve data collection and analysis, through setting up an AIS. The proposed first operation focuses on: (i) the publication of the Agricultural Census 2008-2009; (ii) the draft of probabilistic methodology to collect data; and (iii) the publication of the estimates of support to the agricultural sector. The implementation of the AIS, based on improved data collection and analysis methods will be part of the reforms included in subsequent operations. Emphasis will be placed on analyzing socio-economic data, including gender and diversity variables, to improve the appropriateness in the delivery of agricultural services.
- 2.4 **Component 3. Modernization of the agricultural health and food safety services.** This component seeks to improve the performance of the animal and plant health and food safety services by adopting an agricultural health and food safety integrated system approach, which aims at improving the protection of consumers from illness and food contamination while ensuring that the country’s exports meet international standards. The proposed first operation includes the preparation of a proposal to establish an Inter-Ministerial Working Group for Food Safety (IMWGFS); and the completion of the consultation processes of the major animal health draft acts: (1) Slaughterhouse and Meat Inspection, (2) Animal Production, Animal Health and Animal Welfare, and (3) Animal Feed; and the Plant Protection Act following the International Plant Protection Convention (IPPC) guidelines. This set of reforms will be complemented in subsequent operations through: (i) the establishment of IMWGFS⁹ to improve the coordination among the government actors and to formulate and implement a food safety strategy; and (ii) the update, revision and implementation, for animal and plant health, of the legal framework following international standards and guidance; of the public institutional arrangement for an agricultural health system;

⁹ The Inter-Ministerial Working Group for Food Safety will be composed of representatives of the Ministry of Agriculture, Ministry of Health, Ministry of Trade and Industry and Ministry of Finance.

of the technical and planning capacities and tools; of the appropriate regulations and protocols to manage in accordance with international standards critical permanent services; and of the strategy to declare the country free of major animal and plant pests.

- 2.5 **Component 4. Agricultural Innovation Modernization.** This component seeks to improve the performance of the agricultural innovation services by adopting an agricultural innovation system approach, which aims at closer linkages between research and extension, a stronger orientation towards results (demand oriented) and stronger interaction among actors at national and international level. In the context of the proposed first operation, LVV will prepare and publish a National Agricultural Innovation Strategy, which will lay out the principles, priorities, and an action plan. Main elements of the strategy will be implemented in subsequent operations comprised in this PBP, including: (i) the establishment of a National Agricultural Innovation Board, composed by public and private representatives, to improve the coordination and linkages between the different agricultural innovation actors, and to monitor the implementation of the agricultural innovation agenda; (ii) the introduction of agricultural innovation projects and a project management system based on results, which will enforce collaboration between research and extension, and promote more cross-institutional collaboration between different actors; (iii) the increased allocation of current research and extension budget to agricultural innovation projects; (iv) the formulation and implementation of human resources and infrastructure plans for agricultural innovation; (v) the reorganization of the extension service according to an agricultural innovation approach; and (vi) the formulation and implementation of strategic guidelines to strengthen the international linkages.
- 2.6 **Component 5. Modernization of Agricultural Irrigation and Drainage.** The component seeks to improve the performance of the Agricultural I&D systems, attempting to resolve coordination failures within government structures responsible for agricultural I&D as well as amongst water users. The GOS's approach to achieving the component's goals includes a set of sequential steps of top-down and bottom-up complementary activities. The proposed first operation includes the establishment of an Inter-Ministerial Irrigation and Drainage Coordination Working Group (IMIDCWG) integrated by the Permanent Secretaries of LVV, Ministry of Public Works, Ministry of Regional Development, and Ministry of Finance; the election of nine WB's executive committees and the appointment of three WB's executive committees. Further institutional reforms to be implemented as part of the subsequent operations include: the preparation and approval of a national I&D vision which internalizes environmental challenges facing the sector; the preparation and implementation of I&D investment plans; strengthening of coordination mechanisms in I&D districts; the implementation of norms and regulations to improve the management of WB and facilitate the devolution of the systems to users; and the design and implementation of compensation schemes to incentivize the use of sustainable methods of production in I&D districts.
- 2.7 **Component 6: Sustainable Fisheries Management.** This component seeks to contribute to sustainable fisheries and aquaculture management in Suriname through strengthening of capacities for sector planning, information management and analysis,

administration, monitoring, control and surveillance. The proposed first operation includes: (i) approving a Fisheries Monitoring, Control and Surveillance (FMS) system, and (ii) publishing a Fisheries Management Plan. Further reforms to be implemented as part of the subsequent operations include: (i) implementation of the Fisheries Management Plan aligned with the principles of ecosystem-based management, culminating with the introduction of Harvest Control Rules for the shrimp and ground fish fisheries; (ii) implementation of the FMS system to address enforcement and compliance issues including IUU fishing and piracy at sea; (iii) design and implementation of a Fisheries Information System of Suriname with a view to enhancing the capability of tracking and analyzing the sector's main indicators of performance; (iv) approval of the legal framework and development plan for sustainable aquaculture addressing the main bottlenecks for a viable sub-sector; and (v) strengthen Fisheries department personnel to be able to periodically assess the status of stocks, to monitor and control domestic fisheries, and to have certifiable sustainable fisheries management and effectiveness for the main commercial fisheries.

B. Results matrix indicators

- 2.8 The program aims at increasing agricultural productivity and improving the quality of agricultural services through a set of policy and institutional reforms in key agricultural public services. The success of the intervention will be measured by using agricultural growth as an indicator of impact.

Table II-1. Key Results Matrix Indicators

Outcome Indicators	Rationale of Outcome Indicator
Number of farmers receiving services	Measures degree of accessibility to improved public agricultural services.
Performance Index of the plant system as measured by IICA-PVS tool	Measures the efficiency of the plant health services.
Performance Index of the animal system as measured by OIE-PVS methodology	Measures the efficiency of the animal health services.
Number of hectares irrigated with improved water applications and drainage	Measures farmers' efficiency in use of water resources for irrigation purposes
Number of publications from data generated using probabilistic method	Measures the improvement of data collection and analysis services
Catch per unit of effort CPUE (kg/das)	Measures sustainability of the fisheries management

- 2.9 As a result of the specific policy reforms supported by this operation it is expected that the GOS will: (i) improve the performance of the data collection and analysis; (ii) to increase the performance of the food safety and animal and plant health services; (iii) improve performance of the agricultural innovation services; (iv) increase investment in agricultural research; (v) increase collaboration with national and international research institutions; (vi) improve the effectiveness and sustainability of I&D systems; and (vii) improve the LVV's capacity for sustainable fisheries management. Table II-1 presents the outcome indicators to be measured to assess the program's objectives. Detailed indicators of impacts and outcomes are available in the [Results Matrix](#). As the proposed reforms are of a public good nature, it is expected that the majority of the 10,188 agricultural producers and 1,450 of fishers will benefit, 17% of which are women.

C. Economic rationale and sustainability

- 2.10 The proposed program addresses policy-related economic and institutional problems that constrain the growth potential of Suriname's agricultural sector. The proposed reforms have proven to increase agricultural productivity in other countries. The economic analysis of this intervention focused on the evaluation of the incremental benefits to be achieved through enhanced productivity of agricultural producers as a result of implementing components: 3- Modernization of the Agricultural Health and Food Safety Services; 4- Agricultural Innovation; and 5- Modernization of the Drainage and Irrigation Services. The analysis uses a Monte Carlo simulation for variables affecting productivity, and in all scenarios the resulting Net Present Value (NPV) is positive using a discount rate of 12%. Accordingly, the economic rationale of the PBP and its components is justified. The program's benefits have been underestimated, as the Cost-Benefit Analysis (CBA) does not include benefits to be accrued from improved fisheries management, use of an improved agricultural information system, and health benefits to consumers as food safety standards improve.¹⁰
- 2.11 The sustainability of the three individual operations of the PBP is based on implementing a stepwise approach to consolidate an institutional structure conducive to improve the provision of public agricultural services. This, in turn, will trigger relevant sector investments that will enhance private sector performance. The stepwise approach consists of developing the strategy for the reforms, introducing coordinating mechanisms that will facilitate the design and appropriation of norms and regulations envisioned in the second operation. Finally, the third individual operation aims at implementing operational instruments that will help to more effectively deliver public agricultural services.

III. FINANCING STRUCTURE AND MAIN RISKS

A Financial instruments and contractual conditions

- 3.1 This operation is the first of a series of Programmatic Policy-Based Loans (PBP), composed of three contractually independent but technically interrelated operations to be disbursed in a single tranche each. The subsequent operations are planned for 2014 and 2015 each with an estimated amount similar to that of the proposed first operation.¹¹ The proposed operation will draw upon the resources of the IDB's Ordinary Capital for an amount of US\$15 million. **The single disbursement of the loan resources will be subject to presentation by the GOS of evidence, satisfactory to the IDB, that the conditions described in Annex II ([Policy Matrix](#)) have been fulfilled.**

¹⁰ The CBA assigned all PBP loan resources to the cost flows of the three components included in the analysis.

¹¹ The definite amount for each operation will take into account Suriname's financing needs and the availability of programming resources.

B. Environmental and social safeguard risks

- 3.2 As per Directive B.13 of the Environment and Safeguards Compliance Policy (OP-703), this PBP loan does not have an environmental category. A Strategic Environmental Assessment (SEA) was conducted to evaluate the potential social and environmental impacts and risks of all three years of the PBP and to identify opportunities for improving social and environmental sustainability. The findings of the assessment have been summarized in an SEA report. The SEA concluded that the PBP will have positive environmental and social impacts over time, as policies and plans are implemented by the Surinamese government. To increase environmental and social sustainability of the reforms, several recommendations were identified in the SEA, as follow: (i) for agricultural health, (i.1) in human resources plans include identification of training programs for health and safety, (i.2) in infrastructure and equipment plans include identification of health and safety features, (i.3) establish a pesticide enforcement and monitoring plan for importation and use of pesticides, and (i.4) prioritize the development and use of biological pest control and IPM for all crops, and (ii) for agricultural innovation, (ii.1) in the Agricultural Innovation Strategy consider development of culturally-appropriate approaches for working with Amerindian and Maroon communities, and make explicit climate change risks when defining priorities, (ii.2) in operating procedures for agricultural research projects include a criterion to not fund investigations that could have significant, negative environmental or social impacts; and (iii) for drainage and irrigation, (iii.1) in the development of the National Drainage and Irrigation “Vision,” consider climate change and water supply and quality sustainability issues, and (iii.2) ensure the incorporation of environmental and social sustainability for aquaculture management.
- 3.3 The Bank will be able to verify the inclusion of the recommendations in policies and plans, by reviewing documents submitted to the Bank as triggers for each individual operation of the PBP. Public consultations were part of the proposed policy and institutional reforms that will most affect farmers and civil society.

C. Other key risks and issues

- 3.4 **Fiduciary risk.** There are no significant fiduciary risks associated to the proposed operation. No procurements processes are contemplated to be specifically financed with the program’s resources.
- 3.5 **Execution risk.** Based on the risks identified, the general risk qualification is medium. Mitigation measures are detailed in the Risk Matrix and include: (i) the preparation of a detailed work-plan to comply with policy conditions included in all individual operations; (ii) to cope with inter-ministerial coordination risks, LVV will lead the coordination process and present the coordination strategy to other ministries and stakeholders; and (iii) to help internalize the institutional reforms in I&D, a participatory approach will be used to formulate water boards’ by-laws and water boards’ operation and maintenance work plans.

IV. IMPLEMENTATION AND MANAGEMENT PLAN

A. Implementation and management.

- 4.1 **Beneficiary and Executing Agency (EA):** The Borrower is the Republic of Suriname and the EA will be the Ministry of Finance (MOF). In turn, the LVV, as head of the agricultural sector, will be the main technical entity with responsibility to cooperate with the MOF for the timely and adequate compliance of the agreed policy conditions of the program.
- 4.2 The responsibilities of the MOF will include: (i) coordination with LVV and the relevant entities responsible for the carrying out of the legal, institutional and policy measures comprised in the program; (ii) presentation of the evidence showing that the conditions have been met, and any other information and reports that the IDB may request to approve the disbursement, pursuant to the provisions of the loan contract; (iii) promotion, monitoring and support of the actions required to fulfill the legal, policy and institutional reforms comprised in the PBP; and (iv) gathering, recording and presentation of information and performance indicators so that the IDB and the GOS can follow up, measure and evaluate the results of the Program. In addition, the MOF will coordinate and cooperate with LVV to ensure: (i) communication with the Bank with respect to technical aspect of the program; and (ii) preparation and presentation to the Bank of a work-plan prepared by LVV, establishing a critical path of actions to comply with the policy conditions for the subsequent operations of the PBP, including the detail of the activities, responsible parties for implementing the activities, a timeline for their implementation, and the necessary budget and source of funding to that end.

B. Supervision and evaluation of results

- 4.3 A comprehensive monitoring and evaluation system will be applied to assess the Program's results. The IDB project team will monitor the Program both from the IDB Country Office in Suriname (CSU) and the Environmental, Rural Development and Disaster Risk Management Division (RND), which will be responsible for the follow-up of the Program. The main indicators for monitoring the program are those presented in the [Results Matrix](#) and the [Evaluation and Monitoring](#) links.
- 4.4 The borrower and the IDB agreed to quarterly meetings to conduct program monitoring, to identify progress and anticipate changes that may be required to achieve the goals of the results matrix. The monitoring and impact evaluation plan describes the methodology, indicators to be assessed, and institutions responsible for data collection, timeline and budget. A reflexive methodology and an ex-post CBA will be used to evaluate the effectiveness of the program. At the end of the program, the project team will draft a project completion report that will also serve as the basis for the second operation of the PBP.

C. Policy Letter

- 4.5 The IDB has agreed with GOS on the macroeconomic and sector policies included in the [Policy Letter](#) presented by the MOF, describing the main components of the GOS's strategy for the operation and reaffirming its commitment to implement the agreed activities with the Bank.

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	Aligned		
Lending Program	i) Lending to small and vulnerable countries, ii) Lending for poverty reduction and equity enhancement, iii) Lending to support climate change initiatives, renewable energy and environmental sustainability, and iv) Lending to support regional cooperation and integration.		
Regional Development Goals	Annual growth rate of agricultural GDP (%).		
Bank Output Contribution (as defined in Results Framework of IDB-9)	Farmers given access to improved agricultural services and investments.		
2. Country Strategy Development Objectives	Aligned		
Country Strategy Results Matrix	GN-2637-3	Increase food security by increasing productivity among agricultural producers.	
Country Program Results Matrix	GN-2696	The intervention is included in the 2013 Country Program Document.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	Highly Evaluable	Weight	Maximum Score
	8.0		10
3. Evidence-based Assessment & Solution	9.6	33.33%	10
4. Ex ante Economic Analysis	8.0	33.33%	10
5. Monitoring and Evaluation	6.5	33.33%	10
III. Risks & Mitigation Monitoring Matrix			
Overall risks rate = magnitude of risks*likelihood	Medium		
Identified risks have been rated for magnitude and likelihood	Yes		
Mitigation measures have been identified for major risks	Yes		
Mitigation measures have indicators for tracking their implementation	Yes		
Environmental & social risk classification	B.13		
IV. IDB's Role - Additionality			
The project relies on the use of country systems (VPC/PDP criteria)	Yes	Financial management: Budget.	
The project uses another country system different from the ones above for implementing the program			
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor			
Environment			
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project			
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan			

This program is the first of three Policy Based Programmatic Loans (PBP) aimed at contributing to the growth of the agricultural sector, through an increase in sector productivity. The specific objectives are to develop institutional and policy reforms to enhance farmers' access to improved public agricultural services. Project documentation highlights the need Suriname has to generate sustained growth of non-extractive sectors in general and agriculture in particular.

The focus of the PBP is on increasing productivity of the sector through enhanced access by farmers to public agricultural services. The document includes adequate diagnostics of each proposed sector and in general, the components of the PBP seem to respond to the diagnosis. Evidence is presented on the effectiveness of the provision of the public goods/services, which the PBP intends to promote, on agricultural outcomes. The structure of the results matrix is satisfactory and indicators are SMART at all levels, with baseline and target values.

The economic analysis is based on the evaluation of the incremental benefits of implementing the project as measured by the impact on the productivity of the agricultural producers. The economic rationale behind the proposed policy reforms is clearly argued and justified, however a clear identification and quantification of the cost that would have to be incurred as a result of the PBP to provide the public goods that would enable the increase in productivity that drives the benefit calculation is missing.

The evaluation plan proposes collecting information on the results matrix indicators and using a before-and-after comparison without attribution. The project documentation includes a risk matrix that identifies potential risks and mitigation measures, including metrics to monitor their timely implementation.

POLICY MATRIX

Component 1: Macroeconomic stability				
Objectives	Institution in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanism for second programmatic loan (2014)	Proposed Trigger mechanism for third programmatic loan (2015)
To maintain a solid macroeconomic framework	MOF	To maintain a stable macroeconomic framework, consistent with the program objectives	To maintain a stable macroeconomic framework, consistent with the program objectives	To maintain a stable macroeconomic framework, consistent with the program objectives

Component 2: Policy Support for Modernization of Agricultural Statistics				
Objectives	Institution in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanism for second programmatic loan (2014)	Proposed Trigger mechanism for third programmatic loan (2015)
To improve the performance of the data collection and analysis.	LVV	(i) Agricultural Census 2008/2009 published		
		(ii) Draft of probabilistic methodology to collect data presented by LVV	(i) Agricultural data collection plan ¹ approved (ii) Staff from Departments of Agricultural Statistics (DAS) and Fisheries trained in statistical methods (iii) One survey applying probabilistic method to collect data conducted by LVV (iv) Manual of Operation of Agricultural Information System (AIS) approved	(i) Annual Agricultural Statistics Compendium published, using data collected applying probabilistic method (ii) An Agricultural Information System (AIS) set up and functioning
		(iii) Estimates of support to the agricultural sector published		(iii) Estimates of support to the agricultural sector updated and published

¹ Plan needs to be designed, and will include a detailed description of probabilistic method(s) to be applied, a list of surveys to be implemented, and periodicity of implementation.

Component 3: Policy Support for the modernization of Agricultural Health and Food Safety Services				
Objectives	Institution in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanism for second programmatic loan (2014)	Proposed Trigger mechanism for third programmatic loan (2015)
To improve the performance food safety services	LVV	(i) A proposal ² for the creation of an Inter-Ministerial Working Group for Food Safety (IMWGFS) prepared by LVV in consensus with the Ministries of Health, Trade and Industry, and Finance	(i) IMWGFS established by respective Ministries and functioning. (i.1) Member Ministries of IMWGFS approve a Food Safety Strategy, prepared by IMWGFS ³ (i.2) Member Ministries of IMWGFS approve a Food Safety Human Resources plan, prepared by IMWGFS ⁴ . (i.3) Member Ministries of the IMWGFS approve a Food Safety Infrastructure and Equipment plan, prepared by IMWGFS. (i.4) Member Ministries of IMWGFS approve a Food Safety Legislation plan, developed by the IMWGFS ⁵ (i.5) Member Ministries of IMWGFS approve Food Safety Protocols Plan developed by the IMWGFS ⁶	(i.1) The IMWGFS has developed and presented to the respective Ministers its first progress report on the implementation of the food safety strategy. (i.2) A Food Safety Human Resources plan is being implemented, according to plan. (i.3) A Food Safety Infrastructure and Equipment plan is being implemented, according to plan. (i.4) Member Ministries of IMWGFS approve Food Safety Regulations for food production, post-harvesting and processing plans (i.5) Member Ministries of the IMWGFS make operational Food Safety Protocols

² The proposal will specify the IMWGFS objectives, activities, composition and expected outputs.

³ The Strategy should contain a vision, mission, roles and responsibilities, priorities, expected outputs and performance indicators.

⁴ The Human Resources plan will include job descriptions, training and capacity building activities, calendar and budget to implement it.

⁵ The Legislation plan will include inventory and revision of current legislation, proposed legislation reforms, and an action plan to implement the proposed reforms.

⁶ The plan will include standard operating procedures based on international standards and an action plan.

Component 3: Policy Support for the modernization of Agricultural Health and Food Safety Services				
Objectives	Institution in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanism for second programmatic loan (2014)	Proposed Trigger mechanism for third programmatic loan (2015)
To improve the performance animal health services	LVV	(i) Consultation processes on the following draft Animal Health Acts: (1) Slaughterhouse and Meat Inspection, (2) Animal Production, Animal Health and Animal Welfare, and (3) Animal Feed, conducted by LVV	(i) Regulations of the Animal Health Acts drafted by LVV (ii) Animal Health Acts submitted to Parliament (iii) A plan for improving technical capabilities for diagnostic, risk analysis and emergency preparedness, epidemiological decision making, surveillance and monitoring, international health regulations, quarantine and border control, and inspection and traceability, data management developed by LVV. Technical capabilities includes a Human Resources (including job specification, job description, training, budget and calendar) and Infrastructure and Equipment Plan (including budget and calendar) (iv) A National Animal Disease Surveillance and Monitoring Plan (including its protocols) developed and approved (v) Protocols and rules of procedures for border control and quarantine activities developed and approved (vi) A strategy for declaring the	(i) Regulation of Animal Health Acts approved (ii) A Plan for improving technical capacity on Animal Health (Human Resources Plan and Animal Health Infrastructure and Equipment Plan) being implemented (iii) A National Animal Disease Surveillance and Monitoring Plan being implemented (iv) Protocols and rules of procedures for border control and quarantine activities being implemented (v) Suriname Government declares the territory free of major animal diseases and LVV submits the application for World Organization for Animal

Component 3: Policy Support for the modernization of Agricultural Health and Food Safety Services				
Objectives	Institution in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanism for second programmatic loan (2014)	Proposed Trigger mechanism for third programmatic loan (2015)
			country free of major animal diseases developed, approved and being implemented by LVV, in collaboration with OIE	Health's (OIE) Certification for Freedom of major animal diseases
To improve the performance plant health services		(i) Consultations process on the draft Plant Protection Act ⁷ conducted by LVV	(i) Plant Protection Act submitted to Parliament (ii) Plant Protection Act regulations drafted by LVV (iii) Decree on storage and commercialization of pesticides approved by State Council (iv) Plant Health Strategy (including vision, mission, roles and responsibilities, performance indicators, priorities and action plan) approved (v) A plan for improving technical capabilities for diagnostic, risk analysis and emergency preparedness, epidemiological decision making, surveillance and monitoring, international health regulations, quarantine and border control, and inspection and traceability, and	(i) LVV approves Plant Protection Act regulations (ii) Implementation of Pesticides storage and commercialization Decree monitored by LVV (iii) Progress report on the implementation of the Plant Health Strategy developed and approved by LVV (iv) A Plant Health Human Resources plan and Plant Health Infrastructure and Equipment Plan being implemented by LVV (v) The proposal for reorganization of Plant Health Services is approved and being implemented by LVV

⁷ Draft Plant Protection Act follows International Plant Protection Convention (IPPC) guidelines.

Component 3: Policy Support for the modernization of Agricultural Health and Food Safety Services				
Objectives	Institution in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanism for second programmatic loan (2014)	Proposed Trigger mechanism for third programmatic loan (2015)
			<p>quality control, data management developed by LVV. Technical capabilities includes a Human Resources (including job specification, job description, training, budget and calendar) and Infrastructure and Equipment Plan (including budget and calendar)</p> <p>(vi) A proposal⁸ on organizational structure for Plant Health services to include the efficiency on the service formulated by LVV</p> <p>(vii) A National Plant Pest Surveillance and Monitoring Plan approved, including implementation protocols</p> <p>(viii) Protocols and rules of procedures for border control and quarantine activities developed and approved by LVV</p> <p>(ix) A strategy following International Plant Protection Convention-International Standards Phytosanitary Measures (IPPC-ISPM) guidelines to determine the country status of major plant</p>	<p>(vi) A National Plant Pest Surveillance and Monitoring Plan being implemented by LVV</p> <p>(vii) Protocols and rules of procedures for border control and quarantine activities being implemented</p> <p>(viii) Pest free status, according to IPPC-ISPM standards, notified to trading partners by LVV</p>

⁸ The proposal will include an assessment, work plan and budget.

Component 3: Policy Support for the modernization of Agricultural Health and Food Safety Services				
Objectives	Institution in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanism for second programmatic loan (2014)	Proposed Trigger mechanism for third programmatic loan (2015)
			pests developed, approved and being implemented by LVV	

Component 4: Policy Support for Agricultural Innovation Modernization				
Objectives	Institutions in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanisms for second programmatic loan (2014)	Proposed trigger mechanisms for third Programmatic loan (2015)
To improve the performance of the agricultural innovation services	LVV	(i) Agricultural Innovation Strategy published		
		(ii) Proposal to establish the National Agricultural Innovation Board submitted to the Council of Ministers	(i) The National Agricultural Innovation Board installed by LVV and operational	(i) First progress report on the implementation of the agricultural innovation strategy developed by the Agricultural Innovation Board and presented to LVV
			(ii) A human resource plan for agricultural innovation developed with the participation of CELOS, ADRON, University of Suriname, approved ⁹	
			(iii) A national infrastructure plan for agricultural innovation, developed with the participation of CELOS, ADRON, and the University of Suriname, approved ¹⁰	

⁹ The plan will be prepared following the Agricultural Innovation System Strategy and will include job descriptions, training/capacity building, and budget.

¹⁰ The plan will be prepared following the Agricultural Innovation System Strategy and will include job descriptions, training/capacity building, and budget.

Component 4: Policy Support for Agricultural Innovation Modernization				
Objectives	Institutions in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanisms for second programmatic loan (2014)	Proposed trigger mechanisms for third Programmatic loan (2015)
			<p>(iv) A project management system for agricultural innovation activities developed and implemented by LVV, including:</p> <p>(a) LVV staff trained in project development and management</p> <p>(b) LVV establishes a unit in charge of managing the implementation of the portfolio of agricultural innovation projects, including tasks such as project selection, budgeting and monitoring and evaluation (M&E)</p> <p>(c) 7% of LVV's recurrent budget for following year is allocated to innovation projects</p> <p>(d) At least 10% of the innovation projects included in LVV's following year budget are joint ventures with external partners¹¹</p>	<p>(ii) Project management system for agricultural innovation activities being implemented by LVV, including:</p> <p>(a) Agricultural Innovation Projects' progress reports submitted by the unit in charge of M&E to LVV and to the AIB</p> <p>(b) 20% of LVV's recurrent budget for following year is allocated to innovation projects</p> <p>(c) At least 20% of the innovation projects submitted in LVV's following year budget are joint ventures with external partners¹²</p>
			<p>(v) Strategic guidelines for enhancing linkages to research and extension partners outside of Suriname approved</p>	<p>(iii) At least one agricultural innovation project designed as joint venture with international partners and approved</p>

¹¹ National or international partners, other than LVV.

¹² National or international partners, other than LVV.

Component 4: Policy Support for Agricultural Innovation Modernization				
Objectives	Institutions in charge	Conditions for first programmatic loan (2013)	Proposed trigger mechanisms for second programmatic loan (2014)	Proposed trigger mechanisms for third Programmatic loan (2015)
			(vi) Proposal for the reorganization of the agricultural extension services approved	(iv) Reorganization of agricultural extension services being implemented by LVV

Component 5: Policy Support for Modernization of Agricultural Irrigation and Drainage				
Objectives	Institution in charge	Conditions for 1st Programmatic loan (2013)	Proposed trigger mechanisms for 2nd Programmatic loan (2014)	Proposed trigger mechanisms for 3rd Programmatic loan (2015)
(i) To improve the effectiveness and sustainability of Irrigation and Drainage (I&D) systems	LVV RO OW MOF	(i) An Inter-Ministerial Irrigation and Drainage Coordination Working Group (IMIDCWG) established ¹³	(i) A Suriname Irrigation & Drainage (I&D) Vision formulated by IMIDCWG, including principles of sustainability, operation and maintenance	(i) Suriname Irrigation & Drainage Vision approved by Council of Ministers
			(ii) Plan to execute, monitor and evaluate maintenance and investments activities developed by LVV, together with RO, OW, and MOF. The program will be endorsed by IMIDCWG ¹⁴	(ii) IMIDCWG endorsed plan to execute, monitor and evaluate maintenance and investment activities being implemented by LVV, RO and OW (iii) Budgetary provisions for following year for maintenance and investments activities endorsed by IMIDCWG and approved by LVV, RO and OW

¹³ Objectives, responsibilities and structure for the IDCWG have to be completed in order to establish it.

¹⁴ The program will include a detailed, approved budget for the following year. The program will include provisions for training and capacity building of Water Boards. The maintenance plan will include plan to measure of water quality.

Component 5: Policy Support for Modernization of Agricultural Irrigation and Drainage				
Objectives	Institution in charge	Conditions for 1st Programmatic loan (2013)	Proposed trigger mechanisms for 2nd Programmatic loan (2014)	Proposed trigger mechanisms for 3rd Programmatic loan (2015)
			(iii) Manual of Operation for Inter-departmental Commissions at a district level ¹⁵ endorsed by IMIDCWG (iv) Establishment of an Additional Inter-departmental Commissions at a district level	
		(ii) Nine existing Water Boards (WBs) Executive Committees elected.	(v) Manual of operations to establish Water Boards in Suriname developed by LVV and RO and endorsed by IMIDCWG (vi) Proposal to establish four new WBs formulated by LVV in coordination with RO, following the manual of operations	(iv) Four new WBs established by Council of Ministers
			(vii) Six by-laws of WBs approved (viii) Operation and maintenance work-plans of six WB endorsed by RO and LVV	(v) Implementation of the operation and maintenance plans certified by LVV and RO
			(ix) For at least six Water Boards, rehabilitation plans prepared by LVV in coordination with WBs, RO and OW, endorsed by IMIDCWG, and approved by Council of Ministers	(vi) For at least five Water Boards rehabilitation plans being implemented by LVV and RO

¹⁵ Responsibilities: to have elections done, training, planning; Structure, Functions and Actions to be included in the MO

Component 5: Policy Support for Modernization of Agricultural Irrigation and Drainage				
Objectives	Institution in charge	Conditions for 1st Programmatic loan (2013)	Proposed trigger mechanisms for 2nd Programmatic loan (2014)	Proposed trigger mechanisms for 3rd Programmatic loan (2015)
			(x) LVV submits, in coordination with RO and OW, a preliminary proposal to provide public services to compensate WBs' for increasing their operating and maintenance costs, reviewed by IMDCWG	(vii) A consultation process for the Compensation Scheme completed and final proposal endorsed by IMDCWG (viii) The Compensation Scheme approved by Council of Ministers
		(iii) Three existing WBs Executive Committees appointed		

Component 6: Policy Support for Sustainable Fisheries Management				
Objectives	Institutions in charge	Conditions for 1st Policy Based Loan (2013)	Proposed Trigger Mechanisms for 2nd Policy Based Loan (2014)	Proposed Trigger Mechanisms for 3rd Policy Based Loan (2015)
To improve the LVV's capacity to sustainably manage fisheries and aquaculture	LVV	(i) Fisheries Monitoring, Control and Surveillance (FMS) system approved by the Council of Ministers	(i) FMS system in operation by Ministry of Internal Affairs and LVV (ii) FMS system Act submitted to Parliament	
		(ii) Fisheries Management Plan (FMP) published	(iii) Ministerial Ordinance prepared by the Department of Fisheries according to the FMP, issued by LVV	(i) Harvest Control Rules for shrimp (<i>Penaeus</i> sp.) and groundfish fisheries developed by the Department of Fisheries and issued by LVV

Component 6: Policy Support for Sustainable Fisheries Management				
Objectives	Institutions in charge	Conditions for 1st Policy Based Loan (2013)	Proposed Trigger Mechanisms for 2nd Policy Based Loan (2014)	Proposed Trigger Mechanisms for 3rd Policy Based Loan (2015)
			(iv) Aquaculture development plan approved (v) Aquaculture Act submitted to Parliament	
			(vi) Integrated fisheries information system designed by LVV and in operation	
			(vii) Proposal for a Fisheries Human Resources plan to periodically assess the status of stocks, and to monitor and control domestic fisheries ¹⁶ approved	(ii) Fisheries Human resources plan is being implemented ¹⁷ by LVV

¹⁶ The Human Resources Plan will include job specification, job description, training and justification, and will be submitted for strengthening the scientific and management capacities of the Fisheries Department.

¹⁷ As part of implementation, staff will be trained in systems automation, data collection, analysis, and stock assessment.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-____/____

Republic of Suriname. Loan _____/OC-SU to the Republic of Suriname
Modernization of Agricultural Public Services

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Suriname, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a modernization of agricultural public services program. Such financing will be for an amount of up to US\$15,000,000 from the Ordinary Capital resources of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Approved on _____, 201__)