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Inter-American Institute for Cooperation on Agriculture Delegation in Suriname



# Annual Report 2016 IICA Delegation in Suriname

#### **Acronyms**

ADRM Agricultural Disaster and Risk Management

AHFS Agricultural Health and Food Safety
APP Agricultural Policy Programme

BACIS Bio-agriculture Cooperative of Suriname

BIS Bauxite Institute Suriname

CANROP Caribbean Network of Rural Women Producers

CARDI Caribbean Agricultural Research and Development Institute

CARICOM Caribbean Community

CELOS Center for the Development of Agriculture in Suriname

CFF Carambola Fruit Fly

COP21 21st Conference of the Parties EDF European Development Fund

EU European Union

FAO Food and Agriculture Organization

FF Family Farming

FonTC Competitive Fund for Technical Cooperation (IICA)

GAP Good agricultural practices
GCCA Global Climate Change Alliance

GDP Gross Domestic Product
GoS Government of Suriname

IABA Inter-American Board of Agriculture (IICA)

ICS IICA Country Strategy

IDB Inter-American Development Bank

IICA Inter-American Institute for Cooperation on Agriculture

IMF International Monetary Fund JBI Jamaican Bauxite Institute

LVV Ministry of Agriculture, Animal Husbandry and Fisheries

MDGs Millennium Development Goals NGO Non-Governmental Organization OAS Organization of American States

SBA Stand By Agreement

SDGs Sustainable Development Goals
SMEs small and Medium-sized Enterprises

SPS Sanitary and Phytosanitary

SUNRWP Suriname Network Rural Women Producers
SURAFY Suriname Agricultural Forum for Youth

UN United Nations

UNDP United Nations Development Programme

USD United States Dollar

UWI University of the West Indies

#### **Table of Contents**

Ac	ronyn	ns		4		
Fo	rward	l		6		
Me	essage	e from [	Director of Management and Regional Integration	7		
Me	essage	e from t	the Minister in the Ministry of Agriculture, Animal Husbandry and Fisheries (LVV)	8		
1.	Intr	oductio	n	9		
2.	Exe	Executive Summary				
3.	The State of Agriculture and Rural Life in Suriname in 2016					
4.		ults of t 2016	the Implementation of the National Technical Cooperation Agenda in Suriname	16		
	4.1	tivity Enhancement for the Agriculture Sector	16			
		4.1.1	Building Sustainable Agriculture Practices for the Hinterland	16		
		4.1.2	Value Chain Assessment of the Rice Industry	16		
		4.1.3	Support human capacity development to help indigenous groups to transition from shifting cultivation to permanent agriculture	17		
		4.1.4	Support women and youth groups in obtaining certification for their products	18		
		4.1.5	Strengthening Infrastructure for germplasm production Under Component 2 of the 10th EDF APP.	19		
		4.1.6	Linking Agro-processing SMEs to Markets	19		
		4.1.7	Improving Food Safety Standards and Productivity for Women-owned SMEs	20		
		4.1.8	Promoting Permapiculture Technologies for Bee Keepers	20		
	4.2	Streng	thening of AHFS Systems	21		
		4.2.1	Developing National Contingency Plan for Aquatic Animal Disease Outbreak	21		
		4.2.2	Carambola Fruit Fly (CFF) Sensitization Workshop	21		
	4.3	Organi	izational Strengthening of Producer and Rural Organizations	22		
		4.3.1	Support for the Establishment of Agro Cooperatives	22		
		4.3.2	Resuscitation of CANROP Chapter in Suriname	23		
		4.3.3	Creating Visibility for Rural Women Producers	23		
		4.3.4	Strengthening outreach models for youth agricultural organizations in Suriname	24		
		4.3.5	Strengthening Associative Processes for Agro-cooperatives	24		
4.4 Resilience and Adaptation to Climate Change			nce and Adaptation to Climate Change	25		
		4.4.1	Agricultural Disaster and Risk Management (ADRM) workshop	25		
		4.4.2	Strengthening Knowledge Capacities in Soil and Water Management	25		
		4.4.3	Closure of the UNDP-Biofuel Project	25		
		4.4.4	Knowledge Management Workshop for National Authorities on the Rehabilitation of Mined-Out Bauxite Land	26		
		4.4.5	Promoting Renewable Energy Generation in Suriname Forum	27		
5.	Strategic Alliances with Partner Agencies in Development					
6.	35 Years of Service to Agriculture and Rural Life in Suriname, 1982-2016					
7.	Trib	Tribute to Brahma Ramsoedit, Driver and Field Assistant 33				

#### **Forward**



Curt D. Delice IICA Representative in Suriname

As the new Representative to the Inter- American Institute for Cooperation on Agriculture (IICA) in Suriname, it is my distinct pleasure to present our 2016 Annual Report. The Report is in keeping with the Institute's ethos of transparency and accountability to our stakeholders and partners in our common pursuit of developing a sustainable agriculture and rural sector in the country.

Although the main aim of the report is to highlight the Institute's major achievements and interventions implemented in the rural and agriculture milieu for the year 2016, it is being prepared at a historic time. October of this year 2017, will mark the 75th Anniversary of the founding of IICA, and coincidentally, January 29th, 2017 marked thirty-five years since the formal opening of the IICA Delegation in Suriname. So there is much to celebrate in this historic year.

The volatility in global prices of commodities has negatively impacted the economy of Suriname in 2016 and the agriculture and rural sectors have not escaped the negative impacts. However, from this adversity have emerged a renewed focus on the agriculture sector and the many advantages it presents for import substitution, boosting regional trade, food security and increasing rural employment. These challenges and opportunities formed the driving force behind, as well as shaped the technical cooperation interventions and significant achievements for the year 2016.

We wish to express our renewed commitment to all stakeholders in the agriculture and rural sectors and pledge to continue to provide technical cooperation and leadership in developing and promoting sustainable models of agriculture and rural development for Suriname. In this regard, we would like to recognize the role of our principal partner, the Ministry of Agriculture, Animal Husbandry and Fisheries (LVV), as well as international organizations, and private and public agriculture and rural service provider agencies, in making 2016 a successful year of implementation.

Let me also take this opportunity, on behalf of the Director General of IICA, Dr. Victor M. Villalobos, to extend our gratitude to the Government and People of Suriname, other public and private strategic partners, our past IICA Representatives in Suriname, past and current staff of the Delegation, and all others who have collaborated with us over the last thirty-five (35) years to bring tangible changes to the agriculture and rural milieu of Suriname. We look forward to continue our strong working relationship in the future.

#### Message from IICA's Director of Management and Regional Integration



Diego Montenegro IICA's Director of Management and Regional Integration

The current environment poses the great challenge of making agriculture more productive and sustainable to guarantee the food security of its inhabitants. This challenge is accompanied by other phenomena such as climate change, rural-urban migration, aging farmers, price volatility and the economy slowdown.

Within this context, IICA has worked in its 34 Member States through the articulation with public, private and international institutions for the benefit of rural communities and agriculture for 75 years at the hemisphere level and 35 years in Suriname.

IICA during these 35 years in Suriname has supported the agricultural sector and the country's institutions with the aim of improving the conditions of the rural sector. Currently, the institute develops technical cooperation actions under the 2014-2018 Medium Term Plan and its four instruments of action: Flagship Projects, Rapid Response Actions, Technical Cooperation Fund and Projects with External Resources.

In this regard, I would like to reiterate the Institute's commitment to support technical cooperation actions in the country, especially those related to the great challenges the 21st century agriculture is facing. In Suriname's case, we consider the efforts in two important aspects:

- The diversification of the agricultural sector for import substitution, increase exports to the region and increasing rural employment as a direct response to the current economic crisis facing the country.
- Strengthening Public Sector Institutions and other agriculture and rural service provider institutions for improved service delivery to agriculture and the rural milieu.

The alliance between IICA and the Suriname Government has paid off over the last 35 years, so I am sure that joint and articulated work will allow us to promote a competitive and sustainable agriculture in the country.

#### Message from the Minister in the Ministry of Agriculture, Animal **Husbandry and Fisheries (LVV)**



His Excellency, Soeresh Algoe Minister in the Ministry of Agriculture, Animal Husbandry and Fisheries (LVV)

I hereby wish to convey to the Director General, Dr. Victor M. Villalobos of the IICA the best wishes and congratulations on its 75th Anniversary this year, on behalf of the Government of the Republic of Suriname, and especially the agriculture and rural community within my country. During these 75 years, IICA has contributed through a variety of initiatives to agricultural development and improvement of the wellbeing of the rural communities in the Western Hemisphere.

Suriname has been very fortunate to have benefitted for over 35 years from IICA's significant expertise in the form of the implementation of various programs aimed at developing the agricultural sector with a focus on remote and rural areas. Agriculture has been identified in the Development Plan of my country as one of the main pillars of sustainable socio-economic development by subsequent Governments.

IICA's mission: "to encourage, promote and support efforts to achieve agricultural development and rural wellbeing through technical cooperation", also is fully in line with the goals of the Government and my Ministry which your organizations has proven to be an excellent development partner.

Given the difficult socio-economic circumstances, Suriname is currently experiencing, the agricultural sector more than ever, needs to fulfill a greater role in the economy in order to amongst others, guarantee food security amongst the Surinamese population, It is the Government's and in particular my Ministry's responsibility, to actively cooperate with our main developing partners as IICA, to implement programs aimed at increasing the contribution of the sector to Suriname's national income. And I am convinced that with IICA further support and technical expertise, employment and sustainable income, food security, self-sufficiency for a large part of the economically active population especially for the more vulnerable communities in the remote and rural areas in guaranteed.

It is therefore that we recognize once again, the impressive achievements of the Director General. Under its leadership, we have witnessed over the past years truly remarkable flexibility and responsiveness of IICA to the many challenges facing the development of agriculture in our region and in Suriname.

I wish for further cooperation with IICA, and I may assure you of the continued support of my Ministry in achieving our mutual goals with regard to developing the agricultural sector.

I thank you!

#### Introduction 1.

The year 2016 was characterized largely by contraction in the Surinamese economy and rising inflation which undoubtedly created a challenging environment for agriculture and rural development since a lot of effort was placed at the government level in reigning in cost and stabilizing the economy. Agriculture nonetheless was seen as a strategic sector to boost sluggish economic growth particularly as it relates to import substitution and retaining valuable foreign exchange through a reduction in imports of agricultural commodities, and to create employment in rural communities. This has led to the Government of Suriname promoting and supporting major agricultural diversification initiatives as well as the development of a Master Plan for the development of the agriculture. The latter seeks to strengthen the policy framework for the development of the agriculture sector in Suriname.

The main areas of focus for the strengthening agriculture and the rural sector during the year remained on the establishment of critical infrastructure in the agriculture sector, building knowledge and technical capacities of national authorities and agriculture and rural service provider agencies as well as communities, value chain development, promoting technological innovation in agriculture, strengthening governance and institutional managerial and operating systems of public and social actors representative institutions and organizations, strengthening agricultural health and food safety systems, and strengthening agricultural and rural information systems, promoting knowledge and adaptation strategies to the effects of climate change.

These focused area above were framed within the lens of the broader challenges and risks posed to the agriculture and rural sectors from climate change, and the urgent need for greater awareness and promotion of natural resource management.

The programme of work implemented during the year, was guided by the IICA Country Strategy (ICS) for Suriname which is based on the strategic objectives and institutional functions and contributions as enunciated in its Medium Term Plan 2014 - 2018 and IICA's Strategic Plan 2010 - 2020, which are the precise and operational expression of the Institute's crossthematic and multi-level work in each of its member countries.

IICA's strategies in the countries contributes to better coordination with the stakeholders of agricultural chains and rural areas, and to building consensus regarding IICA's technical cooperation delivered through its technical cooperation instruments.

Thus, IICA's country strategies encompass all the Institute's planning and actions at the different levels, mainly in the form of programmed projects. In constructing these strategies, IICA takes into account not only the international vision of the global or hemispheric phenomena or trends related to agriculture and rural life, but also the baseline studies of the countries and the results of national discussions to identify cooperation needs at all levels of work.

To achieve its technical cooperation mandate, the Institute utilizes four technical cooperation instruments, Flagship Projects<sup>1</sup>, projects executed with external resources, an internal competitive fund for technical cooperation projects (FONTC), focused mainly on pre-investment initiatives, finally the Rapid Response Actions designed specifically to address specific request from member countries emanating to take advantages of emerging opportunities or address emergency situations.

The technical cooperation agenda of the Institute relies on the establishment and maintenance of strategic alliances with public and private sector institutions including academia, civil society organizations and community based organization, individual agricultural practitioners and rural communities. A critical area of focus remains the vulnerable demography of youth and women and many interventions were aimed at working jointly with the organizations which support rural women producers and which promote youth engagement in agriculture to strengthen their governance and operational capacities as well as their capacity for advocacy and involvement in decision making at the national level. Issues relating to climate change and particularly the risks and risk mitigation strategies to strengthen resilience remains a central theme in engagement with strategic partners and also guided implementation of the 2016 technical cooperation agenda.

The report contained herein, provides a brief synopsis of the contribution of IICA to the development of agriculture and rural life in Suriname in 2016. The interventions are largely in response to the priorities agreed upon by the Government of Suriname and IICA as contained in the ICS for Suriname. The results achieved highlight the combined efforts of primary stakeholders in the agriculture sector and strategic partnerships in agriculture and rural development in Suriname.

<sup>&</sup>lt;sup>1</sup> IICA currently executes four Flagship Projects design to holistically cover its key thematic areas. The projects are the following: Productivity and Sustainability of Family Farming for Food Security and the Rural Economy; Competitiveness and Sustainability of Agricultural Chains for Food Security and Economic Development; Inclusion in Agriculture and Rural Areas; Resilience and Comprehensive Management of Environmental Risk for Agricultural Production. Agricultural Health and Food Safety is a cross cutting theme of the four projects.

#### 2. Executive Summary

The contraction of the Suriname economy observed in 2015, continued in 2016 and continues to have a deleterious effect on all sectors, including the agriculture sector. Notwithstanding, this situation has strengthened the resolve of national authorities to accelerate the development of agriculture sector, as means of reducing agricultural imports and stimulating employment especially in rural communities. Investment if the agricultural sector however is still lagging behind other sectors and external grant funding sources represented the main source of development financing for the sector. The promotion of initiatives for the diversification of the agricultural stemming from the Agricultural Master Plan augured well for the sector and boosted public confidence in the sector. These dynamics presented the context for the implementation of 2016 IICA's technical cooperation agenda for Suriname.

In 2016, IICA's interventions encompassed a large number of themes and attempted to address many different technical cooperation needs in the country. The first group of interventions were aimed at enhancing the productivity of the agriculture sector for food security, increased export (local and regional) potential, and increasing insertion in and expansion of new and existing markets for agricultural commodities. The activities were directed at building the capacity of communities in the hinterland of Suriname to adopt sustainable agricultural practices and systems, and particularly as it relates to the transitioning from traditional shifting cultivation production systems to more permanent agriculture production systems. These actions also included for the first time exposing Beekeepers in Suriname to

Perm-apiculture technologies through the use of the Perone Hive technology, under the IICA's Family Agriculture Flagship Project.

Under the IICA's Inclusion Flagship Project, a number of interventions were implemented to support women and youth groups in obtaining certification for their products and also promotion of organic agriculture certification targeted at specific niche markets. The 10<sup>th</sup> EDF Agriculture Policy Programme (APP), played a major role in 2016, facilitating interventions to link Agro-processing SMEs to markets, improving food safety standards and productivity for women-owned SMEs and strengthening laboratory infrastructure of CELOS for the production of improved germplasm to farmers.

The second group of actions for 2016, were focused on strengthening national agriculture health and food safety systems. The key interventions were facilitated under the 10<sup>th</sup> EDF SPS programme, and included the development of a national contingency plan for aquatic animal disease outbreak, as well as two major assessments looking at the national agricultural health and food safety systems and also a cost benefit analysis of the agricultural health and food safety mechanism in the country. Under IICA's Resilience Flagship Project, a joint sensitization activity was conducted between Suriname, Guyana and Brazil, looking at the economically important Carambola Fruit Fly and a viable strategy for its surveillance and control.

The existence of strong organizations is a major pre-requirement to any effective strategy to develop the agriculture and rural sectors,



particularly in economies where private sector investment in these areas are low. A major group of actions in 2016 were aimed at the organizational strengthening of producer and rural organizations as a deliberate strategy of the Institute. Within this context, through IICA's Inclusion Flagship project, several agro-cooperatives received training and support to establish and/or register their cooperatives.

Within that same vein, during the year, the Suriname Network of Rural Women Producers (SUNRWP) was resuscitated with seven cluster groups representing just over 200 rural women producers. SUNRWP later hosted a major forum for rural women producers during the year to highlight the contribution that rural women make to the economy of Suriname and to create visibility for its members and their products.

Another major area on intervention during the year was aimed at engagement with the Suriname Agriculture Forum for Youth (SURAFY) to develop outreach models for youth in agriculture. The activities included, training to foster networking of its members, strengthening its governance and outreach, and promoting agriculture in primary and secondary schools through demonstration training and field trips. The emerging issue of climate change remained a major focus during the year with interventions aimed at building resilience in the agriculture and rural sectors of Suriname.

Under IICA's Resilience Flagship Project, Suriname and Guyana, in collaboration with the United Nations Development Programme (UNDP) in Suriname, undertook a joint training activity looking at ADRM for the two countries and the strengthening of capacities for the creation and use of risk maps and web based risk maps technologies at the national level. Activities were also directed during the year at building local institutional capacities in soil and water management, particularly as it relates to degraded soils.

This year also saw the formal closing of the UNDP Biofuel Project which sought to assess the feasibility of producing three endemic grass species for rehabilitation of mined out bauxite lands and for biofuel production. Linked to the Biofuel project, two major knowledge management interventions were undertaken, one looking at transferring to national authorities the experiences of Jamaica and the Jamaica Bauxite Institute in the rehabilitation and management of mined-out bauxite lands, and the other, through collaboration with the Suriname Business Forum, the UNDP and the Ministry of Natural Resources, looked at the promotion of renewable energy generation in Suriname and the exploration od viable approaches for a viable industry in the country.



## 3. The State of Agriculture and Rural Life in Suriname in 2016

The economy of Suriname is largely dependent on exports of extractives of aluminum, gold, bauxite and petroleum. The decline in global prices for these commodities has had a deleterious effect on the Suriname economy and the economic contraction deepened during 2016<sup>1</sup>, and has impacted all sectors, including the agriculture sector. The country's GDP stood at USD 5.77 billion according to the figures from the Central bank of Suriname in 2015.

The current economic challenges facing the country has steered the GoS towards seeking external help in the form of an International Monetary Fund (IMF), Stand By Agreement (SBA) estimated at US\$748 million, the main aim being to stabilize the national economy and establish the foundation for a future growth trajectory. The austerity measures or conditionality's which normally accompany such IMF interventions is sure to have implications for the agriculture and rural sectors in the near, medium and long term future.

Agriculture, fishing and logging contributes a relatively small share of gross domestic product (GDP), averaging 5-7% annually when compared to the 80% from the extractive industries such as, bauxite, oil and gold, and 14 percent from manufacturing. Over the last decade alone, the direct agricultural share of the GDP has decreased from 11% to 5.8%. Notwithstanding, agriculture accounts for at least 8% of the employed labour force in the country. Much of agriculture contribution to GDP comes from rice and banana production, shrimp and fish exports amounting to about

US\$ 40-50 million per year (10-12% of total export earnings) and lumber amounting to about 1% of export earnings.

Rice accounts for about half of all cultivated lands and is a major export to CARICOM member countries. However, even with the adaptations made to the Cotonou agreement in 2010 to meet new challenges and address State fragility, continued low productivity, high input costs, and a growing debt-service burden will place significant pressure on the industry's survival capacity and threaten the livelihoods of a large number of small producers, agricultural workers and their dependent communities (CARICOM Agricultural Development Profile for Suriname).

The Central Bank of Suriname shows total exports standing at USD295.60 (a record low) million in the first quarter of 2016 decreasing from USD339.90 million in the fourth quarter of 2015. Exports in the country have averaged USD703.32 million between 2008 and 2016 reaching an all-time high of USD 2084.10 million in the fourth quarter of 2010. Gold accounts for the lion's share of the value of these exports.

The main imports for the country are food, fuel, clothing and machinery with United States and the Netherlands being the main import partners and accounting for approximately 42% of total imports between them. Suriname like many of its Caribbean counterparts, continues to grapple with a high food import bill and is a net importer of agricultural

<sup>&</sup>lt;sup>1</sup> The International Monetary Fund Concluding Statement of the 2016 Article IV Mission, projected a 9% following a 2.7% contraction in 2015.

products. In 2015, imports of agricultural products was approximately 10% of the total import volumes of the country. Figures released by the Central bank of Suriname show improvements in the total import situation decreasing to USD318.60 million (a record low) in the first quarter of 2016 from USD443.40 million in the fourth guarter of 2015. However, it is not certain if this trend will be sustained in the near future. Imports into the country have averaged USD599.99 million from 2008 until 2016, reaching an all-time high of USD1406.70 million in the fourth quarter of 2008. The government of Suriname has also expressed its commitment to more than triple the contribution of agriculture to the GDP from its current 6% and to transforming Suriname into a regional and hemispherical breadbasket over the lifespan of this strategy. Guided by the Agricultural Master Plan, the new vision for agricultural development as espoused by the Ministry of Agriculture, Animal Husbandry and Fisheries is one which seeks to reduce the large food import bill through import substitution, but also expand national agriculture sufficiently to supply regional markets with a wide range of crop and meat products.

The vast natural resource base of the country provides avenues for economic growth and development, the recent declines in global prices for gold and bauxite has had severe negative repercussions on the country's financial standing, although prices for gold has begun to trend slightly upwards, it is too early to regard this trend with any long term optimism. The main state-owned Bauxite Company SURALCO has been forced to shut down operations further exacerbating the economic situation in the country and in particular rural communities which relied on mining operations for employment. The start-up of major gold mining operations of Newmont Mining Corp in the last quarter of 2016, is expected to offset the decline in the economy and bring some measure of economic stabilization.

The isolated nature of indigenous communities (Amerindian and Maroon ethnicities), who typically reside in the interior of the country far removed from major commercial distribution and marketing channels exacerbates the challenges of boosting economic activity in the rural communities. However, the country having been denominated as one of the greenest on the planet, has enormous potential for diversification of the rural economy from traditional hunting gathering and shifting cultivation modes of production and livelihoods, to alternative mainstream economic activities of agroforestry, eco and agrotourism. The potential for accessing carbon credits for maintaining natural forests can also likely become a potential source of development finance for many rural communities in the not too distant future. Climate change undoubtedly remains de emerging issue of our times and its impact on many countries are well documented. The 21st "Conference of the Parties", otherwise known as COP21 accomplished a major milestone on the subject of climate, and climate change in December 2015, where the world saw the adoption of the first international climate agreement (concluded by 195 countries and applicable to all). The agreement provides for a limitation of the temperature rise to below 2°C and even to tend towards 1.5°C. It is designed to be flexible so that it takes into account the needs and capacities of each country and seeks balance as regards adaptation and mitigation, as well as durability, with a periodical ratcheting-up of ambitions. Suriname is a signatory to the COP21 Paris Agreement and the Government has recognized that the country is prone to the "slow onset impacts" of climate change resulting in changing weather patterns, coastal erosion, salt water intrusion, the degradation of its complex ecosystems, and loss of arable land and has expressed its commitment to place special focus on adaptation and mitigation policies. This changing policy environment forced upon the country by climate and its impacts has significant implications for agricultural and rural development approaches and strategies in the country.

Suriname has also expressed commitment to the adoption and adherence to the pursuit of the Sustainable Development Goals (SDGs). The UN adopted 17 Sustainable Development Goals at the United Nations Sustainable Development Summit in New York in September 2015. These Goals replaced the Millennium Development Goals (MDGs) from the beginning of 2016. Whilst they continue the focus on eradicating poverty, they also include universal

goals of addressing unsustainable patterns of consumption and production, and protecting environmental resources. It is within this context that the strategic focus on agricultural and rural development will be guided for the coming years, which is aligned with IICA's own strategic objectives and as such sets down the overarching framework for the delivery of IICA's technical cooperation agenda in Suriname.

#### 4. Results of the Implementation of the National Technical Cooperation Agenda in Suriname for 2016

#### 4. 1. Productivity Enhancement for the Agriculture Sector

## 4.1.1. Building Sustainable Agriculture Practices for the Hinterland"

Communities in the interior of Suriname where approximately 10% of the population of Suriname lives, have been successfully using the system of slash and burn for centuries. The system has provided food security for the population but is coming under stress because of the increasing population and the effects of climate change.

IICA has been providing technical support to different communities in the interior for years, but requests are increasing at a rapid rate from different communities for support in moving to a more permanent form of agriculture. The Inclusion Flagship Project provided the framework for continued support to rural indigenous (Maroon and Amerindian) communities to make the move to more permanent agricultural production systems.

In addition to a number of direct technical support interventions to build capacities of the affected populations in sustainable agricultural practices, IICA also collaborated with the Center for the Development of Agriculture in Suriname (CELOS) to organize and host a workshop aimed at improving legal frameworks to facilitate the development of sustainable agriculture in the hinterland of Suriname. Fifty representatives from rural organizations, NGO's, representatives from the Ministry of Agriculture, Animal Husbandry and fisheries, the Ministry of Regional Development, the Ministry of Trade and Industry and different institutions

from agriculture education and research discussed intensively and gave recommendations about the required policy, collaboration, capacity enhancement, development of value chains, financing and programs needed to achieve the goal of sustainable Agriculture in the hinterland of Suriname.

## 4.1.2. Value Chain Assessment of the Rice Industry

A producer and rural assessment of the rice industry in Suriname was made. Suriname's rice industry with an average area of 70.000 ha per year has seen some challenges with rising prices for inputs, leaving the small farmers with a lot of problems. The IICA office received





a request from the Ministry of Agriculture, Animal Husbandry and Fisheries to support them in organizing the rice value chain. A rapid participatory assessment was conducted by the IICA Delegation in Suriname targeting, rice producers, Public sector institutions and rice processors and distributing companies in the main rice growing center of Nickerie.

The need for productivity enhancement, reduced costs of production, higher yielding varieties, improvement in the existing state run irrigation infrastructure, expansion of markets and general improved organization of the rice value chains were the major findings. The wanton burning of tons of rice husks leading to significant carbon emission into the atmosphere after the annual harvest is a major concern as viable alternatives exists for the production of biofuel, soil conditioners, bio fertilizers, etc.

# 4.1.3. Support human capacity development to help indigenous groups to transition from shifting cultivation to permanent agriculture

The IICA Delegation collaborated with the NGO "Stichting wan Mama Pikin" and the Ministry of Agriculture, Animal Husbandry and Fisheries (LVV) to conduct rapid rural assessments in several maroon villages in the Upper Marowijne River. Because of the gold rich deposits in the area there is an influx of small gold miners and recently the establishment of a large mining company employing at least 1500 workers.

This development has increased the market potential for their produce adding to the already lucrative market in French Guyana. Traditional shifting cultivation production systems of the indigenous maroon peoples who inhabit the area, are inefficient and cannot meet the demands on these emerging markets. The villagers that are part of the indigenous Maroons in Suriname cultivate crops mainly for subsistence using slash and burn methods.

Under the Inclusion Flagship Project, following the assessments, training workshops were held for sustainable and more permanent agri-



culture systems in the village Nason. Approximately 40 men and women participated in the classroom and practical sessions. Irrigation and rainwater harvesting practices were of particular interest to many of the participants. In relation to this also in 2016 a meeting was held with ten NGO's, cooperatives and groups of farmers and producers was held in the eastern district of Suriname Marowijne. The objective of this meeting was to bring all the groups active in this district for increasing collaboration in order to make better use of the scarce resource.

# 4.1.4. Support women and youth groups in obtaining certification for their products

In Suriname the cultivation of different crops using organic practices has been growing in the last years. This increase is due to the increasing demand for organic products on the local market as well as on the foreign market. The IICA Delegation is continuing support to women and other producer groups to increase capacity in different aspect of organic production. The following activities for women cooperatives took place in 2016:





- training workshop in theory and practice of Organic Farming - twenty-five (25) members of the Bio-agriculture Cooperative of Suriname (BACIS), who are focused mainly in the cultivation of chili peppers, were trained in the practices of organic farming, organic inspection and certification, soil fertility and organic fertilizers, prevention and maintenance and control of pest and diseases.
- ❖ Plant propagation and nursery setup Fifty (50) participants of two (2) rural Agro-Cooperatives in the Maroon communities of Ovia olo and Moengo (District of Marowijne) and Creola and one (1) rural youth group from the district of Saramacca were able to improve their knowledge and skills in plant propagation and nursery setup. In collaboration with a local expert on plant propagation the group was trained on two different occasions in nursery setup and management and the propagation of citrus and mango.
- Cost of Production and Production Planning - Members of three rural farmer organizations received training in cost of production and production planning. Forty five women and men from the districts of: Saramacca, Marowijne, Wanica and Para participated.



4.1.5. Strengthening Infrastructure for germplasm production Under Component 2 of the 10th EDF APP

The Centre for Agricultural Research in Suriname (CELOS) received support to refurbish its tissue culture facility. In addition CELOS was also able to purchase tools and equipment for disinfecting its agricultural machinery, for more efficient handling of phytosanitary laboratory and field operations. These tools and equipment were also utilized in training demonstrations for banana and cassava farmers in the Brokopondo, Kapasikele, Saramacca, Phedra and Powakka districts to teach train farmers in the use of mass propagation technologies and management of improved germplasms for their crops.

## **4.1.6.** Linking Agro-processing SMEs to Markets

A number of interventions under the 10th EDF APP were aimed at supporting MSMEs in linking to and effectively taking advantage of available markets for their products:

- ❖ Several agro-processors from three local organizations were facilitated in participating at the largest agriculture fair in Suriname hosted by the Chamber of Commerce to display and promote their line of products. Participants were from Bio-agriculture Cooperative of Suriname (BACIS), foundation for the Development of the Cassava Sector (STOCKPA), and the Agrocooperative "Wi Uma Fu Sranan", a mem ber cluster of SUNRWP.
- Representatives from CAFAN Suriname and Agro-cooperative "Wi Uma Fu Sranan", participated in a one-day regional workshop on producer group governance and national producer –buyer networking held jointly by Component 2 and 3 of the 10th EDF APP, in Saint Vincent and the Grenadines. The workshop sought to build knowledge capacities in group dynamics,



group governance, conflict resolution and networking.

Two local SME's engaged in the agro-processing, Agro cooperative Wi Uma Fu Sranan and Blessings Enterprise were supported and received training aimed at improving the design of packaging and labelling for select their agri-food processed products. Training focused on product development, marketing, food safety and GMP. As a result of the training, these participants have to date made significant improvements to the packaging and labeling of their products.

# 4.1.7. Improving Food Safety Standards and Productivity for Women-owned SMEs

Small scale women agroprocessors from two rural communities in the interior of Suriname, Klaaskreek and Kapasikele, received cassava graters and smoke houses to facilitate their processing activities, thanks to an initiative executed by the Inter-American Institute for Cooperation of Agriculture under the Intra-ACP Agricultural Policy Programme (APP), funded by the European Union (EU) under the 10th European Development Fund (EDF).

The women are members of the Agro-Cooperative "Wi Uma Fu Sranan", which means in English, "We, the Women of Suriname". The group is a constituent member of the Suriname Organization of Rural Women Producers (SUNROP). The donation of the two cassava graters and the construction two smoke houses, one each for the two communities, is in keeping with the objective of improving the quality and standard of processed agricultural products manufactured by small and medium-sized agro-processors for income generation and food security.

## 4.1.8. Promoting Permapiculture Technologies for Bee Keepers

Under the Family Agriculture Flagship Project, the Delegation facilitated the participation of one local Bee Keeper in a training workshop on perm apiculture utilizing the Perone Hive technology, held in St. Lucia and facilitated by Dr. Manuel Sanchez, IICA's Representative in Guatemala. The training sought to increase the knowledge base of Honey Producers in production and management of honey in perm apiculture systems as opposed to the traditional Langstroth apiculture system.

The main aims here are reduction of losses, product differentiation, increased productivity and developing more sustainable bee keeping approaches. The Suriname participant, is utilizing his training to build and replace his old hives with the newer Perone Hives which he believes is more suitable to Suriname conditions.



#### 4. 2. Strengthening of AHFS Systems

#### 4.2.1. Developing National Contingency Plan for Aquatic Animal Disease Outbreak

Under the 10th EDF SPS Project, IICA in collaboration with the Ministry of Agriculture, Animal Husbandry and Fisheries through its Department of Fisheries developed a National Contingency Plan to for the establishment of emergency preparedness procedures for aquatic animal disease outbreak.

The Plan provides national authorities and other stakeholders in the aquaculture industry with guidelines to respond potential disease outbreaks. The aquaculture industry is an important component of Suriname's exports.

## 4.2.2. Carambola Fruit Fly (CFF) Sensitization Workshop

The CFF is a pest of major economic importance for Suriname, and the IICA Delegations of Guyana, Brazil and Suriname jointly provided technical support for the hosting of a one-day sensitization workshop in Guyana to facilitated knowledge exchange and dialogue on the actual status of the CFF in Guyana, Suriname and Brazil. The workshop was financed under the Resilience Flagship Project, the Government of Guyana and the Government of Brazil. The workshop also reviewed a draft proposal for a South-South Cooperation Project to address the strengthening of the systems for joint CFF surveillance and control.





#### 4. 3. Organizational Strengthening of Producer and Rural Organizations

Farmer and producers in rural communities in Suriname have been reluctant to setup producer groups and cooperatives in Suriname following bad experiences and weak organizational capacity of the few organizations active in the sector. In the past years however, there has emerged increased interest in setting up farmer and producer groups.

This is also a priority of the Ministry of Agriculture, Animal Husbandry and Fisheries and through its Department for Cooperatives, collaborated with the IICA Delegation to support farmer and producer groups in organizational strengthening. The organizational strengthening of producer and rural organizations is a key element to facilitate the inclusion of rural territories into mainstream commercial marketing and distribution channels.

The Inclusion Flagship Project enabled interventions targeted at agriculture in the rural areas in Suriname where most communities are comprised of people from indigenous groups both Maroon and Amerindian populations These populations are largely excluded from non-agricultural forms of employment for a variety of different reasons.

It is important to note that in rural communities in Suriname women play a major role in agriculture and in Maroon and Amerindian populations particularly, women undertake most of the farming while the men do the hunting.

The IICA Delegation in Suriname therefore places special emphasis on strengthening organizations representing the socioeconomic interests of women and youth.

## 4.3.1. Support for the Establishment of Agro Cooperatives

In 2016 the IICA Delegation provided support to several different rural producer groups to strengthen and/or establish agro cooperatives. These groups consisted of mainly women farmers and agro processors. The crops produced and processed include roots and tubers such as cassava and sweet potatoes, herbs, chili pepper, and fruits. In collaboration with the Ministry of Agriculture, Animal Husbandry and Fisheries, two rural communities namely Kwakoegron in the district of Brokopondo and Van Hattemweg in the district of Wanica, were supported with the startup process of establishment of Agro cooperatives. The first group consists of mainly women agro processors of cassava, spices and acai (a local palm fruit), while the second group registered as a cooperative for livestock and organic farming. A total of forty (40) women participated in training workshops looking at cooperative governance and group dynamics.



### 4.3.2. Resuscitation of CANROP Chapter in Suriname



In supporting the development of leadership skills and strengthening governance models among rural women producers a networking session was held for women representatives from seven rural women organizations from various jurisdictions across Suriname to begin the process for the revitalization of the umbrella body the Suriname Network of Rural Women Producers (SUNRWP), the local chapter of the regional body Caribbean Network for Rural Women producers (CANROP).

The participating organizations were: Agro cooperative Wi Uma fu Sranan, Agro cooperative Tranga Naki oema foe Marwina, Agro cooperative Tranga Naki Kwakoegron, Agro cooperative Woko Makendi Oviaolo, Foundation Jepi Makandra Apoera, Klein Powaka, Agrocooperative Lelydorp. The seven clusters has a total membership of over 200 women farmers, processors, and traditional craft and clothing wear. A new executive was established and they collectively made the commitment to actively participate in the activities of SUNRWP for the benefit of their economic activities.

### 4.3.3. Creating Visibility for Rural Women Producers

The IICA Delegation in collaboration with SUNRWP hosted a women's conference in 2016. The purpose of the conference was to expose the products produced by the various clusters and to highlight to a national audience the contribution the contribution that rural women make to the national economy. The seven clusters which make up SUNRWP engaged in an exposition display of their line of products, and participated in a motivational seminar under the themes of the role of rural women in the economy and the need to foster networking, organizational strengthening and advocacy on behalf of women. Twenty-five (25) rural women agro-processors participated in the event. The feature address at the conference was delivered by the First Lady of Suriname, Her Excellency Ingrid Bouterse-Waldring, who during her message encouraged the women to continue working for the improvement of the livelihoods of their families and also stressed the importance and contribution that women producers make towards the national economy of Suriname.



# 4.3.4. Strengthening outreach models for youth agricultural organizations in Suriname

The Suriname Delegation supported the Suriname Agriculture Forum for Youth (SURAFY), in improving their organizational and governance capacities through a series of seminars/training sessions and workshops. The areas covered included Project Proposal Writing and Funds Procurement, Traceability Training Forum, and sustainable agriculture systems for the Hinterlands of Suriname. Through the Inclusion Flagship Project, SURAFY also received material support to undertake the following: ; engage



new members to participate in the organizations; undertake a school program for junior high students from various schools in organic production of vegetables under protective agriculture structures and production of biofertilizers through composting; educational field visits for SURAFY members to production facilities of Apiculture, Research Units of the Ministry of Agriculture, Animal Husbandry and

Fisheries and commercial Protected Agriculture Facilities in Suriname. A total of forty (40) youth engaged in Agriculture benefited from these capacity building trainings, field visits and facilities.

Also, two youth Agri-entrepreneurs, members of SURAFY, were facilitated under the 10th EDF APP to participate in the Youth in Agriculture (YiA) Business Forum as part of the Dialogue for Development (D4D) held in Grenada. The Forum targeted youth who own and operate agribusinesses and/or manage and play a vital role in a family-owned agricultural enterprise. The Forum enabled sharing of ideas, and experiences and networking among youth for business development at the regional level.

## 4.3.5. Strengthening Associative Processes for Agro-cooperatives

Under the Flagship Project "Productivity and Sustainable Family Farming", one Technical Specialist from the Suriname Delegation joined counterparts from St. Lucia, Jamaica, Ecuador and Trinidad and Tobago at a workshop held in Saint Lucia, to undergo training aimed at developing an internship programme for the strengthening of local cooperative and producer organizations. The thrust of the new skills are to assist local cooperatives/producer organizations to improve their organizational governance, operations to create sustainability in their production and marketing in the countries. The task for each representative country select an existing local Agro-Cooperative and link it to another more advanced host Cooperative and apply a series of processes to transfer exchange knowledge and experiences in leadership, commitment, identifying markets and developing their local products. This program will start in 2017.

#### 4. 4. Resilience and Adaptation to Climate Change



## 4.4.1. Agricultural Disaster and Risk Management (ADRM) workshop

The IICA delegations of Guyana and Suriname under the Institute's Resilience Flagship Project and in collaboration with the United Nations Development Programme (UNDP) Office in Suriname hosted a three-day workshop on Agriculture Disaster and Risk Management to strengthen technical capacities of public sector agencies in the creation and use of risk maps and associate technologies. The workshop focused on the major risks common to Guyana and Suriname, the effects saline intrusion, flooding, drought and pest and disease infestation. Representatives from public sector agencies responsible for the environment, disaster management, agriculture hydrometeorology, research and public works agencies participated in the training workshop.

## 4.4.2. Strengthening Knowledge Capacities in Soil and Water Management

Through a horizontal capacity building activity between IICA Jamaica and technical officers from the Ministries of Agriculture and Regional Development in Suriname, joined their counterparts from other CARIFORUM countries in Jamaica to participate in a three-day training/course on degraded soils. The training/course sought to equip soil technicians with the skills to effective establish and manage pilot pro-



jects in their respective countries for the remediation of degraded soils. The participants from Suriname have selected mine out gold mining areas with problems of mercury contamination to conduct their pilot studies.

#### 4.4.3. Closure of the UNDP-Biofuel Project

The UNDP-Biofuel project was officially closed with the IICA Delegation presenting the findings to key stakeholders. The main objective of the project was to conduct a feasibility study to investigate the agronomic conditions for the establishment and growth of the selected grass



species, *Pennisetum purpureum* (elephant grass), *Gynerium sagittatum*, and Nappier Grass which is a variant of Pennisetum purpureum), on mined-out bauxite soils for the potential production of biofuels. The Project was implemented in collaboration with the Ministry of Natural Resources and was funded by the UNDP.

The study was able to determine that the best condition for the establishment of Pennisetum purpureum (elephant grass and Napier grass) and Gynerium sagittatum on mined out bauxite land involve the addition of NPK at minimum application rates per hectare of 40 kg of nitrogen, 20 kg of phosphorus and 10 kg of potassium. NPK application rates of 80, 40, and 20kg per hectare respectively produce the optimum biomass, but importantly, the survival of the plants on the mined-out bauxite soils conditions depended on the addition of fertilizer.

The accumulation of heavy metals in the species, Gynerium sagittatum rendered it as neither a good candidate for biomass for energy nor for animal feed in case alternative agricultural uses are required. These findings were also communicated to rural communities in the vicinity of the experimental site with the aim of ensuring a participatory approach and building sensitization and awareness on the

potential future rehabilitation options for mined-out bauxite soils in their communities.

#### 4.4.4. Knowledge Management Workshop for National Authorities on the Rehabilitation of Mined-Out Bauxite Land

The Inter-American Institute for Cooperation on Agriculture in collaboration with the Bauxite Institute of Suriname and the Jamaica Bauxite Institute facilitated a knowledge management workshop to build sensitization and awareness of key stakeholders on available policy frameworks and options for rehabilitating and managing thousands of acres of minedout bauxites lands in Suriname. The knowledge management exercises focused on sharing the experiences of Jamaica in the rehabilitation of mined-out bauxite lands particularly as it relates to conditioning for agriculture, and allowed for the identification of the deficiencies in Suriname's approached to the rehabilitation of their own lands. The 75 participants represented from several key ministries, community based organizations, mining companies, educational institutes and youth organizations participated in the open dialogue and identified and examined recommendations for the way forward. .The event was funded under the UNDP Biofuel Project.



## 4.4.5. Promoting Renewable Energy Generation in Suriname Forum

The IICA Delegation, the Ministry of Natural Resources and the UNDP in collaboration with the Suriname Business Development Forum hosted a renewable energy forum under the theme: Towards a Broader Approach for a Viable Industry in Suriname. The forum was designed to place the biofuel initiative within a broader renewable energy perspective for the country, particularly targeted at a getting the private sector's involvement and leadership as they the ones who will most likely be the key investors in the development of a renewable

energy sector in the country. The Forum targeted a wide cross section of the public and private sector as well as international organizations with expertise on the renewable energy. The workshop established some key short to medium term recommendations and priority actions which key stakeholder agencies pledged to work together and effort to achieve them. The representatives from 40 different private companies and state agencies discussed the development and the status of the energy generation and distribution in Suriname and the alternatives for of the generation of renewable energy as a major industry. The emphasis was placed on the important role the policy makers will have to develop in order to facilitate alternative energy sources.





### 5. Strategic Alliances with Partner Agencies in Development

	ORGANIZATIONS	AREAS OF INTERVENTIONS
1_	Ministry of Agriculture, Animal Husbandry and Fisheries	Collaboration on implementation of IICA Country Strategy
2	EU-APP-SPS (European Union, Agriculture Policy Program, Sanitary and Phytosanitary Measures)	Strengthen Agricultural Health and Food Safety Capacities
3	SUNRWP (Suriname Network for Rural Women Producer	Organizational strengthening and improved governance of the network for rural women producers.
4	SURAFY (Suriname Agriculture Forum for Youth)	To strengthen the outreach models for youth in agriculture.
5	UNDP (United Nation Development Programme)	<ul> <li>Biofuel Project: 'Feasibility study of the commercial production of biofuels from dedicated biomass crops on mined-out bauxite lands in Moengo, Suriname.</li> <li>GCCA Climate Change Adaptation Project: "Reducing Farmer Vulnerability to Climate Change Impacts through the Promotion of Climate Smart Agricultural Technologies in Suriname"</li> </ul>
6	Ministry of Natural Resources	Natural Resource Management/Renewable Energy
7	Eco <sup>2</sup> System 2000 (NGO)	Capacity building in Rural Communities
8	CELOS (Centre for Agriculture Research in Suriname)	10 <sup>th</sup> EDF APP and Agricultural technology transfer

	ORGANIZATIONS	AREAS OF INTERVENTIONS
9	SBF (Suriname Business Foundation)	Promotion of Renewable Energy
10	Ministry of Regional Development	Collaboration on agriculture and rural development interventions in the Hinterland.
11	OAS (Organization of American States)	Capacity building youth in agriculture
12	ADEKUS (Anton De Kom University of Suriname)	Agricultural training for youth
13	NIMOS (National Institute for Environmental Development in Suriname)	Environmental management and conservation
14	CAHFSA (Caribbean Health and Food Safety Agency)	Agricultural Health and Food Safety
15	Inter-American System Group (OAS, PAHO, IDB, IICA, PADF)	Technical cooperation coordination
16	Donor Coordination Meetings (Select Embassies, UN Agencies, OAS agencies)	Donor coordination for development interventions

## 6. 35 Years of Service to Agriculture and Rural Life in Suriname 1982-2016

On November 20th 1981, The Republic of Suriname became a formal MEMBER of the Inter-American Institute for Cooperation on Agriculture (IICA). Shortly thereafter, on January 29th 1982 IICA officially opened its office in Paramaribo, Suriname. The IICA Office in Suriname established and proceeded to strengthen vital linkages among Suriname's Agribusiness sector and that of the wider Caribbean as well as other countries in the Americas.

At the National level the IICA Office in Suriname set out to assist Governmental and Non-Governmental Organizations, the University and the Private Sector in their endeavors to develop agriculture and rural life in a sustainable way. It proceeded in doing this by a coherent service of varied approached, including:

 The sponsorship of research and studies into all aspects of crop and livestock production.

- Training of farmers, agriculture extensions officers and technicians in various aspects of improved technology and management.
- The generation and transfer of improved agricultural technologies.
- The detection and diagnosis and design of control methods for animal and plant and diseases.
- Agricultural land rural development planning.
- Agribusiness project identification, design and implementation
- Institutional strengthening and capacity building of agricultural public and private sector development organizations.







IICA Office, 2016

# 35 Years of Agricultural **Transformation and Rural Development in Suriname**





#### 7. Tribute to Brahma Ramsoedit, Driver and Field Assistant



On December 31<sup>st</sup>, 2016, Mr. Brahma Ramsoedit retired from IICA. Born in 1951 in the community of Kwatta in the District of Wanica, Suriname, he completed his schooling in the same area. Prior to joining IICA, he worked at the Ministry of Agriculture, Animal Husbandry and Fisheries (LVV) in Suriname for two years. Although the Inter-American Institute for Cooperation on Agriculture IICA formally opened its Office doors in Suriname in January 1982, it was in November of 1981 that Mr. Brahma was

hired, making him IICA's first and longest serving staff member in Suriname. In 35 years of service, Brahma has, as he puts it, "had the honor of serving 8 different Representatives". If you ask him who his favorite Representative was, he diplomatically tells you, "I have no favorite". They were all honorable men who did good things for Suriname".

Mr. Ramsoedit's job description was driver and as such he was usually the first in contact with new Representatives, visiting dignitaries and other IICA staff members.

He performed many other job responsibilities, including field assistant to the technical specialists, ensuring that the vehicles, building and office equipment were properly maintained, and the taking of stock on office supplies to ensure that the office was always functional.

Mr. Ramsoedit was always soft spoken, polite, and punctual to work, and displayed an exceptional dedication and commitment to his work and in upholding the image of the Institute. He was a wealth of information on a number of issues, from this historical development of Para-





IICA Suriname Annual Report

maribo and location of service provider agencies, real estate (which was extremely valuable to incoming representatives and staff), to local bank procedures, local languages, vehicle and small equipment performance and maintenance, and agriculture, since he was and remains an avid farmer, producing a wide range of vegetables and fruits.

Mr. Ramsoedit has been married for over 43 years to his wife Sieuwradjie and they have two daughters, a son and three grandchildren. He has indicated that he has retired from IICA but not agriculture. For us at the Suriname Delegation, it was an honour and a privilege to have known and worked with Mr. Ramsoedit. He will always remain part of the IICA family. We wish him all the best in his farming and any future endeavor he may wish to pursue.







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