Early Warning System

# IADB-GY-T1211

## Smart Farming for Sustainable Development in Guyana: Precision Ag, AI and IoT

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## Smart Farming for Sustainable Development in Guyana: Precision Ag, AI and IoT

### Quick Facts

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| **Countries** | Guyana |
| **Financial Institutions** | Inter-American Development Bank (IADB) |
| **Status** | Approved |
| **Bank Risk Rating** | B |
| **Voting Date** | 2025-12-06 |
| **Borrower** | The University of Guyana - Institute of Food and Nutrition Security |
| **Sectors** | Agriculture and Forestry, Education and Health |
| **Investment Type(s)** | Advisory Services |
| **Investment Amount (USD)** | $ 0.50 million |
| **Project Cost (USD)** | $ 1.43 million |

## Project Description

According to the IADB, the objective of this technical cooperation is to improve the productivity, climate resilience, and environmental sustainability of smallholder agriculture in Guyana's Amazon Basin by implementing precision agriculture and climate-smart technologies, strengthening technical and entrepreneurial capacities, and promoting bioeconomy practices that support the sustainable use of natural resources and contribute to greenhouse gas emission reductions.

The Smart Farming for Sustainable Development initiative integrates precision agriculture, climate-smart technologies, capacity building, and bioeconomy practices to foster sustainability, productivity, and economic resilience, particularly for smallholder farmers.

The approach focuses on three key components:

- Component 1: Precision Agriculture with Climate/Smart technologies. The aim of this component is to increase agricultural productivity and reduce environmental degradation through the adoption of precision agriculture technologies.
- Component 2: Capacity Building and Training. This component aims to strengthen the technical capacities of smallholder farmers and local institutions to adopt and sustain climate-smart agricultural practices.
- Component 3: Integration of Bioeconomy Practices and Value Chain Strengthening. The component will promote sustainable agricultural practices through bioeconomic models and strengthen value chains for biodiversity-friendly products targeting Guyana’s Amazon Basin region, particularly Region 8.

The project directly benefits 25,000 smallholder farmers, and indigenous communities in regions 1, 2, 7, 8, and 9. These includes indigenous peoples, Afro-descendant, women, and youth, ensuring an inclusive approach to capacity building and technology adoption. The average size of each individual farm of the smallholders targeted is under 4 hectares. The indigenous peoples and afro-descendants comprise 56.3 % of the population in the project area.

**Investment Description**

- Inter-American Development Bank (IADB)

**Private Actors Description**

As stated by the IADB, the University of Guyana stands as the most suitable executing agency for the smart farming project, owing to its eminent academic reputation and robust institutional framework. It is the premiere educational training institution in Guyana, and as such it provides exclusively, the accredited professional workforce needs for the country. Central to this endeavor is the Institute of Food and Security within the university (IFANS), a beacon of excellence in agricultural sciences. The Institute plays a pivotal role by providing cutting-edge research, fostering collaborations with global experts, and developing technologies that enhance food security and agricultural productivity. Its interdisciplinary team of scientists, agronomists, and technologists is dedicated to advancing smart farming techniques, ensuring that the project benefits from the latest advancements in the field. It boasts a distinguished faculty of 16 well-proven and highly experienced international, regional, and local scientists. Over the last two years, the Institute has generated over USD 30 million dollars in grant-funding proposals for its work.

## Contact Information

*No project contacts provided at the time of disclosure.*

### ACCOUNTABILITY MECHANISM OF IADB

The Independent Consultation and Investigation Mechanism (MICI) is the independent complaint mechanism and fact-finding body for people who have been or are likely to be adversely affected by an Inter-American Development Bank (IDB) or Inter-American Investment Corporation (IIC)-funded project. If you submit a complaint to MICI, they may assist you in addressing the problems you raised through a dispute-resolution process with those implementing the project and/or through an investigation to assess whether the IDB or IIC is following its own policies for preventing or mitigating harm to people or the environment. You can submit a complaint by sending an email to MICI@iadb.org. You can learn more about the MICI and how to file a complaint at http://www.iadb.org/en/mici/mici,1752.html (in English) or http://www.iadb.org/es/mici/mici,1752.html (Spanish).

**Bank Documents**

- IDEATE 2025-07-23 Public Summary 1765 GY-T1211