

# Paddy Rice Research Group Americas

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# Two Projects

- Towards Sustainable Low-Methane Rice Production In Latin America (IICA)
- Monitoreo satelital de metano en regiones arroceras de Latinoamérica (Fontagro)

# “TOWARDS SUSTAINABLE, LOW-METHANE RICE PRODUCTION IN LATIN AMERICA”



26 July 2024

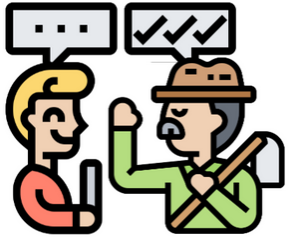
# About the project

1. Brasil, Chile, Ecuador and Uruguay
2. Duration: May 2024 - October 2026
3. Total project: US\$1.146.279
4. Grant: US\$998.779





# activities



**Diagnostic KAP**



**GHG measurement**



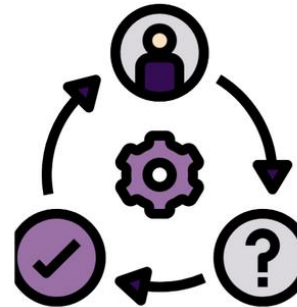
**Experimental plots**



**Business model  
development**



**Demonstration plots  
(participatory)**



**Financial barriers  
and oportunities  
identification**

# progress



Contractual arrangements with partner institutions and definition of detailed budget transfers for 2024-2025.



Final stage of KAP diagnostic instrument design, for implementation in August and September 2024.



Implementation of experimental and demonstration plots begins in Ecuador.



In the process of defining mechanisms for measuring methane emissions in each country.



# Satellite methane monitoring in rice growing regions of Latin America

Strategy 1. Farms

Strategy 2. Territories

Technological

Applied

Information System

2022



<https://www.fontagro.org/new/proyectos/monitoreo-metano/en>

# Participating Organizations

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## Executor

- ✓ Instituto Nacional de Investigación Agropecuaria (INIA) - Uruguay

## Co-executor

- ✓ Universidad Nacional Agraria La Molina (UNALM) - Perú
- ✓ Conagro Semillas, S.A. (CONAGRO) - Panamá

## Associated

- ✓ Fondo Latinoamericano para Arroz de Riego (FLAR) - Colombia
- ✓ Otago University (Otago University) - Nueva Zelanda
- ✓ The United States Department of Agriculture (USDA) - Estados Unidos
- ✓ Instituto Interamericano de Cooperación para la Agricultura (IICA) - Costa Rica



## Researchers

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Project leader Uruguay

**Alvaro Roel**



Researcher

**Eduardo Graterol**



Researcher

**Elizabeth Consuelo  
Heros Aguilar**



Researcher

**Cristhian Delgado**

Researcher

**Viviana Criollo**



Researcher

**Michel Reba**

# Executive Summary

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Given the importance of quantifying methane (CH<sub>4</sub>) emissions from rice paddies in national inventories and the increasing investment in mitigation technologies, there is significant value in developing verification technologies that can be applied at regional or national scales.

It is currently possible to monitor CH<sub>4</sub> content using satellite sensors. An example of such a sensor is the Sentinel-5 Precursor (Sentinel-5P) satellite. This is a reliable data source that can be used to analyze spatiotemporal changes at different spatial scales, including regions and countries.

This project aims to strengthen regional capacities for monitoring, reporting, and verification of methane emissions in rice ecosystems through a satellite tool that provides frequent, reliable, and free estimates to rice communities and governments.

## Project news



**Workshop: Methane from Rice: Current and Emerging measurement techniques**

21/05/2024



**BLOG Revolutionizing GHG Measurement in Rice Cultivation**

27/03/2024



**University of Otago Wins Grand Prize in Space for Planet Earth Challenge**

27/03/2024

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