

# Improving rice productivity in Panama: scaling-up of the SICA method

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Webstory



## The technological solution

Rice is the most cultivated and consumed food in Panama, and is the main source of income for more than 3,000 farmers. Production has been reduced in recent years due to low productivity and high production costs. Climate change will exacerbate this situation. The Intensive Rice Growing System (SICA, for its Spanish acronym) offers an alternative



## Description

SICA is a methodology that is based on the integrated management of soil, water, plant and nutrients. It has been validated in more than 50 countries, obtaining increases of 20% to 100% in yield, up to 90% savings in seed and 50% in the use of water. A study was implemented to scale up of SICA in priority areas of Panama.



## Results

- SICA increased the yield of 24 qq / ha with traditional rainfed systems to 126 quintals per hectare and also makes it possible to produce an additional cycle during the year.
- SICA + modifies planting date, germplasm, fertilization, water management and mechanization and is scalable for small producers with access to irrigation.
- The implementation of these systems is sustainable over time.

**2000**

+ potentially benefited producers

**5**

Technological options evaluated for two types of producers

**5**

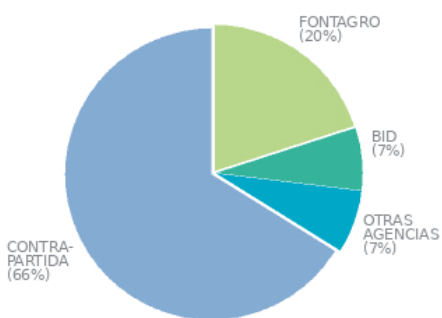
times higher SICA productivity than the dry land system

ABOUT FONTAGRO

FONTAGRO is a unique cooperation mechanism for agricultural innovation in Latin America and the Caribbean (ALC) and Spain, that works through regional platforms. It is composed of 15 countries that have contributed capital exceeding 100 million dollars and the Inter-American Development Bank (IDB), which is its legal representative.

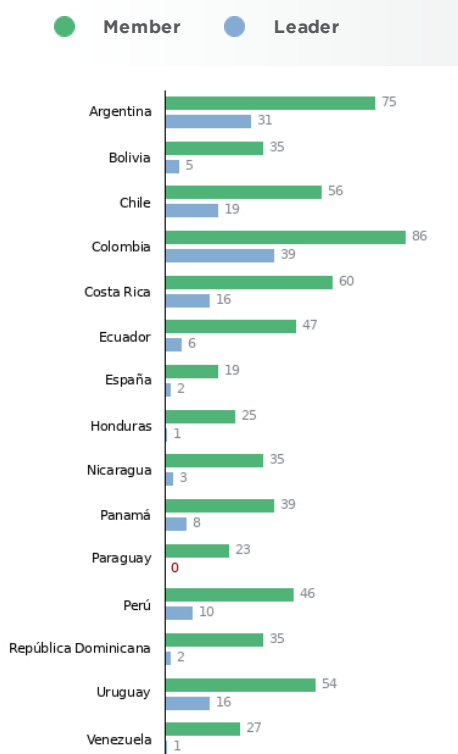


ORIGIN OF RESOURCES



- **Counterpart contribution**  
93.177.555
- **FONTAGRO**  
28.989.468
- **IDB**  
9.922.700
- **Other agencies**  
9.809.078

PARTICIPATION AND ROLE IN CONSORTIUMS SINCE 1998



FONTAGRO IN NUMBERS

**193** Number of projects approved

**141.9** Approved total amount US\$  
MILLONES

**9.8** Contribution from other agencies  
MILLONES

**32** Benefited countries

**63** Generated technologies

**15** New technologies for ALC

**8** Technology of global relevance

MEMBER COUNTRIES

- |            |                    |           |          |
|------------|--------------------|-----------|----------|
| Argentina  | Bolivia            | Chile     | Colombia |
| Costa Rica | Dominican Republic | Ecuador   | Honduras |
| Nicaragua  | Panama             | Paraguay  | Peru     |
| Spain      | Uruguay            | Venezuela |          |