A better way to grow rice: the SICA intensive method

The intensive rice cultivation system originated in Madagascar, requires less seed and intermittent irrigation and achieves equal or better yields. Its evaluation in Panama, Costa Rica and Nicaragua is the central objective of this initiative.





30

platforms (active collaboration groups during the life of the project) in the three countries



10

technicians trained in developing, applying and analyzing baseline information



575

producers trained and informed about the SRI system in the three countries



52

and 17% increase in water use efficiency, in Nicaragua and Panama respectively.



Why consider the intensive rice system?

The implemented initiative

The project attempts to reduce the vulnerability of small rice producers in Nicaragua, Costa Rica and Panama through innovation platforms aimed at greater productivity, food security and adaptation to climate change. Within the framework indicated, sustainable

income and rationality in the use of resources such as water and soil are part of the equation. This effort by FONTAGRO and the FMNM also includes the validation of the SICA system in other tropical countries.

Rice cultivation better adapted to climate change

The technological solution

The Project used the organic modality of the intensive rice system (SRI) with the intention of reducing the use of agrochemicals and protecting soil health and beneficial flora. The strengthening of the radical system, normally achieved by the SRI system, and the use of intermittent irrigation contribute to the adaptation of rice to climate change.

In Panama, SRI plots were compared with conventional transplantation and in Costa Rica and Nicaragua SRI plots were compared with traditional planting known as

"espeque" or "chuzo". The SRI plots received organic fertilizers at the time of land leveling. The transplant was performed with seedlings between 8 to 10 days after germination, placing one every 25 cm between plants and 25 cm between furrows.

The producer socialization and training component considered Field Schools (ECA) and participatory workshops with group techniques such as discussion maps, surveys, brainstorming and rapid diagnostics.

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Results

The research clearly shows the potential of SRI, in particular the possibility of adapting or adopting particular elements of the system depending on the ecological and socioeconomic conditions of each locality.

The results highlights include the activation of collaboration platforms in the three countries; the

training of 10 technicians in the design and analysis of baselines; a 45.6% and 42.8% yield increase in Costa Rica and Nicaragua and an increase in water use efficiency of 17% and 52% in Panama and Nicaragua. It also shows the good performance of the crop in the SRI plots in relation to the attack of diseases to the foliage, panicles and grains, considering that no chemical products were applied.

Main donors











Participating Organizations



