



A better way to grow rice: the intensive SRI method

The system of rice intensification 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.



Panama /Costa Rica /Nicaragua /Panamá



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.



45 45.6% and 42.8% yield increase in experimental plots in Costa Rica and Nicaragua, respectively. Increased efficiency in water use by 17 and 52% in Panama and Nicaragua respectively.

Why consider the system of rice intensification?

Initiative

This 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 SRI in other tropical countries.

Rice cultivation better adapted to climate change

Tech solution

The project used the organic version of the system of rice intensification (SRI) with the intention of reducing agrochemical use and protecting soil health and beneficial flora. The strengthening of the root system, normally achieved through the SRI, 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. Transplants were performed with seedlings between 8 to 10 days after germination, placing one every 25 centimeters between plants and 25 centimeters between rows.

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

MORE INFO



Impacts and 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.

Result 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, respectively, and an increase in water use efficiency of 17% and 52% in Panama and Nicaragua, respectively. It also shows the good performance of the crop in the SRI plots in relation to the attack of diseases on foliage, panicles and grains, considering no chemical products were applied.