

Rice cultivation less vulnerable and more adapted to climate change

Rice cultivation in LAC requires technological innovations, especially in family farming, in order to increase productivity, improve resource utilization and reduce the impact of climate change.



Collaboration to innovate rice cultivation

The implemented initiative

The objective was to improve the resilience of rice cropping and its adaptation to the biophysical and economic effects of climate change through a new technology aimed at raising productivity, income generation and efficiency in the use of resources such as

seeds, water and labor. Collaborators were FONTAGRO, IICA, the Dominican Council of Agricultural and Forestry Research (CONIAF), Dominican Institute of Agricultural and Forestry Research (IDIAF) and the National Federation of Rice Growers (FEDEARROZ) of Colombia.

The intensification of rice cropping is feasible

The technological solution

The technology validated in Colombia and the Dominican Republic is the System of Rice Intensification (SRI) that increases productivity based on a set of practices aimed at reducing plant density, improving physical and biological soil conditions and irrigation management and modifying crop planting. SRI is conducive to the use of less seed and other inputs, less water consumption and better root development. The system, successful in other regions, has seldom been

evaluated in LAC where the challenges multiply due to the diversity of production systems that range from small plots to large areas, with implications for water, labor and machinery utilization. SRI allows the expression of the genetic potential of plants, with strong and well-developed roots that allow to better resist drought, waterlogging, winds, and other adverse factors, fostering the reduction of vulnerability and the strengthening of food security and farmer’s livelihoods.



25
% more yield



96
% less seeds for planting



45
% water savings



55
% higher profitability

MÁS INFO



Results

It was shown that SRI saves costs and is more productive and profitable than the traditional systems. In response to a greater number of spikes, panicles, tillers and root length and weight, higher yields (up to 25%) were achieved along with savings in the use of seeds (up to 96%) and water (up to 45%). The lower investment in fertilizers and seeds with SRI caused an

average cost savings of 10%, resulting in higher profits of 43% in the Dominican Republic and 68% in Colombia. The mechanization (filling of trays, transplantation and weeding) of the crop was evaluated. This innovation contributed with 36% savings in total costs in Colombia and 10% in the Dominican Republic. Several countries in the region are beginning the scaling-up of SRI.

Main donors



Participating Organizations

