

WATER RESOURCES MANAGEMENT: IMPLEMENTATION OF INTERSTATE BASIN WATER RESOURCES PLANS IN BRASIL



Code: 4907-00

Country: Brasil

Starting year: 2019

Year completed: 2025

Objective

Increase the capacity to implement the actions identified in the planning instruments, contributing to improve water resources management.

NBS ANSWERS

How has IICA integrated NbS into its projects?

The project is closely linked to nature-based solutions (NbS) by recommending vegetative, edaphic and mechanical practices to conserve soil and water resources, within the framework of the Water Producer Program. Through its manuals of practices, it addresses global challenges such as water and food security in the face of soil degradation, using natural systems through vegetative practices, mechanical practices such as barraginhas, terraces and infiltration ditches, and edaphic practices such as soil correction and the use of green and organo-mineral fertilizers. These actions reduce environmental impacts by restoring areas and preventing future degradation, in addition to generating multiple benefits to the environment and society, as they recover degraded areas, reduce erosion, increase water infiltration and strengthen local knowledge and participatory governance.

What lessons learned can you share about working with farmers to implement NbS?

Farmers can learn from this technical experience effective soil and water conservation practices to combat soil and water resource degradation.

What examples of innovation in NbS can you share from your experience at IICA?

Some examples of innovation in Nature-based Solutions (NbS) from this technical experience are:

- Integration between mechanical practices and agroforestry systems;
- Bioengineering of soils with strategic plant species;
- Restoration of riparian forests with a productive and environmental approach;
- Use of models such as InVEST and SWAT for the mapping of priority areas for intervention;
- Grasslands managed with an NbS approach.

How are you promoting NbS education and training among farmers?

The project included participatory and continuous training activities, field days, practical workshops and exchanges between producers, with demonstrations on model farms.

It also promoted the production of accessible educational materials.

IICA works with strong community mobilization in the micro-basins, promoting participatory planning and the involvement of farmers. IICA also established integration with agricultural education institutions, universities and technical assistance services, forming knowledge networks on NbS; local technicians were trained as multipliers of the practices described in the manuals; and participatory monitoring was implemented through the incentive-based use of indicators such as erosion, soil fertility and vegetation cover, so that the farmers themselves can follow up on the results and adapt their practices.