



**INTER-AMERICAN INSTITUTE FOR COOPERATION IN
AGRICULTURE (IICA)**

**CENTER FOR KNOWLEDGE MANAGEMENT AND
HORIZONTAL COOPERATION**

A collage of various agricultural scenes is used as a background for the main title. It includes a person in a conical hat in a field, coffee beans, a farm with a red barn, a tractor, and a cow in a field.

BEST PRACTICES BANK

*Successful experiences in horizontal
cooperation*

2021

SOUTH AMERICAN LOCUST REGIONAL MANAGEMENT PLAN

Strengthening implementation of the South American Locust Regional Management Plan to reduce the economic, social and environmental impacts of the plague in Argentina, Bolivia and Paraguay



CHALLENGE ADDRESSED

Locusts are easily the most destructive pests for crops, pastures and natural vegetation. Since locusts feed on almost any plant material, they can devastate a farmer's livelihood in minutes.

After a 60-year recession period, in 2015, locusts returned with renewed force, expanding quickly to cover a surface area of 900,000 km² in 2017-2018, an area that is home to about 100,000 farms across Argentina, Bolivia and Paraguay. It could even reach as far as Brazil.

IN SEARCH OF A SOLUTION

The project is intended to aid at least 300,000 beneficiaries who live and work on the 72,000 agricultural holdings located in the affected areas. Given its nature as a migratory and cross-border plague, collaboration between the countries involved, i.e., Argentina, Bolivia and Paraguay, is a must. To that end, communication between all public and private actors at both the national and regional levels is key.

The actions anticipated in the Regional Plan must be dynamized and strengthened in order to improve early warning systems and decision-making. This will allow for the optimization of monitoring, control and data flow activities to reduce the plague's impact on agricultural production and, ultimately, on farmers.

GENERAL INFORMATION

Project name:
Implementation of the South American Locust Regional Management Plan

Countries involved:
Argentina, Bolivia and Paraguay

Supported by: IICA

Executing entities: Sanitary authorities in Argentina, Bolivia and Paraguay (National Service for Agrifood Health and Quality [SENASA]; National Service for Agricultural Health and Food Safety; and National Service for Vegetable and Seed Quality and Safety, respectively)

Status: In progress

Period: 2021-2022

IICA PROGRAMS

Agricultural Health, Safety and Food Quality

SUSTAINABLE DEVELOPMENT GOALS



Goal: 2.4

Inter-state coordination is essential for managing locusts. To that end, in 2017, an agreement was signed in which the countries, through their national phytosanitary protection agencies (hereinafter, NPPAs), expressed their political decision to work on a technically agreed upon and solid South American locust regional management plan to address aspects regarding phytosanitary surveillance with an emphasis on the border region, phytosanitary control, training and communication, among other topics.

The NPPAs have responded superbly to the emergencies declared in all three countries, interacting with specialists from around the world and acquiring the input and technical training necessary to deal with the plague.

Implementation will include the unification of criteria for data capture through the development of monitoring methods, including the preparation of a regional handbook. Moreover, a regional mobile monitoring system currently operated by SENASA in Argentina will be put in place to allow for the systematization of information, reducing flow rates.

Additionally, locusts will be controlled using ultra-low volume spraying, a technique employed around the world due to the low volume of water (a scarce resource in the affected areas) needed for application. A consultancy will conduct a regional survey of the plague's economic, social and environmental impacts and of potential sources of financing for its control.

All of these improvements will be inputs for a regional real-time data visualization system that will provide essential data for decision-making within the framework of the project. A regional AI system will be put in place to receive and manage reports and alerts, enabling farmers and informants in general to make reports easily, and will facilitate their receipt and response by the NPPAs. In northeast and northwest Argentina alone, it is estimated that the locust plague threatens agricultural production valued at USD 3.7 billion annually, not including fruit farms, cash crops, natural pastures and diverse forage used in livestock production.

The implementation of warning systems will facilitate an early response to threats, allowing decision-makers to act quickly to ensure efficient management and to apply the communication and control technologies (ultra-low volume) promoted by the Regional Plan, resulting in a coordinated response by the countries.

It is expected that strengthening the Regional Plan and implementing the surveillance system in the countries that are currently affected (Argentina, Bolivia and Paraguay) will pique the interest of other countries in the region who are threatened by locusts (Brazil, Uruguay, Peru, etc.) and who may want to join the Regional Plan by means of cooperation agreements, giving the project greater sustainability.

The success of the handbook and regional warning systems will allow the project to be repeated to help manage other locust species (Central American locust) and even other plagues or diseases that affect production in the countries.

MATERIAL GENERATED



Description of the images from left to right:

III International Cooperation Seminar: “Locusts: Management and cooperation perspectives in Latin America and the Caribbean, Africa and India”

Situation of locust plagues in the Americas

RELATED RESOURCES

Resource	Title	Year	URL
Press release	SENASA of Argentina and IICA host “Locusts: An ancient plague” webinar	2020	Link
Press release	Locusts: a threat fought by sharing knowledge	2020	Link
Press release	Locusts: A threat that calls for transnational strategies	2020	Link
Document	Situation of locust plagues in the Americas	2020	Link
Website	<i>Orthoptera</i> Plague (Locust) Task Force	2020	Link
Seminar	III International Cooperation Seminar: “Locusts: Management and cooperation perspectives in Latin America and the Caribbean, Africa and India”	2020	Link
