15 July 2020

Food and Agriculture Organization of the United Nations

ISSN 2707-1723

GIEWS Update

South America

Outbreaks of locusts could threaten wheat and barley crops in Argentina, Brazil and Uruguay

Highlights:

- In late May 2020, a locust outbreak was reported in northeastern provinces of Formosa, Santa Fé and Corrientes in Argentina. Crop and pasture losses have been limited due to the implementation of effective control measures.
- If swarms move to key producing areas of Argentina, Brazil and Uruguay, they could threaten the main 2020 winter wheat and barley crops that will be harvested in the last quarter of the year.
- Intensification of surveillance and treatment activities are required to contain the situation and avoid significant crop losses.

The locust: One of the most dangerous insect pest for crops and pastures

The locust "*Schistocerca cancellata*" is a species of grasshopper belonging to the subfamily "*Cyrtacanthacridinae*". Locusts differ from grasshoppers in their ability to change from a solitary living form into gregarious, highly mobile, hopper bands (young wingless locust nymphs moving together) and adult swarms as their numbers and densities increase. Large swarms, which can contain up to 40 million locusts in 1 km^2, have the ability to eat the same amount of food consumed by 35 000 people or 2 000 cows in a single day.

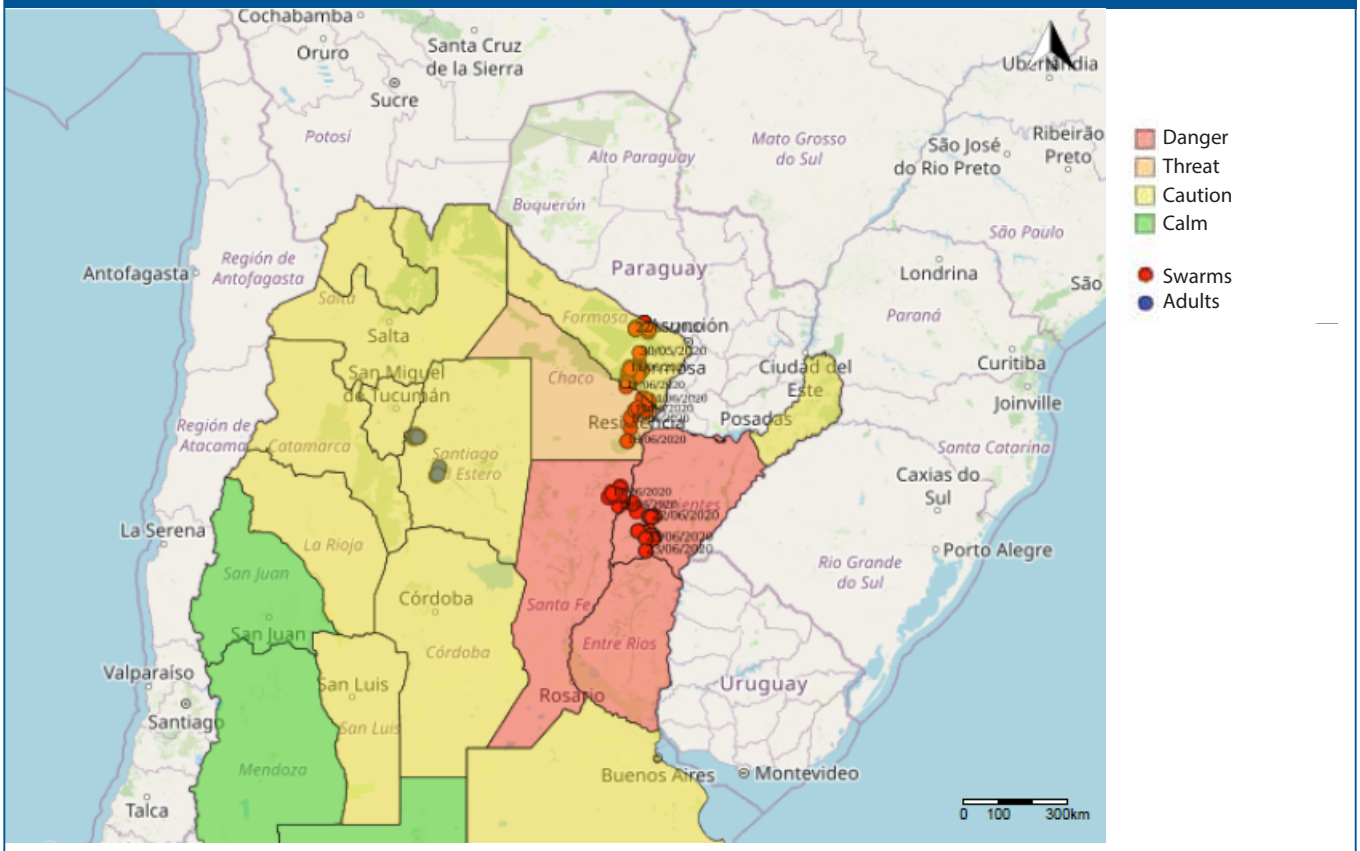
Recent outbreaks in South America

Locusts were present at low densities in Latin America for several decades and increased their numbers in Argentina, the Plurinational State of Bolivia and Paraguay in 2015, mainly due to mild winters and abundant rains from winter to spring. This resulted in reproducing additional generation in addition to the typical two generations per year.

In July 2015, locust swarms up to 25 km^2 caused damages to dry woodlands and pastures and some localized losses of crops in northern Argentina. In January 2016, an outbreak in the key cereal producing department of Santa Cruz in the Plurinational State of Bolivia resulted in damages to crops in more than 10 000 hectares of soybeans, maize, sorghum as well as groundnuts and citrus trees. Large swarms were again identified in northeastern Argentina in June 2017, but their impact on crops was estimated to be limited.

Given the increasing threat of locust outbreaks in the region and the importance of coordinated responses, the Ministry of Foreign Affairs of Argentina developed a

Argentina - Evolution of locust infestation
(since May 2020)



Source: National Food Safety and Quality Service of Argentina (SENASA). Conforms to the UN World map, February 2020.

Regional Programme of Management of the South American locusts, financed by the Argentine Fund for South-South and Triangular Cooperation and aiming to strengthen cross-sectoral collaboration with the Plurinational State of Bolivia and Paraguay.

Current outbreak: Localized crop and pasture losses, but concrete risk of spread to key winter cereal producing areas

Locust swarms were first reported in mid-May 2020 in southwestern areas of Paraguay and entered the northern province of Formosa of Argentina on 28 May. The swarms reportedly measured up to 15 km^2 subsequently moved southward, covering about 600 km in one month. As of 5 July, the locust swarms have been reported in the province of Corrientes, bordering Brazil and Uruguay. Although locusts can travel up to 100 km per day, they have moved relatively short distances so far, mainly due to low temperatures and above-average rains, which hindered their movements.

The National Food Safety and Quality Service of Argentina (SENASA), in coordination with producers and local governments, has intensified surveillance activities since late May and has carried out aerial control operations. According to the latest field reports by SENASA, on 2 July, the aerial control measures in the province of Corrientes succeeded in reducing the infestation levels. Locust-induced crop losses have been limited so far as control measures were effective and the provinces affected are marginal agricultural areas. As of 6 July, the SENASA reported localized damages on maize, sweet potatoes, citrus trees and sugarcane in the province of Formosa, on wheat in the province of Santa Fé and on pasture in the province of Corrientes.

After controlling the outbreak in late February in the southeastern region, the Plurinational State of Bolivia had again raised concerns about locust infestation. As of mid-July, the situation in both the Plurinational State of Bolivia and

Paraguay, where swarms were first reported, remained under control.

The low temperatures in the July–September winter period normally constrain locust movement and hinder their reproduction. However, weather forecasts for the winter period point to a high likelihood of above-average temperature across the region and below-average precipitation in southern Brazil, potentially facilitating the spread of the swarms. If locusts move to key winter wheat and barley producing areas, including Santa Fé, Córdoba and Buenos Aires provinces in Argentina, southern Brazil and western Uruguay, they may cause significant damages to crops to be harvested in the last quarter of the year. On 24 June, the Government of Brazil has declared a state of phytosanitary emergency in southern Rio Grande do Sul and Santa Catarina states and has launched a comprehensive response plan which includes the use of aerial spraying, if necessary.

When locusts are detected, farmers have been advised to immediately contact the local authorities and to strictly follow the application guidelines by the SENASA as pesticides may severely affect the health of people and non-target insects, including bees.

In all areas at risk of locust invasion, the intensification of surveillance activities, the preparation of contingency plans for control operations, international information sharing and coordination of responses are required to avoid major crop production shortfalls.

This report is prepared by the **Global Information and Early Warning System (GIEWS)** of the Markets and Trade Division of FAO, with the technical support by Mr. Hector Medina, from the National Food Safety and Quality Service of Argentina (SENASA). The updates focus on developing anomalous conditions aimed at providing early warnings, as well as latest and more elaborate information than other GIEWS regular reports on the food security situation of countries, at both national and sub-national levels. None of the information in this report should be regarded as statements of governmental views.

For more information visit the **GIEWS Website** at: www.fao.org/giews

Enquiries may be directed to:
Global Information and Early Warning System (GIEWS)
Markets and Trade Division (EST)
Food and Agriculture Organization of the United Nations (FAO)
Viale delle Terme di Caracalla
00153 Rome, Italy
E-mail: GIEWS1@fao.org

The **Global Information and Early Warning System on Food and Agriculture (GIEWS)** has set up a mailing list to disseminate its reports. To subscribe, submit the Registration Form on the following link: http://newsletters.fao.org/k/Fao/trade_and_markets_english_giews_world.

ISSN 2707-1723 [Print]
ISSN 2707-1731 [Online]

CB0187EN/1/07.20