



Addressing transboundary threats to the food chain

Food Chain Crisis-Emergency Prevention System (FCC-EMPRES)



Fighting hunger is not only about producing more food. It also means protecting food sources from diseases that can spread across borders. The Emergency Prevention System (EMPRES), is a surveillance and early warning system established with the objective of preventing food chain emergencies caused by transboundary threats. These may be animal or plant pests and diseases or food safety threats and can have a great impact on food security and food safety. Threats to the food chain affect not only food security livelihoods and human health, but also national economies and global markets. This is why surveillance, early detection, early warning and timely response are essential.

What we do

Transboundary threats are highly contagious epidemic diseases that can spread extremely rapidly, irrespective of national borders.

Prevention is the main objective of FCC-EMPRES. By integrating all relevant expertise and competencies of FAO, this system facilitates the implementation of appropriate actions to prevent a crisis, through surveillance, early detection, early warning and rapid response. Most food chain crises are preventable with the right investments and an appropriate forecasting system. Through FCC-EMPRES, FAO supports member

countries and enhances institutional collaboration in the global governance of transboundary threats to the food chain at regional and country levels.

FCC-EMPRES operates three systems: EMPRES Animal Health, EMPRES Plant Protection and EMPRES Food Safety. These are systems attempting to pre-empt the effects of transboundary threats with a high impact on food security, national economies and livelihoods.

FAO addresses transboundary threats by:

- Monitoring, tracking and reporting food chain crisis threats for early detection, early warning and timely response
- Conducting risk analysis
- Developing international, regional, national and local capacities
- Strengthening early warning and surveillance capacities
- Enhancing the capacities of specialized units and laboratories.
- Building technical networks (epidemiology/ surveillance, laboratory, socio-economics, etc.)

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- Strengthening preparedness through the development of contingency plans and simulation exercises.
- Developing new tools and environmentally sound control technologies
- Partnering with national authorities, international and regional organizations, research institutions, and ensuring communication among all stakeholders



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H5N1 Highly Pathogenic Avian Influenza outbreaks were successfully contained by FAO and its partners. The 60 countries affected in 2006 were reduced to six in 2014 through effective surveillance, early detection/early warning of the virus, timely response, upfront investment in prevention measures (laboratories, animal health systems), and global and regional coordination.

Desert Locust threat is contained by strengthening national capacities and promoting national action in the preventive control of the pest through the three FAO Desert Locust Regional Commissions. The Sahel emergency in 2012 and the four Red Sea and Horn of Africa outbreaks in 2013–2014 were brought under control because affected countries were well-trained and prepared, and utilized new early warning tools developed by FAO.



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Understanding the context

Globalization and the more complex interactions between people, animals and the environment have increased transboundary threats to the food chain. Approximately one-third of global crop production is lost every year to plant insects and diseases that spread to a number of countries. These threats can reach epidemic proportions. For instance locust invasions can destroy the crops of entire communities and wheat rust disease can cause yield losses of up to 80 percent. Likewise, animal diseases, if not controlled, can kill a large number of livestock, which are often the only assets and an important source of livelihood for the world's nearly 1.4 billion extremely poor.

Every year more than 200 diseases are spread through foods and contaminated drinking water, causing millions of people to fall ill and many to die. Globalized trade has made food-borne pathogens travel further and faster and opened up new opportunities for the spillover of diseases from animals to people. Without appropriate measures dedicated to preventing, alerting, preparing for and responding to such food chain crises, transboundary threats can have an increasingly disastrous impact on the lives and livelihoods of vulnerable families and the overall safety of our food supply.

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MORE INFORMATION

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