# ISDS One Health Surveillance (OHS) Case Study

#### **CASE STUDY TITLE**

CEDESAP and REDesastres network with "One Health" surveillance approach for the sanitary risk reduction in the agricultural sector.

#### PROJECT/ACTIVITY TITLE

Center of Training for Sanitary Disaster Risk Reduction in Animal and Plant Health (CEDESAP) and its network REDesastres in Cuba.

CONTACT INFORMATION			
NAME:	María Irian Percedo Abreu		
ORGANIZATION:	Centro Nacional de Sanidad Agropecuaria (CENSA)		
COUNTRY:	Cuba		
Email:	percedo@censa.edu.cu		
WHAT DOMAIN(S) DO YOU WORK IN?	Human health	_x Animal health	Environmental health
OHS AREA(S) OF FOCUS ADDRESSED BY CASE STUDY	_x Cross-Agency Communication and Collaboration	x Training and Resources	xTechnologies and Methodologies
	Other:		

# PROBLEM DESCRIPTION (150 word maximum)

Summarize the problem/situation that was addressed with a OHS approach.

CEDESAP-REDesastres was developed as a result of the holistic approach needed to cope increases of sanitary disaster risks by emerging and reemerging diseases animal and plant diseases with high negative impact on human health, as well as other challenges as consequences of the human activity and climate change upon the pathogen-environment interactions. Its major aim was the strengthening of engagement among the veterinary and plant protection official services, agricultural universities, scientific institutions and the productive sector in the promotion of sanitary risk reduction in agriculture. By the network, the updated information on the international sanitary situation, pathogen characteristics, vaccines, disease diagnosis and prevention/control have been disseminated to more than 500 members, institutions many of them. Information obtained from different national and international sources is analyzed and commented by specialists with the opportunity of sharing their expertise with specialist at those places where risk reduction measures are needed to be taken.

### **ACTION TAKEN (500 word maximum)**

Describe how the problem was addressed and how the action taken was measured. Please include a description of the collaborators and the data sources used.

In 2005, the Center of Training for Sanitary Disaster Risk Reduction in Animal and Plant Health (CEDESAP), and its network REDesastres1, the first national network in the agricultural sector's, were launched. They are sponsored by the National Center for Animal and Plant Health (CENSA), under the auspices of the Ministry of Higher Education (MES) and the Cuban's Civil Defense (DC). REDesastres has a nationwide coverage and some 450 members, including researchers, teachers, specialists and officials at different levels from the ministries of Agriculture, Public Health, Science, Technology and Environment; and Higher Education, with its agricultural universities (in Habana, Villa Clara, Camagüey and Granma provinces), and the Risk Disaster Reduction centers at municipalities and province levels, among others. It was developed as a platform for helping different sectors to be engaged in the activities included in all the phases of the Disaster Reduction

Cycle: Prevention/Mitigation, Preparedness, Response and Recovery. The timely dissemination of the updated technical information, previously selected by experts, with an attractive and simple format and put it directly "on the desk" of decision-makers, scientific, academic and production key persons, was something new and contributed to increase their technical knowledge and awareness of the general public regarding the diseases and their epidemiological chain: pathogen-host-environment, considering risk factors for animals, plants and people with their interfaces currently increasing in the global scenario.

REDesastres has been working with success and unquestionable advantages despite the constraints in the

- national technological platform due the lack of a broad band for Internet connection and its consequences on an optimum use of the new information and communication technologies (ICT):

   Promotes multisectoral and interdisciplinary connection with clear approach to "One Health" surveillance
- Promotes multisectoral and interdisciplinary cooperation with clear approach to "One Health" surveillance and mainly focused on the potential risks for the Caribbean and American regions. For instance: Avian influenza, Swine Influenza and H1N1 epidemic, West Nile, Anthrax, MERS-CoV, Ébola virus, Classical Swine Fever, Encephalomyelitis by Teschovirus, Porcine Epidemic Diarrhea and Porcine Deltacoronavirus, African Swine Fever, Black Sigatoka, Greening Virus, Ralstonia solanacearum, Coffee Berry Borer, Trips palmi, Soybean virus, etc.
- Speeds up communications, crucial for dealing with sanitary emergencies, helping the mechanisms established by the competent national institutions to guarantee an early diagnosis, warning and rapid response.
- Provides an additional channel for informing any risk to the interested parties and facilitates training of human resources.
- Helps to optimize the use of human resources, especially of highly qualified personnel, through forums and other forms of virtual or distance education.
- Contributes to a better risk perception, and development of a protection (safety) culture in the face of any threat of disaster.

The major impact of the REDesastres has been to promote learning and capacity building with "One Health" approach among the relevant sectors of the society through seminars, courses and workshops developed and more than 4000 messages disseminated. CEDESAP-REDesastres has been very encouragingly recognized by several ministries, and the National Civil Defense. Also numerous university professors have appreciated the network's efforts to update their knowledge and its contribution to the teaching-learning process on Veterinary Medicine and Agronomy in Disasters.

1 http://www.censa.edu.cu/cedesap, redesastres-L@censa.edu.cu

## **FACILITATORS AND BARRIERS (100 words max each)**

Please list and describe any factors that contributed positively to this project/activity.

### Facilitators:

- Pre and postgraduate training in Disaster Reduction and Management with an approach to "One Health" surveillance of under graduated and professionals with a college degree in Veterinary Medicine, Agronomy and Medicine (Public Health).
- Intersectoral cooperation institutionalized in the national platform for disaster reduction, including sanitary or biological disasters, which integrates the scientific institutions in the specific fields.
- The high educational level of the society.

#### Barriers:

The technological constraints have limited the feasibility of connection by optimal use of CIT's enough REDesastres available. The size of messages can't no exceed 1 MG, and the access to our webpage through national servers is very limited.

Please list and describe any factors that were a challenge or barrier to overcome.

The need to promptly reach more people from all the sectors to be engaged in the Sanitary Disaster Risk Reduction and Management and in the epidemiological surveillance in our country was a challenge. So, we developed a proactive promotion of the network by both including the key persons in the mailing list without previous warning and writing to the institutions and their staff. This gave us positive results.

# **LESSONS LEARNED (250 word maximum)**

# Please describe any lessons learned or best practices identified by this project/activity.

The sanitary information, either on animal, plant or public health, is very interesting and accepted when it is shared among teachers, specialists, researchers, producers and decision makers whichever the specific field of each one (Veterinary, Plant Health, Medicine), and it contributes to:

- A broader and holistic approach to "One Health" surveillance to deal with animal, plant and human health.
- The highest risk perception and sanitary awareness of all stakeholders.
- The best preparedness for dealing with disease prevention/control.
- The greatest commitment with disaster risk reduction strategy whatever the performance field of the persons in the network.
- The usefulness of the information disseminated is key factor to increase the quantity of the members networking with their own interest.

#### **ADDITIONAL COMMENTS (75 words max)**

#### Summarize the problem/situation that was addressed with a OHS approach.

Some prizes: Technology Innovation Prize (2006), by the Ministry of CITMA-Havana Province; IICA2 award (2007); in 2009, National Prize of the Ministry of Agriculture and "García Galló" Prize, by the Central University. Also, the work contributed to CENSA recognition as OIE Collaborating Center for Risk Reduction in Animal Health (2011) and as part of the First OIE Ad-hoc Group On disaster management and risk reduction in relation to animal health and welfare and veterinary public health (2014-2015).