



Regional response to a natural disaster of volcanic origin the experience of the Caribbean

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1. The Caribbean, a region prone to disasters



• Sanitary disasters / diseases

- Diversity of animal production types
- Heterogeneous socio-economic development and performance of health infrastructure
- Intensification of movements: legal/illegal, tourism

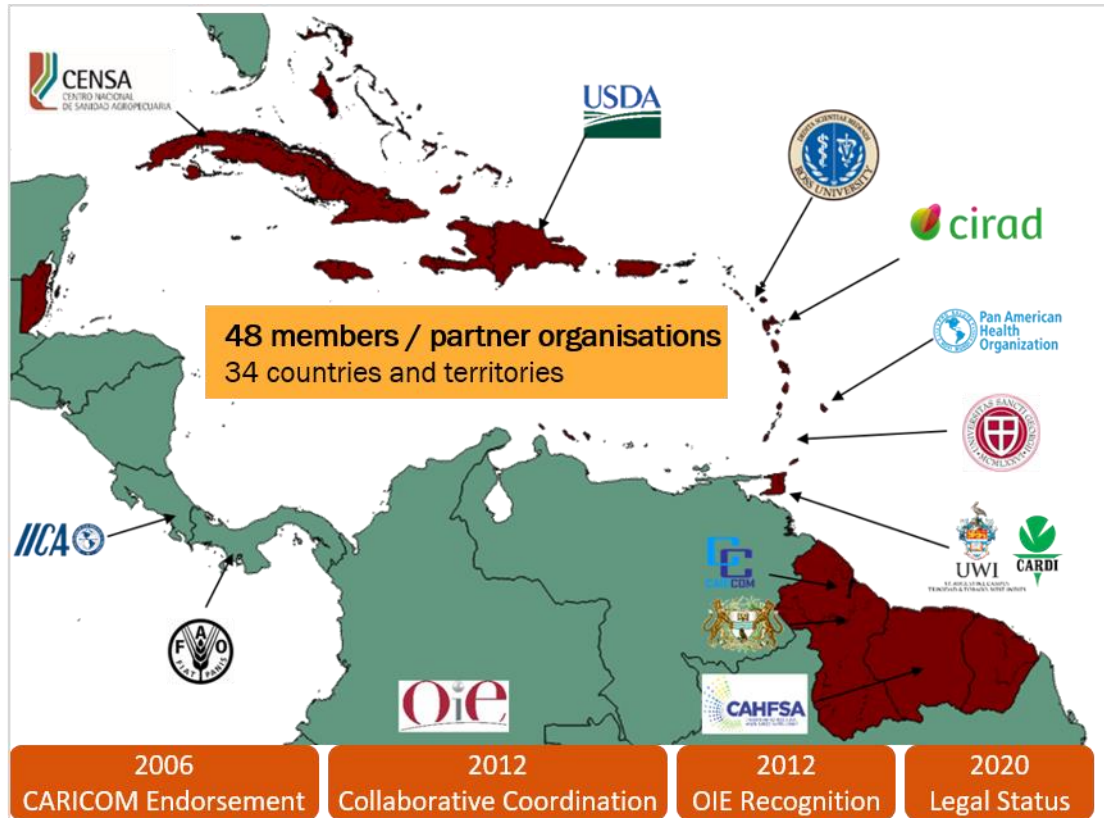
• Other



2. Disaster Risk Reduction: a main goal for CaribVET



The Caribbean Animal Health Network



CaribVET objectives

- Improve animal and veterinary public health
- Reduce vulnerabilities + increase resilience to disasters impacting the livestock sector

DISEASE SURVEILLANCE & CONTROL

CAPACITY DEVELOPMENT

RESEARCH, SCIENCE

ONE HEALTH APPROACH

ENABLING ENVIRONMENT FOR COLLABORATIONS



3. Ashfall hazards and potential impact

On Environment, animals and humans

On animals (acute/chronic)

- By contact: Injuries, burns, dehydration
- By ingestion:
 - Abrasive effect (Silicosis): oropharyngeal respiratory and digestive tract
 - Toxicity (Fluorosis)
- Impact on animal production
- May impact human health
- Other risks: rain, lahars

Major role of the Veterinary Services
Importance of the « One Health » approach



4. Saint Vincent and the Grenadines Soufriere volcanic eruption (April 2021)



Volcanic Eruption Timeline

- 29th Dec: ORANGE alert level
« Eruptions may occur with less than 24h notice »
- 3 Months of effusive activity
- **08th April: Red alert level + evacuations**
- 09th-22th April: series of **32 volcanic explosions**
- **29th April: heavy rains: lahars, landslides and floods**
- 06th May: Alert level back to Orange, 1 month prior hurricane season



A multi-hazard and multi-country event



The event: slow unfolding volcanic eruption during Covid-19 Pandemic



5. Response of the Caribbean Veterinary Community

SVG Preparedness (Jan.-March 2021)

- About **9,000 animals at risk**
- **Series of meetings** with:
Stakeholders +
- Review **disaster plans**
- **Training, exercises**
- Upscale **Animal identification**
- Prepare **animal displacement & destocking**
- **Protect** feed & water
- **Priority needs & procedure**



World Organisation
for Animal Health
Founded as OIE



4 Volcanic Alert Zones



Timeline – Regional Preparedness

- **11th Jan** : CVO of SVG requested CaribVET's assistance - preparing for volcanic eruption

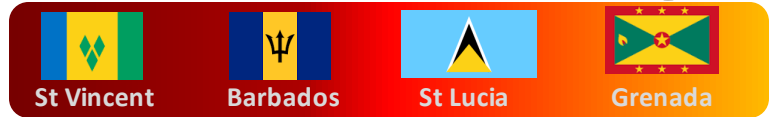
Objectives

- **Support SVG's appeal for assistance**
- **Provide emergency & relief supplies to help animal sector**
- **Mitigate the impact on animals**
- **Organize an effective & efficient team work**
- **3rd April: Regional Volcano Group:** multisectoral and across networks
- **7th April:** everything ready!

6. Results: regional mobilisation

VOLCANIC ALERT LEVEL

4 affected countries among which 2 severely



8 Caribbean countries responded



4 Disaster management agencies/organisations



4 regional networks involved



7. Results: an impactful response

“The regional response was immediate, voluminous and appropriate”

“It addressed the most urgent needs and dealt with all the animals - livestock and pets”



Dr. Hackshaw, CVO SVG



Types of information

- Scientific & technical documents, expertise / contacts
- Situation update (NEMO bulletins..)
- Updates on needs, initiatives...
- Morale support, questions / answers



Outputs

- Revision of disaster & contingency plans
- Awareness campaign to farmers
- Guide for actions and decision-making
- Facilitated others sectors mobilisation
- Mutual adjustment & coordination



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Water, food, medication, molasses

- ❖ 50,000 gallons of water
- ❖ > 48 T animal feed & molasses
- ❖ Feed/grains for cattle, pigs, rabbits, pets
- ❖ Molasses (3000 L) + Sugar for bees
- ❖ Medical supplies: enough of everything!
- ❖ Various materials / equipment

Shipment of emergency supplies (14th April – June 2021)

Bahamas defense force, TT Energy chambers, TT Min National security, Coast Gard, CORECA, 7th Day Adventist Church



8. A highly successful response !

Dr. Mark Trotman, CVO Barbados

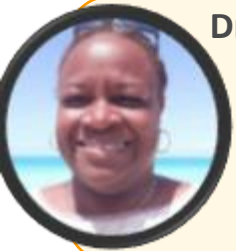
“The mechanisms we were able to put in place were extremely admirable”



Dr. P. Bedford, Field coordinator, Barbados

“The groups performed very well and the many things we have been able to do were incredible”.

“The open and honest communication and the willingness and persistence to go beyond our circles/silos made the response so successful”



Dr. Karla Georges, UWI-SVM, Trinidad

“It was a very well-coordinated effort that involved many persons from the public and the private sector beyond the veterinary community”



Dr. Gil Manuel, private veterinarian, Guadeloupe

“The exchange of information was very efficient, rapid and allowed addressing priority needs expressed by the MoA in SVG”



STRENGTHS: a powerful organisation

- Countries at risk were trained on **LEGS (FAO)**
- **One health leadership & assets-based approach**
- **Use of existing resources, platforms, mechanisms & tools in several networks**
- **Human aspects: passion, commitment, comradery**
- **A great organisation**

OPPORTUNITIES

- **It was a slow event: 3 months to prepare**
- **A landmark event → national & regional unity**
- **Importance of the animal sector for quicker recovery.**
- **Tremendous solidarity**

9. Challenges & area of improvement

Failures

- The **action was not repeated** to help Guyana - historic floods, May 2021

Obstacles

- **Logistics** : the major difficulty
- **COVID-19 related constraints** at ports, international shipping, and stress to 1st responder teams
- **Limited human resources, energy, time**

Weaknesses

- **No regional disaster plan**
- **No DRRM plan for volcanic eruption** (ex Barbados a coral island)
- **No knowledge on volcanic & ash hazards**
- **No feedback organized** in most countries

Recommendations

- **Capitalize** successes & failures to improve preparedness
- **Engage with other sectors & industries + NEMOs!**
- **Co-learning** at the organisational level → networks' memory

PLAN, PREPARE, TEST!



10. Take home messages

Key lessons-learned

- **Importance of the multi-hazard approach**

There may be successive / unexpected hazards to address

- Ashfall, lahars and impacts months after the event
- Hurricane Elsa (1st July, 2021 in Barbados)
- Flooding (May, 2021 Guyana)
- ASF outbreak (July 2021, Hispaniola)

- **Importance of Cross sectorial / One Health collaboration in all DRRM phases**

From analysis of the hazard to lessons-learned

- **Emphasis on prevention & preparedness**
- **Give higher priority on regional cooperation**

Enabling environment
for collaborations



Adaptation
Better results / impact

Emergency Response Coordination tool
under development for the Caribbean



Thank you

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