

One Health Strengthening Response Capacities to Emerging Diseases

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Outline

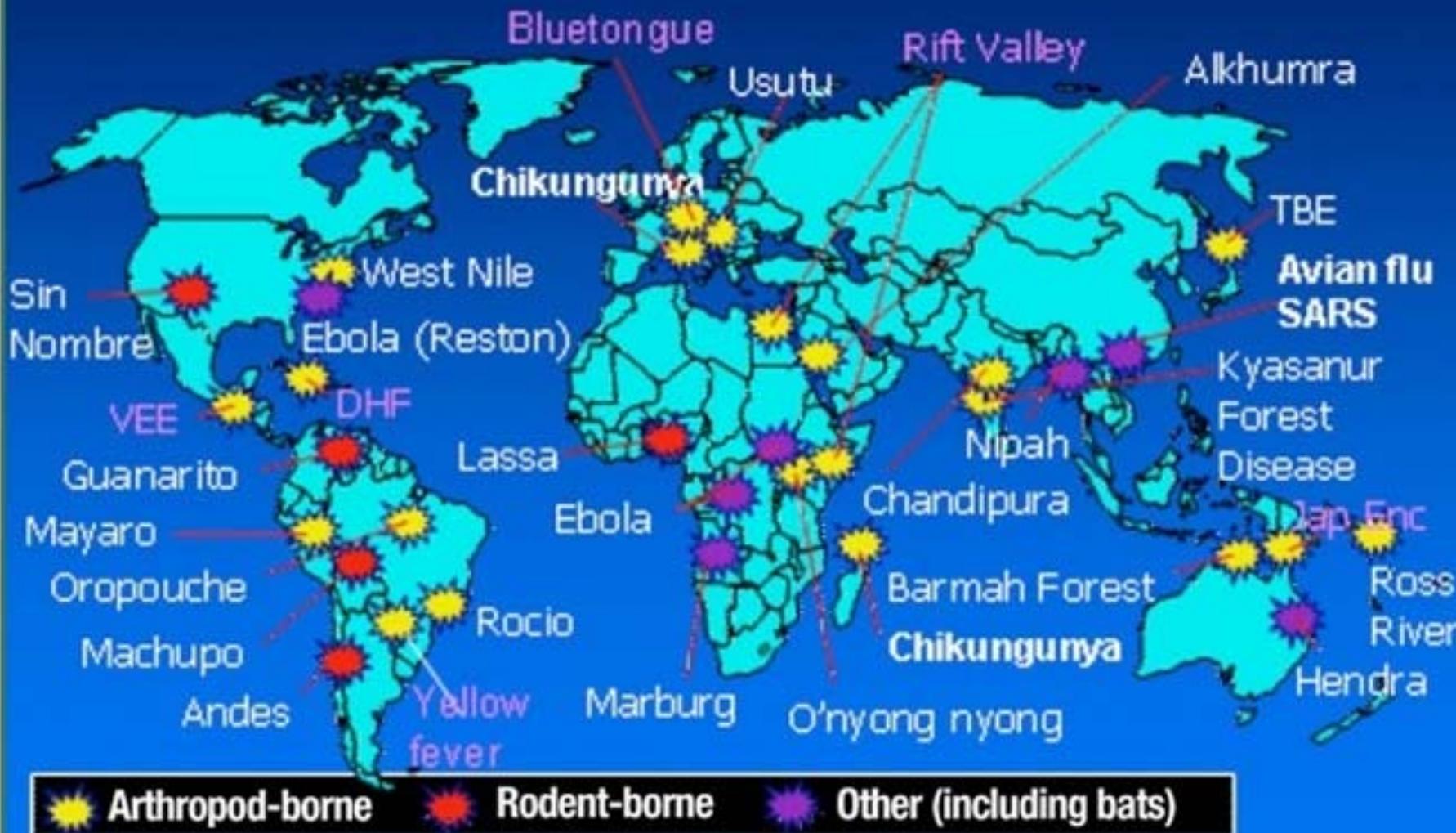
1. Why One Health and Emerging Diseases are important
2. Problem and its major causes
3. Alternative solutions and time incremental approach to address problem
4. How force field analysis is used to understand perspectives of stakeholders
5. Use of Potter model for systematic capacity building

How important Emerging Diseases are currently

- Over 70% of emerging infectious diseases are zoonoses
- Avian and swine influenza now in the forefront of global health problems
- Joint efforts called for e.g. virus surveillance
- These problems have already threatened human health with high burdens of disease, food security and the global economy

Emerging and Reemerging infections - 70% vector-borne or zoonotic

Source: <http://www.onehealthinitiative.com/>



Arthropod-borne

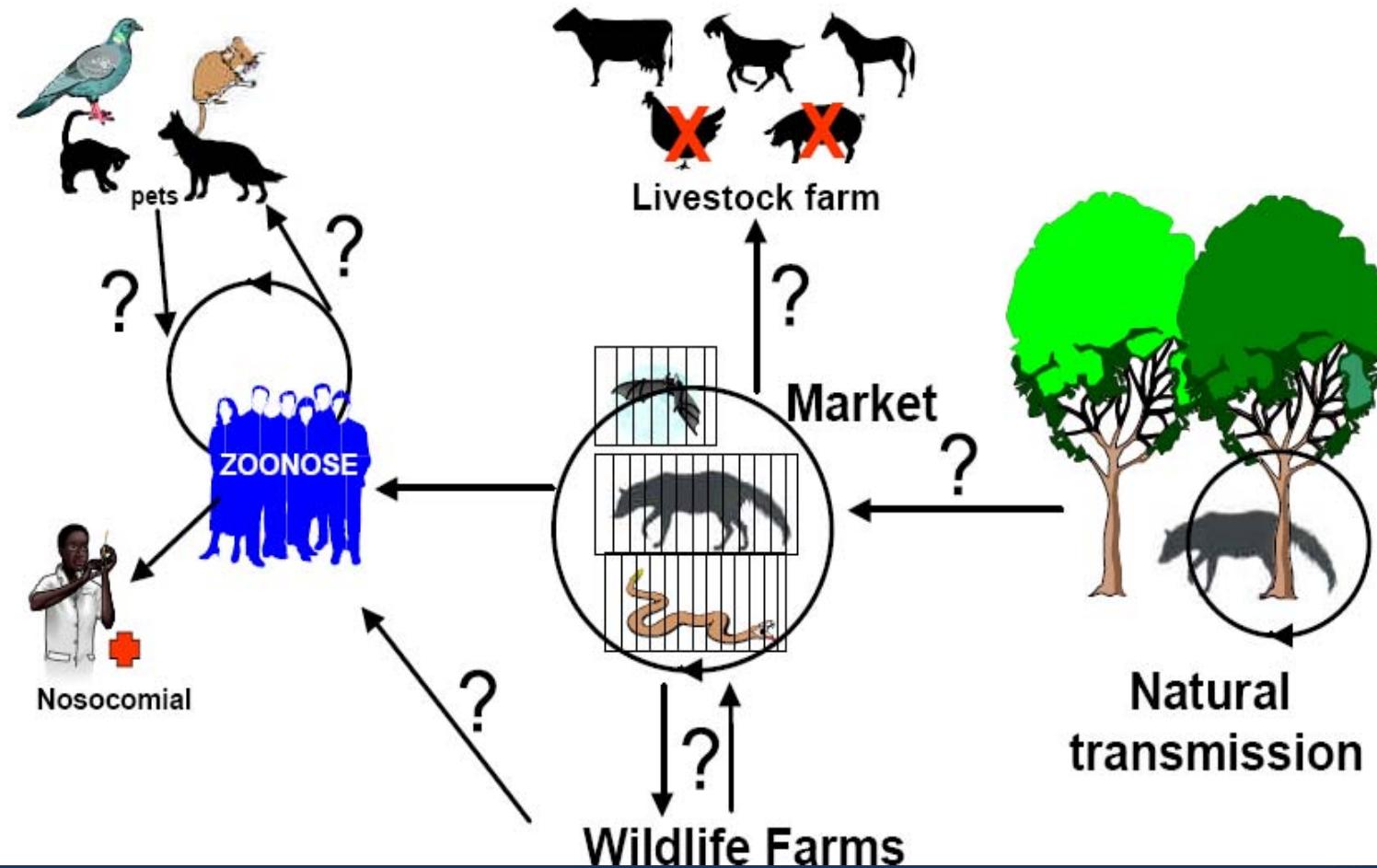
Rodent-borne

Other (including bats)

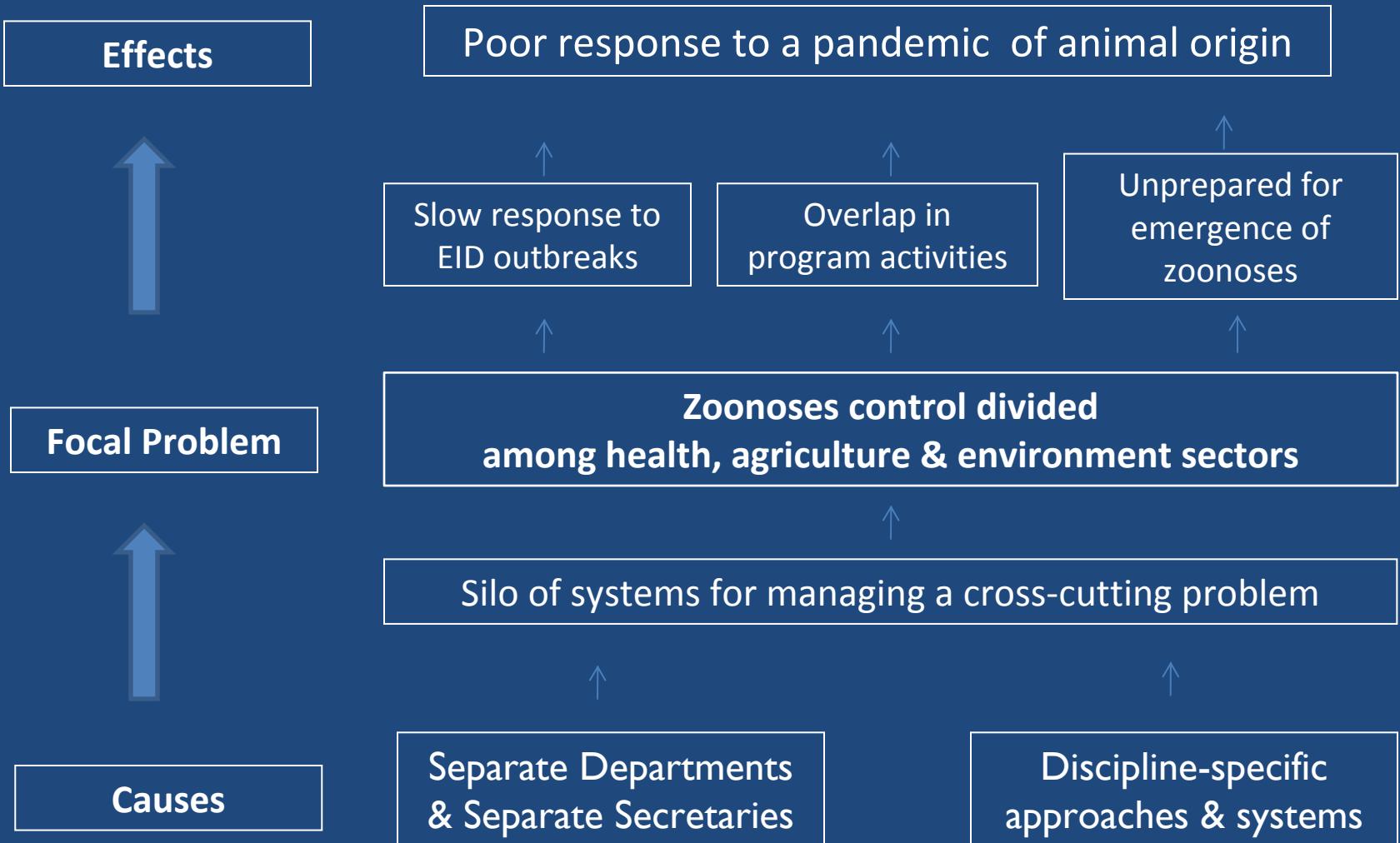
SARS as a ZOOSES

Addressed in the context of One Health

A possible cycle for SARS CoV transmission from animals to humans



Problem tree analysis



Systematic Capacity Building

post-graduate course on
One Health Systems Management

National One Health
Commission/Authority

Performance capacity

requires

Personal capacity

requires

**Workload
capacity
with
Supervisory
capacity**

**Facility
capacity
with
Support
service
capacity**

requires

**Structural
capacity**

**Systems
capacity**

**Role
capacity**

Complexity / Time Dimension of Capacity Building

Easier & more technical

Tools



Skills

post-graduate course on
One Health Systems Management

Staff & Facilities

National One Health
Commission

Harder & more
socio-cultural
& political

Structure, Systems & Roles



One Health Solution

Aims to integrate
multiple disciplines at all levels
towards maintaining the resilience of
the health of people,
animal populations
and the environment
within a healthy ecosystem

The many stakeholders

Department of Health

- National Center for Disease Control & Prevention
- National Epidemiology Center
- Research Institute for Tropical Medicine

Department of Agriculture

- Bureau of Animal Industry
- Philippine Animal Health Center
- Animal Welfare Unit

Department of Education

- Health Division
- Academe – Veterinary & Medical Schools

Department of Interior and Local Government

Department of Environment & Natural Resources

Veterinary and Medical Professional Associations

National Academy of Science & Technology

Force Field Analysis

For change

preparedness for emerging diseases of animal origin

Central leadership, shared resources, multidisciplinary action teams

Build on existing structures, synergies, institutions

Against change

Turf issues, unwilling to give up leadership

Investment on new office, new staff

Longer time needed to build One Health mindset

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Key Outcomes

- Unified effective One Health System management of zoonoses
- Creation of a critical mass of professionals with knowledge and skills to manage and respond appropriately and effectively to zoonoses problems especially highly pathogenic emerging zoonoses

Way Forward

- Plan to propose a project to an international aid agency with my home institute, ANU and DAFF to take stock of the relevant state of affairs and
- show proof of concept of the One Health Management Office in the Philippines

In conclusion

ONE HEALTH

highlights the science of
multisectoral integration
and its relevance to
rapid and effective response
to emerging diseases of animal origin