

# 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

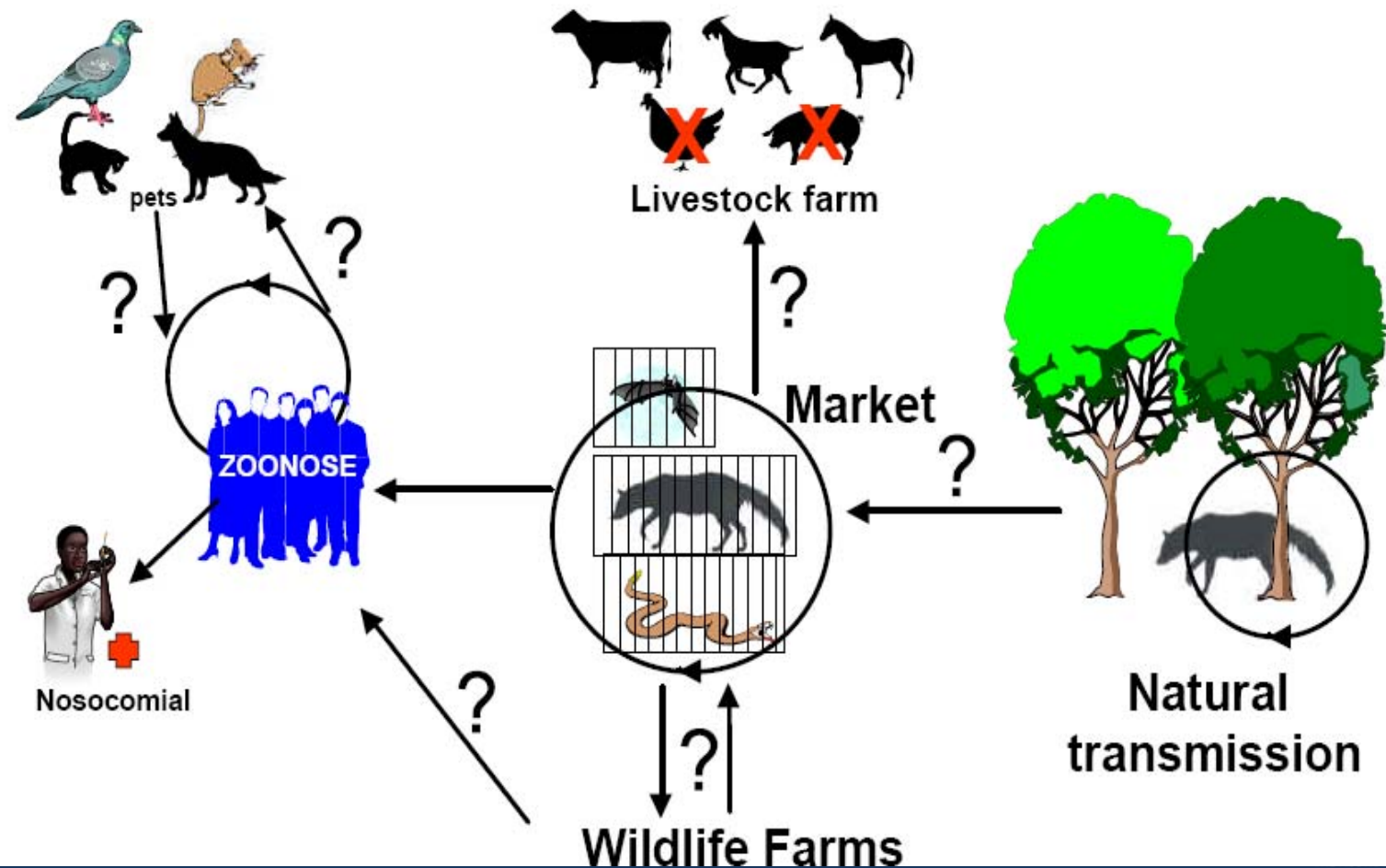
Source: <http://www.onehealthinitiative.com/>



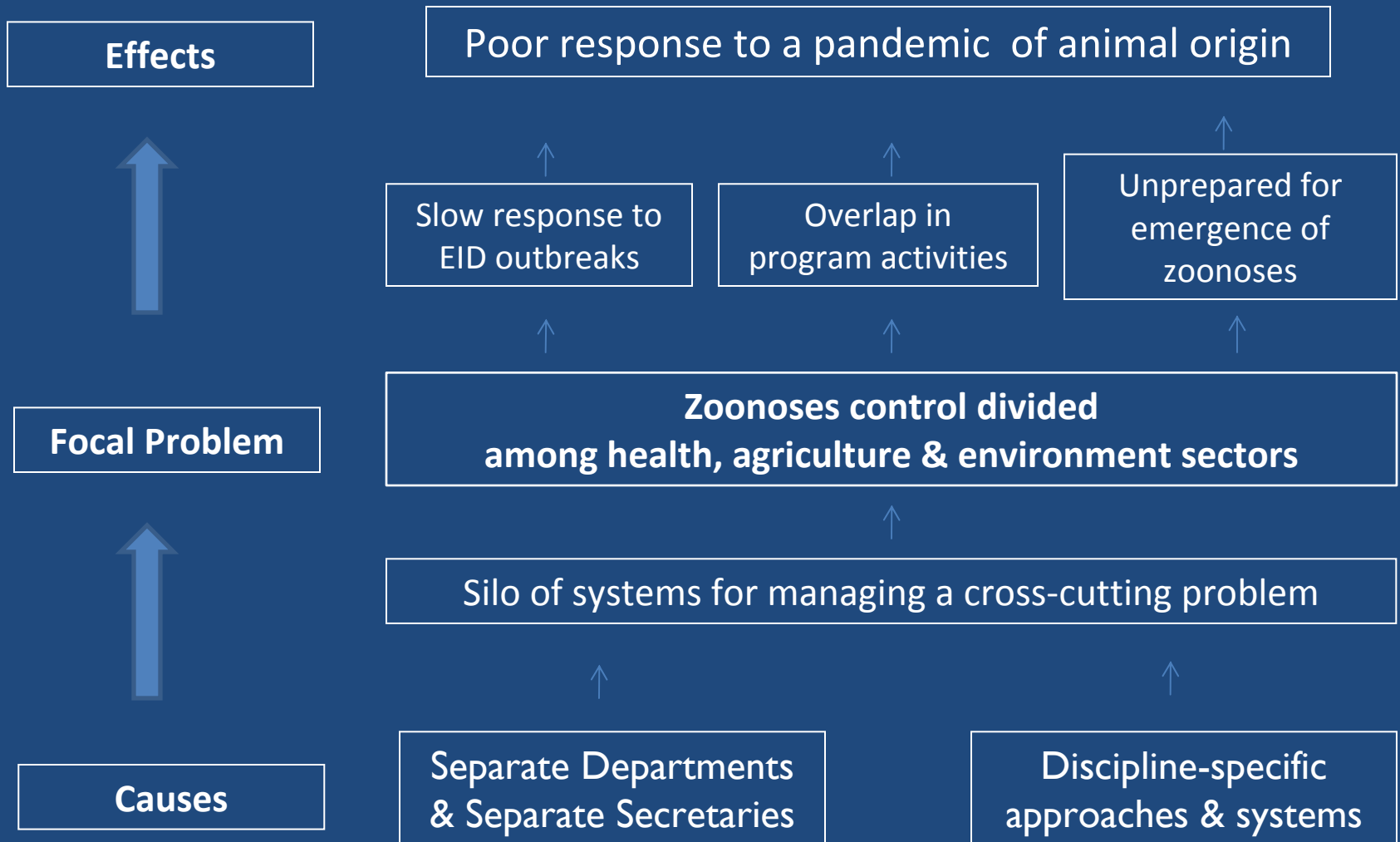
# SARS as a ZOONOSE

Addressed in the context of One Health

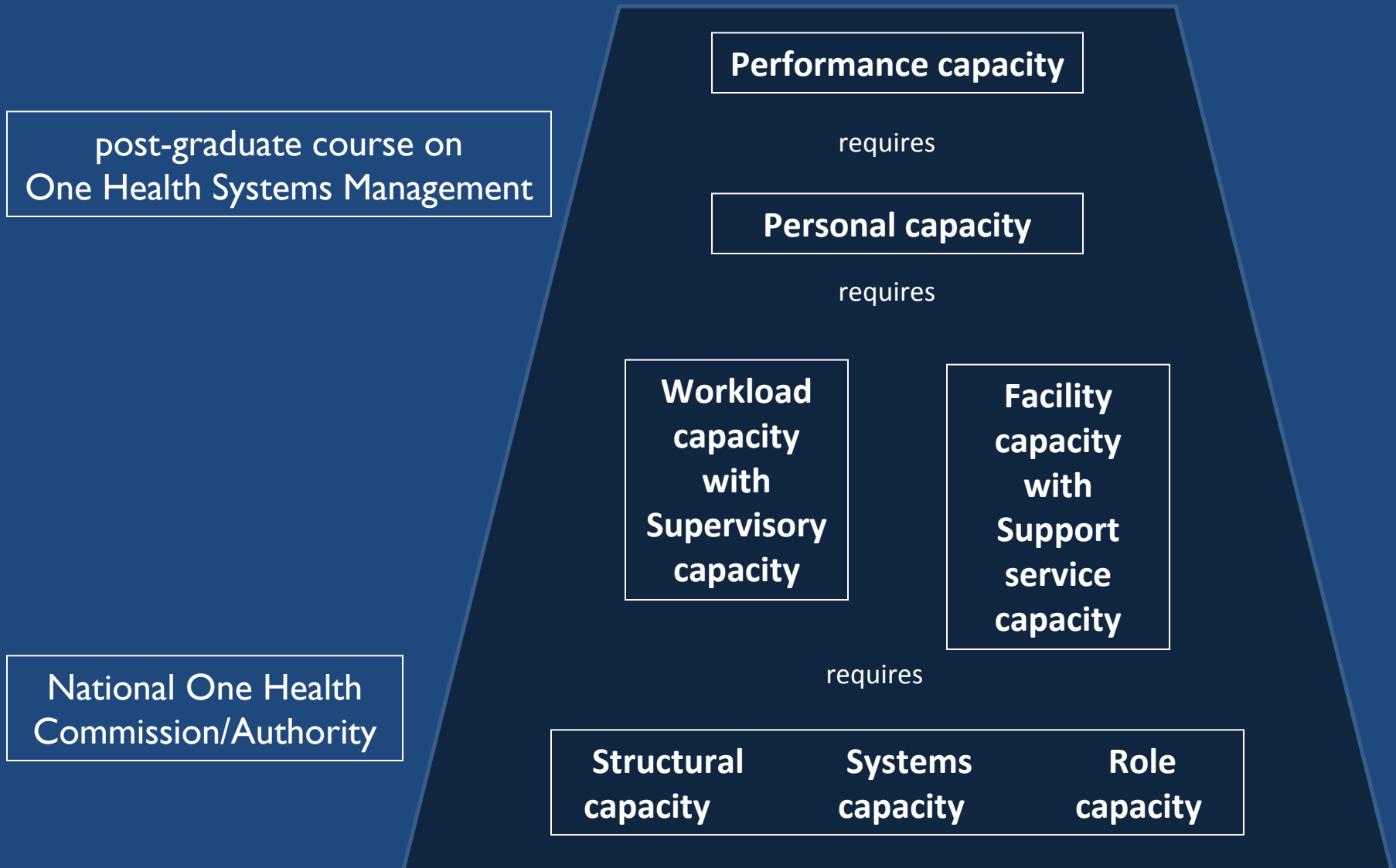
A possible cycle for SARS CoV transmission from animals to humans



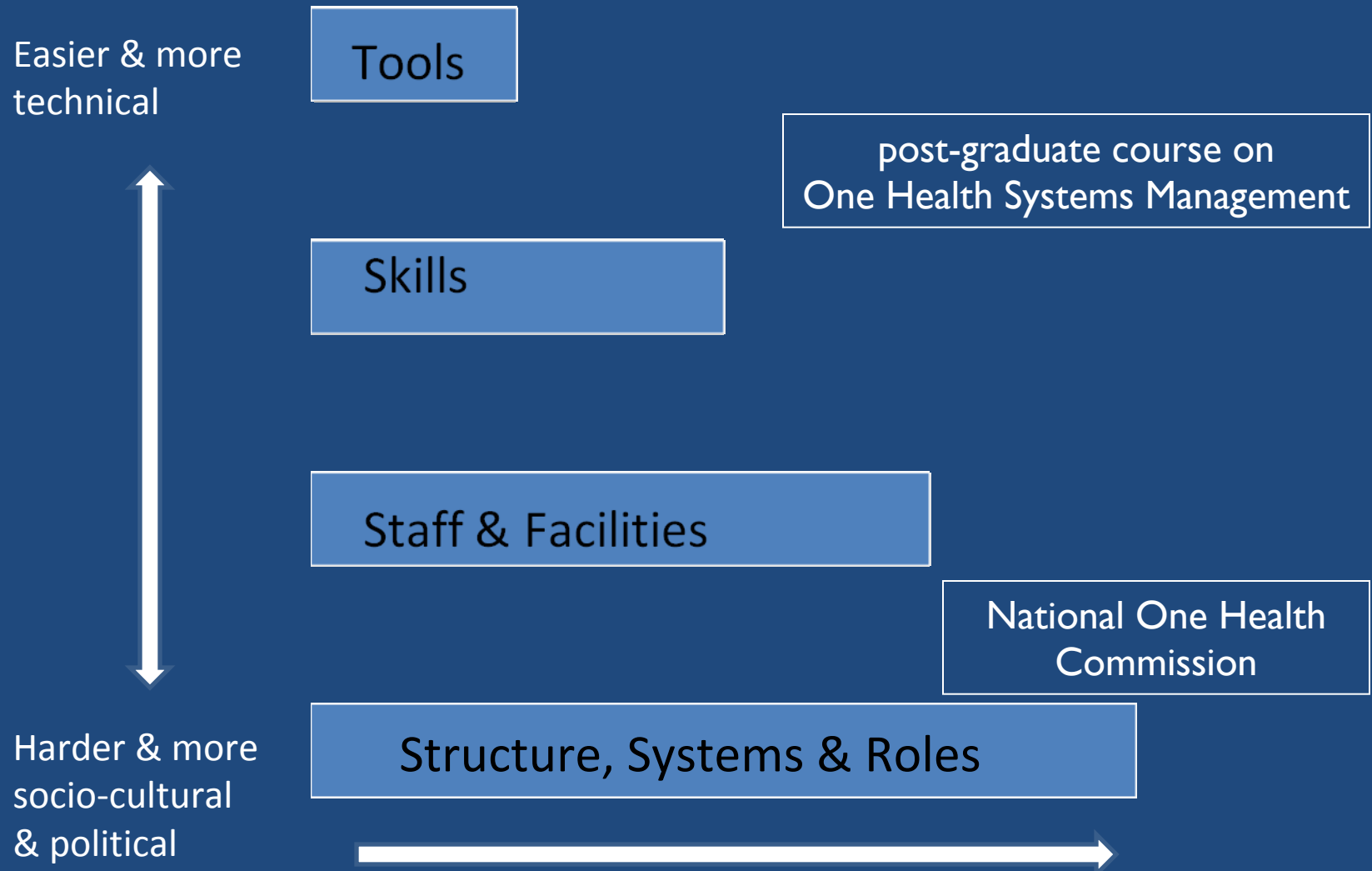
# Problem tree analysis



# Systematic Capacity Building



# Complexity / Time Dimension of Capacity Building



# 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

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Against change

Turf issues,  
unwilling to give  
up leadership

Investment on new  
office, new staff

Longer time  
needed to build  
One Health mindset

# 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