

Animal, Human, and Wildlife Sector Collaboration on Development of One Health Capacity:

A Pilot on Integrated Prevention and Control of Emerging Infectious Diseases and Zoonoses in Indonesia



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Introduction

Indonesia has been identified as one of the 'hotspots' for emerging infectious diseases (EID) in Asia. This increased threat of EID and other zoonoses underscores the need to strengthen the capacity to prevent, detect, and respond to new or re-emerging infectious diseases.

One Health is widely accepted as a valid approach for preventing and controlling zoonoses and EID. A One Health (OH) approach enables the animal, human and wildlife health sectors to collaborate at local, sub-national, country and global level to achieve the best health outcomes for people, animals, and the environment.

Through the Emerging Pandemic Threats (EPT2) program One Health capacity development and implementation mechanisms were developed at local and central government decision maker level in the Ministry of Agriculture (MoA), Ministry of Health (MoH) and the Ministry of Environment and Forestry (MoEF). Working at human, livestock and wildlife health interfaces commitment was built and cross-sectoral agreement was reached on capacity building for field officers in three pilot districts in Indonesia, identified as having a higher than normal potential risk for EID. Guidelines were developed on inter-sectoral coordination using a One Health approach for local government decision makers.

Methods



Figure 1. One Health Capacity Building & Piloting Processes

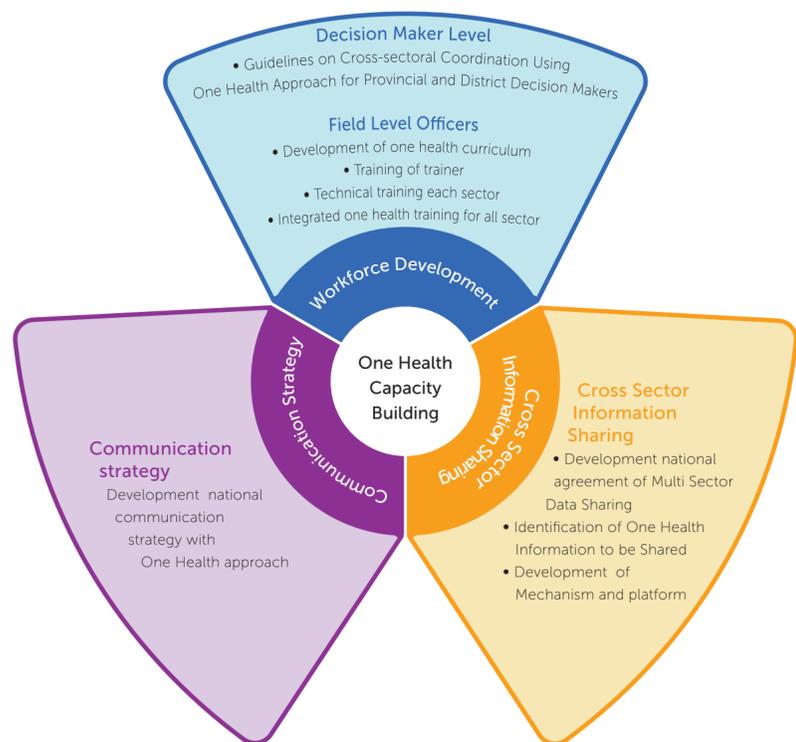


Figure 2. One Health Capacity Building Component and Main Activities

Results

1. Commitment between sectors was reached on planning, funding, and human resource allocation to build One Health response capacity of field officers in 3 pilot districts in Indonesia.
2. Progress on One Health workforce development (Figure 3)
3. Data and information sharing agreement between the three sectors
4. Guidelines developed on inter-sectoral coordination using a One Health approach for provincial and district decision makers.

Discussion

1. Following program implementation, it was concluded that to detect disease and respond in a timely manner it was essential to synchronize programs between sectors from the field level to the decision-maker level, particularly in district and provincial administrations.
2. Significant gaps identified during One Health implementation were:
 - a. The lack of medical background of MoEF staff, which lead to challenges during the training process.
 - b. The different network structure between sectors, leading to different bureaucratic procedures for response to disease outbreak events
3. Based on the needs assessment, the curricula as well as the basic training modules (for each sector) had a different single sector focus. The One Health Module mainly emphasized technical skills (rapid risk assessment, integrated outbreak investigation, integrated reporting) as well as soft skills (communication, coordination and collaboration in the field). (Figure 4)
4. Following the implementation of the One Health approach, the need for better field level information sharing was significant
5. A significant outcome of the process was the development of networks and communication channels between sectoral decision makers and field officers for timely and early detection, early reporting and early response to unusual high impact events.
6. Other outcomes of the training included:
 - a. Mutual understanding of the tasks of each sector and their inherent limitations.
 - b. Introduction of the One Health approach led to greater inter-connectivity and communication between sectors, improving cross-sectoral collaboration on early disease detection, reporting and response.

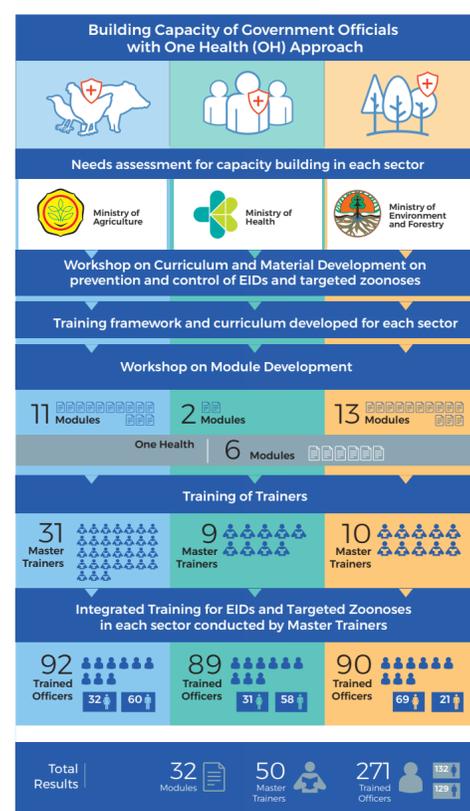


Figure 3. One Health Capacity Building Program in Pilot Areas

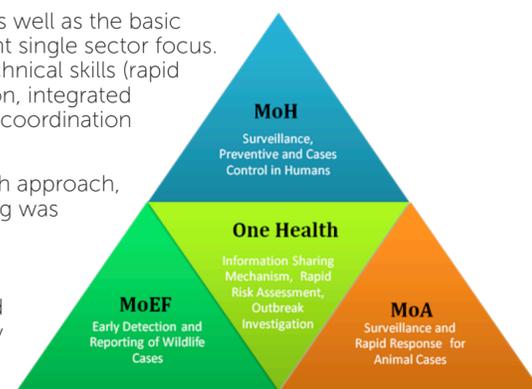


Figure 4. The main competencies of each sector and One Health integration

Lessons Learned

- Collaboration amongst stakeholders requires strong cross-sectoral understanding of problem identification and a willingness to seek practical solutions between sectors.
- The implementation of a One Health approach should be viewed as adding value to the field officers' daily work in each sector (MoA, MoH, MoEF).
- All sectors should understand their roles and responsibilities as well as their capacities.

- Agreement on a strong coordination mechanism at the central level linking downwards to the operational level is crucial.
- The development of a formal cross-sectoral information sharing mechanism is essential for early detection and response.
- Integrated One Health protocols, including Standard Operating Procedures (SOP) are needed to respond to zoonotic disease events in the field.

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