EcoHealth & One Health capacity building in Southeast Asia – an overview with focus on ILRI’s work

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On behalf of the EcoZD team

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Presentation outline

1. ILRI EcoZD
   • Background/Case studies & EcoHealth Resource Center

2. Comparison of selected One Health/Eco Health (OH/EH) initiatives in the region

3. Lessons learned/Reflections/what needs more attention
General objective:
Increase the EcoHealth capacity in SE Asia targeting the risks and impacts of Zoonotic Emerging Infectious Diseases (ZEIDs) and how feasible options can be best implemented

2008 – 2013 (papers & post EcoZD evaluation ongoing)

‘Learning by Doing’ of EH approach; also new for ILRI team

Regional: 6 countries
Key components

• Innovative **Eco Health research in** 6 countries (case studies)
  – Trans-disciplinary collaboration between institutions & teams –
  – New for most of the team members

• Establishment of two **Eco Health Resource Centres**
  – Chiang Mai University (CMU), Thailand
  – Universitas Gadjah Mada (UGM), Indonesia

  ▪ **Appraisal & Consultative Process**
    ▪ Outcome Mapping: demonstrate behaviour changes

• **Networking** with other OH, EH initiatives
ILRI EcoZD – 6 country teams & case studies

**Thailand/Vietnam:** Model of **Hygienic Small Scale Poultry Slaughter** House
Various institutions, Livestock Services, MoH, Universities, PhD student

**Cambodia:** Zoonotic Causes of **Acute Bloody Diarrhoea** in rural Cambodia
4 Institutes (Livestock/AH and Health)

**Vietnam:** Zoonoses priority ranking at Provinces in Southern Vietnam
(Leptospirosis in pigs and humans), 3 **Institutes (PH and livestock)**

**China (Yunnan):** Prevention and Control of **Brucellosis & Toxoplasmosis**
- 4 Institutions/Universities involved

**Indonesia:** Study on **Rabies Control** in Bali (dog ecology and behavior)
4 Institutions/NGO & 1 Universities

**Laos:** Study of **smallholder pig system** in lowland and upland
(zoonoses & production diseases), 3 institutions & 1 University
Experiences from EcoZD - challenges

- Time commitment of teams & partners
- Junior *versus* senior
- “Language – lost in translation”
  - e.g. EH (Bahasa Indonesia) & English skills varied widely
- Identification of a common research interest (e.g. China)
  - sometimes “painful” and time consuming, strong consultative process required
- Social science vs. biometric science background
  - Social science involvement remained a constant challenge
  - Qualitative vs. quantitative research
Experiences from EcoZD - challenges

- Continuous aspiration of EH, how to keep track
- Ensure continued engagement of various partners
- Two-dimensional capacity-building requirement
  - Technical (proposal writing/implementation/methodological)
  - EHRC concept
    - New ideas emerged – e. g. EHRC and EH manual
  - Analyze and synthesize quantitative and qualitative results
- How to share credits
- Policy engagement
- Sustainability
Potential solutions

- Flexible adaptive/consultative approach vs. carte blanche
- Continues “Learning by doing” experience
- Considerable and continued mentoring required to ensure an EH approach, adjusted by specific team needs
- Incentives, e.g. publications, conferences, accepted proposals
Case study: Brucellosis and Toxoplasmosis in Yunnan

Issues:
- 4 institutions with different priorities, also located in different places (counties)
- strong silo thinking... , issues on common research interest (e.g. TB, Bruc, Toxo, HPAI) & budget sharing
- considerable language barriers

Solution:
- local EH expert to provide technical assistance
- sufficient time to address challenges and build trust
- Get the team exited about new tools (e.g. FGD)
- Incentive: invited by FAO to Beijing to present results
- Extended networking (e.g. EHRC, CMU and PE)

➢ Finally one of the best teams
Old habits versus new habits
China team

FGD in the commercial dairy cattle farm and the village, Yiliang, April 2012
Eco Health (One Health) Resource Centre

- EcoHealth-OneHealth Resource center at Chiang Mai University (since Oct 2010)
- EcoHealth Resource center at Universitas Gadja Mada (since Jan 2011)

Capacity building (EH related courses)
Research (various case studies)
Communication/networking
Eco Health – One Health Resource Centre, CMU
Challenges & solutions

- **Limited understanding of EH**
  - Lecture series and seminars

- **How to ensure participation and motivation of faculty members to do EH research**
  - Motivate and involve just few interested individuals (2-3 faculties) rather than trying to get “as much as possible”
  - Common research interest
  - Peer reviewed publications - share credits

- **Sustainability of the center**, How to ensure continued operations in the absence of direct external funding
  - Linking the center to other initiatives
    - OH networks
    - Participatory Epidemiology
EcoZD – visible outputs

Engaging stakeholders to manage emerging zoonotic diseases in Southeast Asia
Jeffrey Gilbert, Detta Grace, Paul Unger, Lucy Lavoie, Renee Arcan, Virendra Neoptolemos, Alvin Bunt, Ting Fong Yuen, Wai Hoi, Swati Chaudhury, and Ronald Myatt

Outcomes in building capacity and strengthening networks: Ecohealth in Southeast Asia
Jeffrey Gilbert, Detta Grace, Paul Unger, Lucy Lavoie, Renee Arcan, Virendra Neoptolemos, Alvin Bunt, Ting Fong Yuen, Wai Hoi, Swati Chaudhury, and Ronald Myatt

Optimizing the Rabies Control Program in Bali through Understanding Dog Ecology and Relation of Dog with Society
Moving Knowledge into Action
In 2003, Bali was struck by rabies. Since then, the rabies outbreak in Bali has cost more than 13 million dollars and caused more than 150 human deaths. Significant financial and human resources have been invested in managing rabies on the island.

Vietnam research evidence for policy
Risk assessment for food safety in Vietnam

Increasing awareness of zoonotic diseases among health workers and rural communities in Southeast Asia
Jeffrey Gilbert, Detta Grace, Paul Unger, Lucy Lavoie, Renee Arcan, Virendra Neoptolemos, Alvin Bunt, Ting Fong Yuen, Wai Hoi, Swati Chaudhury, and Ronald Myatt

EcoHealth - OneHealth Resource Centre
Chiang Mai University
Now we are available online
http://ehrc.wet.cmru.ac.th/
EcoZD - Outcome mapping as M&E tool

A Two-layer process

Layer 1: Relationship between EcoZD project & 8 teams to influence teams’ changes in understanding and applying of EH.

Layer 2: Relationship between teams & their Boundary Partners (BPs) to support BPs’ changes in KAP.*

* Training/mentoring required
2. EH/OH initiatives in SE Asia

- 6 EH/OH activities in SE Asia implemented in the last decade investigated from secondary data and checked for:
  - EH/OH focus
  - Action research component/funded
  - Capacity building/curricula
  - Sustainability/external funding
  - Impact assessment
  - Scaling out demonstrated
  - Publications
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## Summary on initiatives focus and selected characteristics cont.

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EH/OH initiatives – lessons learned

- Most of initiatives focused on capacity building, others mainly on research or both
- Research results generated using an OH/EH approach (EIDs or ZEIDs), but quality varying
- Limited number of peer reviewed papers
- High number of “locally” published papers
- Several networks established
• Impact assessments on the OH/EH approach
  – What has really changed and how
  – How can we document these changes
  – How sustainable are these changes
  – Demonstration of the value added – more case studies

• Decrease donor dependency
  – increase co-funding proportion or self funding
  – collaboration between existing initiatives, joint proposal or grants, attracting several donors
    • Could be also a donor demand, current CGIAR reform a good example
EH/OH initiatives
– final reflections and what needs more attention

• Scaling out
• Stronger private sector engagement
• Policy translation
  – Policy briefs, national/regional for a
  – 1\textsuperscript{st} Regional EH Symposium (June 2013  ➔ 2\textsuperscript{nd} in 2015?)
• Move from projects to programs
• Various initiatives need to operate more coordinated
INDOHUN
THOHUN
VOHUN
MYOHUN

EcoEID
EcoHealth Network
ComAcross
GHI
BECA
ILDRC
CRDI
USAID
Emerging Pandemic Threats Program
ACIAR
World Health Organization
World Organisation for Animal Health
Modified from Hung Nguyen, 2013
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better lives through livestock

ilri.org