The urgency of adopting systemic approach

GREASE: a platform in partnership for research and training in SEA

Flavie Luce GOUTARD– UMR ASTRE CIRAD
Impact of Covid crises in animal sector

● Reduced testing and diagnostic capacities
  ○ Shortage of commonly used ribonucleic acid (RNA) extraction kits, polymerases and specimen swabs will restrict the ability to test animal diseases.
  ○ Societal lockdowns and the closure of some veterinary laboratories and institutions have suspended animal disease testing and research.

● Disrupted animal disease surveillance and reporting
  ○ Disease surveillance activities such as outbreak investigation and disease reporting could be disrupted due to logistical issues including restrictions and constraints on: access to farms, transport of samples, access to equipment and personal protective equipment (PPE).
  ○ Donors may switch priorities to manage the most relevant issues created by production and market disruption, reducing funding and/or logistical support to other project

Management of Emerging Epidemic Risks in Southeast Asia - GREASE

**CIRAD** is the French agricultural research and international cooperation organization working for the sustainable development of tropical and Mediterranean regions.

**GREASE** is research and training platform in partnership implemented by Cirad and its partners in Southeast Asia (Thailand, Laos, Cambodia, Vietnam, Indonesia, Philippines). The platform creates an interdisciplinary framework for understanding **OH / Ecohealth** complex issues.
The urgency of adopting systemic approach for prevention:

*Understanding the origin, the emergence and the spread of epidemics*

- Research project to understand risk factors of emergence of zoonoses – *agricultural intensification, land use change, population dynamics, environmental degradation, biodiversity loss, climate change* ...

- Developing and evaluating **OH surveillance network**
  - **ZooCov Project** “Towards an integrated surveillance of potential zoonotic Betacoronaviruses in the wild animal value chains of Cambodia” Cirad, IPC, WCS, GDAHP, MoH, FFI
  - **Policy Brief** “Moving towards a One Health surveillance system for antibiotic resistance in Vietnam”

- Supranational surveillance systems such as the innovative digital surveillance mechanism being designed as part of the **MOOD project** (MOonitoring Outbreak events for Disease surveillance in a data science context)
The urgency of adopting systemic approach for prevention: the benefit of agroecology

- Inventing intensification pathways that make use of the ecosystem services of biodiversity (ecological/agro-ecological intensification via different approaches), in order to limit the use of inputs in overexposed areas, without prohibiting the use of inputs in under-resourced systems.
  - Agro-ecology and Safe food System Transitions (ASSET) project between 2020 and 2025, aiming at supporting the transition of food and agricultural systems towards more sustainable systems in Southeast Asia.
The urgency of adopting systemic approach for prevention: One Health Education

**InterRisk Master** “Assessment and management of health risks at the human, animal and ecosystem interface”

- **A One Health approach**
  - Training for better assessment and management of health risks at the human, animal and ecosystem interface and at inter-sectorial level

- **Program aims and key competencies expected**
  - To conceptualize and design holistic programs integrating epidemiological, ecological, and socio-economic approaches
A need for a global response

- **Impact evaluation** of post-Covid crisis:
  - Technical **AND** socio-economical
  - Focus on most vulnerable population

- Using the global networks of **platforms** in Partnership: international community of about 1000 knowledge producers (scientists, trainers, practitioners, civil servant, farmers, breeders,...)

- Regional connections between SEA platforms (Cirad, IRD, SEAOHUN, IP ...)

---

Online MSP Meeting 14-18 September 2020
Thank you