Ecohealth research in practice: Insights from researchers in Kunming, China

Giang Pham, Steven Lam, Fang Jing, Dinh Xuan Tung, Hung Nguyen-Viet

The Field Building Leadership Initiative: Advancing Ecohealth in South East Asia and China (FBLI) (2011-16) was created to address health and environmental risks associated with agricultural intensification through research, capacity building, knowledge translation and networking in Ecohealth (Lam et al. 2016). Developed jointly by research centers in China, Indonesia, Thailand and Vietnam and funded by IDRC Canada, this initiative was designed to, among others, strengthen the Ecohealth field in Southeast Asia and China, and build a mature field of research training, and practice.

The FBLI research group at the Kunming Medical University (KMU) focuses on on addressing the impacts of pesticide use on health and environment in Yuanmou County, Yunnan Province, China. The new generation of pesticides that claim to be highly effective, and low in toxicity and residues, is actively promoted by China’s agricultural extension department. These pesticides are widely used by local farmers yet the long-term risks on human health and ecosystems are not well understood.

To capture FBLI China’s progress towards Ecohealth field building outcomes, along with challenges and lessons learned, the Coordinating Unit (CU) at the regional level facilitated a session with the FBLI China team in October 2015 to reflect on outcomes. This work highlights reflections of FBLI China researchers.

Outcome-based evaluation

The evaluation aims to capture outcomes, particularly field-building outcomes, of the China team, and identify challenges and lessons learned. Two evaluation questions are explored: (i) to what extent and how do the outcomes of FBLI represent a (potential) contribution to advancing Ecohealth in China; and (ii) what are the challenges that the FBLI China encountered in achieving expected outcomes of the program?

The data collection process used tools such as focus groups, in-depth interviews, and program document reviews. The process, including five steps, was adapted based on the Outcome Harvesting approach designed by Wilson-Grau (2012).

- Step 1: Review program documents to formulate draft outcomes
- Step 2: Discuss with FBLI China team members on outcomes
Transdisciplinary is one of the six principles of Ecohealth approach and involves both academic and non-academic knowledge and perspectives (Charron 2012). Transdisciplinarity can be acquired through long-time engagement of all parties in the research.

The FBLI China team experienced transdisciplinarity through a number of activities since 2012. For example, to understand the situation of pesticide use in the area and identify solutions, the FBLI China team has been working with the community in Yuanmou County including officials from Chinese Center for Disease Control and Prevention (CDC) and farmers from four local villages. Both groups participated in identifying research issues and solutions.

Another example reflecting the change in doing research is using urine test results to raise awareness of the local farmers surrounding pesticide use. One hundred and twenty (120) urine samples were taken including adults and children, with the dual purpose of laboratory testing and raising awareness. The test results were discussed face-to-face between researchers and the farmers who gave their urine samples. By this way, urine test is not only a scientific research but also a tool to raise people’s awareness.

Local partners were actively engaged in the research process

Yuanmou CDC has been a very supportive partner of the KMU research team since 2006. In an interview with the team members, the team leader indicated that CDC officers showed interest in the Ecohealth research and actively participated in field work (e.g. collecting urine sampling), a first since initial collaborations. The repeated visits of the
researchers to the CDC office to seek for data and information have gained attention of CDC colleagues.

“While in the traditional research, people just come once or twice during the data collection. They [the CDC officers] sometimes felt annoyed when we [FBLI researchers] came back very often”, noted by the FBLI China team member. The CDC partners accompanied the team on several sampling missions in the field. The local partner engaged in the research process in a more active way which gives chances for them to gain deeper understanding about Ecohealth research. It would consolidate the trust of local partner for the research team.

Another evidence for the increasing recognition of Ecohealth approaches among the peer community is the diversity of participants in The Future Leader Training in May 2014. Among the list, there were participants from four university in china and the FORHEAD network.

**Challenges**

The FBLI China team identified challenges in doing Ecohealth research:

- Administration is often inflexible, whereas Ecohealth research is flexible. Changes in research plans (often encountered in Ecohealth research) complicates administrative processes, often leading to delays
- Policy advocacy is not a linear process, difficulties in reaching policy makers
- Researchers encounter challenges in balancing traditional academic norms (e.g. produce publications) with creating positive changes in the community (e.g. interventions)

**Lessons learned**

- Defining Ecohealth field building outcomes are challenging at initial planning stages, however, this activity helped identify and formulate outcomes
- ‘Know someone who knows someone’, connecting with researchers with links to policy-makers can help reach policy makers

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• There are similar outcomes and challenges between FBLI China and FBLI Vietnam, suggesting value in further cross-country exchanges in the future.

**Conclusion and next steps**

Four years since project implementation, changes in behaviour among stakeholders were observed. The FBLI-China team and partners became an informal coalition that raised issues surrounding pesticide use. Regular communication was established between team and partners, and some training of researchers in Ecohealth was achieved. The emphasis on community engagement was the key to the success of project activities so far.

The outcomes harvested from the FBLI China activity are initial but significant, representing gradual contributions to build the field of Ecohealth. Field building is an ongoing process, and the outcome harvesting allowed FBLI-China to better understand contributions to the process, as well as challenges, in order to move forward into its final year of FBLI implementation.

To continue to advance the project, suggested next steps to move forward include:

• Continued engagement with researchers with links to policy makers, and stakeholders
• Sharing reflections and early outcomes to encourage partners to continue advocacy for changing pesticide use
• Communication among research teams of four countries to share experiences.

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**References**


**Contributors**

1. **Giang Pham**
   FBLI Coordinating Unit, Ecohealth Field Building Leadership Initiative
   Email: pthg@hsph.edu.vn

2. **Steven Lam**
   Monitoring and Evaluation Specialist
   Center for Public Health and Ecosystem Research, Hanoi School of Public Health

3. **Fang Jing**
   Research Component Leader, FBLI China Research Team Leader
   Kunming Medical University

4. **Dinh Xuan Tung**
   FBLI Coordinating Unit, Ecohealth Field Building Leadership Initiative

5. **Hung Nguyen-Viet**
   FBLI Regional Coordinator, International Livestock Research Institute (ILRI), Hanoi, Vietnam

*For a copy of the full report, please contact Giang Pham.*

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