

Research Program: ECO-HEALTH FIELD BUILDING LEADERSHIP INITIATIVE (FBLI)

Use of participatory rural appraisal (PRA) tools for Eco-health research: A case study on agricultural and human waste management in Hanam province, Vietnam

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INTRODUCTION

This research is one of components of the Eco-health Field Building Leadership Initiative (FBLI) program, which has been developed by a research team in Vietnam. The purpose is to address human health problems related to agricultural and human wastes management in Ha Nam Province, an agriculture province in the Red River Delta of Vietnam with the remarkable changes in the agricultural intensification in the recent years. The research project has involved multi-stakeholders and multi-institutions as well as policy makers. In this research, we have applied Participatory Rural Appraisal (PRA) tools with Eco-health perspectives in order to identify emerging needs of local communities, feasible solutions, and reasonable plans in the comprehensive aspects of agricultural intensification.



Picture 1: Local people are using PRA research tools to identify emerging needs of their local communities

MATERIALS AND METHODS

During the year of 2013 and 2014, the PRA qualitative research component was implemented, in which we conducted participant observations, focus group discussions (FGDs) in relation to various research tools such as Participatory Problem Analysis, Venn Diagram, Spider Diagram, and Seasonal Calendar. These research tools were used for 15 FGDs (3 local authority and 12 resident groups) of 102 local participants (43 men and 58 women) at Hoang Tay, Le Ho, and Chuyen Ngoai communes in Hanam province. Each group of 6-10 local people with diversity in gender, age, and farming activities discussed their concerns with the research team.



Picture 2: Livestock waste management issues in Hoang Tay commune

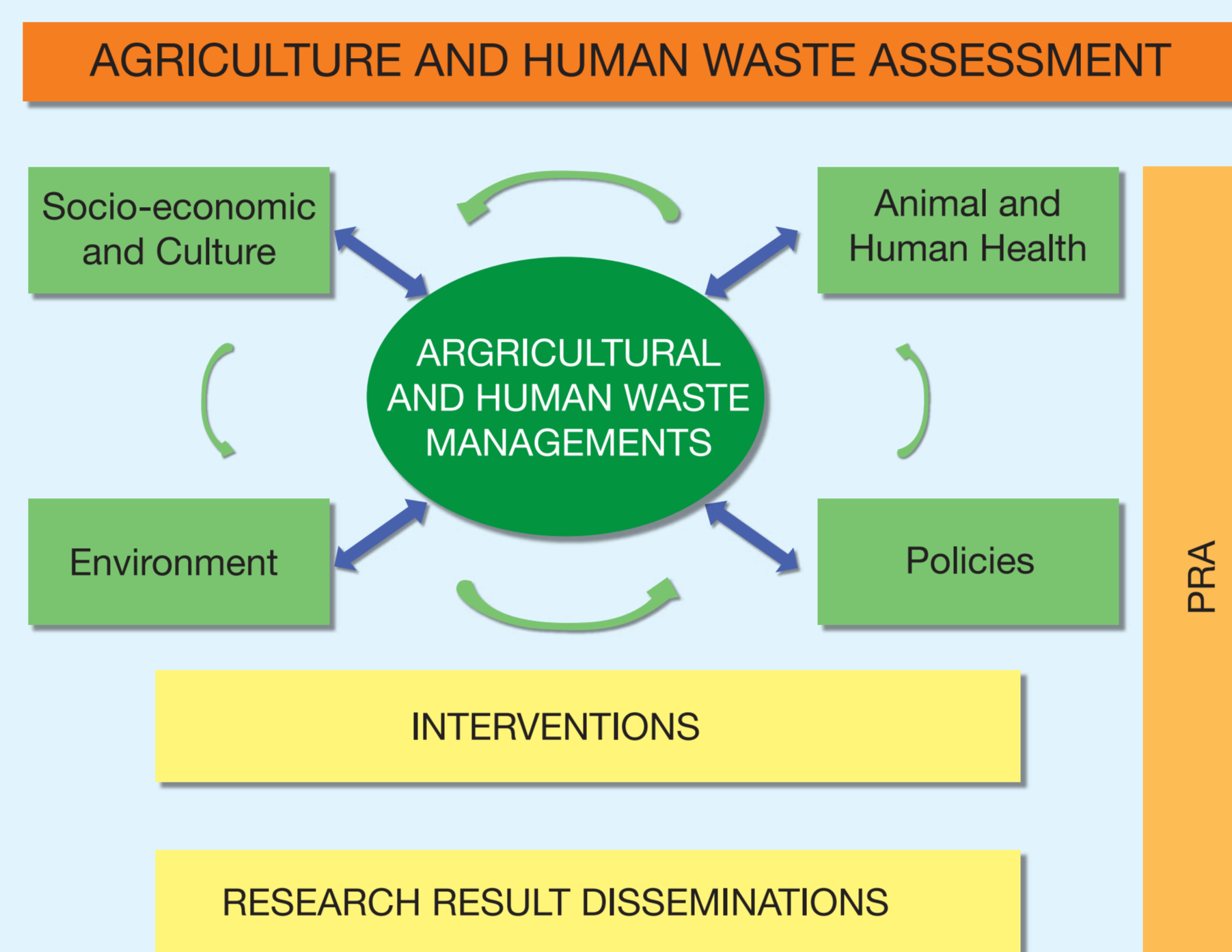


Diagram 1: Framework for studying Agriculture and Human Waste Managements by PRA



Picture 3: Poor pesticide packages waste management in Le Ho commune

CONCLUSIONS

By applying Eco-health approaches and PRA tools, the research team together with local people identified priority issues and solutions for agricultural waste management in order to improving community's health. The result has been used for intervention plans in the next step of the project.

RESULTS

The two main concerns of the local people were poor livestock waste and pesticide package waste managements.

Livestock waste management: Reasons leading to these matters identified by local people were:

- Cleaning breeding facilities were not good.
- Some households have used animal waste without treatment or not properly treated.
- For most households who treated animal and human waste by biogas, the quality of waste water often did not reach the required standards.
- Other kinds of waste also did not managed properly.

Pesticide packages waste management: The identified reasons were:

- Local people' awareness on pesticide safety and environment protection was still limited.
- There were no designated places for disposing off package waste.
- For some places where having tanks for containing these wastes, the management and maintenance of the tanks were not good.

Proposed solutions:

For local people:

- To improve awareness of cleaning breeding facilities for breeders and change behavior in collecting agriculture waste for cultivators.
- To encourage local people using appropriate waste treatment models such as biogas, bio-cushions.
- To use treated waste effectively.

For local authorities and social organisations:

- To build up synchronic sewerage systems.
- To build up pesticide package waste tanks at convenient positions.
- Environment protection, animal and human waste treatments and managements, pesticide package waste collections should be put into village regulations.
- To organize technical training courses and to have financial supports for local people to build up appropriate waste treatment models.
- To establish teams who can manage waste tanks and collect waste regularly.
- Budget to maintain these activities should be socialized.

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