

Penultimate year FR Evaluation

Title of the Project	Managing Environmental Risks to Food and Health Security in Asian Watersheds
Project Leader	KADA Ryohei
<p>General advice and comments of PEC:</p> <p>The project is crucial in terms of its focus on the impact of heavy metal pollution and mass fish killings on water quality of Laguna Bay area in the Philippines and its influence on food and health security. The research in its given two-year period has been done adequately and close to the overall mission and direction of RIHN. Nevertheless, there are various other factors that affect the water quality, escalate environmental issues and cause risks to food and health security in the target area. Population rise, role of private sector, issues between different stakeholders and other visible risks might be further investigated. Causality of these factors might also be further demonstrated during the last year. Then this project might present a reliable feedback and a case study for other Asian countries. So far, there has been a good interaction in terms of releasing and sharing your project results. Your project and its results might be valuable for local governments if you could propose a risk assessment and management model for them. PEC recommends integrating the results of each project group and clarification of the pathway towards transdisciplinary interaction among stakeholders during the final year.</p>	
<p>Reply</p> <p>1) Not only heavy metals but also other major impacting factors should be researched and analyzed.</p> <p><u>Response:</u> We fully recognize that other major organic pollutants such as nitrogen and phosphates are existent in the Laguna de Bay, and are impacting often seriously on food and human securities. Those nutrients mainly come from agriculture, industry or households in the upstream areas. The concept of Payment for Ecosystem Services (PES) has been investigated in this project, designed to induce upland farmers to adopt conservation practices to reduce the loss of nutrients. Furthermore, the UP Los Banos team examines the effects of solid waste management and other possible sources of pollution in the region during the final year;</p> <p>2) Other Asian countries should better be analyzed as for reliable feedback and representation.</p> <p><u>Response:</u> We believe there are relevant implications to Southeast Asian countries which could be analyzed by this research. The Philippine case can be considered as a model to solve similar issues in</p>	

other regions in Southeast Asia. In fact, since 2011 we have conducted similar researches in Malaysia and Indonesia by adopting exactly same research framework and methodology for the purpose of comparison among those countries.

3) Need to clarify the pathway towards transdisciplinary interaction among stakeholders.

Response: The key concept of “community participation” has been designed throughout this research period, while emphasizing the interaction among policy-makers, local governments, scientists and community people. In developing this framework of transdisciplinarity, we have invented the “Yaman ng Lawa” (Blessing of the Lake, in Tagalog), a voluntary program that is basically an application of the framework for involving the communities and local governments in assisting and finding practical solutions to the specific environmental issues identified by the local people.