## **Local Ecological Knowledge of Northern Thai Fish Farmers on Climate Change**

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## ABSTRACT

Increased frequency and severity of climate variability and extremes prompt governments, international organizations, academics, business people, local communities and other stakeholders to consider disaster risk reduction. Among different stakeholders, local communities are directly and most affected by disasters, and they are more concerned about mitigation and adaptation than others. Consequently local communities should be the focal point of disaster risk reduction. Nevertheless, they are in fact overlooked or dismissed by the top-down, science-based plans and policies leading to limited success of such plans and policies. A new promising trend is to focus on community-based disaster risk reduction that integrates both scientific and local knowledge systems. To achieve this, understanding of local ecological knowledge is important since local communities accumulate ecological knowledge and experiences in their daily lives. This paper examines local ecological knowledge of inland fish farmers, both cage culture system and pond culture system, in the Ping river basin in Northern Thailand examining how different local groups use ecological knowledge to explain and understand climate-related problems that affect their aquaculture practices, how they use this context-specific knowledge system to adapt to climate change problems, and how this knowledge interact with dominant scientific knowledge when local communities work with government officials, academics, agribusiness companies and other stakeholders in the process of disaster risk reduction.