The role of middlemen networks and markets in responding to climate variability and extremes in the aquaculture sector in Northern Thailand

Tanyawat Kampa\textsuperscript{a}, Manoj Potapohn\textsuperscript{a}, Louis Lebel\textsuperscript{b}*

\textsuperscript{a} Faculty of Economics, Chiang Mai University, Chiang Mai, Thailand
\textsuperscript{b} Unit for Social and Environmental Research, Chiang Mai University, Chiang Mai, Thailand

**ARTICLE INFO**

*History:*
Draft: 13 Nov 2015
Draft. In prep.

**Keywords:**
Fish farming,
Markets,
Middlemen,
Social networks,
Extreme climate events
Climate variability

**ABSTRACT**

Middlemen are a prominent feature of the aquaculture sector in many countries: linking producers to fish markets, and often also providing key inputs. Common criticisms of middlemen include that they push down farm-gate prices, and do not share risks for production failures. This study took an ethnographic approach to look at the roles, strategies, and networks of middlemen in two areas of Northern Thailand with distinct tilapia culture practices and market organization. Middlemen were categorized into organizations, field agents, and private traders. Organizations included: cooperatives, clubs, and companies. Field agents included: field managers, checkers, and salesman. Middlemen of various types attempted to manage fish supply by monitoring production volumes, planning and manipulating harvest schedules, and observing markets. The quality of relationships among middlemen had a significant bearing on both fish farmers and market structure. Close and regular relationships ensured secure market access for fish farmers, and a stable supply for consumers. In times of climate-related stresses, middlemen drew on their networks of relations to try and maintain supply and stabilize prices. Personal, semi-formal, and formal relationships were all relevant in particular situations.

* Corresponding author

E-mail address: .