

Fish Farmers' Utilization of Social Networks in Adapting to Drought and Water Pollution in Upper Northern Thailand

Weerakan Kengkaj^{a,b*}

^a Faculty of Social Sciences, Chiang Mai University, Chiang Mai, Thailand

^b Unit for Social and Environmental Research, Chiang Mai University, Chiang Mai, Thailand

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ABSTRACT

Many scholars view social capital as being important for adaptation to climate change. Less attention has been given to understanding power relations among resource users connected through social networks. This paper focuses on how social networks of individual fish farmers with other farmers, fish farmer cooperatives/groups, and the Royal Irrigation Department officials, are utilized during times of drought and poor water quality. The study was conducted during 2013-2014 in three villages located in upper Northern Thailand. Information was collected by participant observation and semi-structured interviews from 32 fish farming households, and 16 key informants. Findings revealed that water scarcity and conflict, previously rare, worsened in 2013 and 2014 as a consequence of: decline in local irrigation management (*Muang Fai*); variability in climate; increased water demands; and lack of collective action among water users in maintaining the irrigation system. The study found that fish farmers use social networks to access water in situations where the water management institutions were not functioning properly, or ignored their interests. Strong bonding ties were important when bridging ties failed; but when bonding ties were strong, the presence of bridging ties in a community was not helpful to smaller, less well-connected fish farmers. Differences among the three villages studied imply that either the state, or the community, can manage water alone. Attention to the quality and extent of ties in social networks is useful for explaining, and possibly also in resolving, resource conflicts.

* Corresponding author

E-mail address: .