Thesis Title Community-Based Water Resources Management for Livelihood

Improvement and Poverty Reduction. A Case Study at Lao Nya

Village, Pathoumphone District, Champasak Province, Lao PDR

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## **ABSTRACT**

Water is one of the most fundamental components of socioeconomic development in any society. In the agricultural-based society of Laos, including Lao Nya village, water plays a critical role in livelihood improvement and reduction of poverty. This research focuses on water issues related to both direct consumption of drinking water and also its use in supporting agricultural production for self-sufficiency and for profits from crop sales. The analysis is concerned with people living in the buffer zone of a protected area (a very sensitive upstream landscape). Their livelihood and well-being always have a causal relationship with the quality and quantity of water, as well as with biodiversity in these protected areas. Ensuring sustainable livelihood and the well-being of these people is both critical and necessary.

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This research analyzed the livelihood options and poverty conditions of the residents at Lao Nya village. The demand, supply and management regimes for water as well as local practices were assessed. The principal aim of this research was to address the following three questions: (1) How can water be better managed throughout the participatory processes encompassed in the community-based approach? (2) How can local initiatives on water management contribute to livelihood improvement and poverty reduction for local village residents? (3) What appropriate water management practices can be integrated based on existing conditions? Social equity and water governance between upstream and downstream communities are also taken into consideration in order to ensure the sustainability of the whole watershed.

The main findings of the research include the fact that a local initiative on water management (construction of a dam, fishpond and water diversion canal) has increased rice production by 60 tons per year and adds some 30 hectares of paddy land (61% of 48.96 hectares) of total that is cultivatable in the dry season. In addition, three more hectares of cash crop land was made available for cultivation by this irrigation, while water quantity and quality increased and improved, respectively. In addition, new integration of water management strategies include a community fishpond, combined rice-fish production in paddy fields, river bank cropping practices and promotion of hygiene awareness among villagers. Benefit sharing from the water initiative within Lao Nya and another village downstream (Na Bon) is being managed through negotiation and cooperation among these village committees. Water governance covers watershed protection, water sharing, and operation of existing water facilities, namely a dam, a canal and water wells.

**Keywords:** Lao PDR / water resources / livelihood / poverty reduction / community-based water management / water governance / social equity