
Fisheries co-management in Lower Songkhram River Basin: problems and challenges

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ABSTRACT

The current crisis in resource management is caused, to some degree, by a lack of legitimacy of management regimes. Legitimacy can be improved by co-management, which has been applied in many countries and it is believed that it could lead to more sustainable fisheries management. Main issues/problems and suggestions relating to fisheries activities in the Lower Songkhram River Basin (LSRB) have been identified during a Stakeholder Workshop on Fisheries management in the LSRB, which was carried out in early August 2005.

LSRB is a part of the Mekong River Basin. It covers 33 districts across four provinces in the Northeast of Thailand: Udonthani, Nong Khai, Sakhon Nakon and Nakon Phanom provinces; with a total area of approximately 3,451 km². The LSRB is the most fertile river basin in Thailand, due to a variety of ecosystems with large flood plains. It is the lifeblood of the region, supporting the livelihood of the people within the basin. Most people living in the LSRB are still heavily dependent on natural resources from the basin, as well as fishing activities, which play an important economic role.

The LSRB is a topographically flat basin and due to its flood pulse pattern, experiences heavy flooding. As a result of the geo-physical features of the basin, coupled with its severe seasons of flood and drought, land is mostly unsuitable for general agricultural extension practices.

It would be expected that fishing activities support a great deal of the basins economy. The results from the workshop confirmed that the fisheries sector plays a highly significant role in the LSRB. The fisheries resource has been exceptionally productive and as a result, has been heavily utilized for many decades, the main problems now being faced include illegal fishing, decreasing catch, degradation of habitat and demand from markets. The lack of alternative economic activities has not only been attributed to the exploitation of the fisheries sector, but also the level of poverty in the basin.

Appropriate fisheries management measures are urgently needed to secure the sustainability of the resource. There are numerous suggestions in order to overcome these issues which were provided by participants. For example, laws and legislation should be reviewed and/or revised, occupational opportunities/alternatives should be developed and relevant research is needed to support the formulation of sustainable fisheries management. Nevertheless, this will not work unless implemented in collaboration with all relevant stakeholders, which would be encouraged and supported to reach an integrated, holistic and joint management, leading to sustainable outcomes. How to facilitate these management measures to be more practical will be a major challenge for fisheries management in LSRB.

KEYWORDS: Fisheries co-management, fisheries resources, Songkhram River Basin, problems, challenges, way forward, workshop

INTRODUCTION

Songkhram River Basin is a part of the Mekong River Basin. It covers 33 districts of four provinces in the Northeast of Thailand: Udonthani, Nong Khai, Sakhon Nakon and Nakon Phanom; with a total area of approximately 3,451 km² (Khon Khen University, 1997). Songkhram River Basin is

considered the most fertile river basin in Thailand due to a variety of ecosystems with large flood plains, particularly from the river mouth to Klam Taka District of Udonthani Province, which stretches over a total of 170 kilometers (Mari et al., 2001)

The Songkhram River is vital, just like an artery in the sense that it provides support to the people's livelihoods throughout the basin. Most people living in the basin are still heavily dependent on the natural resources from the seasonally flooded forest and wild plants, as well as fishing activities that play an important economic role in people's livelihoods. Fishing not only provides and ensures food security for the communities in the basin as the most important single source of animal protein, but also offers important sources of income. The current fishing activity in the Songkhram River is conducted throughout the year. The common fishing gears used in the Songkhram River Basin are gill nets, fish traps, stationary trawl nets, hook, long-line and cast nets. Moreover, some of those are illegal fishing gears, according to the fisheries regulations. Some of these include push nets, big fish traps and stationary trawl nets. The operation of illegal fishing gears would negatively affect the fisheries resources.

Increasing population in the existing socio-economic environment is placing huge pressure on this unstable fisheries resource; a situation that has already occurred in the Lower Songkhram River Basin. Most fishers in the Lower Songkhram River Basin have extensive experience in fishing, and have developed fishing gear to improve its efficiency in catch per unit of effort. However, such modified fishing gears are illegal according to fisheries regulation. In contrast to this, degradation of the seasonally flooded forest is becoming serious due to expansion of land use for agricultural activities, which remain unregulated and unchecked.

The problem related to fisheries resources in the Lower Songkhram River Basin becomes more complicated, while the actual problem in terms of the low compliance of fisheries regulation together with conflict between the government sector and fisher community on illegal fishing are still occurring. In addition, there are several organizations interested in carrying out overlapping activities in terms of different project implementation in the same area without the presence of co-management. Consequently, fisheries resources are declining which will eventually affects people's livelihood.

Therefore, in order to overcome this problem and to improve the fisheries management system, the collaboration from all relevant stakeholders on fisheries co-management is encouraged and supported to reach the integrated and holistic management approach for sustainable development. The stakeholder workshop on fisheries co-management will be held in order to facilitate the joint fisheries management process between users and government agencies. In addition, these workshops are aimed at implementing management strategies, which remain unclear, and will attempt to identify possible solutions by involving users and other stakeholders in fisheries management.

OBJECTIVES

1. To identify main issues/problems related to the fisheries sector
2. To identify possible solutions to solve fisheries management problems
3. To identify and analyze existing institutions and processes that could lead to effective co-management systems

METHODOLOGY

All data was obtained from the stakeholder workshop on fisheries management in the Lower Songkhram River Basin, which was held at the Mekong River Grand View Hotel, Nakhon Phanom Province from August 1 to 3 2005. The objectives of the workshop were:

1. To discuss the results of research related to fisheries management in the Lower Songkhram River Basin
2. To identify main issues regarding the problems/constraints of fisheries management
3. To provide suggestions and recommendations on possible solutions to the problems of fisheries management
4. To ascertain alternative occupations in non-fisheries practices
5. To provide guidelines on research necessary to fisheries management in the Lower Songkhram River Basin.

A total of 86 participants were divided into 5 stakeholder groups. These were a) Government Agencies and Non-Government Organisations; b) Small-scale fishers; c) Large-scale fishers; d) Local community leaders; and e) Tambon Administrative Organisation (TAO). Representatives from International Organisations, Department of Fisheries and others participated as observers. Workshop activities included a brief presentation related to fisheries management in the LSRB, group discussion on the main problems and identification of strategies to solve these problems.

RESULTS

The main issues raised at the workshop can be summarised as follows:

- Fisheries sector is considered as a highly significant issue in the Lower Songkhram River Basin as a major source of income and livelihoods for its inhabitants. The resource has been exceptionally productive and heavily utilised for many decades. Appropriate fisheries management measures are urgently needed to secure the sustainability of the resource.

- The characteristic of the Lower Songkhram River Basin, however, may not be physically appropriate for agricultural practices mainly due to the flood pulse pattern in the basin. General agricultural extension practices in the basin are, therefore, unsuitable due to natural flood and drought conditions.
- Household income of most small-scale fishers is under the poverty line. Their livelihoods are in poor condition, education of young children is not favoured, and occupation alternatives are currently scarce.
- Fisheries legislation understanding of local communities is limited. Some poor fishers performed illegal fishing activities because they had no better occupational alternatives. Some fishers ignored fisheries laws and regulations these were seen to limit profits.
- Illegal fishing practices generally found in the basin are mostly large-scale fishing gears, electro-fishing, fishing with explosives and poisoning. These activities, as well as over-fishing, have led to degraded fisheries resources in the basin.
- The fishing grounds and habitats, particularly flooded-forest, are reduced and deteriorated due to illegal encroachment. Clear boundary and management measures should be identified in order to conserve these critical areas.
- Fisheries information in the basin is deficient and outdated. Present communication channels are unsuitable and ineffective. Conflicts among fisheries beneficiaries were evident.
- Coordination and cooperation among parties concerned are inadequate. Integrated planning approach was recently introduced without being fully implemented. Communications among fishery officers, local fishers, local administration staff and others is insufficient, partly due to limited man-power and budget.
- Marketing of fisheries products in the basin is uncertain due to seasonal fluctuation of fish production, product quality and quantity, price negotiation power, etc.

Suggestions and recommendations related to fisheries activities provided by participants can be summarised as follows:

- Fisheries laws and legislations should be reviewed and/or revised (if appropriate) to reduce conflicts of fisheries resource utilisation in the basin. Effective communication on fisheries laws and legislation should be strengthened accordingly to ensure full understanding and compliance with laws and legislations of local communities and parties concerned.
- Sustainable fisheries resources management measures should be formulated with full participation of stakeholders concerned. Gender issue should be fully considered. The

formulation should integrate all scientific, social, economic and local knowledge/information.

Occupation opportunities and alternatives should be developed. Due to various constraints in the basin, the appropriate occupation opportunities and alternatives should focus on:

- Non-agricultural practices, such as small-scale entrepreneurs, handicrafts, cottage industry, etc.
- Services, such as beauty salon, repair and maintenance, tailor, etc.
- Value-added activities, such as food processing and preservation, packaging, etc.
- Eco-tourism on fisheries activities, flooded-forest ecosystem, etc.
- Aquaculture, such as cage culture of indigenous species, breeding and nursing of indigenous species, etc.

However, in the case of the Songkhram River Basin, the relevant research and activities needed to support the Lower Songkhram River Basin sustainable fisheries management measures need to be formulated. Therefore, identification of guidelines required for fisheries management was prepared during the workshop. The results showed that the relevant research for fisheries management should include:

1. Fisheries laws and legislations as tools for conflict resolution.
2. Assessment of fisheries resources in the Lower Songkhram River Basin.
3. Fisheries related occupation development.
4. Flooded-forest ecosystem rehabilitation and conservation.
5. Fisheries marketing system and marketing channel development.
6. Sustainable fisheries resources and co-management process enhancement.
7. Fisheries information and communication system improvement.

CONCLUSIONS

The current problem related to fisheries resources in the Lower Songkhram River Basin is (Figure 1). Therefore, in order to overcome the problems there needs to be a co-management approach. The key-findings from the stakeholder workshop on fisheries management in the LSRB are used to guide further implementation of the “Project for the Sustainable Fisheries Management in the Lower Songkhram River Basin”. However, the stakeholder workshop on fisheries management is an initial step in cooperative management; it needs support from all interested

parties to sustain this participatory process in fisheries management measures, not only in the Lower Songkhram River Basin, but also in all basins within the region.

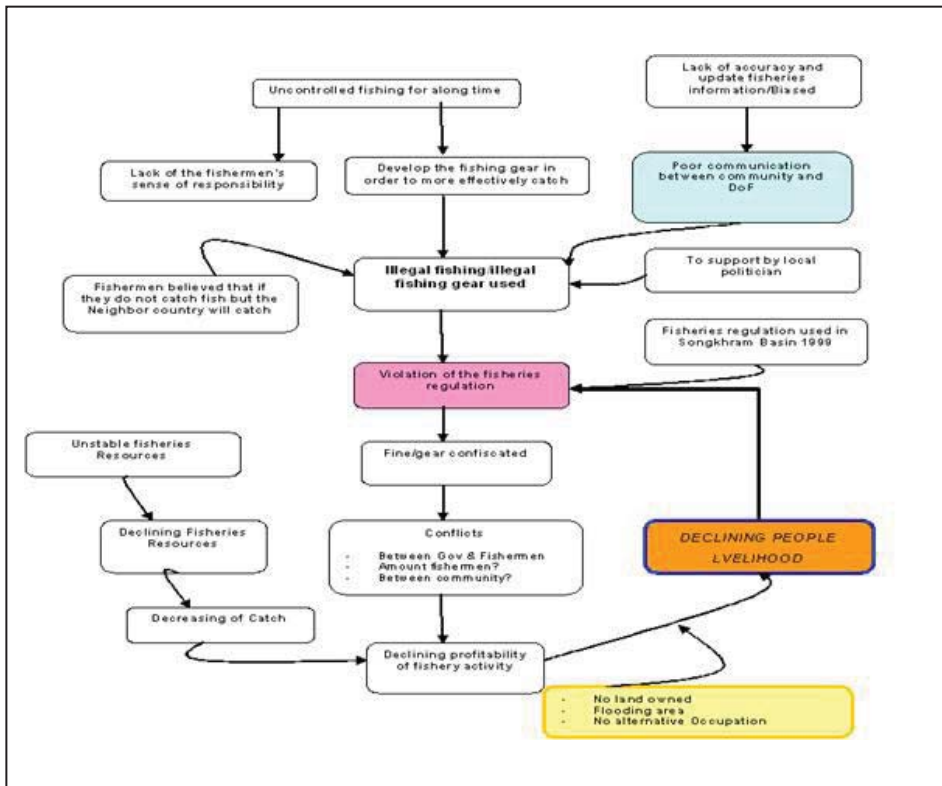


Figure 1. Problem statements in the Songkhram River Basin

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