

## **CONCLUSION AND RECOMMENDATIONS**

This part aims to summarize the finding of the study, derive conclusions, and formulate recommendations that can duly contribute both to the informed policy-making and to further studies. An attempt is made to recap whether the study was successful in meeting its objectives the research. Beside, this part will also discuss the limitations of the study as well as assess the potential contribution of the study results and make recommendations to ward wise use of participatory processes for developing a water quality database in Thailand.

### **Part I: Summary of Major Findings**

AIC and SLP were applied for participatory processes and the stakeholders were involved in participatory processes about 84 persons. Substantial interest during participatory processes was learning process such as providing knowledge, awareness of problems relating to water quality and acquiring of water quality information, alternatives to solve water quality problems and summary of water quality data to include in database. Participatory processes were observed and evaluated during the time. Yet, their were eminent that stakeholders attempt was either inadequate or participate by other people from outside community. Overwhelming by majority of the stakeholders were willing to make an environmental contribution indicating strong interest to participate in water quality database development by participatory processes within watershed. Based on the findings, It was concluded that:

- Stakeholders or local people's strong willingness to participate was substantiated by their willingness to pay towards systematic participatory processes.
- There was an eminent of participatory process to scale up its efforts in principle, think, analyze, and find solution in the systematic way and proceed on any actions to solve problems and mitigate conflicts.

Regarding the participatory database on water quality management, it was found that stakeholders or users satisfied with graphic and video because it was easy to understand and easy to assess, not complicated and more interesting. Since the existing database system was developed though the learning process. It helped identify the activities and explain about the nature of data stores in the current system and data requirements. So the level feedback of database content got high.

### **Part II: Limitations of the Study**

This study was not free from limitation including language and methodology.

#### **1. Linguistic barrier**

The foremost limitation of the study was dealt with the communication problem. The research team used Thai (the official language) but local communities used local language. Therefore, misunderstanding often asked. Furthermore, it was

also experienced that SAOs members were reluctant to open up to a certain extent during the learning process. This was because they could not communicate very well in official Thai language. Therefore, it was essential to have translation in learning process.

## **2. PAR limitations**

Although AIC process and SLP were applied for the participatory process to develop the water quality database. There existed considerable controversies over its biasness and limitations. This study tried to minimize such biasness through the careful design of questionnaire especially by hypothetical scenario and site specific. Yet, this study was not free from limitations concerning with the participatory pattern, sample size as well as testing the validity of this research as most participatory action research experienced.

## **Part III: Recommendations**

### **1. Future research**

Future research of local resource management is needed especially on both supply and demand side. This may include not only the resource management approach to maintain good water quality but also the proper amount of water for local users.

1.1 Local community preferred systematically management of water resources as well as administering a water quality database for their own watershed. It was highly recommended that future study should focus on the collection of water quality; increasing water samples such as points passed each of the land uses types for accurate data.

1.2 The study on building common understanding among the academics and the local agencies on the conceptual and practical approaches in line with the concrete participatory guidelines should be made. In this way, it should review the body of knowledge along with the concept and related researchers for the development and then the construction of linkage from concept to actual practice.

1.3 The researcher should focus more in every step of the participation process. This should be done in line with the systematic approach focusing on particular characteristics of the community.

### **2. Implementation of the study**

2.1 Based on the strong interest of the local community or local organization towards water quality database development in Mae Taeng Watershed, Chiang Mai Province. Research results can be applied to another area, especially main watershed in all regions. Implementing activities must be continuous and more concrete. Therefore, the research team should closely support and monitor continuously because

conditions of water quality need some time in their refinements. These factors facilitate the activities to achieve their objectives.

2.2 The critical point this study tried to raise is the recognition of inter-linkage and benefits that could accrue to local organization if water resource to be used wisely. It was indeed a challenging task and requires actions at multi-stakeholders levels. Such approach must begin with involving all stakeholders of the watershed toward forming a community based institution which could act as a driving force towards wise use of watershed resource.

2.3 SAOs saving fund can realistically be initiated with the formation of a community based local organization. Such local organization, in close collaboration with management agency and other primary stakeholders, could frame the management plan to cover environmental, economic and social issues. Once formed, such community based organization should gradually build its partnership with secondary stakeholders including Office of Natural Resources and Environment, Universities, and NGOs in be actively involved in water quality management.