**Abstract**

**Research Title**  : The Strategy for Surface Water Quality Management

Sustrainable for Water Consumption in Amphawa

district, Samut Songkram Province

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**Abstract.**

The strategy for surface water quality management sustrainable for water consumption in Amphawa district, Samut Songkram province is to identify strategies is to identify strategies for surface water quality management for water consumption by participation of communities and data base water quality in Amphawa district, Samut Songkram Province. The implementation process in this study was divided into four sub-research. Firstly, degradation of surface water quality and land use in the Suan Luang municipal district, Amphawa, Samut Songkram province. Secoundly, participation of communities in suface water quality management for consumption, Amphawa district, Samut Songkram province. Thirdly, Needs of the community for surface water quality management sustrainable for water consumptionin Amphawa, Samut Songkram province . Filnally, Application of particiipatory qeoinformatics to determining water quality Index in Amphawa district, Samut Songkhram province. The research conducted during the 2015 October to 2016 July.

The result show that the surface waer quality at agricultural area were better than community area. At the agricultural area, 2.5 % of water quality were good, 7.5 % were fair and 90.0 % were degenerated. At the community area, 5.6 % of water quality were fair, 91.7 % were degenerated and 2.8 % were very degenerated. So concluded that the surface water quality at agricultural area were better than the community area. When considering the participation behavior overall, most of people (61.2 %) were at the moderate level. In addition, it was found that age, educational background, career, duration of inhabitation, knowledge on surface water management and awareness on problems were related to the participation at the level of 0.05 statistical significances. The results showed that (1) Problem about the surface water quality management in Amphawa District was in the medium level with an average score of 3.33. (2) Needs of communities in the practical surface water quality management for water consumption were in the high level with an average score of 4.02. It could be concluded that the communities desire to have public participation to solve the problems of water and water quality management for the need of water resource management. It could be concluded from the interviewed sessions that the communities desire to have public participation to solve the problems of water and water quality management. The result of this research is the best water quality index locates near Dhaka district because this area is agriculture area and has no household not much in contrast Bang Chang district have low-water quality index because this field has a lot of tourism landmarks and has household too much.

The purposed of this research was developed surface water quality management strategy for sustainable consumption and consumption in Amphawa District, samutSongkhram Province.  The results of the focus meeting encouraged some mitigations such as releasing waste water into pre-treatment grease trap before discharge directly in water resources. In addition, reuse water for orchard is recommended. Community also needs to construct dam in order to protect waste into the canal. Regulations for homestay and resort by community participation also needed to raise awareness and discharge fee. The major problems of water degradation were related with saline intrusion, water shortage in dry season, and waste littering into water body. The community needs to solve water issues by creating knowledge of water management and conservation and also develop contribution project between local stakeholders and governments. Integrated water resources management can also initiated by enhance awareness, participation, volunteer activities and law enforcement to protect water resources by using geographic information systems.

Keyword : Amphawa , Surface Water Quality Management