

# **The flood simulation system as a new process for public participation of local administrative organizations in Tha Wang Pha District, Nan Province**

**Chamnan Kumsap<sup>1</sup>, Vissanu Mungkung<sup>1</sup>, Lanyanat Patanan<sup>1</sup>, Phimraphas Ngamsantivongsa<sup>1</sup>,  
Arisara Charoenpanyanet<sup>2</sup>, Phonpat Hemwan<sup>2</sup>**

<sup>1</sup> Defence Technology Institute 11120, Thailand

<sup>2</sup> Department of Geography, Faculty of Social Sciences, Chiang Mai University

## **ABSTRACT**

This research paper discusses the new process for public participation of 7 local administrative organizations in Tha Wang Pha District, Nan Province in preparedness for flooding situation. Activities for the knowledge and technology transfer of a flood simulation system were conducted and attended by 50 invited representatives, who were presented with 5 questionnaires to test their acquired knowledge and skills. The willingness to apply the knowledge and skills to flood situation preparedness of their workplace or missions was analyzed through sub-questions and illustrated in a series of tables. The results showed that the contents of the knowledge sharing were comprehended between 82-90%. Following the technological workshop, the participants planned to use the knowledge to flood preparedness at 100% with measured skills at 100%. The paper concluded that 100% of the respondents agreed with the use of the flood simulation system in terms of building cooperation upon the knowledge and technology exposure, collaboration with relevant agencies, and support for the implementation of the flood simulation system. The official coordination of agencies and institutes was the key for the successfully organized activities, thus be it the new process for the focus-group public participation of local administrative organizations.

**Keywords:** Disaster Management, Flood Simulation System, Knowledge Sharing, Public Participation.

*\*\*Please refrain from uploading your abstract to any online platform, including personal web pages, to prevent instances of self-plagiarism.\*\**