

Jeerasak Phermsin 2009: Capacity Development of Leaders and Responsiveness Geographic Information System Application in Solid Waste Management in Leam Phak Bia Sub-district, Ban Leam District, Phetchaburi Province. Master of Science (Environmental Science), Major Field: Environmental Science, College of Environment. Thesis Advisor: Mrs. Dusadee Chareansuk, Ph.D. 155 pages.

This study were both quantity and quality research in order to develop the capacity of Laem Phak Bia Community leaders and responsiveness using GIS for solid waste management in Leam Phak Bia Sub-district area.

The target group in this study were 78 Community leaders of Laem Phak Bia, Ban Laem District, Petchaburi Province, participated the action research workshop in solid waste management, and responsiveness using GIS for solid waste collection, and study the capacity development and responsiveness using GIS for solid waste management of the leaders compared before and after participated the action research workshop by pre-test and post-test method. The data were analyzed by percentage, means, standard deviation, and test values (t-test). In addition the GIS had been using for solid waste management by analyzing solid waste collection routes and setting bins in suitable place household in Laem Phak Bia Sub-district.

The results of capacity development of leaders in solid waste management in Leam Phak Bia Sub-district management found that after action research workshop leaders had increased knowledge, attitude, awareness / practice, skills, and responsiveness of GIS for solid waste management higher than before participated the action research workshop significantly at level 0.05. The analyzed of GIS program found that the distance of solid waste collection routes were shorter than former routes around 14.319 km/week or approximately 744.588 km/year that savings fuel energy approximately 1,911 liters/week or about 99,372 liters/year, and for setting bins in suitable place found that this area should have 473 households and responsiveness GIS for solid waste management in Laem Phak Bia Community found that the target group had highly significant responses at level 0.05.

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Student's signature

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Thesis Advisor's signature