

Manida Yamsung 2013: External Cost of Opened-dumping Solid Wastes of Mueang Lopburi and Khaosamyod Municipalities of Lop Buri Province. Master of Science (Resource Management), Major Field: Resource Management, Interdisciplinary Graduate Program. Thesis Advisor: Associate Professor Vute Wangwatcharakul, Ph.D. 103 pages.

Failure to acquire new sanitary landfill site and the continuous dumping of solid waste at the existing site of Lopburi and Khaosamyod municipalities, Lopburi province causing environmental impacts on rice field and residence in its surroundings have been persistent for many years. These result in frequent public complaints and demonstration. The purpose of this study is to assess the external costs of dumping wastes on rice production and public health. Change in productivity approach is used to evaluate the impacts of rice productivity and willingness to accept for compensation is used to evaluate the health impact on the residence.

The study shows that in 2011, 55 rai of paddy field was damaged by the leaching from dumping site with a total external cost of 550,000 baht. In the same year, the health damages to 590 households, caused by smell, insects and other nuisances were 8.6 million baht. Hence, in 2011, the total external cost of dumping sites of the two municipalities was 9.2 million baht. This cost was very high compared to the existing measures applied to address the problems. This external cost is the social cost and part of the cost to excessive dumping of wastes on the existing site and the delay in developing new sanitary dumping site. In addition, these increasing impacts have gradually influenced the community to refuse economic assessment and existing management and stage up the issue into social conflict. The issue would be aggravated unless the municipalities seek better solution to the existing site and establish a new dumping site.

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