



Thesis Abstract

Environmental Management of the Stung Mean Chey Solid Waste Disposal Site in Phnom Penh City, Cambodia

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Strung Mean Chey dumpsite, the only disposal site in the Phnom Penh City, is still being used now and will be full by 2010. There is an urgent need to manage this dumpsite so that its productive lifespan can be extended while waiting for a new disposal site. This study aimed to: a) describe the existing situation of the Stung Mean Chey (SMC) solid waste disposal site in terms of selected biophysical and socio-economic parameters; b) examine the interactions of the different institutions that are involved in the management of the SMC disposal site; and c) determine the perceived effects impact of the SMC dumpsite on the environmental effects, health, and livelihood of the directly affected communities and the waste pickers. The study's methodology included collection of data and information through household and waste pickers surveys, key informant interviews and primary data collection for selected biophysical parameters.

The analysis of current solid waste management of Phnom Penh City indicated that the system is inadequate and needs improvement from waste generation stage until the final disposal stage. Households in Phnom Penh generate an average waste of 487 g/person/day and the collection rate was 95 percent. The collection method is inefficient due to old and few collection vehicles. There is no waste discharge rule, thus, people throw wastes to any place after the collection service is done.

The average household size of the households and the waste pickers is almost the same, that is, 5-6 members. More illiteracy was found from waste pickers (40%) than the households (28%). Most of the waste pickers come from rural areas. On the other hand, the average monthly income of the household respondents was lower than the average household income in Phnom Penh. Most of the households and the waste pickers were adversely affected by the environmental effects caused by the disposal site. Moreover, the physical environment such as groundwater, leachate, air and noise pollution were also contributing to the environmental problems.

Administratively, the roles and responsibilities of the relevant organizations are not clear. In general, the organizations lack an established system for promoting proper solid waste management including the management of the Stung Mean Chey dumpsite.

During the interim period while the new disposal site is being constructed, the study recommends the promotion of the 3Rs (reduce, reuse and recycle) for the households and strengthening the administrative organizations of the City's solid waste management programs for extending the lifespan of Strung Mean Chey disposal site.