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"Can agroecological farming feed the world? Farmers' and academia's views"

Livestock manure management and use by smallholder farmers, an assessment in battambang province in Cambodia

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Abstract

In Cambodia soil depletion presents a serious threat for the agricultural production. Livestock manure can contribute with its organic content to a better soil fertility. However not much is known about the manure management practices in Cambodia. Therefore the aim of the study was to generate basic knowledge about the farmers practices regarding farmyard manure management, including collection, storage and processing practices and the final use of the manure. Focus was laid on the management of cattle and chicken manure, only little information was collected regarding pig manure.

To gather information 68 semi-structured household interviews and seven key informant interviews were conducted. The interviewed households and key informants were found in six different villages in Battambang province, which is located in the north-western part of Cambodia. To select the interviewed households a non-random purposive multistage sampling was applied. The following results were found:

The majority of the respondents collects the cattle and chicken manure and stores it on simple heaps. By this storing method the manure is stored on natural floor and not protected from weathering.

Normally the manure is not processed, only a small number of farmers did burn the manure. Around 70 % of the interviewed households did apply the cattle manure on their own crops. For chicken manure it was 83 %.

Main reasons for not using the manure at all were the time consuming and hard work needed to collect, transport and apply the manure compared to the easy application of chemical fertilisers. Secondly some respondents were complaining about more weeds growing in the field after applying manure.

Especially storage and processing practices have potential to be improved. When these practices would be ameliorated, some of the problems mentioned by the respondents as reasons for not applying manure on their crops would already be solved.

Keywords: Cambodia, cattle manure, chicken manure, livestock waste management, soil fertility, Southeast Asia

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