Environmental literacy of the general public: A case study in Matara municipality

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Abstract

Although "environmental literacy" is a difficult concept to define, it means the capability for a contextual and detailed understanding of an environmental problem in order to enable analysis, synthesis, evaluation, and ultimately sound and informed decision making at a citizen's level. Environmental literacy requires a fundamental understanding of the systems of the natural world, the relationships and interactions between the living and the non living environment, and ability to deal sensibly with problems that involve scientific evidence, uncertainty, and economic aesthetic and ethical considerations.

The environmental literacy of the people is a crucial factor for a success of a community based environmental projects. Therefore, a community based household waste management project in Matara municipality was conducted by the Faculty of Agriculture. Environmental awareness and conduct of the people were determined using standardized 10 questions for each family. Sample size was 112 house holds in Walpola GN division which was considered as a cluster. Within the selected households, 230 members were interviewed. In addition to descriptive statistics, pooled 't' test was used to compare the environmental literacy of different groups.

The results revealed that the awareness of general issues of environment such as sources of water pollution (57%), sources of green house gases (44%), biodiversity (53%), role of ozone layer (43%), hazardous waste materials (32%) and different sources of energy (64%) are low compared to such knowledge of people in developed countries. Conduct of good practices such as managing electricity use (84%), managing water (67%), use of energy saving equipments (78%), sorting and reducing garbage (54%) and avoiding chemicals (64%) was high while buying recyclable materials (9%), volunteer participation in waste management (7%) and use of low energy transport modes (17%) was low. The scores obtained for both the awareness and the conduct were significantly higher in males than females. Formal education level is another significant determinant for the level of awareness.

Results of the research suggest that the environmental literacy about global issues is low in the studied sample compared to such knowledge of the people in developed countries. Also the environmental literacy is low in female members in households compared to male members. Therefore, community based environmental management programs should direct towards female members of households to achieve objectives of such programs.

Keywords: Environmental literacy, Community based waste management