

Farmer Knowledge and Perception of Pesticide Exposures towards Health and Environmental Hazard in Selected Areas in Uva Province, Sri Lanka

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Monitoring the knowledge of small-scale farmers on pesticide usage would be useful to assess the appropriateness of the information for reducing the risks from pesticides in rural regions of Sri Lanka. The patterns of pesticide usage, perception and levels of knowledge of the risks posed by pesticide usage to the environment were investigated by means of a semi-structured questionnaire survey and key informant interviews. Welimada, Haputhale, Badulla, and Ella DS divisions were selected as major vegetable growing areas ($S_1=119$) while Moneragala, Badalkumbura, Bibile and Medagama DS divisions were selected as major field crop cultivated areas ($S_2=127$). Basic information *viz.* farmer household and farmlands, commonly used pesticides and farmers' knowledge on pesticide usage was ascertained as the primary data. All the interviewed vegetable grown farmers have used fungicides and insecticides. However, only 35.3% farmers have used herbicides while all interviewed field crop cultivated farmers have used herbicides but 70.1% and 99.2% used fungicide and insecticides respectively. Only 29.4% (S_1) and 13.4% (S_2) of respondents have undergone a proper training on the effective use of pesticides and such trainings were mainly conducted by organizations of the private sector who are already involved in pesticide marketing. 60.5% (S_1) and 61.4% (S_2) of farmers have taken some precautionary measures and long pants and long sleeve shirts are the most common precautionary methods during pesticide spraying. The correlation analysis indicates that farmers' knowledge on the correct handling of pesticides, disposal of pesticide leftovers/containers and personal hygiene after pesticide application were significantly ($P<0.01$) influenced by the farmers' level of education and training on pesticide handling. The present study indicated that the application of pesticides in the study area posed a potential risk for the environment and the farmers.

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