



## ASSESSMENT OF PESTICIDE USAGE FOR VEGETABLE CULTIVATION IN NUWARA ELIYA DISTRICT

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Farmers who cultivate upcountry vegetables apply high amounts of pesticides and fertilizers, especially due to the short duration of crops and highly favorable humid conditions for the rapid spread of pests and diseases. Indiscriminate use of pesticides causes health hazards to humans and long lasting bad effects to the environment. The objective of this study was to identify the type and frequency of pesticide (insecticides, fungicides and weedicides) used by the farmers and the impact of the pesticides. Specifically the study was carried out to identify the water sources used for the cultivation, disposal methods of empty pesticide containers, and the beliefs of the farmers on the crops and pesticide usage. Primary data for the study were collected from 80 (n=80) farmers in four villages of Nuwara Eliya. DS division namely Bambarakelle, Shanthipura, Galpalama and Ambewela. Approximately, 90% of the farmers applied Glyphosate as a weedicide. Insecticide and fungicide applications began from 2-3 weeks after the crop establishment. Most of the farmers always apply pesticides prior to the appearance of any symptoms. Survey data revealed that 90% of the farmers used Chloropyrifos as a pivotal insecticide. Climate is the common factor that determines whether to apply pesticides or not. The survey revealed that most prominent fungicide used by farmers (90%) was Chlorothonil. Approximately 13% of the farmers used fungicides at high frequency (apply 3-5 times per crop). Most of the farmers (90%) used natural water streams or well water as the water sources. The majority of the farmers (>90%) disposed the empty pesticide containers, particularly by throwing in the crop land itself. All farmers agreed (Average 6.6) that pesticides were highly toxic when their perception was measured at 1-7 Likert Scale. However, everybody was with the intention of using pesticide for their crops in the next season. They believe that without applying the pesticides as and when necessary, high level of profits would not be achieved from vegetable cultivation.

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