

**Investigating the Factors that Influenced the Excess Use of
Pesticides by the Vegetable Farmers in Badulla and
Nuwara-Eliya Districts**

A dissertation submitted to the
Faculty of Animal Science and Export Agriculture
Uva Wellassa University
In partial fulfillment of the requirements for the award of
Bachelor of Science in Export Agriculture

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2014

ABSTRACT

Pesticides are the result of modern technology and synthetic organic poisons used to exterminate specific organisms by inhibiting certain vital functions. Similar to many developing countries pesticide related issues in Sri Lanka have become a major concern in the present day context. It is because of over use and abuse of pesticides. Over use of these pesticides have severe effects on environment and human health that may lead to an immediate and long term effects. Therefore it is important to identify the factors effect on excess use of pesticides which can help to overcome the intensive use of pesticides over the years in vegetable cultivation. Investigate the level of awareness of pesticide usage among farmers, identify the factors that cause to excess use and determine the approaches that reduce the excess use and abuse of pesticides is important in order to reduce human factors that negatively affect environmental and human safety. It is very fewer researches were conducted about awareness of the farmers' pesticide usage. Having recognized the need, present study was conducted to assess curb the excess use and abuse of pesticides by reinforcement of farmers' level of awareness. Both descriptive and econometric statistic methods were used to analysis the data. Descriptive statistical methods were used to describe the characteristics of the sample such as distribution of gender, education level, type of cropping, Information about farmers opinion on reduction of pesticides usage and farmers level of awareness on pesticides usage. Binary logistic regression model was used to determine the extent to which the identified factors affect farmers' probability of pesticide over usage and also quantify the relationship between dependent variable and independent variable. Stratified random sampling technique was used to select 600 vegetable farmers from Nuwara-Eliya, Walimada and Bandarawela Divisional Secretariat divisions. Nearly 64% farmers over use pesticides and almost all the farmers depended on chemical pesticides for the management of pest and diseases. Total household income, social factors, technical factors, policy and legal factors, market factors, farmers attitudes/awareness, cultivated land extent, farmers education level and farmers experience on vegetable cultivation were significantly contributed to farmers' probability of excess use of pesticides. Education, income, age and family size of farmers had showed no relationship with the excessive use of pesticides.

Key words: Pesticides, Farmers' awareness, Excess use, Vegetable farmers