IMPACT: International Journal of Research in Applied, Natural and Social Sciences (IMPACT: IJRANSS) ISSN (P): 2347-4580; ISSN (E): 2321-8851 Vol. 6, Issue 1, Jan 2018, 15-26 © Impact Journals



## FARMERS' AWARENESS ON PESTICIDE USAGE, CLIMATE CHANGE AND ADOPTION OF STRATEGIES: A CASE STUDY OF SHIMLA DISTRICT IN HIMACHAL PRADESH

## Shanta Kumari

Research Scholar, Department of Agricultural Economics, College of Agriculture and Natural Resources,

Dilla University, Ethiopia

Received: 28 Dec 2017 Accepted: 04 Jan 2018 Published: 27 Jan 2018

## **ABSTRACT**

The study was conducted in Shimla district of Himachal Pradesh in India to assess farmers' awareness of pesticide usage, productivity, change in climate and adopted strategies used by the farmers to minimize adverse impact of pesticide usage on biodiversity and soil. The collection of primary data was done from the farmers who were using the agro-chemicals for growing the vegetable and apple crops. Awareness about the impact of pesticide use was more on large farms than small farms. While awareness for immediate treatment practices for pesticide poisoning and precautionary measures against the exposure of pesticides was slightly more on small farms in comparison to large farms. The farmers' response on the perception of decrease in productivity was more on large farms and for increase in cost of production was almost similar on both farms. The farmers of both farms responded that climate was the main factor to decrease in productivity followed by disease and pest and lack of pollination. There is a variation in the perception of farmers of small and large farm for the change in temperature and rainfall. Whereas, similar perception was reported by the farmers of both farms for decrease in humidity and snowfall. The temperature fluctuation and hail storm were the main prevailing problems of the study area which are affecting the productivity of apple particularly on both farms. A few farmers were using the anti hail net against the hail storm on both farms. Due to its more cost, farmers were not using to protect their apple orchards. Therefore, there is a need to provide awareness by the extension workers for growing resistant varieties of crops to tolerate fluctuation in temperature and government should give anti hail net on subsidized rate for the farmers. It will be helpful to reduce the cost of production to some extent. Also, the government should pay attention to strengthen extension facilities, the promotion of use of agro-chemicals in a scientific way and for the use of organic agro-chemicals. This could be very useful to minimize the adverse impact on biodiversity, soil and human health. It will play a vital role to save the livelihood of the farmers and our ecosystem.

KEYWORDS: Adverse Impact, Awareness, Biodiversity, Climate Change, Pesticide and Strategies