A case of Negative Externality: Use of pesticide and its impact on health among farmers in Salumbhu village, Nepal

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Agriculture is the major contributor of the economy for developing countries. In the process of mass level Agric-production, there is a necessity of using pesticides to increase the net yield for the farmers. The widespread and uncontrolled use of harmful pesticide creates influential negative externalities ranging from environmental degradation to the health status of the farmers. This study investigates the effect of using pesticide on different health symptoms experienced by the farmers from a primary survey data in Salumbhu, a village in Nepal. A total of 6 health symptoms were considered among the farmers those who are the applicator of pesticide in the field. They are grouped into 2 categories, such as serious health related issues and irritants, and estimated by the ordered logit model. The estimation shows a significant effect of using pesticide on all the health symptoms faced by the farmers and the sign is expected. The farmers are more prone to the serious health-related issues than irritants from pesticide use. The findings of main empirical model are robust across different models such as Poisson and Negative binomial.

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