

Evaluate the effect of agricultural inputs and chemical pesticides on rurals' environment (Case study: Zarindasht City rural area)

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Abstract extended

Introduction

Risk is a form of entrepreneurship [18]. Environmental hazards are sudden or gradual occurrences of the natural or human origin, which is threatened by the health and safety of a wide range of habitats and human habitats [8]. Many of the natural disasters are occurred in the rural areas of the country, which , causes many damage to the villagers, due to the weakness of facilities in these areas [15]. The use of chemical pesticides to control agricultural pests causes unpredictable damage to human health, other living, and environmental conditions. In the same way, in the last two decades, the use of microbial agents have been very much taken into consideration, which are controlling pests that have lower levels and have a narrower and more specific range of effects on target insects [10]. Toxins and chemical fertilizers come from agricultural land to water sources include about 15 percent of the cause of water pollution. Agricultural pesticides directly affect water quality, but in the case of organic fertilizers, when these fertilizers enter large amounts of soil, the excess is fed into the rivers and lakes through drainage waters and provides rapid growth of algae food [1]. In order to prevent the destruction and destruction of their agricultural products, which are costly, and time-consuming, as well as due to population growth and constraints on the production of various food products, different methods for controlling plant pests are used. Among these methods, one of the most popular are the pesticides. In conventional agriculture, more than 300 kinds of hazardous synthetic chemical compounds, such as toxins and chemical fertilizers, are used to control pests, diseases, weeds and soil fertility. In addition to contaminating water, soil and air, some plants enter and remains as a residue of pesticides in agricultural products and is transmitted to the human body during the process of consumption, which can lead to endemic diseases like cancers and allergies in humans [26].

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Research method and analysis

This research follows a descriptive survey in its proposed method. Since most of the residents of Zarindzht City are engaged in agriculture (32% in the agricultural sector and 3.5% in the gardening sector), the statistical population of this study are farmers of 15 villages of this city. The number of members of the statistical society is 19622 people, using the Cochran formula and at 95% confidence level, the number of members of the sample, 377 household heads were selected as the sample population for answering the questionnaires. Therefore, a stratified random sampling method was used to obtain the logical volume of the sample, taking into account the villages of Zarindstth city (15 villages) as statistical classes.

Discussion

In this research, Pearson correlation coefficient was used to determine the effect of chemical pesticides (independent variable) on the environment of the villages (dependent variable). As it can be seen in the results, the use of chemical pesticides in agriculture has had an impact on the environment and the health of living creatures. The poisoning of agricultural workers with chemical pesticides is one of the most common occupational hazards. The excessive use of these pesticides by farmers has had damaging effects on the environment, and in particular on the environment of the village. The aim of this study was to assess the effects of agricultural pesticides on the environment of the villages.

Conclusion

According to the results of this study, the use of chemical pesticides in agriculture causes environmental pollution. These contaminations affect the environment and cause its destruction. In this regard, providing educational programs to raise farmers' awareness of the amount and correct use of pesticides is advised. The Ministry of Agriculture can help farmers to properly use chemical pesticides and appropriate spraying time. Therefore, according to the mentioned variables, promoting propagation has a constructive role in the knowledge of farmers about the harmful effects of pesticides on agricultural products. The authenticity of the assertion confirms the extension of the correct use of poisons. According to the presented materials, it can be said that today the use of high quality agricultural inputs and pesticides has been unbalanced and excessively damaging to aquatic, plant, animal and human ecosystems. Therefore, the use of fertilizers and chemical pesticides on the environment has caused irreparable damage. This is particularly noticeable in rural areas, which account for the vast majority of agriculture and natural areas of the country. Considering the importance and position of the rural community in the country and the challenges this community faces in its development process, recognizing and analyzing the characteristics of rural development planning in the country and addressing all aspects of it is imperative.

Keywords: "Agricultural toxins", "Environment", "Inputs", "Structural equations of PLS"), "Zarin Dasht villages".

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