

Research Paper

Analysis of the Relationship Between Sustainable Land Management and Crop Yield and Evaluating Its Effects on Food Security of Households in Rural Eastern Miyankoo (Poldokhtar City)

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ABSTRACT

Sustainable Land Management (SLM) represents the integration of agricultural, environmental and socioeconomic factors, and has a large impact on crop production and food security of farmers. The purpose of this study was to investigate the relationship between sustainable land management and crop productions, as well as its role in the food security of farmers. Based on statistical population, 514 rural household farmers live in eastern Miyankoo. Of them, a sample of 217 households were selected. The data collection tool was questionnaire. For data analysis, single-sample t test, correlation coefficient V Cramer and Spearman correlation were used. Results show that land management, plowing perpendicular to the slope, creating the paragraph above ground and using different fertilizers and agricultural products have the greatest impact on increasing yield. In relation to the method of land management and food security, the findings show that among the top five land management practices, three techniques of crop patterns, increase soil fertility and water resources management, had the highest relationship with food security of rural households and farmer. They have access to safe and healthy food due to the quality of land and high efficiency. Therefore to enhance food security and increase investment in this area, we should provide more support services to farmers, as well as take measures to further cooperation in the field of sustainable land management for farmers to be done.

Key words:

Sustainable land management, Food security, Rural development, Agriculture, Poldokhtar City

Extended Abstract**1. Introduction**

Agricultural products in developing countries is not enough to meet the growing demand for the population food. As a result, it is essential to increase yield capacity and stability of agricultural production. Identifying existing technologies and methods of their application are the most appropriate way to achieve

this important goal. This requires investment in sustainable land management and use of resources, such as fertilizers, seeds, pesticides, as well as techniques to maintain soil quality and prevent its erosion. These are the key factors in solving the problems and resolving environmental damages and economic feasibility problems in the areas mentioned. This method is highly beneficial for farmers in order to increase and improve their productivity, maintain soil structure and water resources, increase activity and diversity of soil animals, which potentially increases agricultural production, protects the environment and reduces soil erosion. Thus the efficiency of agricultural production and

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food security increases, as well as reduces the vulnerability of the agricultural system. In this regard, it is necessary to pay more attention to alternative models, and in particular sustainable land management. In this study, we discussed the relationship between sustainable land management practices and increase in agricultural yield and its role in the food security of rural households in Poldokhtar City.

2. Methodology

Political Groups valley villages in the eastern district of the province is Poldokhtar city functions. The study area is located at the foot of Zagros mountains. So the reason, in case of heavy rainfall, rainfall and surface flows quickly become and the runoff volume added that in its wake serious flooding in the basin of the way. Floods had many effects on soil erosion, livelihood and food security of the people, so that at some point in time their livelihoods had changed. This is an applied research and its methodology was both quantitative and qualitative. The study tool was a questionnaire. The study population includes all heads of households living in Poldokhtar City. A sample of 217 households were randomly selected to participate in the study. To analyze the data, the correlation coefficient V Cramer, one-sample t test and Spearman correlation coefficient were used. To collect information about food security at the household level, Food Security Scale was used. In order to assess its reliability, Cronbach α coefficient was calculated. Also the validity of the test was approved according to the judgment of the specialists in the field.

3. Results

In the first stage of research, the results of the survey regarding the use or non-use of land management practices showed that 91.7% of participants believed on the use of conservation and sustainable land management practices and 8.3% did not. Survey findings show that the method of land management, the method of plowing perpendicular to the slope, creating the paragraph above ground, and using different fertilizers and agricultural products have the greatest impact on increasing yield. With regard to the method of land management and food security, the findings show that out of five general ways, three ways of cropping patterns, increasing soil fertility and managing water resources, have the strongest relationships with food security of rural households.

4. Discussion

The most important factor limiting agricultural production is low investment in sustainable land management, which increases soil erosion and consequently low pro-

ductivity and food insecurity in rural areas. Given the seriousness of these problems and the need to improve soil fertility and attention to sustainable agriculture, most farmers in the area have some way to run sustainable land management program. With the increased use of management practices in rural areas, households feel more secure and confident by increasing the yield of crops and by having food security, rural households' anxiety about food supply is reduced.

5. Conclusion

So sustainable land management through increase in crop yield, soil fertility, labor productivity and resources, conserves land, water, biodiversity and environment, conserves ecosystem and produce food for local farmers, increase their income, household livelihoods and ultimately increases food security of rural households in the study area. Therefore, we can say that in order to enhance food security in this area, there must be more support services and investment provided for farmers, also measures should be taken in the field of sustainable land management.

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Conflict of Interest

The authors declared no conflict of interest.