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**The Thesis Submitted for the Degree of M.Sc (in the field of
Agricultural Economics)**

Relationship between farm size and wheat production productivity in Sistan region

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Abstract

Farm productivity is one of the most important issues in agricultural economics. In the production of agricultural products, the relationship between farm size and productivity is considered. In Sistan region, agriculture is one of the most important factors of livelihood and employment. Therefore, it is important to study the ways to revive and increase the agricultural productivity of the region and to find the factors affecting farm productivity. It is necessary to study the productivity of wheat cultivation as a strategic product in Sistan region. The average cost and income of farmers was estimated by asking experts and distributing questionnaires among farmers in Sistan region. Stata software was used to measure the total productivity of production factors and compare costs and revenues. The results of data evaluation confirmed the direct relationship between field size and wheat production productivity in the study area. More than half of the studied farmers cultivate wheat in small fields (1 to 2 hectares).

By reducing the number of workers outside the family on large farms (more than 10 hectares), Sistani operators have replaced machinery with labor. 27% of farmers have taken the technology completely (planting, holding and harvesting stages) to the farms. This number is related to the exploiters in the fields more than 10 hectares, which includes only 13% of the studied farms. Due to the arid climate of Sistan and dehydration and the drying of the Helmand River in recent years, suggestions were made to improve the management and agricultural conditions. There should be changes in farm size, cultivation patterns, and incentives for farmers to grow a variety of wheat using new technologies. Increasing water productivity, regulated irrigation, conservation tillage, the use of modern irrigation methods, financial support for farmers, as well as the formation of training and extension classes are recommended to Sistan agricultural managers.