

Analyzing the Human and Technical Factors that Affect the Level of Intensive Cultivation in the Household Farming System

(Case study: the Household Farming of Kermanshah)

Taleb M.

Professor of Sociology, University of Tehran

Ebrahimpour M.

Professor of Sociology

Salmanvandi Sh. *

M.A. Student of Rural Developmental Management, University of Tehran

Received: 20/06/2001

Accepted: 2/11/2011

Extended Abstract

Introduction

Agriculture has a long-time connection with living in village. Agriculture is constituted the most important part of Iran's economy. It constitutes about $\frac{1}{4}$ of GDP and 30 percent of employed peoples who work in agriculture-related activities. Green revolution has had positive effects, though it has faced with issues such as equality and continuity and endurance of land ownership that in turn, needs a new phase of research and development in agriculture. Prior to the land improvements, the major land owners had had 56 percent of ownership of whole of the agricultural lands in their hands; that figure did included 34 percent of all villages of the country. Meager owners, with 41/ 93 percent, were living while they had just 10/13 percent of ownership of whole agricultural lands of the country. Meanwhile, land ownership was the main source of political power in Iran but after the land

* Responsible Author: shsalmanvandi@gmail.com

improvements, farmer households had had 36 percent of whole agricultural lands. During the 1970s and 1980s when many of Asian countries went through industrialization and urbanization rapidly, small farms were regarded as barriers to Is process. According to some studies, however, it was found out that small farms had had more productivity than big ones. This study tries to find out the answers to 4 questions: Is there any correlation between increasing the level of education of farmers and intensive method of agriculture? Is there any relationship between the household aspect of farmers as working forces and intensive cultivation? It is correct that the tendency toward modernization will lead to intensive cultivation? Is there any relationship between using technology and facilities and intensive cultivation?

Methodology

This study is among applied and developmental researches; given the phases and the goals of the study, it uses the survey method. In this respect, 340 questionnaires were distributed among farmers, then after data collection using SPSS software, the relationship between variables was tested within 4 hypotheses. Firstly, RRA method was used for collecting preliminary data, then collected data were analyzed and the questionnaires were designed. Statistical population included 2000 farmers of Kermanshah; 322 farmers were selected as sample population via Cochran formula. In order to avoiding the error and to increase the accuracy of choosing the sample population, that figure increased to 340 farmers. In the study, Content Validity (especially Face Validity) has been used. After designing the questionnaires and involving measures for research indicators, the questionnaires were analyzed by the experts. They stated their views after analyzing and matching the obtained measures with the indicators and observing the context of the research. The views of the experts along with societal and cultural characteristics of the studied region gave birth to the final questionnaire. For evaluating the validity of questionnaire, Cronbach's Alpha coefficient has been used. Cronbach's Alpha is 0.63 that represents internal correlation between the measures and the studied indicator in a considerable level.

Findings

T Test has been used to testify the hypotheses of the research. The findings show a significant (99 percent) relationship between the level of education of farmers, scale of using the agricultural facilities and technology, the level tendency toward modernization, the household aspect of farmers, and the level of intensive cultivation. Regression analysis also showed that the variables of tendency toward modernization, scale of using the agricultural facilities and technology, and the household aspect of farmers constitute the 0.55 variance of the level of intensive cultivation. The amount of multitude coefficient of correlation is 0.63 and it shows a significant correlation between the significant variables in regression equation and the variable of intensive cultivation. Standard coefficient of correlation showed the most correlation (0.507) between the household aspect or labor force and the intensive cultivation level, and the least correlation (0.23) is occurred in the level of education of farmers. The high Beta of household factor as the most important one in this regression equation shows the importance of labor force in the process of intensive cultivation. The interesting point, however, was that the variable of the education level had lost its significance compared with other effective variables in the process of intensive cultivation, while the other variables have had a significant correlation with the level of intensive cultivation, in addition to the analytical power of regression model, that also finally shows which variables with which degree had effected on dependent variable. According to the coefficients of standardized Betas of independent variables, it could be observed that the household aspect, the level of tendency toward modernization in agricultural affairs, and the level of using the modern technology of agriculture have had the greatest effects on the explanation of the dependent variable, the level of intensive cultivation.

Conclusion

The growth in the agriculture section with the focus on household farmers in the villages has always been a precondition for agricultural and rural development.

Moreover, the household unit of farming and its maintenance as an organizational unit can help to agricultural and rural development. The results of the study showed that labor force and the use of modern technologies of agriculture were significant as the factors in process of intensive cultivation. The outcomes of these two factors, the increasing of labor force and technology livelihood, should be implied in the intensive cultivation.

Keywords: Intensive agricultural, Tomato cultivation, System of family exploitation the rural area of Kermanshah.