

An Integration of the Function of Indigenous and Modern Knowledge and Its Role on Rural Development, (Case Study: Rural Areas of Birjand County)

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Extended Abstract

1. INTRODUCTION

The rural areas of Iran have faced many challenges during 1990s and 2000s due to the failure of development programs, incidence of persistent draughts, vulnerability of rural economics and their consequences, including lack of employment opportunities and rise in migration to urban districts. Therefore it is necessary to identify the potentials of indigenous knowledge and its prospects and challenges for rural areas. Since each certain indigenous knowledge is constructed on the basis of the realities of its environment, it provides us with appropriate methods to manage the environment. The integration of this indigenous knowledge with modern forms of knowledge can present us with initiatives to achieve sustainable development. This study aims to introduce such an initiative in rural development, based on indigenous knowledge.

2. THEORETICAL FRAMEWORK

Indigenous knowledge is defined as the technology, skills and knowledge of native people that come from their direct interaction with the environment which stores in their memories and their activities after growing in their beliefs and ideas and ultimately it is projected in their proverbs, myths, ritual, social laws, agricultural practices, crop varieties and livestock breeds, etc. From a social point of view, it is more economical, environmentally friendly and it involves minimal risks to farmers and rural producers. Therefore its implementation in each region will be essential in order to achieve development.

3. METHODOLOGY

This is an applied study which follows an analytic-descriptive methodology. The data were collected through archival and field studies. The sample includes 381 households, selected from 33 villages

around Birjand (each containing more than 20 households) by the help of Cochran method. To confirm or reject the hypothesis, analytical methods including Fisher and Kruskal-Wallis variance analysis were used through SPSS software.

4. DISCUSSION

Given the extent of the population's current needs and vulnerabilities of the remaining natural resources, neither indigenous knowledge nor technology alone can satisfy the needs and requirements. Therefore, the appropriate model should be a mixture of formal as well as indigenous knowledge. The correlation of integration methods and the rate of efficiency indicate that the majority of those who used the methods reported an increase in efficiency. There has been also an increase in the income of those employed in agriculture industries. But people with traditional agriculture faced with reduced income.

According to theoretical perspective and an increasing emphasis on the use of indigenous knowledge systems due to the perceived needs, it is necessary to enrich formal knowledge with indigenous Knowledge in the areas of development, so that combining these two forms of knowledge provides improvement in agriculture and rural development.

5- CONCLUSION

The results of this study show that the integration of indigenous knowledge with modern knowledge offer conditions of sustainable development through creating employment and income diversification and increasing productivity in agriculture. However, indigenous people don't trust their knowledge as they did before. Because dissemination of modern knowledge among rural people made them to believe it after discerning signs of improvement. But due to their compatibility with environmental circumstances,

not only these transient symptoms improve the situation in rural areas but also made rural people, who lost their beliefs, attracted to cities. Hence the revival and development of rural areas is proposed.

1 - It is necessary to create a database of indigenous knowledge and to inhabit groups (graduates of Geography and Agricultural Engineering) in the city of Birjand in each of the rural districts, in order to collect farmers experience , and to identify a technology suitable to natural-human characteristics of the region for the promotion of agriculture.

2 - It is necessary to Establish a rural indigenous knowledge in agricultural related courses for

engineering rural development students in keeping with teaching and promoting the indigenous knowledge and skilled professionals to integrate indigenous knowledge with the modern one.

3 - It is necessary to train rural people with modern knowledge in the form of training in fields and cooperative projects in order to preserve and promote indigenous knowledge in agriculture.

Key words: Indigenous Knowledge, Modern knowledge, Rural Development, Birjand County.

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