Measuring the Degree of Agricultural Development (Cultivation sub-sector) in Rural Areas
(Case Study: Dashtroom Dehestan in Boyer-Ahmad County)

Saleh Shahrokhi Sardoo[1]∗- Shahab Mirzaie[2] - Mosa Mahmoudiboram[3] - Behrooz Hassanpour[4]

1- Ph.D. Candidate, in Agricultural Development, Yasouj University, Yasouj, Iran.
2- MSc. In Rural Development, Yasouj University, Yasouj, Iran.
3- MSc. Rural Development, Yasouj University, Yasouj, Iran.
4- Assistant Prof., in Agricultural Economics, Agricultural Research and Natural Resource and Education Center, Yasouj, Iran.

Extended Abstract
1. INTRODUCTION
The pattern has been the same for the planning and management of agriculture in rural areas, which is applied to various forms of state failure and inefficiency of the agricultural development programs. Because this planning and management have not been designed based on needs, talents, and abilities of the rural areas, but based on consensus over the potential and actual needs and abilities. Accordingly, knowledge of the distribution and degree of development of agriculture in this area could be a prerequisite for agricultural and rural development projects and programs to be considered. In this regard, one of the ways that can be useful in planning and managing the development of agriculture is the classification of rural areas according to conventional indicators of agricultural development. Results obtained from the survey studies, showed that due to changes in development, regardless of its natural resources, these regions are among the deprived areas and to achieve the appropriate level of development requires government intervention and planning. Hence, in order to reduce the problems of development, intervention and orientation of the agricultural structure will be an important factor. In this regard, the aim of the present study is to determine the level of agricultural development (Farming Subsector) in rural areas in Dashtroom village in Boyerahmad county to improve rural development planning.

2. METHODOLOGY
The present study, from the objective point is an applied research and from the analitycal point is quantitative research method. The population of the research consisted of rural areas more than ten households in the central part of the Dashtroom village in Boyerahmad county that includes 39 villages. To determine the sample size, Krejcie and Morgan methods was used through families residing in the study area. Sample size of 320 households were calculated, and then in every village,

according to its population, a number of farmers who were the heads of households were selected. In this research, the data were primarily collected through field studies and questionnaire. Content validity was checked to determine the validity of the questionnaire which was designed and revised after consulting with university professors and experts. In order to determine the reliability of the questionare, the pre-test (30 questionnaires) was conducted; the Cronbach's alpha coefficient obtained indicated the reliability of the questionnaire. To assess the development of agriculture in the region, the hybrid method of TOPSIS-entropy was used. Data processing was carried out through using MATLAB 7.10 software.

3. DISCUSSION
The results showed that the agricultural development coefficient (Farming Subsector), in the rural areas of Dashtroom, is the highest (0.90) in Tangary village and the lowest (0.08) in Cheshmeh Baloot village. Thus, the amplitude of the development level in the agricultural sector was estimated 0.82. In addition, villages including Cheshmeh Balutak, Gav Barg, Kooshk Olia, Saadat Abad, Bahareh-e-Barg Khiari, Cheshmeh Khersi Piroozak, Chel Mohammad Bagheri Pereshkaft, Chel Mohammad-e-Bagheri Pereshkaft, Dare Khani Pereshkaft, Moradi Pereshkaft, Dare Galga Pereshkaft, Cheshmeh Roghat, and Chah Pazanan were considered as underdeveloped villages, and Tangary and Hussein Abad Olia as developed villages. Furthermore, the results indicated the unfavorable development of agriculture in the region (with an average of 0.35 in a range of zero to one); thus, most of the villages in the region (58.97 %) are the least developed ones. The calculated dichotomy coefficient reflects the existence of inequality and differences in the rate of development in rural areas. The results showed that the spatial distribution of agricultural development in the region is not in a balanced state. The data indicated that the average rate of development, in the agricultural sector, in terms of economic, social,

∗. Corresponding Author: saleh.sh0028@yahoo.com   Tel: +98913 348 8416

technological, infrastructure, and environmental dimentions in the region is equal to 0.34%, 0.43%, 0.49%, 0.34%, and 0.52%, respectively. Given the agricultural development dichotomy coefficient, it can be said that, the lowest dispersion, with the coefficient of 0.34, was the technical dimension and the infrastructural dimension, with the coefficient of 0.53, was the maximum amount of dispersion and the lack of balance in the rural districts. Other findings indicated that the natural location of the villages under survey is effective in enhancing the rate of development of rural areas. So that, the villages located in the plain areas had higher development rate. It can be said that, the villages which are in a plain position have been developed more because they are in the normal position of infrastructure and services (i.e., good communication, good access to transportation, fertile lands, etc) for its residents in comparison to the villages in the hills and further development of the forest have created.

4. CONCLUSION

The findings suggested that, the studied villages have different levels of agricultural development. Tangary village, with the degree of development equal to 0.909%, and Cheshmeh Balootak village, with the degree of development equal to 0.082%, have the highest and the lowest level of agricultural development in the Dashtroom district. Among the five dimensions of agricultural development, dichotomy coefficient of technical dimension was the lowest that is indicative of the relative homogeneity of the villages in this dimension. Infrastructure dimension had the highest level of dichotomy coefficient. Data analysis revealed that, the degree of agricultural development in the region under study in terms of economic, social, technical, infrastructure, and environmental dimensions was 0.34, 0.43, 0.49, 0.34, and 0.52%, respectively, that reflects the superiority of environmental dimension compared to other dimensions. Overall, the results suggested that, the spatial distribution of agricultural development rate in the studied region is not in a balanced state.