

Analysis of the Economic and Social Consequences of the Drought in 1386 on Agriculture, Rural Areas (Case study: Esmali villages, Jiroft Township)

Sirous Ghanbari*

Assistant Professor in Geography and Rural Planning, University of Sistan and Baluchestan, Iran.

Habibollah Bayad

MSc. student in Geography and Rural Planning, University of Sistan and Baluchestan, Iran.

Extended Abstract

Introduction

Considering geographical status of Iran & its location in the dry climatic zone in the world and shortage of rainfalls, we should claim that as studies on drought phenomenon in Iran show, the outbreak of water & drought crisis are typical characteristics of this country. Although occurrence of such crisis are not often involved for the country in general, none of the areas in the country were safe from this phenomenon & according to their natural position, experience the effects of this wrecker phenomenon (Ghayoor, 1998:28) Jiroft is not an exception here, so that given the low rainfall during recent years, it has been categorized among cities facing with drought. The extent of drought effects in some rural areas of Jiroft has been so much that has had remarkable effect on the decline of agricultural products & yearly economical income of villages. In this regard & because of the same geographical characteristics in rural areas of Jiroft, the effect of drought on agriculture of Esmali Sofla village has been surveyed randomly. Although it's an important issue, unfortunately no comprehensive study has been done about the effect of drought & its consequences on rural areas of Jiroft & so this can reduce the effectiveness of plans against drought & lead them to the problems. So given the urgency & importance of the matter, the present study has been done with the purpose of analyzing drought effect on villages of Esmali rural district of Jiroft environs.

Materials and Methods

The general approach of research and quantitative research methods of data collection based on the library data - documents and field surveys. First, to identify indicators of socio - economic consequences of the drought and its related indicators with special emphasis on rural areas of expertise related studies was used. Accordingly, The 23 indicators of economic and social consequences of the drought were identified, And the design of the questionnaire as a research tool in the field studies. To increase the validity of the method or technique, formal and content validity were used, In this regard, the validity of the study was to verify the number of experts in specialized fields. The Cornbrash's alpha technique was used to measure the reliability of 0.757 was obtained, indicating the reliability of the tool of research. According to Cochran formula, 217 households in the village Esmali questionnaire was distributed to a random stratified sampling. In order to analyze the data collected from field studies of statistical tests were applied.

Discussion and Results

So the key point in perception of drought is understanding its environmental economical & social dimensions. So in the present research it is tried to survey the effect of drought of 1386 on both economical & social dimensions. At first in order to evaluate the economical & social effects of drought before & after 1386 according to the Likert, Wilcoxon test was used to measure the items. Statistical analysis of difference between before & after drought with respect to sample society from Wilcoxon rating test, suggests significant difference among items before & after drought & alpha is less than 0/05. As table 4 indicates in all items this gap is obvious so that Negative ratings

* Email: ghanbari@gep.usb.ac.ir

are much more than positive ones. In terms of economical dimension most obvious gap is among indicators of reduced performance in horticultural crops and also drought leads to reduction in current & fixed assets of rural households. In addition, with respect to social dimension after drought, confidence in villagers has declined & also smuggling among residents has increased. On the other hand conflicts between residents & farmers during drought than before that have had remarkable rise. In order to examine the relation among impacts of drought on income of farmers, area under cultivation, employment in agriculture & investment in agriculture it is used from descriptive table of Summers, compatibility table of Kendall tau eBay & correlation coefficient tests of Kendall tau c. The results are separately mentioned.

Conclusions

One of the most important effects in the village under study is economical effect that has led to the reduction in area under cultivation and current investment and income. According to the findings of the analysis there is a positive meaningful relation between drought effect & level of income & investment. So that shares of incomes lower than 900 thousands RLS have increased after drought. From among 217 samples under study (i.e. 68/70 percent of total participant) that have evaluated the effect of drought on reduction of agricultural income in a 'very much' level, number of 118 people (i.e. 68 percent of total samples), have rated the effect of drought in an 'average' level. One of the other effects of drought is on the area under cultivation, & that results from analysis showed that most of the villagers are active in a cultivation level of 0/5 to 1 Hectare, before & after drought. But share of lands have reduced to 1/5 hectare & large farm have been restricted because of drought effect & lack of water. One of the other important effects of drought is its social dimension. One of the factors of social dimension is migration. In general results of the present study show that after drought there hasn't been much tendency to migration in household & this can because of temporary job changes after drought, so that 60/37 percent of households have changed their job temporarily & 42/86 percent of them have started up service affairs that most of them were busy with agriculture before drought.

Keywords: Drought, Rural household, Economical & Social dimension, Agriculture, Jiroft County.

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