

## A Survey of the Role of Reliving of Hamoun Wetland on the Income of Production of Handicrafts among People living in Sistan Region

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### Abstract

*Hamoun Wetland, one of the largest and most important freshwater ponds, in south - east of Iran and the seventh pond registered in Ramsar Convention on Wetlands, in spite of containing international significance, has faced droughts in recent years because of the shortage of water and the lack of sufficient attention to the ecological principles. In addition to the devastating effects of environmental, social and economic recession and the reduction of the job opportunities especially in handicraft products spread among the Sistan region residents. The present study examines the role of reliving Hamoun Wetland on Sistan people income from handicraft products. The research methodology is descriptive and analytical – based on library studies and the statistical population includes rural residents of Hamoun wetland with at least 5 years experiences living around the wetland that producing handicrafts as their major incomes. Due to the high volume of statistical population, random sample method was applied and 95 families were selected as the sample of the study. A Standard questionnaire was used for gathering information and distributed among 15 members of different statistical population. Cronbach's alpha coefficient was 0.7 which pointed out the reliability over the research instrument. The average comments of the respondents about the revival of Hamoun wetland on Sistan's people income based on handicraft production was equal to 3.5 Vs. 0.51 of their statistical dispersion. The information obtained with regard to the results of Student's t-test and with 95% confidence coefficient, revealing Sistan Region people believe reliving Hamoun wetland leads to their more income from handicraft products*

**Key Words:** Hamoun Wetland, Reliving, Drought, Handicrafts, Income, Sistan Region people

### Introduction

Iran's Sistan, according to a comprehensive plan Zabul area in 2002 with an approximate area of 15197 square kilometers in the north of Sistan and Baluchestan Province, with 410020 inhabitants of which 250795 people, about 61 percent living in 837 villages and has four parts: Water Slope, Water Back, Water Central and Miankangi with four towns: Mohammadabad, Adimi, Bonjar and Helmand. Hamoun lake as the world's seventh largest freshwater lake is one of the main centers of agriculture and livestock in the Sistan region, but it is due to successive droughts in recent decades and the construction of numerous dams on major rivers entering the water in Afghanistan, Afghanistan's lack of commitment to abide by international treaty in 1972 to release 26 cubic meters of water per second (820 million cubic meters per year) of Iranian diplomatic power in the Helmand river and weaknesses in solving this problem, the epicenter of the crisis moving sand dunes conversion and cause harmful effects on environmental, economic and social. As the activities of the livelihood of People living in the Hamoun region, including agriculture, livestock, fishing and handicrafts, maintain and continue these values in the region depends on the water intake Helmand change in the region and the hydrology changes in the job opportunities for the people of the region, especially in the production of handicraft products.

During the recent years and severe droughts in Sistan Region, in addition to the environmental and social impacts, the effects of the devastating economic make many types of rural crafts at risk of extinction. so that textile dating back five thousand - year - old , which burned samples dating back to witness , There is no trace of that in the region, and that of Sistan or Ghali about the thirteenth century which has a new global reputation and now only with the help of aid agencies succeeded in four workshops employ about 200 people or straw weaving in Sistan region which the raw material comes from the web of straw in Hamoun wetland , now with the drought crisis in the wetland , the raw material from the north of the country will be brought to the region and in this way very little income was achieved for mat weaver.

As well as, Silk embroidery which was unique to the region, despite having great branches of the gardens in Sistan, but there is no trace of that. All of these cases refer to the reality of the effect of drought on income achieving from handicrafts' production, as though 61 percent of the population live in villages, income region less than 1 percent of gross domestic product (GDP) in spite of human power capacity. So knowing the exact effect of relieving Hamoun wetland on the Income of Production of Handicrafts in order to understand the features and capabilities of handicraft production, raise living standards, jobs and income as well as preventing seasonal migration to cities is the main objective of this research. The present study is an effort to investigate on the role of relieving of Hamoun Wetland on the Income of production of handicrafts among people living in Sistan region. The following research hypothesis was addressed in this study:

H1: Relieving of Hamoun Wetland will increase the Income of Production of Handicrafts among People living in Sistan Region.

## **2. Method**

The research methodology is descriptive and analytical – based on library studies.

### **2.1 Participants**

The statistical population includes 1626 rural residents of Hamoun Wetland with at least 5 years experiences living around the wetland that producing handicrafts as their major incomes. Due to the high volume of statistical population, random sample method was applied and 95 families were selected as the sample of the study.

### **2.2 Data collection and analysis**

The questionnaire was used for data collection in this study. The researchers developed the survey instrument. Validity of the instrument was established using a panel of experts. The first phase of the study involved the validation of the study questionnaire. On the basis of review of the literature, a questionnaire was developed to collect the necessary data. As well as making use of the defining insides of a Standard questionnaire, this is named "Evaluating the economic empowerment of rural households in satisfying their needs" which has 32 insides? To Obtain content and face validity of questionnaire, it was discussed in the panel discussion that experts Mashhad city Agricultural Organization office and Professors from Department of Economics in Payam-e-Noor University of Mashhad. Finally, some items omitted or changed and a 16 item questionnaire was developed on the basis of experts thoughts. The questionnaire covered two areas:

- 1) Demographic characteristics such as age and the level income of the respondents.
- 2) The point of view of rural people about factors of economy empowerment which were measured on a five-point likert scale which ranged from 1 (very little) to 5 (very much). Therefore, the researchers revised the newly-designed questionnaire, accordingly.

Next, the internal consistency of the whole questionnaire was examined with Cronbach's Alpha reliability estimated. A pilot study was conducted with 15 members. Reliability for the overall instrument was estimated at 0.89. Therefore, it was pointed out the reliability over the research instrument. Data collected were analyzed using the statistical package (SPSS.21). Appropriate statistical procedures for description (frequencies, percent, means, and standard deviations) and t-test were used.

## **3. Results**

The first part is related to age-related demographic characteristics of respondents. According to the statistical community to form households, hence the question of the head of household is assessed. The result of these questions is reported in the following table.

**Table 1: Age distribution of respondents**

Age	Number	Percent
< 20	8	8
20-29	14	15
30-39	17	18
40-49	23	24
50>	33	35
Total	95	100

The above table is based on the research findings, it appears that the majority of the selected respondents (35%) have more than 50 years of age, in other words, the head of households selected from rural areas surrounding Hamoun wetland, that the production of handicrafts provides some of the household economy are mostly over 50 years old. Next question, demographic information research tools related to household incomes from the production of handicrafts that the results are compiled and in the below table have been reported.

The researchers found that 55 percent of the selected households earning less than 500000 Rials from the production of handicrafts. Also, 40 percent of sampled households have income between 50 and 100 thousand Rials and 5 percent of them earn more than One million Rials from the production of handicrafts. (see table 2).

**Table 2: The distribution of the income level of the respondents from the production of handicrafts**

Income level from the production of handicrafts	Number	Percent
Less than 500000 Rials	52	55
500000-1000000 Rials	38	40
Above 1000000 Rials	5	5
Total	95	100

After describing the general characteristics, general views of respondents in relation to each of the questions of options research instrument was measured (Table 3)

**Table 3: Percent relative frequency distribution of subjects' responses to questions of options research instrument**

No	Items of research tools	Very little	little	Some	Much	Very much
1	The participation of household members in the production of handicrafts	%0	%13	39%	29%	%19
2	The availability of financial resources through the sale of products	%0	%5	%49	%24	%21
3	Handicraft production's role in financing families	%2	%8	%29	%47	%13
4	handicraft production rates in around Hamoun wetland	%0	%7	%40	%35	%18
5	dependency rates in handicraft products to Hamoun wetland	%2	%25	%42	%21	%9
6	The amount of financing of households through Hamoun wetland's products	%0	%16	%45	%24	%15
7	The desire to continue living in households in Hamoun Wetland area	%0	%2	%38	%45	%15
8	The desire of households to remain in Hamoun Wetland area provided that reliving it	%0	%5	%49	%38	%7
9	The desire to attract new households for living in Hamoun Wetland	%0	%18	%37	%28	%17
10	The effect of reliving Hamoun wetland on improving the quality of household's lives	%0	%26	%31	%39	%4
11	The effect of producing handicrafts on the quality of 1 of household's lives	%1	%19	%35	%32	%14
12	Household's confidence to increase our financial resources through reliving Hamoun Wetland	%2	%19	%41	%18	%20
13	Positive attitude towards the production of handicrafts and increased household's financial resources	%0	%9	%51	%23	%17
14	The impact of reliving Hamoun wetland in increasing the production of handicrafts	%4	%4	%36	%40	%16
15	The impact of reliving Hamoun wetland in improving the households livelihoods	%0	%13	%35	%38	%15
16	Improve the growth and development in the households' location provided that that reliving of Hamoun Wetland	%0	%11	%38	%32	20%

As the data in the table above shows the items or questions in all research tools (questionnaires), the highest frequency is belong to some of choice, muchand very much.The highest frequency of questionnaire items related to the thirteenth row that 51 percent of selected respondents have stated their attitudes in relation to the production of handicrafts and increased financial resources moderately positive. Then the highest frequency is related to the second and third items that are based on the results it can be stated that 49% of respondents reported that access to financial resources through selling the handicraft products is the middle and 47 percent of respondents have assessed the role of producing handicrafts in increasing household financial resources, very high. In table 4 it have been made by a scaling to describe the specifications of each question in the research tool clearly to get easier conclusions about them. In this method, if the respondent to answer any questions or indicator, option is chosen very little score 1, little option selects 2 points, 3 points is the medium of choice, select much option score of 4 and if the option is chosen very much will earn 5 points.

**Table 4: Descriptive indicators of each research instrument questions (questionnaires)**

Variable	Number	the lowest score	The most score	Mean	SD
Indicator 1	95	2	5	3/5	0/94
Indicator 2	95	2	5	3/6	0/88
Indicator 3	95	1	5	3/6	0/89
Indicator 4	95	2	5	3/6	0/86
Indicator 5	95	1	5	3/1	0/96
Indicator 6	95	2	5	3/4	0/92
Indicator 7	95	2	5	3/7	0/74
Indicator 8	95	2	5	3/5	0/71
Indicator 9	95	2	5	3/4	0/98
Indicator 10	95	2	5	3/2	0/89
Indicator 11	95	1	5	3/4	0/98
Indicator 12	95	1	5	3/3	1/07
Indicator 13	95	2	5	3/5	0/89
Indicator 14	95	1	5	3/6	0/95
Indicator 15	95	2	5	3/5	0/90
Indicator 16	95	2	5	3/6	0/93

Results Table 4 indicates that the average points of 95 respondents' comments about 16 indicators, the 7 indicator was the top score with 3 / 7, out of a total of 5 points and the lowest points in the indicator 5 with 3/ 1, out of a total of 5 points scored. In order to describe and evaluation of the main research variables (i. e. the role of relieving of Hamoun Wetland on the income of production of handicrafts among people living in Sistan region), the average resulting scores of 95 respondents' comments about 16 indicators of instrument's research based on Likert's scale (Table 5)

**Table 5: Descriptive indicators of the main variable**

Variable	No	Lowest	highest	Mean	Sd
The role of relieving of Hamoun Wetland on the income of production of handicrafts	95	2/6	4/4	3/5	0/51

According to the results of the Table 5, it is observed that the average comments of 95 respondents about the role of relieving of Hamoun Wetland on the Income of production of handicrafts is 3/5 and the dispersion of individuals' comments equals with 0/51. It is noteworthy that the average obtained for this variable shows the respondents' view, in connection with the variable, higher than the average level. Also by obtaining 95 points for this variable, the lowest point is 2/6 and the highest score equals with 4 / 4. It is represented that none of respondents select the choice of "very little" or "very much" in indicators of research instrument. In order to check the normality of the main variable statistics, Kolmogorov - Smirnov test was used. According to the results shown in the following table (Table 6), it is observed that the main variable for the P-value is greater than 0/05. The normal assumption of the role of wetland Sistan plain on the income from the production of handicrafts has been confirmed and the results of the study parametric tests are used to draw inferences about this variable.

**Table 6: Test Kolmogorov – Smirnov in main variable**

Variable	Kolmogorov – Smirnov	P-value	Result
The role of reliving of Hamoun Wetland on the income of production of Handicrafts	0/843	0/477	Normal

In Table 7, Descriptive data and the results of t- test for checking the significant impact of the respondents' mean scores are presented.

**Table 7: Results of t- test for basic hypotheses**

Variable	No	Mean	Std.deviation	t	Df	P-value
The role of reliving of Hamoun Wetland on the income of production of handicrafts	95	3/5	0/51	1/159	94	0/000

The findings reported in the above table shows that according to the views and opinions of respondents, the average of the role of reliving of Hamoun Wetland on the income of production of handicrafts among people living in Sistan region is equal to 3/5. Given the amount of student t- test statistic and P-value resulting from it, because this amount is equal to 0.000 and the significance level of the test is much smaller ( $P\text{-value} = 0/000 > \alpha = 0/05$ ), as a result the null hypothesis at a significance level of %5 is a completely rejected. So with regard to the test results, with 95 percent confidence factor can be concluded that the residents believe that reliving of Hamoun wetland increasing people's income in producing handicrafts, etc.

#### 4. Discussion

Since the handicraft productions cause creating jobs and economic development and make a complementary elements in agricultural economy and prevent seasonal and permanent migration in every region. As well as, natural resources including wetlands are an important part of wealth in each country, the results of this study can provide useful information about goods and services provided by the wetlands and their value to society. Limitations of the study are the problems in various stages of research that related to the researcher, the resources of research and social realities. They may be controlled or not controlled. In this study, the researcher faced with several problems and obstacles that has been in the following important obstacles in the way of doing this study pointed out there. One of the obstacles is that the majority of Iran's social studies are facing and also in this study, due to the weakness of the research culture as a result the majority of people in society consider the done research like a joke. They will bind themselves because they don't know that, in the case of any question and answer in reality. Where a researcher at the present study face - to - face was met, to a great extent, the barrier were blocked, but not enough time to complete the questionnaire, the researcher faced with a lot of problems, including frequent visits. Other barriers of this research was stiff resistance that respondents before the start of the questionnaires were attached to the completion of the questionnaire and some questions refusal to respond.

To respond to the trust of the respondents because of his strong conservatism and great discretion of other obstacles in this study we face. Since in Iran, there is not specific investigation similar to the subject of this study, especially in the field of reliving natural resources and its effect on household's economy, therefore, The researchers didn't find the defined framework of the model and this factor in most of the various stages of research, makes a lot of problems and many repetitive activities. At the end, some following suggestions are related to findings of this study and the others are offered for researchers who are trying to do the same research, to complete this research or develop it.

- Pursuing the water right legitimized Hamoun wetland that the only way to relive the wetland at the Foreign Ministry is due to the contract 1972 year which, unfortunately Afghanistan does not act to the act,
- The more active NGOs, loving environment with international attention to the Hamoun wetland and regional discussion, Holding the cultural handicrafts of weeks in different provinces in order to introduce Hamoun wetland's crafts in the region and encourage the investors to investment in the region,
- The government's help to build local workshops to handicraft production affiliated to Hamoun Wetland which are aimed at reducing the cost of production and co - operatives in order to increase the share of purchasing products from the sale of the Products and eliminate the brokers and also deliver raw material to restore crop production by cooperatives the wetland.

- Encouraging managers to set priorities to ensure that the ecosystems' health, integrity, and uniqueness are conserved in a proper manner.

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