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# RURAL WOMEN'S CONTRIBUTION IN AGRICULTURAL PRODUCTIVE ACTIVITIES TO IMPROVE THE ECONOMIC SITUATION IN IRAQ

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## Abstract

The research aimed mainly at identifying the agricultural productive activities that rural women contribute to improving the economic situation, as well as identifying the personal and economic variables of rural women, in addition to identifying the achievement motivation and the sources of access to related information of agricultural productive activities. To achieve the objectives of the study, the research was carried out in the Madain Agriculture Division / Directorate of Baghdad Agriculture. A sample of (120) women was selected by (48%), where the data were collected using a questionnaire form for the interview of rural women and the statically program (SPSS) was used to analyze the data. Percentages, frequencies, arithmetic mean, standard deviation, weighted mean, T-test for one sample and one- way anova test was used as a tool for statistical analysis and draw conclusions and the most important findings of the research were: The highest proportion was found in the age group of (41-50) years and the category (31-40) years, where the percentage reached to (30.8%, 26.7%) respectively and the great majority of the female respondents were married by a percentage of (84.2%). As well as, the results showed that a 60% of the female respondents in the two categories read, written and illiterate, furthermore, two-third of them (65%) owned (5) dunums and nearly half of them by (48.3%) are marketing of productive activities in the two categories (always, sometimes). Moreover, more than one-third of the female respondents by (36.7%) gets information from their personal experience, In addition to they were motivated by high achievement. The results also showed that the contribution of the respondents in some activities was high, as it came in an advanced rank and according to the weighted mean: storing and drying vegetables (bean, okra, etc.) by (2,733), bread making (2,73), rearing sheep and goats (2,64), poultry rearing (2,64), fruit drying such as apricots, grapes and others (2.53), enhanced ghee manufacturing (2.40), making kubba and kufta (2.38) and yogurt manufacturing (2,31). The researcher recommended that attention should be paid to educating the rural women's, since their education increases their knowledge of recent information and the need to intensify extension efforts directed at rural women through the preparation of training courses to improve the quality of agricultural production activities and to provide them with information on modern technologies in food and crafts manufacturing.

***Key words:*** Rural Women, Contribution, Economic Situation.

## Introduction

Rural development is one of the challenges facing developing countries. It aims to promote all economic, social, health, educational and cultural levels of the individual and society through the optimal use of all material and human energies (Fayed, 2009, p:99) Human energies are the real driving force of the rural development process and from the important elements for achieving it. In order to make the development process successful, it requires the participation of both men and women, as well as the equity of their access to its benefits (Musa, 2003, p:59). Furthermore, women had an important and prominent role to play, with half of society as a population and a good percentage of its productive capacity, the role of rural women does not stem from the fact that they are either educative and responsible only for the management and care of the family, they included their participation in other places of work and various decision-making centers within and outside the family, this made her an important role an important role in economic life and thus she became an important partner with the man in various fields (Idris, 2007, p:174). She is fully responsible for activities related to food, nutrition, family care, food processing and storage, in addition to her contribution to various agricultural activities and operations, especially those related to agriculture, animal and poultry farming and its contribution to rural domestic industries and production and marketing operations.

Moreover, she is also practicing in any activity based on the exploitation of environmental output, whether they are agricultural or animal waste, or some activities related to small food industries. (Haikal, 2007, p:64). The development of small industries, including food, has proved to be the creation of jobs for the unemployed and to contribute to rearing the income level of the poor family. (Said, 2006, p:69) Perhaps the improvement of the family income in this way drives her to persevere achieving a higher level of success and then began to engage in marketing activities for these industries at a commercial level in order to seek the well-being of family members. Thus classifying activities performed by rural women from within or outside the family (home). Studies and research have pointed to the roles played by rural women in the areas of development, where Arab labor organization statistics showed that the ratio of women working in agriculture and animal husbandry in Iraq reached 39.34% (Al- Sageer, 2008). As (Al- Hetty, 2011, 113) pointed out that 80% of rural women high performed in animal husbandry and care. While (Ali Shehata, 2003) explained that rural women had high production activities, especially with regard to poultry, ducks, geese rearing and making bread. According to (Al-Ausi *et al*., 2007) findings, that 87% of rural women contribute to agricultural and service activities to a high degree, especially in the fields of crop, livestock agriculture and the manufacture of agricultural products. Furthermore, the (World bank, 2009) study indicated that rural women were involved in decision-making processes within the family, especially with regard to the sale of animals and their products and that the use of funds from the sale of surplus agricultural crops could be decided to buy more livestock and poultry. Despite the important role played by rural women in the agricultural sector and various food and crafts production activities, but there are still many problems in this sector. Where many activities performed by rural women are usually excluded from the labor force and national income statistics, particularly in rural areas, which are an economic activity that contribute to family and national income. (Al- Sageer, 2011). The reason behind the attention to the rural women was due to her invisible and marginalized work, in addition to some of the social that reduced their access to economic benefits such as modern technologies, agricultural credit and others. The increasing number of female-headed households due to migration and war, have made women bear the burden of supporting their families, as well as other household burdens, which have increased their working hours (Al-Tanobi, 2001). (Al-Taie and Iskandar, 2014) have mentioned that although there is expectance of training and instruction activities for rural women, they are described as few in number and domain, which they are not suitable with the numbers of rural women and with their important roles in agriculture or home and their need for knowledge, skills to improve their performance in those fields. In addition to that, there is also a lack of statistics and data showing the productive activities of rural women to improve the economic situation for her and families, which should be taken into account in the formulation of outreach programs and extension activities, by providing trained agricultural female extension agent for the purpose of providing rural women with information and skills to improve their performance in productive activities to increase their income. The interest in the contribution field of rural women to productive activities was aimed at identifying the most important of these activities that could be undertaken to improve the economic situation of rural families, to identify appropriate extension needs and develop an extension and training programs for the purpose of providing them with information and skills to improve their efficiency and qualification in accordance with their work and the potential available. Therefore, the aim of this research was to identify the most important agricultural productive activities of rural women, in addition to identify the sources from which the female respondents obtain their information on agricultural production activities, as well as identify the achievement motivation for rural women, by trying to answer the following questions. What were the most important agricultural production activities in which rural women contribute, what were the most important sources of access to information on agricultural production activities and does rural women have the achievement motivation for agricultural productive activities. While the main objective can be summarized as follows: Identify the personal and economic variables of rural women, identify the sources of the female respondents access to information on agricultural production activities, identify the achievement motivation for the female respondents of agricultural production activities and identify the most important agricultural production activities that the female respondents contribute into improve the economic situation

## Materials and Methods

The research was conducted in Baghdad governorate / the Madain Agriculture Division / Baghdad Agriculture Directorate, the number of rural women was (2,500) and a 48% random sample was taken, so the sample size was (120) woman, where the data necessary to achieve the research goals were fulfillment using a questionnaire through a personal interview with rural women. The Statistical Package for the Social Sciences (SPSS) was

**Table 1:** Distribution of female respondents according to some personal variables.

| Variables | Number | % |
|---|---|---|
| Age of respondents | | |
| 30-20 | 29 | 24.2 |
| 40-31 | 32 | 26.7 |
| 50-41 | 37 | 30.8 |
| 60-51 | 22 | 18.3 |
| Marital status | | |
| Never been married | 7 | 5.8 |
| married | 101 | 84.2 |
| widows | 9 | 7.5 |
| divorced | 3 | 2.5 |
| Educational status | | |
| illiterate | 19 | 15.8 |
| read and write | 53 | 44.2 |
| primary | 26 | 21.7 |
| middle | 15 | 12.5 |
| preparatory | 7 | 5.8 |

used to analyze the data. Percentages, frequency, arithmetic mean, standard deviation, weighted mean, T-test for one sample and ONE Way ANOVA test were used as a tool for statistical analysis and draw conclusions.

## Results and Discussion

### First: Identify the personal and economic variables of rural women

The results in table 1, show the following variables as follows; where the personal variable can be categorized to Age, where the results of the research shows that the highest percentage of female respondents was in the age group (41-50) years and the age group (31-40) years, where the percentage reached to 30.8%, 26.7% and the lowest percentage in the age group was (51-60) years by a percentage of 18.3%. These findings indicate that women of these ages are active and are keen to maintain their families through the family budget follow-up and their endeavor to contribute to various agricultural productive activities, which lead to improve the economic situation of the rural family. The second personal variable was marital status. The results showed that the majority of female respondents by 84.2% were married, while 7.5% were widows and 5.8% of them have never been married and 2.5% were divorced and this result was consistent with the nature of rural society in the early marriage prevalence for girls. The decrease in the percentage of divorced women is in line with the values, customs and traditions prevailing in rural society for the importance of matrimonial life and the formation of a stable family. The third personal variable Educational status: the results observed that 60% of the female respondents in the two categories read and write and illiterate and followed by 21.7% with a primary certificate and 12.5% and 5.8% with a middle and preparatory certificate respectively. This result indicates a high percentage of female respondents read and write without having a scientific qualification and illiterate women, which requires more efforts to be made to teach them as illiteracy is one of the obstacles to rural development.

The second variable was Economic variables, which also can be categorized to the size of the agricultural land tenure, where The results in table 2, showed that two-thirds of the female respondents had 65% land tenure (5) dunums, while 25% had (10) dunums and 10% had (15) dunums. It is observed from the table below, there was a significant difference in the small size of land tenure, where the calculated $Chi^2$ value was 58.2 at level of 0.05, the small tenure enables the female respondents to carry out various productive activities because they have enough time to practice agricultural production activities inside and outside the house.

And marketing: The results of table 3 show that nearly a half of the female respondents (48.3%) marketing the productive activities in two categories (always and sometimes) and that (32.5%) in the category (rarely) and the percentage (19.2%) in the category (I do not). This result was a factor that increases the desire of rural women to contribute to the agricultural production activities to market them and to improve the economic situation of rural families.

**Table 2:** Distribution of female respondents according to the size of agricultural land tenure.

| Land tenure | Number | % | Calculated $x^2$ | LSD | Degree of freedom |
|---|---|---|---|---|---|
| 5 dunums | 78 | 65 | 58.20 | 0.05 | 2 |
| 10 dunums | 30 | 25 | | | |
| 15 dunums and more | 12 | 10 | | | |

**Table 3:** Distribution of respondents according to marketing.

| Marketing | | | | | | | |
|---|---|---|---|---|---|---|---|
| Always | | Sometimes | | Rarely | | I do not | |
| frequency | % | frequency | % | frequency | % | frequency | % |
| 9 | 7.5 | 49 | 40.8 | 39 | 32.5 | 33 | 19.2 |

### Second: Identify the sources of the female respondent's access to information on agricultural production activities.

Table 4, shows the distribution of female respondents according to sources access of information related to agricultural production activities. The results indicate that more than one third of the female respondents (36.7%) received information from their

**Table 4:** Distribution of respondents according to sources access of information.

| Land tenure | Number | % | Calculated $x^2$ | $x^2$ table | Degree of freedom |
|---|---|---|---|---|---|
| Personal experience | 44 | 36.7 | 29.25 | 9.49 | 4 |
| Sons | 30 | 25 | | | |
| Visual and audio programs | 20 | 16.7 | | | |
| Publications | 11 | 9.2 | | | |
| Agricultural male or female extension agent | 15 | 12.5 | | | |

**Table 5:** The second test for the difference between the sample average and the assumption average of the achievement motivation scale.

| Total sample | Mean arithmetic | Standard deviation | Assumption average | Calculated T-value | T value table | Degree of freedom | Significant level |
|---|---|---|---|---|---|---|---|
| 120 | 17.59 | 2.37 | 16 | 7.36 | 1.96 | 119 | 0.05 |

personal experience and (25%) of them have access to information from the sons, while (16.7%) of them are obtained from the visual and audio programs and (12.5%) from the agricultural male or female extension agent and the lowest percentage (9.2%) of publications.

Using the chi square test, it was observed that the difference was the personal experience, where the calculated chi square value reached to 29.25 higher than the chi square table result by (9.49) at the level 0.05 and the degree of freedom (4). The results indicate also that the publications and the agricultural male or female extension agent came in the last two ranks, which requires increasing the activities of extension work directed to rural women through the preparation of training courses, seminars and meetings between the agricultural female extension and rural women to provide them with the information and skills necessary to improve agricultural production activities and the development and use of modern technology.

### Third: Identify the achievement motivation for the female respondents of agricultural production activities

The results in table 5, showed that the mean arithmetic reached at (17.59) degrees and the standard deviation was (2.37) degrees. The using of (t-test) for one sample shows that the difference is statistically significant, while the calculated T-value was higher than the tabled T-value of (1.96) with the degree of freedom (119) and the significant level was (0.05).

**Table 6:** Arithmetic means and standard deviations of achievement motivation according to the age.

| Age groups | Number | Arithmetic mean | Standard deviations |
|---|---|---|---|
| 30-20 | 29 | 17,6207 | 2,36664 |
| 40-31 | 32 | 17,2500 | 2,59030 |
| 50-41 | 37 | 17,3514 | 2,27567 |
| 60-51 | 22 | 18,4545 | 2,10955 |
| Total | 120 | 17,5917 | 2,36748 |

The above table showed that the female respondents have the high achievement motivation because the mean arithmetic of the sample was higher than the assumed average of the size by statistical significance (t). In order to determine the relationship between the achievement motivation and the age of the female respondents, One Way Anova was used to know the significance of differences between the achievement motivation and the age, where the results in tables 6 and 7 indicated that there was no statistically significant difference, as the calculated F value (1.34) was less than the F value table which amounted to (2.68) at level of (0.05) and the degree of freedom (4,495), which indicates that all age groups in the sample have the achievement motivation.

### Fourth: Identify the most important agricultural production activities that the female respondents contribute to improve the economic situation

The results in table 8, showed that the contribution of female respondents to some activities was high, in the first rank and according to weighted mean and most contributing was storing and drying of vegetables (bean, okra, etc.) (2.73), making bread (2.73), rearing sheep and goats (2.64), poultry rearing (2.64), fruit drying such as apricots, grapes and others (2.53), enhanced ghee manufacturing (2.40), making kubba and kufta (2.38), yogurt manufacturing (2.31). The results also showed that the contribution of the female respondents to some activities was medium and according to the weighted mean, including the planting and processing of fodder (2.6), making pastries and cake (2.19) the manufacture of jams and sweets (2.18), preserving and pressing dates (2.16), manufacturing cheese and butter (2.14), fattening the calves (1.82), cage and baskets industry (1.81), thick cream industry (1.8), brooms industry (1.8). This may be due to the fact that women engage in such activities within or outside the home, this reflects the importance and ease of the marketing of these activities, which improve the economic situation of the rural family. It was found that

**Table 7:** One Way ANOVA to detect the significance of differences in the achievement motivation scale according to the age.

| Source of variance | Sum of squire | Degree of freedom | Mean of squire | F value | Significance |
|---|---|---|---|---|---|
| Between groups | 22,277 | 3 | 7,426 | 1.34 | N.S. |
| Inside groups | 644,715 | 116 | 5,558 | | |
| Total | 666,992 | 119 | / | | |

some activities were ranked late and according to the weighted mean, including the manufacture of tomato paste (1.59), the manufacture of vinegar and pickles (1.48), tanning leather (1.37), the manufacture of molasses (1.35), the manufacture of noodles (0.52), bee keeping (0.32). These findings show that the contribution of female respondents to productive activities is low, requiring the preparation of extension programs for rural women to increase their efficiency in such activities. Extension work should take into account the preparing of integrated extension and training programs to develop the production and marketing capacities and skills of rural women for various activities to guide production processes to meet market demands of quantity and quality and the product is of high quality specifications.

## Recommendations

Regarding to the study findings, it can be drawn few recommendations that are useful in increasing the contribution of rural women in agricultural productive activities as follows:

1. The need to pay attention to rural women education, as their education increases her vision to the modern information and new techniques for agricultural production activities.

2. The necessity of increasing the extension efforts directed to rural women through the preparation of training courses to improve the agricultural production activities and provide them information on modern technologies in the field of food processing and crafts.

3. The results of the research showed that rural women have a high motivation for achievement, this requires attention to increase their participation in the development process through the allocation of programs aimed at spreading small industries, which can be carried out within the home to increase the income of the family and raise the standard of living.

4. The need to encourage rural women and help them to market agricultural products through the organization of exhibitions and provision of extension services, raw materials and equipment required by the extension service.

**Table 8:** Frequency, arithmetic means and percentages weights of rural women's contribution to agricultural production activities.

| Section | Always | | Sometimes | | Rarely | | Idon't do it | | Weighted mean | Standard deviation | % weight | R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Freq. | % | Freq. | % | Freq. | % | Freq. | % | | | | |
| Store and drying | 88 | 73.3 | 32 | 26.7 | / | / | / | / | 2.73 | 0.44 | 91 | 1 |
| Drying vegetables | 68 | 56.7 | 48 | 40 | 4 | 3.3 | / | / | 2.53 | 0.56 | 84.33 | 5 |
| manufacture of tomato paste | 10 | 8.3 | 66 | 55 | 29 | 24.2 | 15 | 12.5 | 1.59 | 0.81 | 53 | 18 |
| preserving and pressing dates | 42 | 35 | 56 | 46.7 | 21 | 17.5 | 1 | 0.8 | 2.16 | 0.73 | 72 | 12 |
| manufacture of vinegar and pickles | 20 | 16.7 | 39 | 32.5 | 40 | 33.3 | 21 | 17.5 | 1.48 | 0.97 | 49.33 | 19 |
| Yogurt manufacturing | 51 | 42.5 | 56 | 46.7 | 12 | 10. | 1 | 0.8 | 2.31 | 0.68 | 77 | 8 |
| manufacturing cheese and butter | 44 | 36.7 | 52 | 43.3 | 21 | 17.5 | 3 | 2.5 | 2.14 | 0.79 | 71.33 | 13 |
| poultry rearing | 86 | 71.7 | 28 | 23.3 | 3 | 2.5 | 3 | 2.5 | 2.64 | 0.66 | 88 | 4 |
| fattening the calves | 32 | 26.7 | 45 | 37.5 | 32 | 26.7 | 11 | 9.2 | 1.82 | 0.93 | 60.67 | 14 |
| manufacture of jams and sweets | 45 | 37.5 | 54 | 45 | 18 | 15 | 3 | 2.5 | 2.18 | 0.77 | 72.67 | 11 |
| making pastries and cake | 47 | 19.2 | 50 | 41.7 | 22 | 18.3 | 1 | 0.8 | 2.19 | 0.76 | 73 | 10 |
| Making bread | 93 | 77.5 | 24 | 20 | 1 | 0.8 | 2 | 1.7 | 2.73 | 0.56 | 91 | 2 |
| manufacture of molasses | 7 | 5.8 | 50 | 41.7 | 41 | 34.2 | 22 | 18.3 | 1.35 | 0.85 | 45 | 22 |
| cage and baskets industry | 26 | 21.7 | 50 | 41.7 | 39 | 32.5 | 5 | 4.2 | 1.81 | 0.82 | 60.33 | 15 |
| brooms industry | 29 | 24.2 | 45 | 37.5 | 39 | 32.5 | 7 | 5.8 | 1.8 | 0.88 | 60 | 17 |
| tanning leather | 14 | 11.7 | 40 | 33.3 | 42 | 35 | 24 | 20 | 1.37 | 0.93 | 45.67 | 21 |
| planting and processing of fodder | 49 | 40.8 | 57 | 47.5 | 10 | 8.3 | 4 | 3.3 | 2.26 | 0.75 | 75.33 | 9 |
| Bee keeping | 4 | 3.3 | 3 | 2.5 | 20 | 16.7 | 93 | 77.5 | 0.32 | 0.69 | 10.67 | 24 |
| rearing sheep and goats | 79 | 65.8 | 40 | 33.3 | / | / | 1 | 0.8 | 2.64 | 0.53 | 88 | 3 |
| manufacture of noodles | 2 | 1.7 | 7 | 5.8 | 42 | 35 | 69 | 57.5 | 0.52 | 0.69 | 17.33 | 23 |
| making kubba and kufta | 56 | 46.7 | 54 | 45 | 10 | 8.3 | / | / | 2.38 | 0.64 | 79.33 | 7 |
| thick cream industry | 26 | 21.7 | 53 | 44.2 | 32 | 26.7 | 9 | 7.5 | 1.8 | 0.87 | 60 | 16 |
| enhanced ghee manufacturing | 61 | 50.8 | 49 | 40.8 | 7 | 5.8 | 3 | 2.5 | 2.4 | 0.71 | 80 | 6 |

5. Supporting small-scale industrial projects through increasing training programs for the development of rural women, holding intensive seminars and courses to involve them in small productive projects to achieve suitable income for them and provide the necessary funding for them.

## References


Ali, Khadija Mustafa Mohammed and Samira Saif Shehata (2003). Rural women carry out some small agricultural production activities to increase household income in Fayoum and Qalubiya governorates. Proceedings of the Second Arab Forum on Activating the Role of Agricultural Extension and Rural Community Development, 1-2 October, Cairo University.

AL-Awasi, Adnan Ibrahim *et al*., (2007). The role of rural women in agricultural and service activities (field study in Ramadi district). *Anbar Agricultural University Journal.,* **Volume (1). Number (1).**

Fayed, Amal Abdul Rasoul Ahmed (2009). Prospects of agricultural extension work with rural women who received loans from the Development and Agricultural Credit Bank to implement the project of rearing female cattle in some villages of the province of Beheira - *Alexandria Journal for Scientific Exchange, Alexandria University.,* **30(2)**.

Hiti, Najwa Salem Ali (2012). The role of rural women in the development of animal production in some villages of Baghdad province, Ph.D. thesis, Faculty of Agriculture. Cairo University.

Heikal, Ihab Abdul Khaliq Mohammed (2007). A study of some of the effects of development projects financed by the local development fund loans for rural women in Fayoum Governorate, Ph.D. thesis, Faculty of Agriculture, Cairo University

Idris, Nargis Hamrouni (2007). The role of women and the way of their integration in the development. Regional Water Awareness Project in the Arab States / Amman, Hashemite Kingdom of Jordan, Arab Organization for Agricultural Development, Khartoum.

Musa, Mahmoud Yousef (2003). The role of the rural development at Al Beheira project in the development of rural women and the dissemination of small productive projects for farmers and young graduates, the second Arab Forum on activating the role of extension and the development of rural communities, Cairo.

Saeed, Abdul Jalil Dirham (2006). Food Industries and their Role in Providing Food in the Republic of Yemen, National Training Course on Developing Food Awareness for Rural Women in Sana'a, Republic of Yemen, 3-8 June, Arab Organization for Agricultural Development, Khartoum.

Sagheer, Karima Mohamed (2011). The reality of rural women working in the labor market locally and internationally. The Fourth Arab Conference for Human Resources Development 13-15 / 2/2011, Riyadh.

The World Bank, FAO and IFAD (2009). Gender in Agriculture Source book.

Tanoubi, Mohammad Omar (2001). Arab Rural Women, First Edition, Art Radiology Library and Press, Alexandria.

Taei, Hussein Khudair, Iskandar and Wasen Wadih (2014). The reality of organizing extension of rural women in some governorates of the central region in Iraq and ways to develop it, *Journal of Agricultural Science of Iraq.*, **45 (1)**, University of Baghdad.