



Rural women participation in the irrigated agricultural development

An empirical study with reference to rural women farmers in

Shendi/Matammah localities irrigated agricultural sector

د. آدم الرضي محمد¹

ملخص:

أجريت هذه الدراسة لتقييم مشاركة المرأة الريفية في التنمية الزراعية بالمناطق المروية. شملت دراسة حالة للمنطقة المروية بمحليتي شندي/المتمة. اختيرت عينة الدراسة من خمس قرى بالمنطقة، واستخدمت طريقة الكوتة لاختيار 100 أمراه يمثلون عينة الدراسة. المعلومات الأولية جمعت عن طريق المقابلة الشخصية باستخدام استبانة معدة لذلك الغرض، والمعلومات الثانوية تم الحصول عليها من الدراسات السابقة (البحوث والأوراق)، وكذلك من محليتي شندي والمتمة إضافة إلى المصادر ذات الصلة. وتم استخدام عدد من الطرق الإحصائية لتحليل المعلومات و لاختبار فروض الدراسة من بينها الجداول و التكرارات، و مربع كاي، لاختبار المعنوية الإحصائية للفروق بين المتغيرات. النتائج التي تم الحصول عليها من اختبار مربع كاي أوضحت وجود فروق ذات دلالة غير معنوية بين المبحوثين بمنطقة الدراسة من حيث الخصائص الشخصية، المشاركة في النشاطات غير الزراعية، كذلك معرفتهم بالبحوث الزراعية، ساعات العمل اليومية في الزراعة، الأعمال اليومية (غير مدفوعة الأجر للمرأة)، مدى الاتصال بالإرشاد الزراعي، مستوى استعمال الأسمدة في الزراعة، وأهم المشاكل المز رعية التي تقابل المبحوثين. واشتملت الدراسة تأسيساً على نتائج البحث على عدة توصيات من شأنها أن تسهم في تحسين مشاركة المرأة في التنمية الزراعية بصفة عامة، بجانب توفير الخدمات



الزراعية للنساء، وأهمها المدخلات (أسمدة، تقاوي ومبيدات) إضافة لتوفير الخدمات العامة للمرأة الريفية حتى تخفف من الأعباء المنوط القيام بها، كخدمات التعليم، الصحة وتوفير مياه الشرب.

Abstract:

This paper is designed to assess the rural women participation in irrigated agricultural development. A case study of women farmers in Shendi/Matammah irrigated area.

The sample of respondents was selected from 5 villages in the area of study (Shendi/Matammah area). Quota sampling procedure was employed for selection of 100 women in the area. The primary data were collected by use of structured interview schedule. The secondary data were obtained from the previous studies (research, papers), and official reports and documents of Shandi/Matammah localities and other relevant sources. A number of analytical techniques for data presentation and analysis were employed, descriptive statistical analysis, (frequencies and percentages), and chi-square.

Moreover, the results revealed that women farmers in Shendi/Matammah area were not aware of agricultural practices, and had no contact with extension and research. In addition they were not interested in practicing agricultural activities, beside participating in activities other than agriculture.

The paper suggested a set of recommendations that focused on ways of improving rural women participation in other practices rather than agriculture, together with availing services for these practices, and increasing access for social services for women in the area of study such as (educational services, health services, drinking water etc...).

Introduction:

Women represent almost half of the society in any country. Their social status in all the developing countries is relatively lower than men, since they have less access to education, carry more work load, affected more by malnutrition, and adherence to old customs and traditions (Mahgoub, 1999).

Women in the developing countries usually divide their time between home and farm activity, using local tools in both. Although they carry out heavy duties and responsibilities, they do not get the recognition they deserve and the opportunities to improve and develop their skills by which they can change their status.



In African developing countries, two main types of rural communities can be identified. One in which wage labourers are few and women are very active in agricultural work, and the other type where women take little part in agricultural work and the male cultivators employ more hired male labours. In some countries, where hired workers are men termed as male farming, have little female participation. In other countries a more intricate social and sex pattern exist where women work as casual labourers for male cultivators as traditional norms allow (Boserup, 1970). Women's economic activities are considered in any society as a significant factor for the improvement of family income. In general, illiterate rural women contribute more labour for agricultural production and animal husbandry than educated females who tend to take up non-farm employment as teachers, nurses, midwives...etc when available (Ministry of Finance, 1996).

Women's contribution to agricultural production in the Sudan is very substantial based on statistical evidence. However, this contribution varied from one area to another depending on the variation in socio-cultural and economic factors (Ahamed, 1992).

Modernization is often a factor, which reduce women's contribution in agriculture (Basher, 1987).

The main objective of this paper to investigate women contribution to the irrigated agricultural work in Shendi/Matammah area and their off-farm work and the constraints that affect their participation in agricultural development.

Methodology:

The paper adopted the case study as a method for research. A questionnaire and interviews of respondents, officials, elites of the society who were selected by quota sampling were used. In addition to that previous studies (research, papers), observations are used. A descriptive analysis (frequencies and percentages) and chi-square is also used to identify the significant differences between the variables if any.

The population of this paper is the rural women who are resident in Shendi/Matammha localities, whose work in irrigated agriculture or in the livestock raising in addition to being housewives (settled and nomads) in the area of the study, 100 women were selected by using quota sampling procedure, from 5 villages in the area, namely were Elmagaweer, Elsayal, Altaragmah, Elmisaktab and Gandato.



The area selected for the study is the main Nile banks and islands constituting the agricultural irrigated and flooded lands of Shendi/Matammah localities.

Results and discussion:

The results showed that most of the respondents (70%) were in productive age (20- 49) years age, so they have the enough physical effort to practice agricultural activities, while, 62% of them were married and settled with their families. Most of the women were educate, illiterate represented by 32% only.

Table (1) distribution of the respondents by their work in agriculture:

Employment	Frequency	Percentage
Work in agriculture	56	56%
Not worked in agriculture	44	44%
Total	100	100%

Source: Field survey April (2004)

As shown in table (1) the respondents who were engaging in agricultural work were represented by 56%. It is clear that women in Shendi were engaged in agricultural work in a suitable degree, but the agricultural enterprises are small and men are more engaging in agricultural work and not giving chances for women, whose engaged in domestic work only more than agriculture. The respondents who are not working in agricultural, they perform their full time in the roles of reproduction and the domestic work in their homes.

Table (2) distribution of the respondents by number of years worked in agriculture:

Number of years	Frequency	Percentage
1-2 years	07	07%
3-4 years	06	06%
5-6 years	04	04%
More than six years	39	39%
Not working in agriculture	44	44%
Total	100	100%

Source: Field survey April (2004)

According to the results in table (2) the distribution of the respondents by number of years they have been working in agriculture, It reveals that 43% of them their experience in agriculture not less than five years relatively they were practicing agriculture for along time.

**Table (3) distribution of the respondents by kind of farm ownership:**

The kind of farm ownership	Frequency	Percentage
Self-owned	17	17%
Family or husband's farm	30	30%
Cooperative or project	02	02%
Rented or shared	07	07%
Not working in agriculture	44	44%
Total	100	100%

Source: Field survey April (2004)

Table (3) shows that self-owned farms were spread more in the area between males (head of household or husband), in the area of study traditionally head of households were men. This reflects the dominance of men's farm ownership in the area. The cooperative system of ownership is not dominant in Shendi, renting of farms is more spread in the area (7%) because most of the agricultural land in Shendi area is owned privately.

Women in the area were not participating in income-generating activities because there were no income-generating enterprises offered to them in the area of study. In addition the community social participation was very poor, due to the fact that no benefits as they considered.

Table (4) distribution of the respondents according to type of their agricultural work they do in the farm:

Type of agricultural work	Frequency	Percentage
Participate in all agricultural activities	05	05%
Participate in most agricultural activities	09	09%
Participate in planting and harvesting	11	11%
Participate in preparing food & inputs	19	19%
Caring for livestock	12	12%
Not working in agriculture	44	44%
Total	100	100%

Source: Field survey April (2004)

Table (4) shows the distribution of the respondents according to the type of agricultural work they do, reveals that women in the area their dominant participation was in preparing food and inputs for male farmers, in this respect the women in the area were active because they do not participate fully in the main agricultural activities.



Table (5) distribution of the respondents by number of daily working hours in agriculture:

Number of working hours	Frequency	Percentage
The entire day	06	06%
Six hours per day	26	26%
Less than six hours per day	24	24%
Not working in agriculture	44	44%
Total	100	100%

Source: Field survey April (2004)

As shown in table (5) most of the respondents are not engaged in agriculture all the time, only 6% of them are engaged entire the day. This indicates that women in Shendi area are working only partially in agriculture, and in the farms. Their work is mainly confined to preparing food and inputs for men.

The respondents in the area were aware of the benefits of fertilizers, chemical fertilizers or organic fertilizers (animal manures), but the prevalence knowledge about animal manure more spread in the area of study. The respondents aware about agricultural extension and agricultural research, but they agree that no benefits of them, this reflect the weakness of it's services in the area of study.

Table (6) distribution of the respondents by their farms productivity:

Productivity	Frequency	Percentage
Less than average	08	08%
Average	08	08%
Above average	21	21%
Very good	16	16%
Excellent	03	03%
Not working in agriculture	44	44%
Total	100	100%

Source: Field survey April (2004)

Reverting to the results in table (6) the respondents average productivity for most of them ranging between above average and very good, this may be due to the fact that the main dominant problems in the area that affect productivity negatively were pests and irrigation, high cost of production, and lack of agricultural credit for women.



Table (7) distribution of the respondents not working in farms by the degree of their interest to work in agriculture:

Degree of interest	Frequency	Percentage
Very interested	07	07%
Interested	06	06%
I will practice if any opportunity availed	11	11%
Not interested	05	05%
Agriculture is a male practice	15	15%
Working in agriculture	56	56%
Total	100	100%

Source: Field survey April (2004)

As shown in table (7) 7% of the respondents agreed that they are very interested to work in agriculture if they find a chance to do so. 20% of the respondents reported that they are not interested in agricultural work, because it is a pure male activity (due to the norms and traditions of the local societies there). The main problem for those interest in agricultural work if they find opportunity was the scarcity of agricultural land, however it limit their participation. We observe that women in the area of study were faced by many obstacles which make them refuse to practice agricultural work.

Chi-square test revealed that there were no significant differences between the respondents in terms of agricultural participation, kind of farm ownership, farm productivity, daily working hours, interest to participate in agricultural activities, daily home activities (un-paid), participation in social activities, contact with extension, and the main agricultural problems.

Conclusion:

The paper conclude that the main problems facing rural women in the area of study in agricultural development was the farms ownership, a very serious problem the work in agriculture socially not accepted for women, and the weakness of agricultural extension and agricultural research services in the area of study.

Recommendations:-

The following set of recommendations is based on synthesis of the results generated by the paper. The recommendations are focused on ways of improving and increasing rural women participation and awareness especially in agriculture and other related activities.



Generally women need to improve their access for control over production factors, services and infrastructure facilities, to reduce women's workload, to increase the involvement of women in decision making at domestic local, national and international level, to improve women knowledge and self awareness to improve the organizations of women at all levels, to encourage the exchange of information and communication between rural women's groups and to change the stereotypical image of rural women.

The potential economic benefits from the time they saved in fetching (water, fire wood) and closely related to the extent of women involvement in domestic, economic and community development work, so time and energy gains from reduction in water and fire wood collection may be used in community self-help projects, educational activities and development.

References:

- Ahamed, I. (1992). "The Role of Women in Agriculture in the Gezira Scheme".
- Basher, M. (1987). "The Structure of Agricultural Production and the Role of Women in Different Farming Systems in Central and Eastern Sudan (with an emphasis on commercial large scale agriculture)" In "Intrim Report of the: National Conference on the Role of Women in Agriculture and Rural Development in the Sudan" Khartoum 18-22 January 1987.
- Boserup, E. (1970) "Women's Role in Economic Development" St. Martin's Press Inc., New York.
- Mahgoub, E. (1999). "The Participation of Women in Rural Development Programmes in Northern Kordofan Area Development Scheme Elobeid (ADSEO)". M.Sc. Thesis, Faculty of Agriculture, U. of Gezira.
- Matammah agricultural sector, (1994) annual report.
- Matammah locality, (2003) annual report.
- Ministry of Finance, (1996) Annual Report.