RESEARCH PAPER

Participation of rural women in agricultural activities in Algeria, the case of the commune of Maafa (South East Algeria)

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Abstract

The rural women in the South East Algeria play a pivotal role in agriculture. They are crucial for the overall success of efforts directed to agricultural development in rural areas. This paper examined the participation of rural women in agriculture activities in the region of Maafa, South East of Algeria. This work showed that, the most farm activities, in Maafa, were oriented for marketing more than for subsistence. The agriculture depends much on the presence of women. More than 50 % of workforce feminine was characterized by advanced age (more than 50 years). All the inquired rural women contribute in agriculture and animal breeding in addition to their routine household duties. Their agricultural activities are regarded as an involvement to improve the family income and farming agricultural production. Evidently, factors militating against the participation of women in agricultural production are many, and some of which are social, physical and biological in nature.

Keywords: Rural women, agriculture activities, Mâafa, Algeria.

Participation des femmes rurales dans les activités agricole en Algérie, le cas de la commune de Maafa

Résumé

Les femmes rurales dans le Sud Est d'Algérie jouent un rôle pilier dans l'agriculture, et leur participation dans le développement agricole dans les zones rurale est très important. Cet article pour but d'analyser la participation des femmes rurales dans les activités agricoles dans la région de Mâafa (Sud – Est d'Algérie). Les résultats montrent que la production agricole de la majorité des exploitations est destinée à la commercialisation plus que l'autoconsommation. Les activités agricoles utilise largement la main d'œuvre féminine. Plus de 50% de la main d'œuvre féminine se caractérisent par une tranche d'âge âgée (plus de 50 ans). Toutes les femmes rurales enquêtées participent dans les activités agricoles et les activités d'élevage parallèlement au travaux de ménage. Ces activités contribuent dans l'amélioration du revenu familial. Cependant; des facteurs sociaux, physiques et biologique pèsent sur la participation des femmes dans l'agriculture.

Mots-clés: *Femmes rurales, activités agricole, Mâafa, Algérie*

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1.INTRODUCTION

Rural women constitute the majority (70 to 90 %) of women in developing countries. With varying degrees, they are currently significant, if often unrecognized, participants in agricultural production providing an estimated 60 to 80 % of agricultural labor in Asia and Africa, and 40 % in Latin America (Jacqueline, 1997). The African woman in rural areas is an important workforce in agriculture. In Burundi, 97.4% of the women in the age of activity contribute to the agricultural activities (Niyonkuru, 2002). In Morocco, the rural women represent 50.3% of the whole of the female population and they are responsible for most of the household in addition to agriculture and animal breeding (Zrira, 2006). In the south of Mali the women represent 70% of the agricultural workforce (GRDR, 2012). In Nigeria is the fact that rural women, more than their male counterparts, take the lead in agricultural activities, making about 60-80 % of labour force (Yemisi, 2009).

In the rural areas, the agricultural workforce is divided between the women and men. But in the majority of the countries of the world, the women are still remained invisible workers in the agriculture. However, it is shown that, the women often obtain better results to their conscientious work and to the attention which they lend to a neat management. The rural women play a key role in the household food and nutrition security, improving the incomes and the rural means of existence and the general wellbeing. Thus, they might contribute to the rural development; the experiments of international fund of agricultural development, showed the role of the woman in the rural development and the fight against poverty (FIDA, 2011), the world conference of the land reform and the rural development (Rome in 1979) devoted the integration of the rural women to the development as being one of the principal guarantors of its success (Nafaa, 1998). The estimation of the food and agriculture organization of the United Nation (FAO) demonstrated that women account for more than half the labor required to produce the food consumed in the developing world, and perhaps three- fourths in sub- Saharan Africa (Quisumbing, 1995).

In the mountainous, steppe and Saharan areas of Algeria, the rural women involve in many agricultural activities. However, women involvement has received little attention in the research literature. Indeed, rural women farmers deserve better recognition and greater appreciation of their tangible contributions to agriculture and rural development and food security (Ogunlela and Mukhtar, 2009). In this backdrop, the present study was undertaken to find out the involvement of rural women in the agricultural production system in the semi-arid rural areas of Algeria, thus supporting the integration of the rural women to the development.

The study was conducted in the commune of Maafa, where the women are known with their participations in the agricultural activities, since a long time.

2. METHODOLOGY

The present investigation was designed to study the role and participation of rural women in agricultural activities in the commune of Maafa, south-eastern of Algeria (latitude 35°18´N and longitude 005°52´E, 735.6 m above sea level). Using semi_ structured questionnaires, a survey was conducted across 10% of total households randomly selected from the rural areas. Focus group discussions, key informat interviews were conducted . ; a woman by each farm household was inquired. The information collected included households bio- data, production ressources, roles and skills,contraintes and challenges in agricultural activities of women. The data were collected personally with the help of structured pre tested interview schedule. Data so collected were statistically analyzed with the help of percentage.

3.RESULTS

In the past, the agriculture in Maafa was regarded as a principal source of income. Currently this sector became a secondary source, because of the low profitability of agriculture compared to the needs for the life. Arboriculture is the principal culture (Apricots, Olive trees, Walnut, Fig trees, Indian Fig, Pomegranate trees and Apple trees). Other cultures could be found in this region such as the market gardening and the cereals.

3.1. Presentation of the farms

About 93.94% of the farms had surfaces lower than 2 hectares. Farms having a surface between 5 and 10 hectares represent only 6.06 %. These farms were generally owners with 75.67 %, collective 18 % and 6.06 % tenant. The majority of exploitations (93.75%) were far from housing with a distance lower than 5 km. Then 6.25 % of the farms were far from housing with a distance more than 5km. The production system is dominated by the traditional cultivation system (84.85%), while the modern cultivation system represents only 6.06%, the remainder of the exploitations

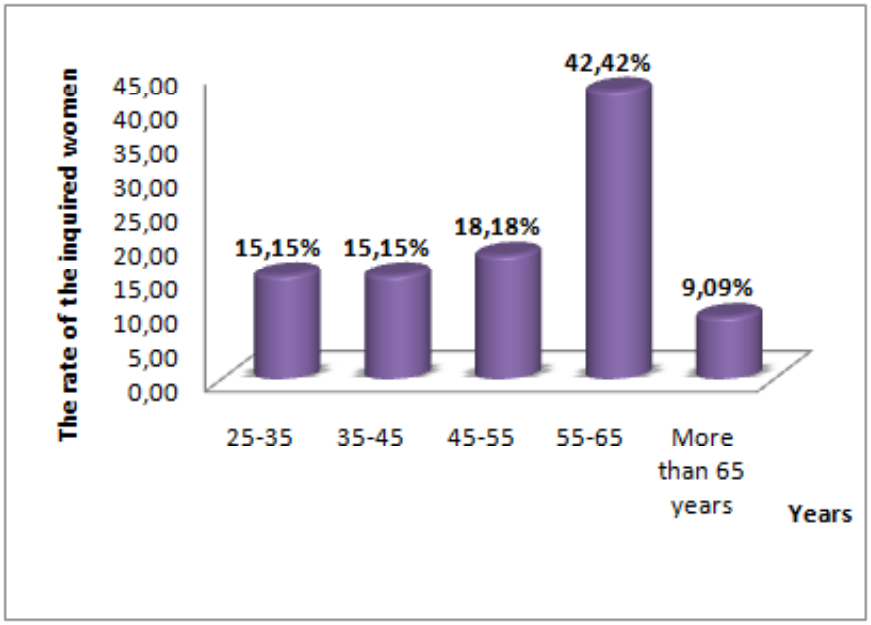

Fig. 01: The ages of the inquired women.

is characterized by the modern and traditional cultivation system. Man is the major responsible of the farm (more than 87%). The widowed women are also taken care by the responsibility of their farms.

The agriculture produces especially the apricots, where 84.85% of the farms are intended for marketing more than the subsistence farming, while 12.12% of the farms ensure just the subsistence farming.

3.2. General situation of the inquired rural women

The inquired rural women were aged between 25 to more than 60 years (Fig. 1). The group of age (55 to 65 years) was most significant by 42.42% of the inquired women. The weakest group of the age was that of the old women aging more than 65 years. 72.73% of the surveyed women were married, 6.06% devoured, 6.06% single and15.15% widows. More than 45 % of the rural women were illiterate, 3.25% had the primary studies certificate, 24.14% do not follow the primary study and 24.14 % were registered in the courses of elimination of illiteracy. All the inquired women were the responsible for the household activities, in addition to agriculture and the animal breeding.

3.3. Participation of rural women in the agricultural activities

The results of the study showed that there is a sexual division of agricultural work (Table 01). The rural woman carries her activities at the same time inside and outside the hearth. At the interior, she completes all the housework; she processes the foodstuffs and makes the craft industry. At outside, she takes part in the agricultural activities as well in the sector of the animal breeding, also she contributes in the drudgery of wood.

Table 01 indicates that the rural woman in Maafa, like the man, participates with different degrees in the various agricultural activities. Their rate of individual participation in the various activities oscillates between 3.23% and 50%. She is generally occupied by the weeding (50%) and the churning of seeds (41.65%). Their rate of participation was lower at the level of the work on the ground, fertilization, irrigation and agricultural production sale. These activities are taken in load by men.

The harvest and churning of seeds require an overall work between two sexes, and the man never takes these activities individually. A very significant rate of the co-operative work of the two sexes of certain activities was observed, such as sowing, plantation, harvest, and churning of seeds.

3.4. Participation of rural women in the animal breeding activities

The animal breeding is an old activity in Maafa. But this activity is currently not very dynamic compared to the past due to the resort to the paid works. The results of inquiry showed that 78 % of families in Maafa

have animal breeding. Each family in the commune had an average number of four goats, two ewes and / or sheep and two chickens. These types of breeding generally ensure the auto-cosumption families for the meat, fertilizer, milk and cheese. Breeding animals for principal income is rarely used by the families of the studied region.

According to the table 2, the rural woman is the major person in charge for the animal breeding with regard to the other agricultural activities. She works in maintenance, food, milking, transformation of milk into butter, cheese and natural pasture. Their rate of participation in these activities exceeds 65% and they are particularly helped by the men.

3.5. Seasonal distribution of the activities

The time devoted to each activity is very irregular according to the seasons and the activities of production and monitoring vary according to the vegetable and animal cycle. In winter she is occupied by sowing of the vegetable cultures as the garlic, faba bean, Onion, turnip, carrot and cleaning of the farm. In spring she takes part in the weeding, hoeing of the small pieces, mowing of grasses, harvesting cultures of autumn and churning. In summer, she participates in the harvest of apricots, apples, figs. In autumn the harvest of the grenades, pruning and preparation of small pieces of ground for sowing, she also contributes in the irrigation. The monitoring of the animal breeding is daily. Certain women suffer within the days as she reaches 08 hours per day in the farms in summer. The rural woman is also responsible for the food safety of her family where she has the load of the transformation and storage of food.

3.6. Constraints related to the agricultural work of the women

By nature of our occupation subjects, we are all imposed to constraints. Due to their capacity of production, women meet major and specific constraints to carry out the agricultural activities. These constraints are related to several factors:

Psychosocial factors:

- The versatility; the women are certainly obliged to leave an activity to carry out another activity.

- The incompatibility of the schedules of work and the social rhythms; When the women have children of younger ages, they prefer to occupy by them on the detriment of their agricultural activities, consequently, the day activities obligatorily will change.

- Atypical schedules; the number of working hours in a farm of large surface rises to 8h, which obliges the women to begin early the morning (06h in summer).

- The rhythm imposed by the dependence of the colleagues, since certain agricultural activities require a collective work as harvest.

- Attentional requirement; the agricultural activities

Table 1: Distribution of the agricultural activities by gender (Percent)

Activities	Man	Woman	Man and woman
Work of the ground	88.46 %	7.69 %	3.85 %
Sowing and plantation	22.22%	18.52%	59.26%
Weeding	6.25%	50.00%	43.75%
Fertilization	36.36%	18.18%	45.45%
Hoeing	33.33%	15.15%	45.45%
Harvest	0.00%	3.03%	96.97%
Irrigation	57.58%	9.09%	36.36%
Churning	0.00%	41.67%	58.33%
Participation in choosing cultures	21.43%	21.43%	57.14%
The sale	87.10%	3.23%	9.68%

Table 2: Distribution of the animal breeding activities by gender (Percent)

Activities	Man	Woman	Man and woman
feeding	8%	76%	16%
Watering	8%	76%	16%
Natural pasture	8%	76%	16%
Milking	0%	100%	0%
The mowing of grasses	4%	68%	28%

are permanent and successive then it requires a continuous follow-up.

Physical factors:

The physical load: due to several aspects; certain women pass through long ways, reaching sometimes 3km, to reach their farms or their habitats, as they carry an overload of weight, the diversity of activities to be made in not enough time,

- The exodus of the men towards the city for works puts the woman in position of head of family and obliges her to assume additional responsibilities and activities.

- Temperature extremes; Maafa is a zone presenting extreme temperatures especially in summer, and the work is surely painful there.

Biological risks:

- The presence of wild boar at the level of the commune is one of the biological risks which block the market gardening such as potato, the onion, garlic, turnip... etc.

DISCUSSION

The African continent is primarily rural; nearly 90% of its population survives of a traditional agriculture of subsistence, based on the use of a rudimentary technology and on the work of the families (Chlebowska, 1989). In Maafa the local population practices the food agriculture which frequently exceeds with marketing. All the surveyed rural women were the primary responsible for the household activities, in addition to agriculture and the animal breeding and the rural women are late compared to the urban women in the house works because of the no modern domestic equipment.

The zone being insulated far from any form of modern life, even the schools are distant or completely absent as the college. More than 45 % of the rural women are illiterate; some of them make only the primary school, because that requires a great investment and the school is not a priority in this region. In this case, the women and their daughters are condemned to remain in the hearth. Chlebowska (1998) announced that, in the majority of the African countries, more than 95% of women are illiterate.

The low rate of participation of the young women compared to the old women in agricultural activity is justified by the significant role at the house, to raise and educate the children, in parallel, the advanced age of the women farmers.

The rate 3.03% and 3.23% respectively of the women who harvest and sale the fruits without the assistance of the men is related to the women head of hearth devoured or widows whom they have farms of small surfaces.

The feminine workforce in agriculture of Maafa is an originating permanent, nonpaid; women participate in the agricultural activities since a long time like the Afghan woman in the valley of Baharak (Duchet, 2006). On the other hand, in the west of Delta of Egypt, the coastal zone of Morocco and in the area of Zaghouan in the north of Tunisia, the workforce of women is paid by the contractor farmers (Bouzidi et al, 2011). The woman in Maafa as the men is in charge of all the agricultural activities since the pruning until the sale, in contrast to the woman of the valley of Baharak in Afghanistan which is responsible for the market gardening except the potatoes that are cultivated in full field (Duchet, 2006).

We can note that, the rate of women participation is varied according to several factors. The first factor is the hardness of work; the pruning and irrigation are strong activities which are dominated by the men, thus the co-operative work of these activities is weak

to fairly weak. The second factor is the need of meticulous workforce like the weeding. The third factor is the requirement of patience to carry out certain activities like churning. Certain agricultural activities can be spread throughout the year like the maintenance of the orchards.

The culture of the apricot trees is dominant; it requires the participation of all members of the families to harvest the fruits.

Concerning the animal breeding, the activity which requires a strong patience and a daily follow-up, and because the number of head per family is weak, the woman deals much by the activities related to the animal breeding and the man considered just as an assistance. The participation in animal breeding is significant in all the tasks. However, the contribution of the women in Pakistan to carry out activities of livestock management is medium to very low compared to the other activities of livestock (Arshad, 2013). In Anand district of Gujarat state, the participation of farm women was observed more in the aspects related to milking, feeding, health care and management and less in general aspect of animal husbandry (Upadhyay,2011).

The study revealed that 100 per cent women involved in milking while in Karnataka 90 per cent women involved in milking (Rathod, 2011).

CONCLUSION

The obtained results clearly showed that the women play a very determining role in the agricultural activities in the area of Maafa. These activities are the responsibility of the men and the women. The activities of the women are especially concentrated in the animal breeding, weeding and churning of seeds, while the men activities related mainly to the ground, irrigation and sale of the agricultural production.

It may be concluded that farm women are actively involved in agricultural operations. In spite of the constraints facing their agricultural activities, the rural women are never weary of their task, in order to ensure the survival of their families.

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