

# *Rural Women in the Protection of The Agricultural Environment in Jordan*

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This paper reviews the role of rural women in the preservation of the agricultural environment in Jordan, and deals with types of pollutants in the Jordanian rural regions. It is based on studies which attribute pollution to unorthodox methods of using fertilizers which contaminate water in the respective regions. Contamination occurs as a result of the seepage of degraded fertilizer residues into underground and surface water resources. The paper also focuses on the adverse effects of pesticides and identifies the methods, amounts and types of pesticide residues in different ecosystems.

The paper deals with rural women in general, and focuses on women farm managers, family farm laborers and wage laborers. It also discusses the role of rural women in protecting the agricultural environment from pollution. It calls for women's awareness in matters of handling pesticides and fertilizers and in conforming to requirements for public safety while handling these chemicals.

The following are excerpts from El-Khaimh's paper that are directly related to women's relationship with the agricultural environment in Jordan.

## **The Role of Rural Women in Agriculture**

Statistics show that one out of every two Jordanian women work in agriculture. Despite the fact that



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women form half of the rural population, the amount of research about their role in agriculture is minimal compared to one investigating roles and needs of urban women.

Jordanian rural women contributions to agricultural production is significant, but they are not considered skilled labor because of the untrained tasks they perform. Field surveys have shown that women can play a more important role in agricultural production if technically trained. However, they continue to be excluded from planning and development projects, and restrictions on their interaction with men hinders their participation in relevant local and public activities. Hence, the status of women in agricultural production is not

visible. They are perceived as assistants to the men in their family and therefore their work is not remunerated. This marginalization of women continues to overshadow the relationship between women and agriculture, whereby society does not perceive any connection between them.

## **The Effect of Socio-economic Changes**

Women are the ones who are mostly affected by changes in educational levels. Familial and social obligations have a direct effect on their role in agriculture, keeping it marginal because women must carry out all the domestic tasks. Women, however, work more than men by an average of 15 hours per week including the variety of chores

## Gender Labor Force Participation in Agriculture Jordan 1980

Tasks	% of Women	% of men
Plowing	10.0	90.0
Sowing	30.0	70.0
Weeding	60.0	40.0
Harvesting	70.0	30.0
Transport of harvest	20.0	80.0
Storing	50.0	50.0
Manufacturing nutritional produce	80.0	20.0
Marketing & transporting produce	10.0	90.0
Care of farm animals	70.0	30.0
Milk production	80.0	20.0

required for housekeeping and agricultural tasks.

A study conducted in 1980 on Jordanian women's agricultural activities revealed that women are leading participants in the relevant labor force and the stages of production (see Table 1). Men cannot operate and financially provide for the family without women's participation in the various processes of agricultural work.

### **Women's Use of Pesticides**

Another field study was conducted in Jordan to examine women's knowledge of the various stages and methods in using pesticides starting from what to buy, to planning, storage, mixture of material, and disposal of left-overs. The study showed that women had substantial knowledge about the diseases of plants, their cause, and which pesticide to use for each. Women's work in this sphere can be summarized as follows:

1) The Diagnosis of the Plants' Needs. It is an administrative task in agriculture. This being the case, the women's diagnosis of agricultural diseases and botanical diseases are collected by experts from the Farm Directorate who then report them to the Ministry of Agriculture for further analysis and action.

2) The Purchase of Pesticide. It is

usually done by the Farm Directorate but it is also performed, to a lesser degree, by women in agriculture. In this case, these rural women depend on the brand name and the color of the product rather than on technical constitutions of which they probably have little knowledge.

3) Mixing of Pesticides for use. Women perform this task which requires little technical education and knowledge.

4) Spraying and Use of Pesticides. This process is controlled by men. Nevertheless, a few women perform manual spraying or spraying of specific areas, small in size, during the absence of men. Generally speaking, the role of women in this stage is limited to assistance tasks such as carrying the hoses. We also note that men and women do not wear safety overalls during the spraying from lack of knowledge of the dangers of chemicals.

5) Storage of Chemicals. Usually women do not need to store pesticides because little, if any remains, for they cannot afford to buy excess quantities. When storage is relevant, women place the containers of pesticides in plastic bags and hang them on trees or put them under lock in closets/cupboards.

6) Disposal of Pesticide Bags and Containers. Women perform this task too. Disposal consists of burning them

or burying them in the soil.

Recommendations for Improving Women's role in Agriculture and Protecting the Environment

1) Create agricultural cooperatives which cater to women working in agriculture.

2) Concentrate on disseminating technical knowledge by creating training and service centers.

3) Have the Ministry of Agriculture in collaboration with Union of Agricultural workers organize training workshops for women in diagnosing and treating diseases.

4) Up-grading legislation related to environmental control.

5) Develop public awareness through the media with emphasis on environmental-friendly attitudes and habits.

6) Supervision and demand quality control of agricultural fertilizers.

7) Encourage further research.

8) Increase opportunities for agricultural education of young girls in secondary schools.

9) Increase control over pesticides and insecticides manufacturing factories to prevent leakage into air and water ●

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