

**Women's contributions to agricultural production and food security:  
current status and perspectives in Syria**

Kaisi A., Al Zoughbi S.

in

Sagardoy J.A. (ed.), Lamaddalena N. (ed.), Quagliariello R. (ed.), Chimonidou D. (ed.),  
Guelloubi R. (ed.), Pinca V. (ed.).  
Mainstreaming gender dimensions in water management for food security and food safety

Bari : CIHEAM

Options Méditerranéennes : Série A. Séminaires Méditerranéens; n. 77

2007

pages 105-115

Article available on line / Article disponible en ligne à l'adresse :

<http://om.ciheam.org/article.php?IDPDF=800485>

To cite this article / Pour citer cet article

Kaisi A., Al Zoughbi S. **Women's contributions to agricultural production and food security:  
current status and perspectives in Syria.** In : Sagardoy J.A. (ed.), Lamaddalena N. (ed.),  
Quagliariello R. (ed.), Chimonidou D. (ed.), Guelloubi R. (ed.), Pinca V. (ed.). *Mainstreaming gender  
dimensions in water management for food security and food safety.* Bari : CIHEAM, 2007. p. 105-115  
(Options Méditerranéennes : Série A. Séminaires Méditerranéens; n. 77)



<http://www.ciheam.org/>  
<http://om.ciheam.org/>

# WOMEN'S CONTRIBUTIONS TO AGRICULTURAL PRODUCTION AND FOOD SECURITY: CURRENT STATUS AND PERSPECTIVES IN SYRIA

A. Kaisi\* and S. Al Zoughbi\*\*

\* General Commission for Scientific Agricultural Research, MAAR - Damascus, Syria

Email: ak-gcsar@scs-net.org

\*\* National Agricultural Policy Center, MAAR - Damascus, Syria

**Abstract** - Hunger and malnutrition inflict heavy costs on individuals and households, communities and nations. More than a quarter of the world's chronically hungry people live in countries where the prevalence of undernourishment is very high (35% and even more). Syria is among the low-income, food-deficit countries. Despite progress in agriculture, current production cannot keep up with population growth that is considered one of the highest rates in the world. This paper presents a preliminary assessment of food security issues in Syria through the most recent relevant studies conducted at global, regional and Syrian national levels. The assessment covers Syrian governmental plans and policies towards achieving food security and fighting hunger in the rural areas as well as the ongoing research of FAO, UNDP, WHO, UNICEF, and other international organizations. The first part of the paper is a definitional and conceptual framework. The second one is an analysis of recent literature review (at global, national and household levels) with special reference to the linkages between food security and the sustainable livelihood approach. While the last part summarizes the state of food security in Syria and concludes discussing some research needs. It was shown that Syria still has challenges to achieve food security in many spots of the rural areas where many families not having enough food accession and availability. Moreover, challenges can be met through increasing awareness-raising campaigns on the use of balanced and sanitary food, reducing thinness rates and malnutrition among children.

**Key words:** food security, malnutrition, plan, policies, challenges

## INTRODUCTION

FAO estimates under-nourishment in Syria at 2.5 to 4% of population, a relatively low share among the developing countries. Yet, the estimation was mainly based on the per capita calorie intake which is in fact insufficient for a country like Syria and it showed a little decline between the period of 1990-1992 and 1999-2001 (FAO, 2004). However, Syria still faces a daunting challenge to meet the national goal of achieving food security, especially because most Syrian's poor (61% of the poor) live in rural areas and depend on agriculture for survival (UNDP, 2005). The most recent estimation was done by the UNDP cooperating with the Syrian Government illustrating that in 2003-2004, almost 2.02 million individuals in Syria (11.4% of the population) could not obtain their basic food and non-food needs.

In fact, The rise in population growth rates, the increase in the number of new comers to the labour market, and inability of the economy to provide them with job opportunities, in addition to the impact of international economic changes on the Syrian economy in recent years, led to a rise in unemployment from 6.8% in 1995 to 9.5% of the total workers in 2000 (State Planning Commission & UNDP, 2003) and up to 10.8% in 2004 (CBS, 2006).

This paper presents a preliminary assessment of the most recent relevant policies towards achieving food security and fighting hunger in the rural areas. The impact of structural adjustment programmes on household food security is a major area of policy concerns. Changes in employment and income-earning opportunities, coupled with a reduction in government subsidy programmes, has had adverse effects on food consumption, both quantitatively and qualitatively.

Due to the crucial links between the environment and the role of rural women in ensuring household food security, there is an increasing need for policy measures to enhance the participation

of women in rural development programmes, especially in the areas of forestry and energy supply. Policy makers and planners should recognise that women should participate in rural development on an equal basis with men and fully share in improved conditions of life in rural areas. They also should recognise that the integration of women's roles and needs in the development paradigm is a prerequisite for a successful rural development planning and programme implementation.

The role of women as producers and providers of food should be promoted and therefore the importance of gender to household food security emphasised.

The paper starts with a brief description of the current status of food security in Syria in terms of the three dimensions: food availability, stability, and access to food. Then, it shows the most vulnerable groups to food insecurity in Syria; and highlights the role of women in food security and safety, ending up with the main constraints to women contribution and what solutions could be potentially discussed.

## CURRENT STATUS AND PERSPECTIVES

Food security has three dimensions: availability, stability, and accessibility. The so far literature review have assessed food security in Syria in terms of variables at macro-economy level, e.g. income distribution and food supply, household and food consumption, and in terms of individual status, food intake and anthropometric measurements. In brief, the assessment has been made in terms of the three dimensions.

### Food Availability

Self-sufficiency in agricultural production has been realised in the last decades and enabled the country to meet the fast growing demand for food ratios improved for a wide range of food commodities. There were even large surpluses in some commodities, which started being exported such as wheat, vegetables, and fruit (FAO, 2003). In addition, average per capita availability of basic food commodities (cereals, fruits, vegetables and poultry meat) increased by high percentages in the last five to six years.

Average per capita calories intake in Syria remained stable during the periods 1999-2000 and 2001-2005 ranging from 3034 to 3040 calories per day (FAOSTAT, 2004). The protein intake increased in between these periods by 2.6% (from 73.3 g to 75.2 g per day), while the fat remained almost stable (from 107.2 g to 106.3 g). The largest share of calories consumed in 2005 is from vegetable origin (2625 calories per day making 86.4% of total daily calories). Livestock products accounted for 413 calories per day, representing 13.6% of total daily calories intake.

Table 1 compares food consumption in Syria in terms of calories and nutrient intake to high income countries. In 2005, the daily-consumed calories were 3654 in France, 3671 in Italy, and 3774 in US. These levels are higher than in Syria (by more than 600 calories per day) and reflect the income effect and the differences in consumption patterns. Moreover, the share of calories of animal sources in these countries is higher than that in Syria and represented 37% in France, 26% in Italy, and 28% in USA. Such evidences confirm literature argument that calories and protein of animal origin in total calories and protein intake increase therefore with the level of per capita income.

Table 1. Per Capita Food Consumption in Syria Compared to Selected High Income Countries in 2005 (FAOSTAT, 2006)

Country	Daily calories			Daily protein grams		
	Total	From plant sources	From animal sources	Total	From plant sources	From animal sources
Syria	3,052	2,635	417	75	53	21
Italy	3,671	2,729	934	113	52	62
France	3,654	2,242	1,355	117	40	77
USA	3,774	2,771	1,043	115	42	73

The per capita calorie intake has increased by 271 k calorie or 8.7% as a total increase between 2000 and 2005. There also has been a slight change in favour of commodities of plant origin as compared to those of animal origin.

### **Food Stability**

After the mid 1980's, trade liberalisation policies have led to considerable increases in agricultural trade; in the same time, export earnings grew at a fast rate to finance imports needed to ensure the stability in food supplies. The most important imported food commodities in the period 2001-2003 were sugar, rice and dairy products, while on the export side the most important food products were represented by sheep, vegetables, and olive.

### **Food Accessibility**

Evidences confirm literature argument that calories and protein of animal origin in total calories and protein intake increase therefore with the level of per capita income and reflect the income effect and the differences in consumption patterns. Monthly salaries in Syria increased, particularly in recent years, in the public and private sectors. Wage increases have concentrated in the past few decades on low income groups with the aim of achieving equality in income distribution, and reducing disparities between minimum and maximum wages. This was reflected in the lives of over 63% of the work force (as they work on wage base) and their consumption patterns as well. Nevertheless, this increase was not reflected in spending on families' durable and luxury goods and the rate of per capita consumption of animal protein has slightly increased.

## **VULNERABILITY TO FOOD INSECURITY**

Vulnerability refers to the full range of factors that place people at risk of becoming food-insecure. The degree of vulnerability of individuals, households or groups of people is determined by their exposure to the risk factors and their ability to cope with or withstand stressful situations. There is also an important time dimension to the phenomena of inequality and poverty. The notions of vulnerability and marginalisation are often employed in the livelihoods context being in or falling into relative or absolute poverty.

WFP Syria Community Food Security Profiling (CFSP) within Arid and Semi-Arid Regions, a specific exercise was implemented in Syria, whose primary objective was to profile some of Syria's poorest and most food insecure communities within arid and semi-arid regions. The results showed that approximately 19% of Syria's population living in the poorest regions of the country (i.e. the arid and semi-arid climatic zones 3, 4 and 5) were estimated as food insecure (Fig. 1). There were some geographic concentrations of relatively moderately low food insecurity, located within the governorates of Deir ezzor and Al Raqqa. A second relatively better off area was found just north and east of Damascus not far from the main road connecting Damascus with Homs. The sub-regions of Al-Hassakeh, Aleppo, Sweida, and Dara'a governorates, similarly, were registered with relatively suitable food security levels. The reasons and causes of poverty and food insecurity are complex and multi-dimensional with numerous factors at work that generally cannot be addressed by a single agency or institution. As such, there is a strong rationale to create alliances and effective partnerships to achieve the common goal of eradicating food insecurity and poverty in the country (WFP, 2004).

The map shows data from Syria, pertaining to both food insecurity rate and depth. The two indicators were integrated into one combined food insecurity index that was subsequently mapped. A pattern of dispersed food insecurity emerged across Syria's arid and semi-arid regions, with no obvious concentrations of most food insecure clusters lying adjacent to one another. The five clusters falling into the "highest" and "high" food insecurity levels are located within sub-regions of six different and often non-adjacent governorates (WFP, 2004), yet who are the most vulnerable groups?

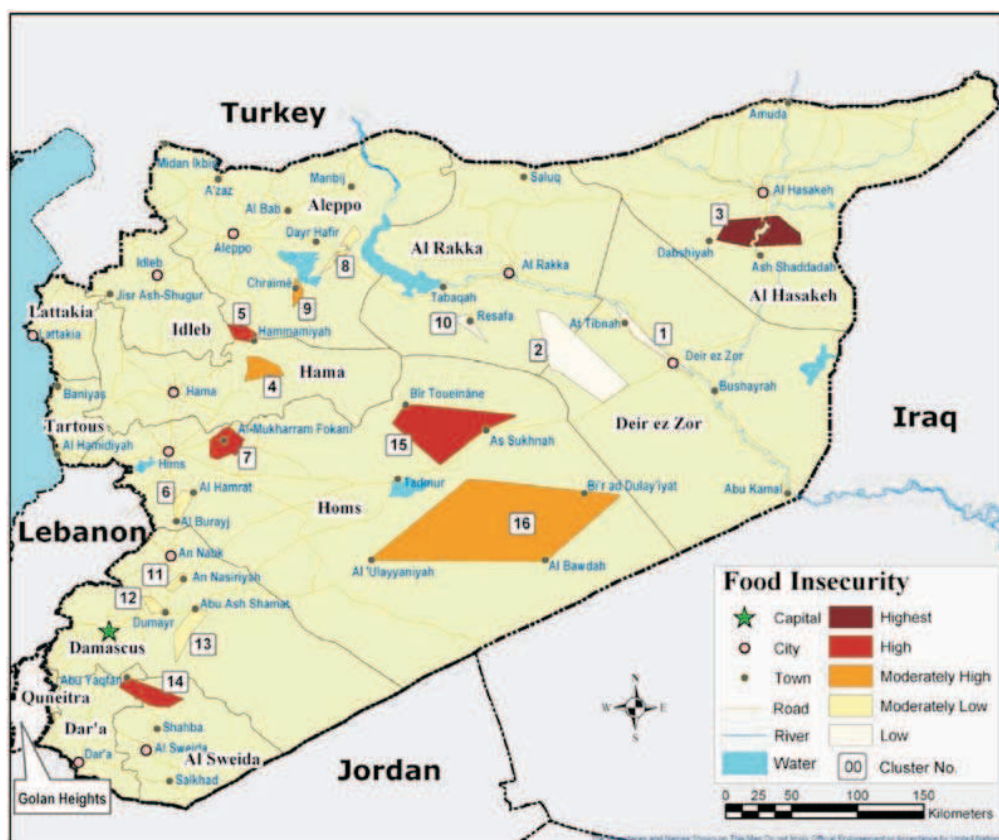


Fig. 1. Food insecurity map in Syria, 2004, Source (WFP, 2004)

### Small-Scale Farmers and Herders

Shortage of good quality agricultural land for smallholders is a problem in many regions due to environmental degradation, conversion of land for non-agricultural purposes, and population pressure. Access to land through ownership or secure tenure is, on the hand, the sine of improving agricultural productivity. Without secure land rights, farmers have little or no access to credit or the benefits of membership in rural organisations which are often conduits of agricultural inputs and services. Moreover, with no stake in the land or assurance of access to it, farmers have few incentives to engage in sustainable agricultural practices or to consider the long-term environmental impact of the exploitation of the land.

### Rural Women

Rural women, among the most economically disadvantaged in the country, are 65% of development beneficiaries, particularly the following groups:

- Landless women and adolescent girls who have no permanent skilled employment and who support family income on casual/temporary labour.
- Woman and adolescent girls living within households having a high dependency ratio; 5 or higher (i.e. one adult household member of working age-self-employed or employed full time supporting 5 dependents or more).
- Adolescent girls (14-17 years) with restricted access to education.
- Women living within a household that regularly depends on non-family members for cash or in-kind assistance for subsistence living.

### Undernourished Children

In Syria, 3.5 million are classified as rural poor. Rural women and children suffer the most from poverty and its physical and social deprivations. A study by Shibani (2004), compared differences in



child growth and nutrition in rural livelihood groups of Aleppo province, Syria. It concluded that stunting and underweight remain serious issues in certain rural communities of Aleppo province. In contrast, urban middle class children were growing more normally and indeed, were often overweight. Wasting prevalence is low in both rural and urban groups, which indicates that the levels of underweight observed in the rural children can be explained by the poor linear growth observed.

Food insecurity prevails in Jabal-Alhos (Aleppo province) due to the scarcity of water and natural resources, which are favourable to agriculture and related activities. However, 80% of the lands (157,000 ha) are rocky and require reclamation; soils are characterised by a low nutritional value and a high pH rate (8.5), and rainfall is lower than 250 mm (FAO, Telefood, 2004). As a result, most of the youth have migrated to other areas to seek job opportunities, leaving behind children, women and old people who use the available resources to live below the poverty and hunger line. Family size is 9 persons with dependency rate of 5 person and an average income lower than 0.5\$/day/person (UNDP, 2005). The Syrian government and the UNDP conducted two specialised multi-purpose surveys published between 1993 and 2000 and provided a wide base of official data and indicators to measure children's nutritional conditions by collecting data concerning their weight and height and by using standard indicators to describe their nutritional conditions.

Table 4. Percentage of the Syrian children who suffer from hunger between 1993 and 2015

	1993				Total	2000				Total	2015
	Place of residence		sex			Place of residence		sex			
	Urban	Rural	M	F		Urban	Rural	M	F		
Extreme thinness	2	2.1	2.6	1.5	2.1	0.9	0.8	1.2	0.5	0.8	0.4
Medium thinness	6.7	5.4	5.9	6.2	6	3.2	2.8	3.4	2.5	3	1.5
Extreme under-weight	2.7	3.3	2.8	3.2	3	1.3	1.9	1.9	1.7	1.7	0.9
Medium under-weight	8.8	9.5	10.1	8.1	9.1	4.3	5.8	5.5	4.8	5.2	2.6
Extreme shortness	11.4	12.6	12.9	11.0	12	6.4	9.6	8.8	7.9	8.2	4.1
Medium shortness	14.6	15.1	14.9	14.8	14.9	8.8	12.1	10.5	10.8	10.6	5.3

Source: CPS & UNDP, 2004

By comparing the results of 1993 and 2000 child health surveys and applying the standard deviation measures recommended by WHO, which is less than 3% for extreme thinness, 2% for medium thinness, it was shown that thinness among children dropped from 2.1% to 0.8% in the same period. The rate rises, however, among children aged 10 to 12 months, which is the weaning stage. Thinness rate is higher in urban areas than rural areas and higher among males than females.

## WOMAN ROLE IN ASSURING FOOD SECURITY

Women produce more than 50% of the food grown nationwide, according to FAO estimates (FAO, 2005). While there is still insufficient gender disaggregated data to give exact figures on women's contributions to agricultural production in Syria, disaggregation of data is increasing. This data, together with field studies, participatory rural appraisal, make it possible to draw a number of conclusions about the extent and nature of women's multiple roles in agricultural production and food security. If women's contributions to farming and forestry may be underestimated, as many surveys and censuses count only paid labour. Women are active in both the cash and subsistence agricultural sectors and much of their work in producing food for the household and community consumption, as important as it is for food security, is not counted in statistics.

## Women as Food Producers

The roles that women play in agriculture vary from region to region in the country. Men and women often have complementary roles, sharing or dividing tasks in crop production, livestock raising. In other cases, women and men have distinctly different tasks and responsibilities for certain crops and livestock. Where large-scale cash cropping has been introduced, the tendency remains for men to become involved in this sector, especially when it is highly mechanized, with women becoming increasingly responsible for household food production and small-scale cash cropping with low levels of technology. Women also supply a significant proportion of the agricultural labour on plantations. In 2005, the number of women working in agriculture amounted around 58.7% of the total women labour versus 26.5 of the total male work.

In Syria, about 50% of the population lives in rural areas, half of them are women who are the major contributors to four sub-sectors of the rural economy: crop production, livestock production, food processing and household and family maintenance. However, as in other countries, women's contributions to agricultural production have been underestimated, due to the fact that their labour is mainly unpaid in subsistence food production. Women are responsible for the more time-consuming and labour-intensive tasks of crop and livestock production: sowing, application of fertilizers, weeding, harvesting, threshing, winnowing, cleaning, sorting, grading and bagging. These tasks are carried out manually or with simple tools. According to a field pilot survey of a social sample in rural Damascus area conducted by GEWAMED team in Syria, women involvement, determined as percentages as, is as follows:

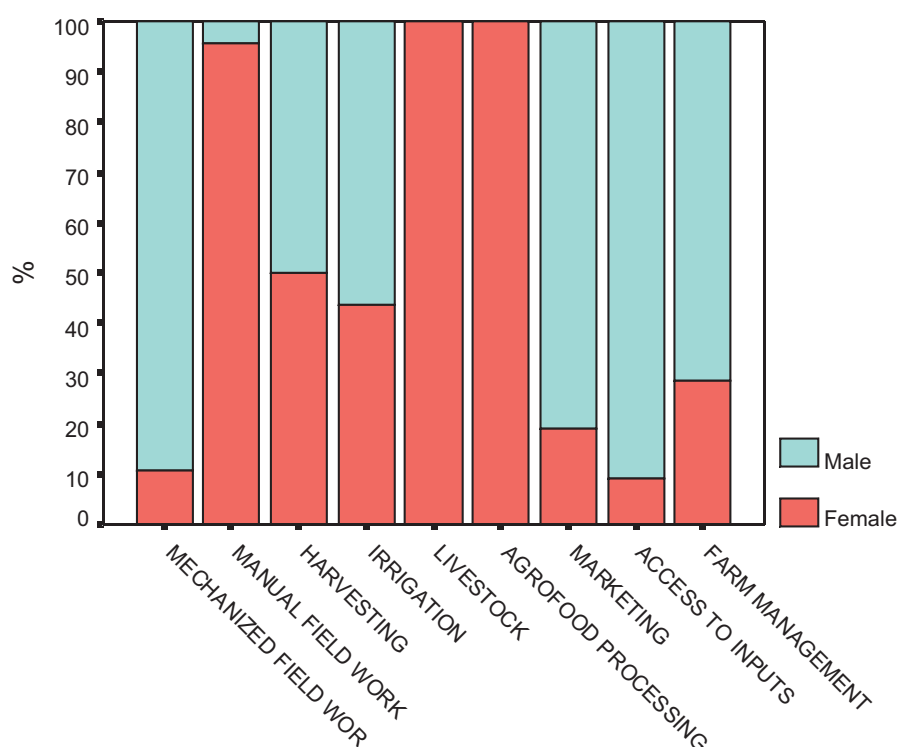


Fig. 2. Women involvement in agricultural practices in two villages of Rural Damascus

Rural women contribute to 70% of agricultural activities (weeding, harvesting, grading, and sorting), and other works that require much more bear, patient, and trouble, whereas, women's role is decreasing in marketing process (only 0.5% of cases); marketing is in most cases in the hands of men. Women contribution to weeding and harvesting rank the first followed by seeding and planting, then irrigation which depends on men because irrigation needs hard work and at most times, it is done at night (GCSAR, 2002).

All family members participate in harvesting but women have a major role in some post harvesting activities, especially food processing. They play a very important role in the management of fruit trees

plantation particularly for pruning, treating, watering and harvesting. Most vegetables are produced in gardens close to the house and are in the hands of women.

Women participation in animal cow/sheep production especially in animal watering and feeding, and cleaning stables, while the least of the list are buying forage, sheep herding, animal marketing, wool sheaving, and taking care of new born animal. Women daily water and feed the animals and may also graze and milk them. However, when flocks and herds need to be taken to pasture, the young men or children are more likely to be involved. Women are always responsible for poultry and processing of products from livestock, especially dairy products. At household level, women fetch water usually from far distances for drinking and for cooking and other house-work where they keep the amounts of the household water requirement. Therefore, women play an important role in rational water use assuring the household water security by reusing water for other purposes in different ways. As shown above, generally, dairy production and processing mainly involve women, whereas men handle marketing and loan provisions. In all cases, women in fact play a significant role in food production securing their household food availability.

### **Women's other Contributions to Food Security**

In addition to their crucial roles in food production, women contribute to food security in other significant ways as described below:

- As those who process and prepare food: while women produce more than 50% of the food, they also perform the overwhelming majority of the work in food processing in developing countries. Food processing contributes to food security through reducing food losses, contributing to diversity of diet and supplying important vitamins and minerals. In addition to the time-consuming tasks of grinding and pounding the staple grains, dried fruits and vegetables, smoked meats, women process and preserve the fruit and vegetable produce from their home gardens and from the forests. Moreover, women are almost universally responsible for preparing food for their households and thus for the nutritional well-being of its members.
- As those who preserve biodiversity: the preservation of biodiversity and plant genetic resources is now widely recognised as essential to food security and safety. Because women are responsible for supplying their families with food and care, they often have special knowledge of the value and diverse use of plants for nutrition, health and income. Consequently, they are frequently the preservers of traditional knowledge of indigenous plants. Moreover, women often experiment with and adapt indigenous species and thus become experts in plant genetic resources.
- As those who care for the basic needs of the households: women perform virtually all the tasks required for household food security and ensuring good nutrition and healthy lives. These tasks include gathering fuel and fetching water, cleaning, cooking, child rearing, and caring for the sick.
- As wage earners: women are often responsible for providing food for their families, if not by production then by earning the income to purchase it. Both rural and urban women in waged labour dedicate a substantial portion of their income to the purchase of food for their families. Moreover, it is increasingly recognized that rural men and women often have different responsibilities for providing for the basic needs of their households, with women responsible for supplying food. Development planners have discovered that the increase of household income through the employment of men in cash crop production does not necessarily increase household income available for the purchase of food (Karl, 1996). On the other hand, when women have direct control over income, they tend to spend it on the well-being of the family, particularly on improving the nutritional security of the more vulnerable members.
- As households heads: the feminisation of agriculture appears to be less pronounced than in other countries. Overall the percentage of female-headed households is small, although their number is increasing as a result of temporary and permanent migration of men from rural to urban areas. In Syria, female-headed households account for 16% or less of the total (UNDP, 2005). Consequently, women's contributions to agriculture are frequently overlooked because most of their work is unpaid labour on family farms, headed by men.

### **FACTORS AND CONSTRAINTS AFFECTING WOMAN'S ROLES IN FOOD SECURITY**

Given women's crucial roles in and contributions to food security, any efforts to reduce food insecurity worldwide must take into consideration the factors and constraints affecting women's ability



to carry out these roles and make these contributions, with a view to removing the constraints and enhancing women's capacities. This section will look at some of the major factors and constraints affecting the Syrian women's roles in food security.

### **Invisibility of women's Contributions to Food Security**

Despite the increasing supply of gender disaggregated data and studies of women's roles in agricultural production and food security, there is still a lack of sufficient data and information on these. Much of women's work remains "invisible", because it is not counted in surveys and censuses which still often count as work only that which is remunerated, or ask what is the principal work of a person. Thus, women, who may be involved in one day in working on the family plot, tending small livestock gathering fuel-wood, fetching water, processing food and preparing meals may not be able to answer what their principal works are.

### **The Lack of Awareness of the Specific and Different Roles**

The contributions of men and women to agricultural production and food security results in what has been called "gender blindness". Unaware of these differences, policy makers, planners, extensionists proceed as if they did not exist, as if the situation and needs of farmers were the same, whether they are men or women. What they see, however, is the situation and needs of male farmers and not those of women farmers. Thus, policy making, planning and extension services are built on a partial view of reality.

Development policies of the Syrian Government are becoming increasingly aware of the crucial contribution of women farmers to agricultural production and food security. Nevertheless, agricultural policies on the whole still do not address the needs of women farmers adequately. Where the roles and needs of women farmers are recognised in policy, these tend not to be adequately translated into practice in agricultural development programmes and planning. Agricultural research, too, gives inadequate attention to women farmers and their needs. As has been pointed out, for instance, women and men farmers are often responsible for different agricultural tasks and crops. Research is generally focused on the improvement of production and technologies for men's crops and tasks, while those of women are neglected.

National agricultural policies focus on export-oriented crops which are important for foreign exchange, and to give scant attention to food crops for domestic consumption, although the latter are essential for household food security. Moreover, the importance of local markets for national food security is also often overlooked.

### **The Lack of the Collection and Dissemination of Gender-Disaggregated Data**

This is one of the underlying causes of this neglect of women's contributions to agricultural production and food security in agricultural development policies and research. Another root cause of this neglect is the lack of women's participation in policy-making and decision-making bodies at national level. The exclusion of women from decision-making and leadership positions begins at the local level.

### **Impact of Environmental Degradation**

As the primary food producers in the world, women have a stake in the preservation of the environment. However, because of their lack of access to agricultural resources, women farmers trying to eke out an existence on marginal lands often have no choice but to contribute to its further degradation. Lack of secure land tenure acts as a disincentive to environmentally agricultural practices while lack of access to credit limits the purchase of less environmentally damaging technologies and inputs. This sets up a cycle of declining productivity and increasing environmental degradation.

## **Access to Resources**

Access to resources is essential to improve agricultural productivity of both men and women farmers. Because women play crucial roles in agricultural production, improving productivity will depend to a great extent on ensuring that women farmers, as well as men farmers, have sufficient access to production inputs and support services. While both men and women smallholders lack sufficient access to agricultural resources, women generally have much less access to resources than men. The causes are rooted, to a great extent, in gender-blind development policies and research, discriminatory legislation, traditions and attitudes; and lack of access to decision-making. Rural women have insufficient access to land, membership in rural organisations, credit, agricultural inputs and technology, training and extension, and marketing services. Title to land is generally given to the male head of household. Agrarian reform programmes also tend to give title to men, and this has been especially the case in Syria. Without secure title to land, women are often denied membership in cooperatives and other rural organisations and thus to the benefits of this membership. They also lack collateral which is generally indispensable for access to credit.

## **Rural Organisations**

Membership in rural organisations such as cooperatives, agricultural producers' organisations and farmer's associations, is important for access to productive resources, credit, information, training and other support services. These organisations also represent the interests of their members in relation to governments, project management, and development policy makers and planners at different levels.

When women farmer's access to membership and leadership positions in these organisations is restricted, by law or custom, their access to resources and their ability to make their views known to policy makers and planners is as a consequence restricted too. The obvious results is the inability of women farmers to carry out their roles in agriculture and food security to optimum potential.

The same agrarian reform programmes that have given land titles to male heads of households and thus restricted women's ownership of land, have also restricted membership in agrarian reform organisations and cooperatives to male heads of household.

## **Credit**

A direct consequence of women's lack of access to land and membership in rural organisations is their lack of access to credit. Land is usually required as collateral for loans, on the one hand, and, on the other, credit schemes are often channelled through rural organisations to their members. This is a serious obstacle to improving women's agricultural productivity, as without credit women farmers are unable to buy inputs such as seeds, fertilizers, and improved technologies, or to hire labour.

## **Agricultural Inputs and Technology**

With the increasing population pressure and growing environmental degradation, it becomes more and more important to increase productivity in sustainable ways. This requires access to appropriate agricultural inputs and technologies. The access of women farmers to agricultural inputs and technologies is constrained by their lack of access to credit and membership in rural organisations, but also by gender blind development programmes and lack of attention to the needs of women farmers in research and technology development programmes. Alternative technologies which are also effective and easier to manage, can help ensure that women, whose agricultural production is essential to good security, retain their rights and ability to farm the land. Because women farmers everywhere are engaged in a wide range of laborious tasks related to food security, there is a need for the development and introduction of appropriate laboursaving technology in food processing and storage as well as in food production, and in related areas such as water, sanitation, fuel and food preparation.

## **Training and Extension**

Women's access to training and extension are limited by a number of factors in addition to the lack of access to membership in rural organisations which often channel or provide training opportunities. These include gender neutral or gender blind agricultural research which gives inadequate attention to women farmer's needs in terms of crops and technology; the lack of training of extensionists who could relate to women farmers, excludes women from training and the benefits of extension services. Finally, women extensionists are still often trained only in home economics and do not have the skills to provide the services and information needed for agricultural production.

## **Marketing Services**

Structural adjustment programmes and the trend towards liberalisation of trade have led to the diminishing of many of the marketing services that were previously available to farmers. In addition, lack of access to membership in marketing cooperatives also limits women's ability to market their produce. These constraints act as a disincentive to women farmers to produce surplus food, since the difficulties of marketing are too great if not insurmountable.

## **CONCLUSION**

Gender and food security are closely interrelated. In recent years, there has been increased recognition of the crucial importance of women's contribution to food security. In most developing countries, rural women are the mainstay of small-scale agriculture, farm labour, and day-to-day family subsistence. Efforts to alleviate rural poverty and improve food security will not be successful unless issues relating to women as producers and providers of food are taken into account. These issues include the contribution of women to household food supply and income, access to productive resources, and the impact of policy reforms on the economic and social roles of women and household food security.

Data show that although there is a wide diversity in household production patterns, women in Syria play a predominant role in household food security through agricultural and food production. The relative share of income that a household member contributes to particular items of essential expenditure is often a function of societal traditions. However, the direct responsibility for household food provision largely falls on women, and that the improvement of household food security and nutritional levels is associated with women's access to income and their role in household decisions on expenditure.

In almost all countries female-headed households are concentrated among the poorer strata of society and often have lower incomes than male-headed households. The problems faced by such households vary according to their degree of access to productive resources including land, credit and technology. Moreover, although women farmers play a predominant role in food production, they often lack access to agricultural services. For instance, lack of land ownership restricts women farmer's access to credit as land is often used as collateral. Membership in cooperatives also tends to be based on land ownership or "head of household" criteria and thus excludes women. In addition, training and extension services have, in practice, been predominantly directed towards men. Since the possibility of improving household food security can only be realised if female farmers, in addition to their male counterparts, have access to agricultural services. The need to incorporate the constraints women face in obtaining such services in household food security policies and programmes, should be emphasised.

Many agricultural development policies and programmes have yet to adequately address the needs of small farmers, particularly those of women. While initiatives have been made to include rural women in agricultural development activities, either through direct projects, or national women's organizations, a major impediment to incorporating gender issues into such activities has been the lack of comprehensive data on the nature and role of women's contributions to food and agricultural production.

In general, the majority of agrarian reform and land settlement schemes entail the division of land

into separate holdings based on the "head of household" concept as mentioned previously. Thus ownership of land has overwhelmingly bestowed on the male household head who has ultimate legal authority over land use and its utilisation as collateral for credit, even when absent from the household.

The role of women as producers and providers of food should be promoted and therefore the importance of gender to household food security emphasised. Government should continue to facilitate and strengthen the contributions of women to agricultural growth and the alleviation of rural poverty. This in turn will enhance the availability and stability of food supplies while ensuring access to food by all.

## REFERENCES

- Department for International Development (DIFD), 2001, *Sustainable Livelihoods Guidance Sheets*, London, UK, October, 2001.
- Food and Agriculture Organization of the United Nation (FAO) and World Water Assessment Programme, 2003, *Agriculture, Food and Water*, A contribution to the World Water Development Report, Rome, Italy.
- Food and Agriculture Organization of the United Nation (FAO), 1993, Director-General's Report on Food Security: *A Review of the Concepts and Approaches*. Committee on World Food Security, Eighth Session, Rome, 13-20 April 1993.
- Food and Agriculture Organization of the United Nation (FAO), 2003, *Syrian Agriculture at the Crossroads*, FAO Agricultural Policy and Economic Development Series, Rome 2003.
- Food and Agriculture Organization of the United Nation (FAO), 2004, *The State of Food Insecurity in the World: monitoring progress towards the World Food Summit and Millennium Development Goals*, Rome, Italy 2004.
- Food and Agriculture Organization of the United Nation (FAO), 2005, *Achieving Food Security via TeleFood Micro Projects*, FAO Development projects, Rome, 2005.
- Food and Agriculture Organization of the United Nation (FAO), 2005, *World Agriculture Towards 2010: An FAO Study*, Chichester: John Wiley & Sons.
- Haidar, H., Kassar, H., 2001, *The State of Food Security in Syrian Arab Republic*, Report, MAAR, Damascus, Syria.
- Hamdy, Salem, 2001, *Food Security in Syria*, a study prepared under project GCP/SYR/006/ITA FAO/Government of Italy Cooperation Programme/NAPC, Damascus, Syria, 2001.
- International Center of Agricultural Research in the Dry Areas (ICARDA), 2004, *Sustainable Agriculture for Dry Areas*, Aleppo, Syria. August, 2004.
- Ministry of Agriculture and Agrarian Reform (MAAR), 2005, *The State of Food and Agriculture in Syria Arab Republic*, NAPC Annual Report, under the project GCP/SYR/006/ITA FAO/Government of Italy Cooperation Programme/MAAR (not published), Damascus, Syria.
- Shibani Ghosh, 2004, International Center of Agricultural Research in the Dry Areas (ICARDA), *Poverty, Household Food availability and Nutritional Wellbeing of Children in North West Syria*, Aleppo, Syria. August, 2004.
- Syrian Central Bureau of Statistics (CBS), 2004, *Annual Abstract*, Damascus, Syria, 2004.
- Syrian State Planning Commission and United Nation Development Program (UNDP), 2003, *National Millennium Development Goals of the Syrian Arab Republic*, Damascus Syria, 2003.
- United Nations Development Programme (UNDP), El Laithy H., Abu-Ismael K., 2005, *Poverty in Syria: 1996-2004 Diagnosis and Pro-Poor Policy Considerations*, Damascus, Syria, June 2005.
- World Food Programme (WFP) of the United Nation, 2004, *Syria Community Food Security Profiling (CFSP) within Arid and Semi-Arid Regions*, WFP Vulnerability Analysis and Mapping (VAM) Unit, ODC WFP Syria Country Office, Damascus, Syria, 2004.