## Development implications of research on women farmers in the province of Kastoria <br> Constantina Safiliou ${ }^{\text {i }}$ <br> Agricultural University of Athens

Whenever significant social changes occur, many people including social scientists and policy makers are not willing to accept them and attempt for a long time to find arguments to explain away the evidence. One such social change, that since the late 90's has been taking place in rural Greece, is the growing number of active women farmers who are either farm owners and farm managers or only farm managers and instead of their husbands, members of agricultural cooperatives. Because for many years and in many European countries women have not liked agriculture and have been trying hard to get away from rural areas and from agriculture, nobody is willing to believe that in some rural areas in Greece women want and even choose to be active farmers (Bock, 1994a; 1994b; Safiliou, 2004;

Safiliou-Rothschild, 2006).
The Greek Agricultural Census of 1999-2000 shows that from 1987 to 2000 the number of men active farmers declined by 28 per cent, whereas the number of women active farmers actually doubled (i.e. from 103, 760 women in 1987 to 205,140 women in 2000) and the percent of women active farmers in the entire country increased from 10.9 in 1987

[^0]to $25.1 \%$ in 2000. In 2000, while in the entire country $25 \%$ of all active farmers were women, in 14 provinces, that is in $27 \%$ of all provinces, the percent of women was 30-51\% of all active farmers. On the other hand, there are 13 provinces in which active women farmers are less than $20 \%$ of all active farmers and in three provinces among them, (Pieria, Xanthi and Rothopi), the percent of active women farmers is 15 or less. If the trends of the last 15 years continue, in the six years since these data were collected most probably the percent of active women farmers has increased even more. However, the considerable degree of heterogeneity of Greek rural areas with regard to the gender of active farmers will still be an important reality to be taken into account in all types of rural development planning and programs.

Rural sociological studies undertaken during the last decade have shown that the gender differentiation in farm management depends mainly on the following important factors: the median level of agricultural income; the type of farming system and type of crops that can yield different levels of agricultural income and occupational prestige as well as different intensity of required agricultural labor; opportunities for stable off-farm employment for men and women; level of men's pluriactivity; level of women's unemployment; fertility level and lack of young men to succeed in parental farms; availability of investment resources that can render agriculture a profitable undertaking; and the strength of traditional stereotypic values concerning the roles of men and women particularly in agriculture (Safiliou and Papadopoulos,
2004). This heterogeneity and agricultural and social differentiation have, as we shall see in some detail in this paper, significant implications for regional agricultural and rural planning as well as for rural development policies.

A rural sociological field research undertaken in 1998 in four provinces, Karditsa, Evia, Chania (Crete) and Lesvos, showed the existing heterogeneity of rural areas regarding the gender of active farmers not only from province to province but also between different rural populations within each village. In the provinces of Karditsa and Evia the percent of women active farmers was and remains low, while in Lesvos and to a somewhat lesser degree in Chania the percent of women active farmers replacing their pluriactive husbands, was high. Moreover, in each of the 23 villages studied in the four provinces, there were two distinct rural populations with different farm characteristics and a different gender of the active farmers ((Safiliou-Rothschild, 2003; Safiliou and Papadopoulos, 2004).

In all provinces in the one rural population, most men were landowners and farm managers; they were rarely and only seasonally pluriactive; they performed most of the agricultural work by themselves (they did not even hire laborers); and the women were only marginal agricultural assistants. In the other rural population, most of the men had a full-time off-farm employment and many of them had legally transferred the farmer status to their wives; the women were the owners of all or most of the land and many of them (42\%) were cooperative members and farm managers or co-managers with their husbands. While the profile of the former rural population is similar in all provinces, the
profile of the second rural population differs significantly from province to province. The above profile of the second rural population holds true mostly in Lesvos and to a lesser degree in Chania. In Karditsa and Evia, however, where traditional values regarding the roles of men and women in agriculture are still quite powerful, the differences between the two rural populations were not so clear-cut. In these two provinces, few men had transferred the farmer status to their wives and even those who did, did not allow their wives to become active farm managers and/or to become cooperative managers. This situation often resulted to women being active farmers only in the papers or to women being in charge of all agricultural work without being able to participate in farm management (Safiliou and Papadopoulos, 2004).

The implications of these research findings are very important for the formulation of appropriate rural development policies that can address the rightful active farmers in different areas and to correspond to their real needs and to their potential for development. The second population represents the more flexible farmers who are able to adjust to changing agricultural and socio-economic conditions resulting from CAP regulations and who are able to survive by having two sets of incomes, an agricultural and an off-farm income (Safiliou-Rothschild, 2001; 2003).

This paper presents the findings from a recent research undertaken in the province of Kastoria, a province in the Western Macedonia region, characterized by a high unemployment rate and a high percent of registered active women farmers, as is also true for the entire region of Western Macedonia. Kastoria underwent almost a fourfold increase of women active farmers in the recent years, from
$8.4 \%$ in 1987 to $31.3 \%$ in 2000. The crucial difference of importance in this research is the inclusion of the entire population of active women farmers rather than the focus on smallholder women as it was mandated in the earlier research.

## Methodology

The selection of districts within the province of Kastoria was made on the basis of the data provided by the Greek Agricultural Census of 1999-2000 concerning the following two criteria: a relatively high percent of women declared as full-time farmers and representation of plain, semi-mountainous and mountainous areas. In this way, 13 communities were selected in which the percent of declared active women farmers was at least $33 \%$ of all farmers and almost equally distributed in plain areas, semi-mountainous and mountainous areas.

The women farmers to be interviewed were identified on the basis of the lists of farmers receiving agricultural subsidies available at the agriculturists' offices at the local agricultural directions. Women farmers who belong to this list cultivate more than 2 hectares, agree to continue farming for at least 5 years and are under 65 years old. The total number of women on these lists was 127 but only 88 (69\%) were interviewed because of a variety of reasons such as: 5 women could not be located after many phone calls; 13 because the district agriculturists confirmed that they were not occupied with agriculture; and 22 women who refused to be interviewed, in ten cases their refusal most probably due to the fact that they are not working in agriculture and were afraid to face penalties for false
declaration. Overall, the percent of women declared as active farmers but in reality not actively involved in agriculture are estimated to be around 23 (18\% of the entire sample), 8 of which are Young Farmers. As a result, the realized 88 interviews represent $85 \%$ of the 104 active women farmers registered for agricultural subsidies and they include 26 women Young Farmers that are not discussed in this paper ${ }^{1}$.

Data were collected by means of in-depth interviews based on a questionnaire primarily consisting of unstructured and semi-structured questions that were thoroughly pretested and previously used in a study of farmers in other four Greek provinces. The interviews were realized during the month of November 2004 and their duration ranged between one and one-and-a half-hour. All answers were quantified by means of content analysis.

Active participation in agricultural decision-making is measured by the comparative involvement of husbands and wives in the nine agricultural decisions that are considered to be the most important ones in the Greek rural context. An index of participation in agricultural decision-making is calculated that indicates from 1 to 5 the degree of 'masculinization' or 'feminization' of agricultural decisionmaking. The higher is the score, the greater the degree of feminization (that is, the greater the number of decisions predominantly made by the wife and the number of decisions

[^1]made jointly with the husband), while a score around 3 tends to indicate an egalitarian decision making mode.

The gender division of agricultural work, is measured with a series of questions regarding who primarily performs the most important specific agricultural tasks. On the basis of the answers to these questions, an index of participation in agricultural labour has been calculated that indicates from 1 to 5 the degree of "masculinization" or "feminization" of agricultural labour. The higher the score, the greater the degree of feminization, that is greater the number of agricultural tasks performed predominantly by the wife and the number of tasks performed equally by husband and wife. We consider that women are farm managers when they make all or most decisions by themselves, or an equal number of decisions as their husbands and that they are institutionally integrated in the agricultural occupation when they are members of agricultural cooperatives.

Women's integration in the agricultural occupation is measured by the extent of their participation in agricultural decision-making and by their membership in agricultural cooperatives. Within the context of rural Greece, we consider women who make most decisions by themselves or jointly with their husbands as farm mangers or farm co-managers with their husbands.

## Research Findings

The analysis of the data shows that, despite the continuing disbelief as to whether the women registered as active farmers are what is claimed, most of them are in fact active farmers. The data show that $37 \%$ of all the interviewed women farmers are both active agricultural
decision makers and institutionally integrated in the agricultural occupation by being members of agricultural cooperatives. Another $25 \%$ are members of agricultural cooperatives but do not play an important role in the agricultural decision-making at the farm level; and another 17\% are farm managers or co-managers with their husbands but are not cooperative members. It seems, therefore, that only 13 (21\%) of the interviewed women play a minor role in agriculture, thus fitting the existing stereotype of women farmers only in the "papers" (Table 1).

The data show that whether or not the women declared as active farmers in the official agricultural records are farm managers and cooperative members depends on a number of factors such as: farm size, type of cultivated crops, women's level of education, women's age, husband's off-farm employment status, access to agricultural training, women's off-farm employment and the intensity of participation in agricultural decision-making at the farm level.

The trends of women's integration in the agricultural occupation vary with farm size since $43 \%$ of the women with more than 4.6 hrs. are integrated at both levels (farm and institutional), while only $28 \%$ of the women with less than 4.5 hrs. are similarly integrated. The difference, however, is not statistically significant (x2=2.6035, p>0.05). Furthermore, farm size is not significantly related to women's cooperative membership ( $\mathrm{x} 2=1.6941, \mathrm{p}>0.05$ ) or to the extent of women's participation in agricultural decision-making (x2=0.0052, p>0.05). Despite the fact that previous studies have emphasized the importance of farm size for women's ability to play an important agricultural role (Safiliou and Papadopoulos, 2004), the data from the province of Kastoria do not show a negative relationship
between farm size and women's integration in the agricultural occupation.

On the other hand, the type of crops cultivated is significantly related to women's membership in agricultural cooperatives: women who cultivate intensive crops (such as tomatoes, potatoes, beans and other horticultural crops) and/or tobacco are significantly more often members of agricultural cooperatives than women who cultivate nonintensive crops (such as primarily apples, maize and wheat) (x2=4.2885, p<0.01) but the prevailing type of agricultural decision-making is not significantly different (x2=0.7656, $\mathrm{p}>0.05$ ). Women tobacco growers are particularly more often cooperative farmers than the other women farmers since $82 \%$ of them are cooperative members while only $50 \%$ of those who cultivate other intensive crops and $55 \%$ of those who cultivate extensively are cooperative members. Moreover, the percent of women tobacco growers who are integrated in the agricultural occupation at the farm and the institutional level is the highest (59\%), since half of all the integrated women farmers are tobacco growers.

On the other hand, while $32 \%$ of women with extensive cultivation are integrated at both levels, most (58\%) women, who do not seem to play an important role in agriculture, belong to this category.

Membership in agricultural cooperatives is an important indicator of women's integration in the agricultural occupation because women have been excluded from such membership for a long time (Stratigaki, 1987). However, while there is a relationship between making agricultural decisions and being a member of the agricultural cooperative, it is not statistically significant (x2=1.0902, p>0.05).

Moreover, it must be pointed out that the cultivation of tobacco is also related to farm size since $73 \%$ of women farmers with farms larger than the Greek average of 4.5 hrs and only $27 \%$ of those with farms smaller than average cultivate tobacco. We can conclude, therefore, that in the province of Kastoria women tobacco growers have large farm size and are well integrated in the agricultural occupation both at the farm and the institutional level.

While women tobacco growers' level of education is not different that that of other interviewed women farmers, they are significantly more often under 55 years old than women with extensive crops (x2=7.0848, $p<0.01$ ). The higher percent of relatively younger women (less than 55 years old) among the women tobacco growers ${ }^{2}$ ( $96 \%$ versus $65 \%$ among women with extensive cultivation), as we shall see below, is a significant factor for the women's integration in the agricultural occupation. Finally, although the differences are not significant, women tobacco growers receive more often agricultural training than growers of other intensive crops (59\% versus none) and more often than women farmers with extensive type of cultivation (59\% versus 22\%). In fact, $69 \%$ of all interviewed women who have received agricultural training are tobacco growers.

There is a significant relationship between women's cooperative membership and their having received agricultural training (x2=5.1053, p<0.05). Given women's scarce access to agricultural training (only 25\% of them), it seems that their institutional integration signals their farmer status and increases their chances for agricultural training: 13 out of the 15 women who received agricultural

[^2]training are cooperative members. It seems, therefore, that women who cultivate tobacco have greater access to agricultural training because they are most often cooperative members than the other women farmers.

The data also show that in the population of active women farmers in Kastoria, the majority of them (54.7\%) are landowners of more than the Greek average size of landholdings of 4.6 hrs.; the majority of them (53.2\%) are farm managers or co-managers with their husbands; and 62\% of them are cooperative members. Only 6 women who cultivate less than 4.5 hrs . with non-intensive crops and 7 women who cultivate more than 4.6 hrs. with intensive crops are not cooperative members and are not actively involved in agricultural decision-making.

Women's age is also an important factor: women younger than 55 years old are significantly more often than older women integrated in the agricultural occupation at the farm level as farm managers as well as institutionally as members of agricultural cooperatives ( $x 2=6.5211, p<0.01$ ). Women's educational level, on the other hand, is not significantly related with their degree of integration in the agricultural occupation.

Contrary to what has been found in previous research studies (Kaffe-Gidarakou, 1966; Safiliou and Papadopoulos, 2004), women 's full-time activity in agriculture is not primarily the result of men's pluriactivity. Only in 31\% of the cases women cultivate land legally transferred to them primarily by the husband and in fewer cases by the father, mother or son. In another $22 \%$ of the cases, women rent from relatives or others all the land they cultivate, a few of them purchasing and renting land. In another 10\% of the cases, women supplement the size of the land that has been
transferred to them with additional land they rent. If, however, all cases are added in which women rent land in addition to land they have purchased or have inherited or has been transferred to them, $60 \%$ of all women rely at least partly on land rental. It seems, that in this province husbands' pluriactivity is not the determining factor for women's activity in agriculture. It is not, therefore, surprising to find that whether or not husbands are pluriactive does not matter for the prevailing pattern of agricultural decision-making and for women's ability to become integrated in the agricultural occupation (Table 2). Similarly, when husbands are pluriactive, wives do not shoulder a significantly greater part of farm work than when men are full-time farmers. In other words, women farmers' ability to make agricultural decisions or to perform farm work does not depend primarily on their husband's pluriactivity and his inability to perform the work or to shoulder the responsibility of agricultural decision-making.

## Place Table 2 about here

Finally, when women dominate agricultural decisionmaking, $73 \%$ of them are both agricultural decision makers and cooperative members.

## Conclusions

The increasing feminization of agriculture in this province, and probably as well in other provinces and regions, indicates an endogenous development that needs to be built upon with further development actions in order to improve their competitiveness.

The important conclusions that concerns all those who plan or implement rural development policies are:
(1) Agricultural and rural development planning must take into consideration not only geographic differentiation in terms of plains or mountainous or semi-mountainous regions but also differentiation in terms of active farmers' gender.
(2) Agricultural and rural development planning must take into consideration that in most villages there are two distinct rural populations with different farm characteristics including the gender of active farmers, the type of land ownership and farm management, the extent of men's and women's pluriactivity and their flexibility and acceptance of innovation and modernization.
(3) Provinces and districts with a high percentage of declared women active farmers usually include a high percent of women farm managers or co-managers that have to be included in agricultural training seminars and agricultural improvement programs.
(4) Married women who are cooperative members usually are women who are also active at the farm level, performing farm work and participating in agricultural decision-making.
(5) Active women farmers are not only among smallholders but also larger farmers cultivating high value commercial crops. It is crucial, therefore, to plan programs that will assist them to become more competitive in local and foreign market.
(6) Even small agricultural exploitations must not be viewed as family farms dominated by husbands. Men and women in all agricultural exploitations must be
viewed as individuals with their own plans and activities. Hence, women farmers must not be viewed necessarily as dependent of their husbands' plans; they may not be active farmers only by default because their husbands have a full-time off-farm employment and have transferred the farmer status to them. In some areas such as Kastoria, women choose to be farmers regardless of whether their husband is a full-time farmer or pluriactive by renting the land they need.

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Table 1. Farm size by women's membership in agricultural cooperatives and by the type of agricultural decisionmaking

| A. Farm size <4.5 hrs. | Type of agricultural decision making |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Husbanddominated | Joint | Wifedominated | Totals |
| Cooperative members | 6 (46\%) | 2 (15\%) | 5 (39\%) | 13 (100\%) |
| Not members | 6 (50\%) | 4 (33\%) | 2 (17\%) | 12 (100\%) |
| Total women with <4.5 hrs | 12 (48\%) | 6 (24\%) | 7 (28\%) | 25 (100\%) |
| B. Farm size >4.5 hrs | Husbanddominated | Joint | Wifedominated |  |
| Cooperative members | 9 (38\%) | 9 (38\%) | 6 (25\%) | 24 (100\%) |
| Not members | 7 (64\%) | 2 (18\%) | 2 (18\%) | 11 (100\%) |
| Total women with >4.5 hrs. | 16 (46\%) | 11 (31\%) | 8 (23\%) | 35 (100\%) |

Table 2. Husband's off-farm employment status with women's cooperative membership and type of agricultural decisionmaking

| Husband's off-farm employment status | Type of agricultural decision-making |  |  |  |  |  | TOTALS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Husband Dominated |  | Joint |  | Wife Dominated |  |  |
|  | Coopera tive members | Not | Coopera tive members | Not | Coopera tive members | Not |  |
| Pluriactive | $\begin{aligned} & 5 \\ & (25 \%) \end{aligned}$ | $\begin{aligned} & 2 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & \hline 3 \\ & (15 \%) \end{aligned}$ | $\begin{aligned} & \hline 2 \\ & (10 \% \end{aligned}$ | $\begin{aligned} & \hline 6 \\ & (30 \%) \end{aligned}$ | $\begin{aligned} & 2 \\ & (10 \% \end{aligned}$ | $\begin{aligned} & \hline 20 \\ & (100 \%) \end{aligned}$ |
| Full-time farmer | $\begin{aligned} & 9 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 5 \\ & (15 \%) \end{aligned}$ | $\begin{aligned} & \hline 8 \\ & (24 \%) \end{aligned}$ | $\begin{aligned} & 3 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & \hline 7 \\ & (21 \%) \end{aligned}$ | $\begin{aligned} & 2 \\ & (6 \%) \end{aligned}$ | $\begin{aligned} & 34 \\ & (100 \%) \end{aligned}$ |
| TOTALS | 14 | 7 | 11 | 5 | 13 | 4 | 54 |


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[^1]:    1 It must be noted that most of the women who were not actively involved in agriculture were encountered in one district (Argos Orestithos) in which extensive wheat cultivation predominates and is carried out mainly by hired workers. In this district, both husbands and wives are only marginally involved in agriculture.

[^2]:    ${ }^{2}$ It must be noted that the highest percent (73\%) of women tobacco growers are 41-55 years old.

