RURAL HOUSEHOLD AND EMPLOYMENT, NEW TRENDS AND NECESSARY MEASURES FOR THE FORMATION OF A BALANCED RELATIONSHIP: THE CASE OF A GREEK PROVINCE (MESSINI-PELOPONNESE)

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Abstract

This paper examines the rural household and its employment, the new trends involved in this issue as well as proposes measures for a balanced relationship focusing its interest on a geographical region (rural nature), the Messini (Peloponness) province. Within the limits of the present paper and in order to achieve its objectives, a local sampling research is conducted, using the method of the questionnaire. The questionnaire aims at collecting information concerning the general characteristics of each household, the rural characteristics of the family holding, the structure of the employment and the new trends. Depending on past research as well as on primary and secondary data, it is possible to point out the targets for the rural households in order for them and their employment to function as a balanced unit: support of the rural household which under-employs its labour-force, solution to the problem of the succession of holdings through measures which aim at it, improvement of the position and employment of women of the countryside, since they feel justifiably unsatisfied and achievement of a balance between crop and livestock production through measures which aim at the development of the latter.

Résumé

Ce travail porte sur la famille rurale et son emploi, sur les nouvelles tendances ainsi que les mesures proposées pour aboutir à une relation équilibrée; il concerne en particulier une région géographique (une nature rurale) de la province de Messini (Péloponnèse). Dans les limites de ce travail et pour atteindre nos objectifs, une recherche d'échantillonnage locale a été menée en utilisant la méthode du questionnaire. Le questionnaire vise à collecter des informations concernant les caractéristiques générales de chaque famille, les caractéristiques rurales de la famille paysanne, la structure de l'emploi et des nouvelles tendances. Sur la base des recherches du passé ainsi que des données secondaires et primaires, il est possible de signaler les objectifs des familles rurales, pour qu'elles forment une unité équilibrée avec leur emploi; appui de la famille rurale qui sous-emploie sa force de travail, la solution au problème de la succession à travers des mesures ciblées, l'amélioration de la position et de l'emploi des femmes rurales, du fait qu'elles se sentent juste­ment insatisfaites, et la réalisation d'un équilibre entre la production culturelle et animale à travers des mesures visant au développement de ce dernier.

The data of this research were collected during the period from 27/10/97 to 6/12/97 with the help of a questionnaire and based on personal interviews of 90 members of rural households of the Messini community. The determination of the sample was based on the principles of the random stratified sampling, through the division into plain, semi-mountainous and mountainous communities. Concerning this distribution a relevant, corresponding division employed by the National Statistical Service, was followed. In addition, only mixed crop and animal-breeding holdings were chosen. This was decided because the rural holdings combining crop and livestock production present a particular interest concerning the employment. The questionnaire was based on the objectives of this research, taking into consideration various sources of information such as the N.S.S.G (National Statistical Service of Greece) questionnaire for the labor force research (1992), the N.S.S.G questionnaire for the agriculture and livestock sector census (1991) and questionnaires of other researches concerning rural household or employment. There was also a test application in a number of families in the Aristomenous community.

The questionnaire is divided into three parts: The first

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part aims at collecting general data concerning the interviewed and his/her family. The second part aims at collecting information concerning the rural characteristics of the family holding. Finally, the third part aims at collecting information concerning the employment of the rural family.

SOCIO-ECONOMIC CHARACTERISTICS

Through the sampling research, the frequencies and the relevant frequencies of the numbers of family members, concerning the three layers (plain, semi-mountainous, mountainous), one observes that a considerable percentage of rural families numbers only two members. This percentage is equivalent to the 40% for the plain communities, it is considerably augmented for the semi-mountainous (66.7%) and slightly higher for the mountainous communities (76.7%). This means that a considerable percentage of households are in the stage of "dissolution" (Meyer Fortes, 1969) and the families which replace them do not tend to settle in the same areas (Beopoulos and Skuras, 1997). It is also observed that the largest part of the relevant distribution is three offspring for all three layers, despite the fact that is no corresponding contribution of children to the rural household (another proof of the desolation of the area under investigation). The greatest frequencies for all three layers were reported between the ages of 56 to 69 years. Moreover, there have been reported lower frequencies of fathers at younger ages in the semi-mountainous in relation to the plain and even lower in the mountainous regions. In addition, regarding the age of the mother the frequency distribution is almost the same as the one of the father.

The first stage presents considerable percentages of absence from the family for all three layers, plain areas 43.3%, semi-mountainous areas 70% and mountainous areas 90%). In addition, one can observe higher percentages of girls compared to those of boys (17:12 in total). Regarding the age of the first child of the family, the age range with the highest frequency is "19-25" for the plain areas, however with a slight difference from the ranges of "0-11", "11-18" and "26-35". The "11-18" range presents the highest frequency for the semi-mountainous areas as well as for the mountainous ones.

The educational level is for the vast majority less than a high school education, with higher frequencies in semi-mountainous areas and even higher in mountainous areas. The educational level of the mother appears to be diversified, in relation to the educational level of the father. The number of mothers with an educational level lower than primary school education seems to be higher than the number of fathers. This difference is more intense in semi-mountainous and mountainous areas. Also, there are a number of mothers with lyceum education despite the absence of fathers with the same educational level. Regarding the educational level of the first offspring, the highest frequency appears with lyceum level, followed by those with high school level. Concerning the educational level of the second, third and fourth offspring, the highest frequency points at high school education.

The size category of owned land ranging from 31 quarters of an acre to 40 quarters of an acre appears with the highest frequency in plain areas. However, in semi-mountainous areas the size category with the highest frequency is the one ranging from 51 quarters of an acre to 60 quarters of an acre. In addition, most holdings do not present rented land in the plain part of the research. In semi-mountainous and mountainous areas, this percentage appears to be slightly lower.

Regarding land allocation among owners, the highest percentage (63.3%) appears to possess 7 to 10 holdings. Higher number of holdings appears to exist in mountainous areas, followed by semi-mountainous areas. Regarding the irrigation capacity of the holdings, the vast majority for all three layers possesses an irrigation land less than 10 quarters of an acre.

RESULTS AND DISCUSSION

Summarizing the results of this research, one should stress the following: 43.3% of households in plain areas presented pluriactivity. The respective percentages for the semi-mountainous and mountainous part of the sample were 33.3% and 20%. In the total of the sample, pluriactivity appeared in the 32.2% of the families. These percentages are lower than those found during the research of rural holdings structure in 1989 (42.3%) as well as other researches conducted in Greece, with the sole exception of one research conducted in 1993 in various regions of the country and which gave a percentage of 30% of pluriactivity of rural households. This low pluriactivity percentage is due to the methodological particularity of the research, because the smallholdings (with a size of less than 2 E.S.U.=2.400 E.C.U.) did not take part in the research (Efstratoglou-Todoulou, 1994). The percentage of pluriactivity households in this research is lower than the percentage of pluriactivity households found in another research conducted in areas of Phthiotida and Corinthia – Central Greece and North Peloponnese – (55-60%), through the use, however, of a different methodology (Efstratoglou, 1994).

The low percentage of pluriactivity in this paper is explained by the fact that the study comprised only mixed crop-animal breeding holdings, because of their particular interest. The mixed crop-animal breeding holdings include in their total holdings where the employment with animal breeding does not leave labour surpluses and hence interest in a possibility of pluriactivity. This has already been confirmed by other studies (Efstratoglou-Todoulou, 1994). The lowest percentages of pluriactivity found in the mountainous and even more in the semi-mountainous part of the sample, demon-
strate the limited possibilities for such an employment in these areas and lead to the thought that maybe pluriactivity is related to the age of the multi-employed persons, since higher aging of the population has been reported in the semi-mountainous and mountainous part of the sample. For this reason, the following hypothesis was tested:

i. Ho: "The pluriactivity of the father is distributed regardless of his age for the plain part of the sample" in relation to the alternative hypothesis. H1: "The pluriactivity of the father is not the same for all age groups for the plain part of the sample". With the assistance of the x^2 test, it was found that \( x^2 = 86.7 \) on a significance level \( a = 0.01 \). Consequently, the zero hypothesis of \( H_0 \) is rejected and the alternative hypothesis \( H_1 \) is the one accepted.

ii. Ho: "The pluriactivity of the father is distributed regardless of his age for the semi-mountainous part of the sample" in relation to the alternative hypothesis. H1: "The pluriactivity of the father is not the same for all age groups for the semi-mountainous part of the sample". With the help of the \( x^2 \) test, it was found that \( x^2 = 36.5 \) on a significance level \( a = 0.01 \). Consequently, the zero hypothesis of \( H_0 \) is rejected and the alternative hypothesis \( H_1 \) is the one accepted.

iii. Ho: "The pluriactivity of the father is distributed regardless of his age for the mountainous part of the sample" in relation to the alternative hypothesis. H1: "The pluriactivity of the father is not the same for all age groups for the mountainous part of the sample". With the help of the \( x^2 \) test, it was found that \( x^2 = 12 \) on a significance level \( a = 0.01 \). Consequently, the zero hypothesis of \( H_0 \) is rejected and the alternative hypothesis \( H_1 \) is the one accepted.

The percentage of households presenting pluriactivity of the father is smaller than the percentage of households presenting pluriactivity of the mother. The pluriactivity of the father is distributed in the same order in pluriactivity (Moisidis, 1996, Estratou-Todoulou, 1994), however, a different methodology was followed due to the different objectives of the research. More specifically, there was a categorization into leaders of rural holdings, wives and other members. This paper attempts to investigate pluriactivity from the rural household viewpoint and not from the point of view of the rural family holding, consequently there was a categorization into fathers, mothers, offspring, grandfathers and grandmothers. In the present study, the pluriactivity of children appears to be increased in relation to the pluriactivity of the "rest" of the members in previous studies, due to the differentiation of these two concepts as well as the different methodology concerning the structure of the sample. The phenomenon of under-employment of the labour-force in agriculture is observed in the whole country during the last decades (Sakelis, 1983, Gidarakou, 1992). Although under-employment, on a seasonal basis, is unavoidable up to a certain extent, because of the biological foundations in agriculture and although the extent of under-employment in this region is not as high as the general one, the time of under-employment decreased, according to the structural study of 1989. During the year of reference, the father of the family gained 147 wages in the plain areas, 191 in the semi-mountainous areas and 180.5 in the mountainous areas. The percentage of under-employment appears to be more intense in plain areas and this is probably due to the decreased livestock production of the specific layer. In total, the rural households are employed in crop production. All families were employed in the cultivation of olive trees. 50% of the sample in plain areas was employed in the cultivation of fig trees and 73.3% and 60% of the semi-mountainous and mountainous areas respectively. The corresponding percentages for the outdoor crop cultivation were 93.3%, 86.7% and 93.3%. 50% of the families in plain areas was employed in some other cultivation, whereas for the semi-mountainous and mountainous part the percentages were 70% and 86.7% respectively. The cultivation of the olive tree occupies, on average, for the most part the rural household and is followed by the cultivation of fig trees, outdoor crops, vines, etc. In all these crop categories except for the cultivation of outdoor crops, the father of the family gains, on average, the most wages and is followed by the mother, the children, the grandfather and the grandmother. In the cultivation of outdoor crops, the mother, on average, slightly surpasses the father and is followed by the rest of the members.

The father of the family is employed in crop production for 91 wages in plain areas, 86 wages in semi-mountainous areas and 78 wages in mountainous areas. He is followed with a slight difference by the mother, the children (30, 33 and 28 wages respectively), whereas the grandparents present, on average, low employment. This paper also examined the hypothesis of whether the employment of each child (first, second, third and fourth) in crop production depends on his/her sex or it...
is distributed regardless of this factor. These hypotheses were examined for the total of the sample through the use of the χ² statistical test which showed high correlation (on an importance level α=0.1% (α=0.01) the prices for χ² were found to be 78.3, 45.7, 112.5 and 65.3 respectively). Regarding the change of employment in crop production during the last decade the following points were confirmed: 27% of the fathers in plain areas, 24.2% in semi-mountainous areas and 36.7% in mountainous areas did not change its employment in crop production. 41% of the fathers in plain areas has decreased its employment in crop production, whereas a percentage of 31% has increased it. The corresponding percentages for the semi-mountainous and mountainous areas were 38% compared to 35% and 50% compared to 13.3%. In other words, during the last decade the fathers who decreased their employment in crop production were more than those who increased it and this is more obvious in the mountainous part of the sample. In order to investigate the causes of this change the Ho hypothesis was examined: H₀: “The change of employment of the father in crop production during the last decade is independent of his age” in relation to the alternative hypothesis: H₁: “The change of employment of the father in crop production during the last decade is different for every age group”. The statistical test of χ² rejected the H₀ and confirmed H₁ for a level of importance α=1% (α=0.01). Regarding the employment of the father in crop production in the next five years, the answer in most cases was that there would be a decrease or termination rather than an increase due to a change in physical capacity. The vast majority of cases where increase was predicted, this was attributed to the increase of the crop capital.

Regarding the employment of the mother in crop production in the next five years, the answers were almost the same as those of the father. The only difference was that the answers predicting an increase were slightly more in the plain part of the sample. This increase was attributed to a change in the capabilities of the mother. It concerns cases of a temporary limited capacity due to maternity. The change in the employment of the children in crop production presented a definite increase. This is natural because separate answers were given for every child of the rural family and within the next decade child employment is expected to increase. Concerning the change in child employment in crop production within the next five years, the following answers were given: A percentage of 18.5%, 31.7% and 60% of children in plain, semi-mountainous and mountainous areas respectively, predicted a decrease or termination of their employment in crop production, since they tend to quit the rural sector. From this sample, 60% in plain areas, 57% in semi-mountainous areas and 62.25% in mountainous areas are girls, a fact that reveals a stronger tendency towards change on their behalf. 9.3% of the children in plain areas answered that they foresee a decrease in their employment because they think it is disadvantageous. In answers predicting an increase in child employment, this was attributed to factors such as changes in physical or other capacity or capability for all three layers. For the 15.3% of the total sample of children, the increase was attributed to the increase of crop production. The restructuring in cultivation which took place during the last decades, resulted in many plantations of olive trees (to replace vines or other products such as wheat) in deserted and other regions (even in forests). These trees, with the passing of time, increase production and consequently the labour requirements. 6.9% of the children in plain areas predict an increase in employment in crop production regarding it as the most advantageous solution. The employment of the grandparents presented a decrease during the last decade and a decrease or termination is expected in the next five years due to physical or other changes. Family employment in crop production compared to the employment of the previous generations appears to be unchanged for the 30% of families of the sample. Higher stability percentages were observed in the mountainous part of the sample, followed by the semi-mountainous and plain part. In the plain and semi-mountainous part of the sample the answers pointed at a decrease in employment, whereas in the mountainous part they answered that there was an increase.

The decrease in employment of some households is probably due to the mechanization of certain tasks.
mechanization for the collection of olives, mechanization of the cultivation procedure, etc.), as well as to changes in structure and cultivation since many tasks demanding considerable amounts of labour were abandoned (wheat, raisin cultivation). From the total number of households, two of them in plain areas and 13 and 11 in semi-mountainous and mountainous areas respectively, followed the territorial system of breeding whereas 28, 17 and 19 respectively followed the sheltering system. Territorial breeding occupies, on average, for the most wages the families, which employ it, whereas the sheltering system of breeding demands fewer wages. The father of the family makes most wages in the territorial system of breeding and is followed by the mother, and the children, whereas the employment of the grandparents is not reported. In the sheltering and home system of breeding the order of employment is different: the mother brings the most wages and is followed by the father, the children and the grandparents. Thus, the mean of employment of the mother in animal production amounts to 62.5 in 100.5 and to 96.5 wages for all three layers and is followed by the father, the children and the grandparents. Regarding the employment of children in animal breeding the following hypotheses were tested: whether the employment of each child (first, second, third or fourth) is dependent on his/her sex or not. These hypotheses were tested for the total of the sample with the x² statistical test which showed high correlation (on an importance level a=0.1% (a=0.01) the test produced prices for x² equal to 5.2, 1.3, 12.3 and 6.3 respectively). Concerning the change in employment in animal breeding during the last decade, the following was confirmed: 68.9% of the fathers in plain areas, 44.8% in semi-mountainous areas and 43.3% in mountainous areas did not change employment. The 27.5% of the fathers in plain areas had decreased the employment in animal production whereas a percentage of 3.4% had increased it. The corresponding percentages for semi-mountainous and mountainous areas were 34.4% compared to 17.2% and 53.3% compared to 0% respectively. This means that during the last decade the fathers who decreased their employment in animal breeding were more than those who increased it and this was more intense in mountainous areas. In addition, this decrease is stronger than the decrease in crop production. To investigate the causes of this change, the following hypothesis was tested: H₀: "The change in employment of the father in livestock production during the last decade is independent of his age" in relation to the alternative hypothesis. H₁: "The change in employment of the father in livestock production, is not the same for all age groups". Through the x² statistical test H₁ for an importance level a=1% (a=0.01) with x²=71.3. Concerning the employment of the father in the next five years the most popular answer pointed more at a decrease or termination, due to changes in capacity and less at an increase due to interest or some other reason. The vast majority of families, however, predicted stability in the father's employment (90%, 74.1%, 56.7% for all three layers: plain, semi-mountainous and mountainous). During the last decade, the change in employment of the mother in livestock production seems similar to the one of the father, although the decrease in employment was not so striking. Regarding the change in employment of the mother in livestock production in the next five years, the answers were almost the same with those for the father, in other words, stability is prevailing and a decrease or termination is predicted in most cases, due to changes in capacity or other reasons. The change in employment of children in livestock production during the next five years, no changes are expected. This view is more prevailing in this case compared to the answers given to questions regarding crop production. The percentages of answers regarding decrease in employment and/or termination are similar to those concerning crop production, however, the percentages pertaining to increase in employment are significantly lower. Household employment in livestock production, in relation to the employment of the preceding household appears decreased at 63.3% of the families of plain areas and at 60% and 36.7% in semi-mountainous and mountainous areas respectively. The remaining families mainly answered that there was no change. The non-rural activities of the children referred to boys, for the total part of the sample. During the last decade, the employment in non-rural activities remained unchanged for the fathers in their vast majority (62%, 75% and 83.3% for all three layers). From the remaining fathers, very few of them – mostly in plain areas – increased their non-rural activity. The reasons for which many multi-employed fathers decreased their non-rural activities during the last decade, except for age-related cases, are, linked to a decrease in wage prices that took place during that period because of the arrival of foreign workers. Stability is predicted concerning the employment of the father in non-rural activities for the next five years. During the last decade, the employment of the mother in non-rural activities appears to be stable and the same is predicted, according to the answers that were given, for the next five years. For the last decade, children employment also remained stable, although according to most answers, there has been an increase more than decrease. For the next five years, stability is also expected in 53.4% of children in plain areas, 54.7% in semi-mountainous ar-
The aim of this paper was the presentation of the rural activities (rural handicrafts).

CONCLUSIONS

i. expansion of fig cultivation due to the fact that this product is considered essential for the particular natural environment,
ii. production of biological and high quality products and
iii. increase of pluriactivity, with the increase of parallel activities (rural handicrafts).

The aim of this paper was the presentation of the rural household and its employment as well as the new trends involved in this issue. It also tried to propose measures through which the rural household and its employment will ensure a balanced interaction, focusing its interest on a geographical region (rural nature), the Messini (Peloponnese) province. Within the limits of the present paper and in order to achieve its objectives, a local sampling research was conducted, using the method of the questionnaire. The questionnaire aimed at collecting information concerning the general characteristics of each household, the rural characteristics of the family holding, the structure of the employment and the new trends.

One of the important observations of the present paper was that there is absence of children in the rural household of the Messini region due to the exit from the rural sector, and this is more obvious in the semi-mountainous and mountainous parts (the absence of girls is greater than the absence of boys). For the future, similar tendencies to escape are expected in semi-mountainous and mountainous areas and especially among girls. Another important observation was that mixed crop-livestock breeding households displayed pluriactivity. The low pluriactivity percentages of the semi-mountainous and mountainous regions are due to the limited capacities of these regions for this sort of employment and to the fact that pluriactivity appears stronger when it comes to young farmers. Olive tree cultivation occupies, on average, the family for the most wages, in relation to the cultivation of other products and is followed by the cultivation of fig trees, outdoor crops, vines, etc. In all these cases, except for the outdoor crop cultivation, the father of the family gains, on average, the most wages and is followed by the mother, the children and the grandparents. In outdoor crop cultivation, a slight excellence of the mother is observed (followed by the father and the rest of the family members) and this is probably due to the fact that in most cases there is a family crop garden. The employment in crop production is more important than that of livestock for the plain part of the sample, whereas for the semi-mountainous and mountainous part terms are reversing. The new trends, which are shaped in relation to the employment of the rural household in the region under investigation, constitute the combination of many factors, some of which have a positive effect on employment, while others have a negative influence and are different for each member of the household and each field of activity. The change in employment in every activity sector, for example, depends primarily on the change in a person's physical or other capabilities and possibilities and on the alternative solutions that are available. The employment in crop production is under the influence of the increase of the crop capital and the mechanization as well as decrease of the economic yield for most system of cultivation. The employment in livestock breeding is under the influence of stability and/or slight increase in the economic yield of goat breeding but it is also under the influence of the
aversion of the young people to this system of employment. Like every household, the rural household and employment are subject to mutual influences (Cavounidis, 1984). Depending on past research as well as on the primary and secondary facts of this paper, it is possible to point out the targets for the rural households of the specific region with the appropriate, of course, suggestions and reinforcement on behalf of the State, in order for the rural household and its employment to function as a balanced unit:
1. Support of the rural household which under-employs its labour-force having, at the same time, to face the new competition conditions of the world market resulting in the decrease of its income.
2. Solution to the problem of the succession of holdings through measures which aim at it.
3. Improvement of the position and employment of women of the countryside, since they feel justifiably unsatisfied.
4. Achievement of a balance between crop and livestock production through measures which aim at the development of livestock breeding, especially goat breeding.

REFERENCES
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