

A Socio-Professional Analysis of the Semi-Subsistence Farms Managers in Dâmbovița County

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Abstract. The requirement for improving human skills in the agri-food and forestry system is rather acute if we take into consideration the fact that the semi-subsistence agriculture prevails in the Romanian agriculture, which is rich in rural human resources in quantitative terms (number), but still poor as regards the quality and professionalism of human resources in EU terms. This research study is based on the quantitative and qualitative analysis of a sample of 500 semi-subsistence farmers in Dâmbovița County who accessed Measure 141 and who attended information and vocational training courses in economics. The sample was stratified according to various criteria: field of activity, sex, different age groups of the managers of holdings, levels of agricultural and non-agricultural training, education, skills, etc. All these criteria were correlated and investigated according to the minimum level of farmers' knowledge in management, accounting, marketing and organic farming, after at least two years from the implementation of projects. Due to the highly heterogeneous basic training, within the non-agricultural part without economic knowledge, authorized small farmers were forced by the newly created circumstances to adapt, more or less correctly and thoroughly, to the new accounting, fiscal and management requirements. The farmers' education and vocational training, as well as the monitoring of the implementation of projects have also had an impact on the use of financial support and the quality of farm management and marketing of agricultural products.

Keywords: Sample of farmers, Measure 141, vocational training, semi-subsistence farms, Dâmbovița County

INTRODUCTION

The requirement for improving human skills in the agri-food and forestry system is rather acute if we take into consideration the fact that the semi-subsistence agriculture prevails in the Romanian agriculture, which is rich in rural human resources in quantitative terms (number), but still poor as regards the quality and professionalism of human resources in EU terms.

The objectives of increasing agricultural and forestry yields and market potentiality can be fulfilled by investing in irrigation and other production inputs, but also by improving small farmers' (technical and managerial) education on the semi-subsistence farms. Given that the agricultural sector and rural economy are exposed to the competitive pressures of the single market, within the NPRD 2007-2013, Measure 141 "Supporting semi - subsistence agricultural farms" targets the increase of competitiveness of agricultural holdings undergoing restructuring, expressed by increasing the production volume aimed for marketing, production diversification according to market requirements and introducing new products, so that semi-subsistence farms can become economically viable.

In Romania, out of 350 thousand semi-subsistence farms classed 2-8 ESU, over 20% receive financial support under Measure 141, for their transformation into commercial farms.

One of the conditions imposed by the authorities for accessing the European funds under this measure is authorizing farmers, either as individuals (ANP), or as individual enterprises (IE) (Government's Ordinance 44, 2008).

The published statistics (Romania, National Trade Register Office, 2013), on authorizing individuals entrepreneurs, only refers to the activity branch "agriculture" and annual reports (Romania, Department of Rural Development of MARD, 2013), on the progress of implementation of Measure 141 under the NRDP 2007-2013, are very poor in information on the quantity and quality of human resources who are running projects and are receiving financial support. These data are limited only to regional statistics on farmers' gender and their delimitation within the age group 18-40 years, grouping by UAA intervals and the number of farmers who applied agro-environmental measures or fall into disadvantaged areas, as well as to the total contracted and paid amounts.

Within these projects lasting five years, already after the first 3 years after a thorough check, farmers must demonstrate entrepreneurial skills to increase the economic viability of the farms on the basis of business plans, the annual growth of at least 20 % marketable production, increase of operated areas and/or livestock number.

Their authorization according to GO. 44/2008 also requires technical knowledge in economic and fiscal management and single-entry bookkeeping in which business planning should be reflected.

There is no comprehensive statistical information of public interest on all these matters, and a research on a sample of farmers is very difficult to be accomplished due to their reluctance to provide fiscal impact data.

Since the authors' statistical investigation possibilities are limited, the research was conducted in Dâmbovița County and aimed at the analysis of the socio-professional quality and structure of the farmers running projects under Measure 141 in 2011-2013.

MATERIALS AND METHODS

This research study is based on a brief analysis of statistical data at national and regional level supplied by Agency of Payments for Rural Development and Fisheries (Romania, Department of Rural Development of MARD, 2013), as well as on the quantitative and qualitative analysis of a sample of 500 farmers in Dâmbovița County who accessed Measure 141 and who attended information and vocational training courses in economics.

The sample was stratified according to various criteria: field of activity, sex, different age groups of the managers of the holdings, levels of agricultural and non-agricultural training, education, skills, etc.

All these criteria were correlated and analyzed according to the farmers' minimum levels of knowledge in management, accounting, marketing and organic farming, after at least two years from the implementation of projects.

RESULTS AND DISCUSSIONS

The obtaining of European funds under Measures 112, 141 and 121 for investments in modernization and in stimulating the marketization of a significant part of the obtained production was conditioned by the obligativity of small farmers certification (be they young or less young farmers) as non-legal entities (Authorized Natural Persons, Individual Enterprises, Family Enterprises), which need the utilization of economic knowledge in management, single-entry bookkeeping, marketing, technical-operative agricultural evidence, etc.

In the period 2009-2012, out of total 82000 farmers authorized at the National Trade Register Office (NTRO), 80% are farmers who accessed European funds under the Measure 141 (82%) and Measure 112 (18%) (Fig. 1).

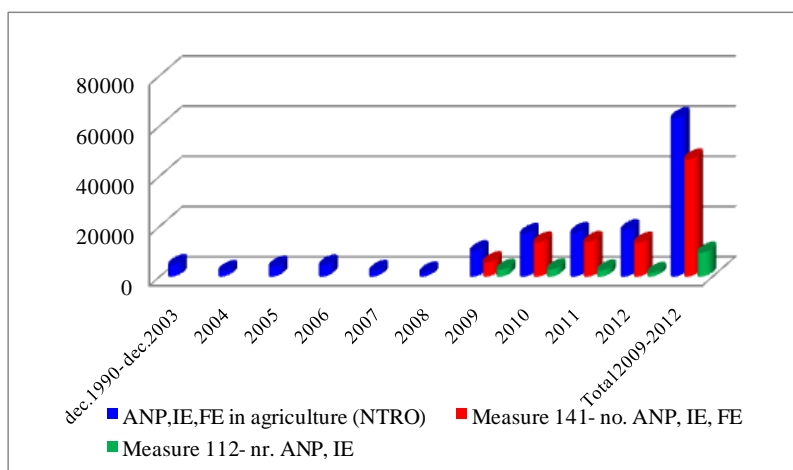


Fig.1. Evolution of the total number of authorized natural persons at NTRO for agricultural activities and farmers who carry out projects with non-refundable funds under Measures 141 and 112

The evolution of authorizations depended on the frequency of sessions organizations, of files checking up and publication of their eligibility. The efforts made by the project management authorities, as well as by farmers, led to accessing the European funds by an increasing number of eligible projects from one session to another.

At Measure 141, the reported statistical data (Romania, Department of Rural Development of MARD, 2013) reveal the participation of farmers less than 40 years of age in a percentage of 52% and of women farmers in a percentage of 28% (In the first 8 months of 2013 funding contracts were further concluded with 8342 farmers under M 141. Out of total contracted value payments were made in a percentage of 40% up to 30 August 2013- www.madr.ro). At the same time, it was found out that 72% of the farmers who benefit from financial support under Measure 141 operate up to 5 ha UAA, out of which one-third are women and more than half are farmers under 40 years of age. The small farms are mainly specialized in horticultural activities (vegetable growing, fruit-tree, vine farming) and bee-keeping. The farms with areas equal to or larger than 10 ha account for only 9% of total and are managed in a percentage of 22% by women and 44% by young people aged less than 40 years, growing field crops or being involved in mixed activities (Fig. 2).

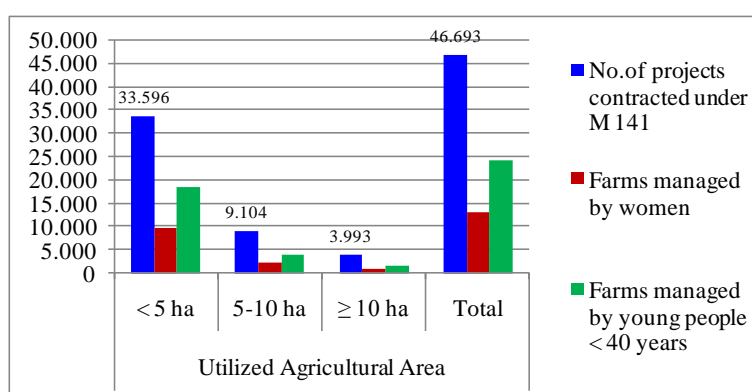


Fig.2. Total number of projects contracted through APRDF in the period 2008-2012 under Measure 141, grouped by UAA categories, managed by women and people younger than 40 years

At regional level it can be noticed that *Region 6 N-V* has the highest number of projects, some of them meeting all the four criteria (Fig. 3).

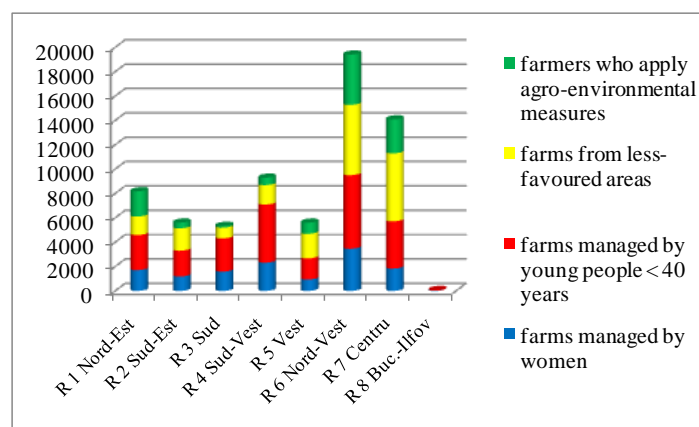


Fig.3. Regional distribution of farmers who carry out projects under M 141 and their classification according to social and agro-environmental criteria

Out of total number, 27% are women farmers, 25% are farmers under 40 years of age, 30% of projects are located in less-favoured areas and 37% are farms that also accessed agro-environmental measures. *Region 7 Centre* comes next, with 29% of projects located in less-favoured areas and 25% of farms that also accessed agro-environmental measures, while *Region S-V Oltenia* is on the 3rd position, with 18% of farms managed by women and 20% managed by farmers under 40 years of age.

The investigated sample was extracted from a number of 1500 farmers from Dâmbovită County who accessed Measure 141 in the sessions from the year 2011 and who participated to vocational training and information courses, organized under M 111.

The sample represents 30% of the surveyed farmers and it has been randomly established by statistical step, from the lists drawn by the course organizers, depending on the order in which the farmers concluded the funding contracts.

Out of total sample, 59% are men farmers and 41% women farmers. Almost half of the farmers are working full-time in agriculture. Among the men farmers, 54% are involved only in the farming activities on their own farm, as compared to women, whose share is 39% (Tab. 1).

The young farmers aged under 40 years account for 49% of total (two-thirds men and one-third women), quite close to the national share, i.e. 52%. The average age of sample is around 40 years, with slight differences between genders. With men, the share is by one year lower, and in women by one year higher than the sample average. From the point of view of extremes, the minimum age is 22 years in both genders and 62 years in men and 64 years respectively in women.

According to the legal form, more than two-thirds of farmers are Authorized Natural Persons, while the remaining is organized as Individual Enterprises, according to Government's Ordinance 44/2008.

The farming activities are well-represented in sample. According to the county specificity, 52% of farmers who accessed Measure 141 are specialized in fruit-tree farming, out of which women account for more than half. The vegetable farming in the southern area of the county comes next, with 15% of farms, followed by the bee-keeping sector, distributed in all areas, with 14%. The mixed crops (cereals, potatoes, cabbages, onions etc.) and the mixed activities (crops and livestock production) are found as equal activities of 10% each in sample.

Tab.1

Structure of investigated sample, by gender, according to the time spent for the on-farm activities, by legal form and age

Gender	Sample	Farmers out of total	Full-time farmers out of total	M and W full-time farmers out of total M and W	ANP	IE	Age < 40 years	Average age	Maximum age	Minimum age
	no.	%	%	%	%	%	%	years	years	years
Men	295	59	32	54	52	7	65	39,5	62	22
Women	205	41	16	39	32	9	35	41,4	64	22
Total	500	100	48	xxx	84	16	49	40,3	xxx	xxx

Source: survey conducted by the authors

From the age point of view, one quarter of the sample is represented by the young fruit-tree farmers less than 40 years of age. The young vegetable farmers follow at great distance, with 9%, the young bee keepers with 7% and mixed crops with 5%. In the age group 40-49 years, the farmers from the fruit-tree growing sector also stand out, with 18%. The other higher age categories do not exceed 3% for all the farming activities (Fig.4).

By the basic occupation, 48% of farmers (two-thirds men and one-third women) carry out full-time activities, while the remaining farmers work part-time in other activity fields, being helped by the other family members in the agricultural activities (Fig.5).

The men farmers work as employees in the following sectors: industry and transports (33%), agriculture and forestry (19%), under way of completing their higher education (15%), secondary education (11%), economy (7%) administration (4%) and pensioners 11%.

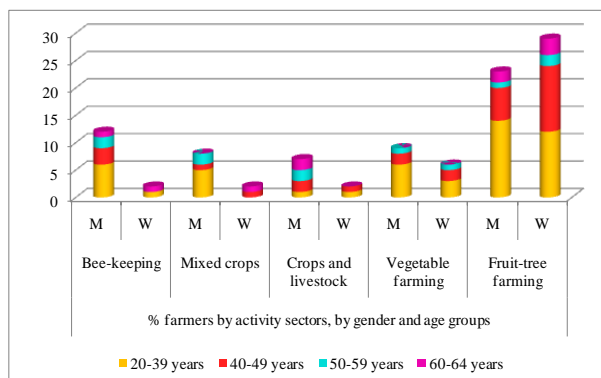


Fig.4. Percentage distribution of farmers from sample by activity sectors, by gender and age groups under M 141 in Dâmbovit County

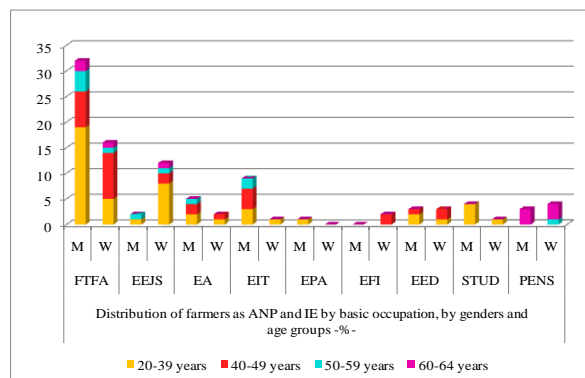


Fig.5. Percentage distribution of farmers from sample according to basic occupation ^{*)}, by gender and age groups under M 141 in Dâmbovit County

*) Definition of abbreviations under Basic occupation:

- FTFA Full-time farmer in agriculture
- EEJS Employee in the economic and juridical sector
- EA Employee in agriculture
- EIT Employee in industry and transports
- EPA Employee in public administration

- EFI Employee in food industry
- EED Employee in education
- STUD Students
- PENS Pensioners

The men farmers under 40 years of age work on part-time basis in the following sectors: 31% are going to complete their higher education studies, 23% are employees in industry and transportation, 15% in agriculture and education each, 8% in the economic and administration sectors each.

The women farmers work as employees in the following sectors: economic and juridical sector (48%), education (12%), agriculture and food industry (8% each), industry and completion of higher education studies (4% each) and pensioners (16%). In the age category under 40 years of age it is the women farmers who work in the economic and juridical sector that prevail (67%) and in almost equal proportions of 8% each they work as employees in agriculture, industry, education or completion of higher education.

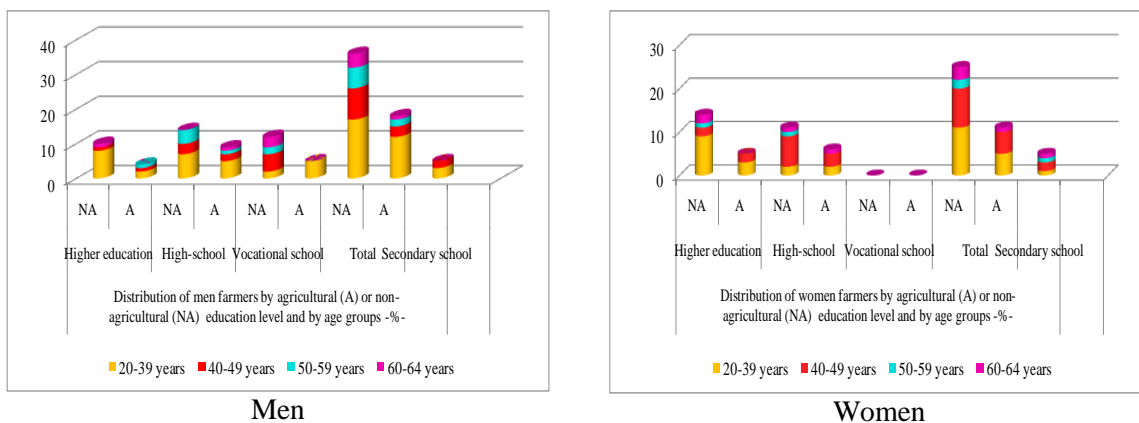


Fig.6. Percentage distribution of men and women farmers by educational level and age groups under M 141 in Dâmbovită County

The sample analysis by the educational level, by gender and by agricultural or non-agricultural profile, reveals the high share of non-agricultural education (61%), out of which 59% men and 41% women; in this category the young people aged under 40 years account for 46% (Fig.6).

By educational levels, the medium education prevail (40%), out of which 57% men and 43% women. One-third of farmers who accessed Measure 141 in Dâmbovită County are higher education graduates, in which the women's share (58%) is higher than that of men (42%). The farmers who graduated vocational schools are only men, and the farmers with 8-10 grades account for 10% of total and they are equally men and women.

Before beginning the vocational training, information and knowledge dissemination courses, the participating farmers were tested with regard to their basic theoretical and practical knowledge in the following fields: management, single-entry bookkeeping, marketing and organic farming. A score was obtained after checking up the tests (Fig.7).

The sample database was investigated according to the average score obtained by each tested field of activity, by genders and age groups. Out of the total score obtained by the sample, management and accountancy obtained 23% of scores each, while marketing and organic farming 27% of scores each. Men obtained 49% of total score, while women outran them by 1%.

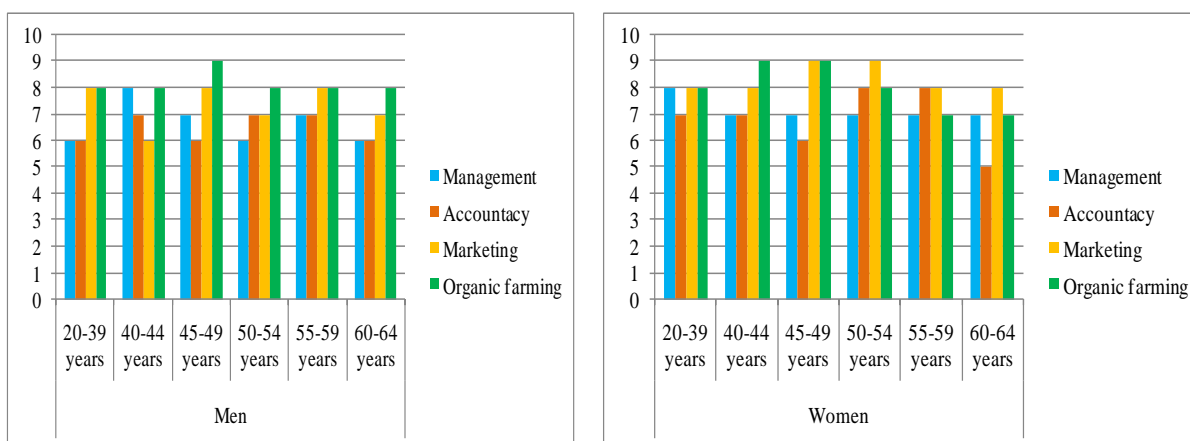


Fig.7. Average scores obtained by farmers in the initial tests, before beginning the training courses, by gender and age groups

By fields of study and gender, women obtained the best score in marketing, while men obtained the best score in the theoretical and practical knowledge in organic farming.

By age groups and genders, it was found out that management and accountancy are not strengths in men less than 40 years of age and in those over 60 years old, most of them excelling in practical activities. The women under 40 years old proved basic theoretical and practical knowledge in all the tested fields. At the same time, the women in the age group 40-54 years proved quite good knowledge in accountancy, marketing and organic farming.

The analysis of the sample of farmers, by the working time spent on the farm and the score obtained at testing their knowledge in the four fields of activity, revealed that the experience and studies in other fields of activity contributed, together with the agricultural knowledge, to obtaining better average scores by farmers who work on part-time basis. The full-time farmers had excellent results in organic farming (Fig.8).

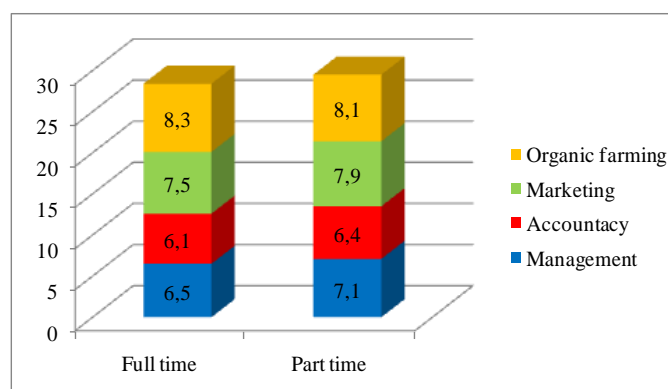


Fig.8. Average scores obtained in the four training fields by farmers, according to the working time allocated to farming activities

CONCLUSION

Farmers' participation with projects for obtaining non-refundable funds under Measure 141 was conditioned by the authorization at ONRC according to GO 44/2008 and evidence in single-entry bookkeeping of the expenditures and agricultural incomes. This new position and recognition as economic operator in the market economic environment had both

positive and negative aspects from the agricultural management point of view, from the point of view of the relations with the other players on the market and from the fiscal point of view.

Due to the extremely heterogeneous basic vocational training, as regards school attendance and activity fields, partly non-agricultural and without economic knowledge, the small authorized farmers had more or less likely to adapt and cope on-going, more or less correctly and thoroughly, to the new accounting, fiscal and management requirements.

One working hypothesis was confirmed, namely that men have better theoretical and practical knowledge in agricultural operations, while women are more involved in the sale of production on the markets, if we take into consideration the high share of horticultural products (fruit and vegetables) produced by the farming sector of the Dâmbovită County.

An important effect of these semi-subsistence farm funding measures, besides the financial support, was that it also involved the young or less young rural women in the economic activities, with medium and higher education, who had become housewives due to the lack of paid jobs in the rural or urban areas. At the same time, the farmers' vocational training and information level, as well as the project implementation monitoring influenced the financial support utilization modality and the quality of farm management and marketing of agricultural products.

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