Study Regarding the Perception of Small Farmers from the South- East of Romania on Social Agricultural Cooperatives

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Abstract

Social economy suggests new, innovative solutions to certain social, economic or environmental problems of communities in order to meet the needs expressed by community members, which are insufficiently covered or ignored by the public or the private sector. The domain represents a priority both at the national and at the European level for the period 2014 – 2020, being a research topic for the academic environment and the subject of a great number of scientific conferences and research studies. The study below presents the original research performed by the authors in order to determine the social agricultural cooperative acceptability degree among the farmers from the south-east of Romania. The first stage of the research strategy materialised in various documentation activities regarding the draw-up of a questionnaire and finished with the completion of the questionnaire and of the computer-based methodology used for its processing. The second stage involved the design of the sample structure and size and the processing methodology. In the third stage, we put forward the working hypotheses and we identified the connection degree between the variables that constituted the basis for making the hypotheses.

Keywords: social economy, social agricultural cooperative, sustainable development

1. Introduction

Social economy suggests new, innovative solutions to certain social, economic or environmental problems of communities in order to meet the needs expressed by community members, which are insufficiently covered or ignored by the public or the private sector. (Arpinte, Baboi, Cace, Tomescu, & Stanescu, 2010) The domain represents a priority both at the national and at the European level for the period 2014 – 2020, being a research topic for the academic environment and the subject of a great number of scientific conferences and research studies. According to the recommendations made by the European Commission (CIRIEC, 2015), the economic and social models must be rethought and adapted to the present context, and social entities must support social innovation as well as an inclusive and durable economic growth. Sustainable development is a general and fundamental objective of the European Union aimed at continuous improvement of the quality of life, based on interconnections among economic development, environmental protection and social justice. (Huttmanova, 2016)

The legislative initiatives regarding the freedom of association led to the development of social economy throughout history. Thus, the freedom of association was acknowledged even from the 19th century in Great Britain, Germany, the Netherlands, France and In the modern period, in 1980, the representatives of the mutual and associative

cooperative sectors drew up the Social Economy Charter, which was updated in 1995, and which reiterated the values and organisation method of social economy by highlighting the fundamental principles of this sector: solidarity, responsibility, freedom, equal chances for all the members of the organisation, and mutual respect. In sustainable agriculture and rural development, a special place is occupied by family farms, which, despite the pressure of agri-industrial corporations, still are a basic organisational form of agriculture, being a socially attractive way of agricultural production. (Wrzaszcz & Zegar, 2016)

The objectives of social economy regarding employment, the development of social services and the consolidation of social cohesion are found in the creation and development of the social economy entities from the two sub-sectors: commercial and non-commercial. (Longo, Clark, Shriver, & Clausen, 2015) The major orientations regarding public policies refer to social economy by means of social inclusion policies, of workforce market insertion policies, of local development policies and job creation policies. (Research Report Regarding Social Economy in Romania from a Comparative European Perspective, 2015)

In Romania, according to (Stanescu, 2013), the social economy sector is in an early stage of development, being undersized as far as the number of employees is concerned as compared to its percentage in other European countries. The research performed by Stanescu is also confirmed by (Barna, 2014), who proves that, in 2013, the social economy sector in Romania included 39,347 active organisations, which hold fixed assets of 13,917,508 thousand lei, revenues amounting to 12,298,111 thousand lei, and which hired a number of approximately 131,127 people (Barna, 2014).

2. The Stages of the Research and the Methods Used

The study below presents the original research performed by the authors in order to determine the social agricultural cooperative acceptability degree among the farmers from the south-east of Romania.

The first stage of the research strategy materialised in various documentation activities regarding the draw-up of a questionnaire and finished with the completion of the questionnaire and of the computer-based methodology used for its processing. The total number of items used in the questionnaire was of 14, out of which the first 11 items focused on the fundamental problems of the research (the human resources management policy, the affiliation to a certain county, the respondents' expectations regarding the evolution of social agricultural cooperatives, their activity sector, the social responsibility area, the acceptability degree of the social agricultural cooperatives, the development of local communities), whereas the last 3 questions were dedicated to gathering information on the respondent profile (gender, age, activity sector).

The second stage involved the design of the sample structure and size and the processing methodology. Filling in the questionnaire was voluntary, an agreement questionnaire being used. The results are relevant due to the fact that only the people who were interested in the topic expressed their opinions. The maximum permissible error was determined by using formula (1), whereas the size of the representative sample was determined by means of formula (2).

The sample size to be investigated was designed by taking into account the fact that the maximum permissible limit error in the case of this type of survey is:

$$\Delta_{\overline{x}} = z_{\alpha} \frac{\sigma}{\sqrt{n}} \sqrt{1 - \frac{n}{N}}$$
From where $n -$ the size of the sample is extracted.

From where n - the size of the sample is extracted:

$$n = \frac{Z^2 \sigma^2}{\Delta_{\overline{\chi}}^2 + \frac{Z^2 \sigma^2}{N}}$$

where:

 $\Delta_{\bar{x}}$ the maximum permissible limit error

 σ – the standard deviation

 z_{α} - the value of the Laplace variable for the α risk

 α – the value of the 1st degree risk

 $P = 1 - \alpha$ the reliability probability

N - the number of the general population

n – the size of the investigated sample

- The sufficiently reliable, close to certainty, result guarantee probability ($P=1-\alpha$), from a practical point of view;

- The dispersion of the feature in the general population σ^2 , or in its estimator;

(2)

The values resulted from the calculation are increased both for obtaining a whole number and out of practical considerations so that the research could not be endangered, taking into consideration the fact that a certain number of questionnaires may be rejected. After establishing the size of the sample, we encoded the answers in order to facilitate the subsequent processing. After gathering, checking and validating the questionnaires, the obtained data were entered in SPSS.

In the third stage, we put forward the working hypotheses and we identified the connection degree between the variables that constituted the basis for making the hypotheses.

3. The Results of the Investigation

3.1 The respondent sample characterisation



Table no 1. The respondent sample characterisation divided into the counties where they operate

Source: Authors' own research

Activity sector	Number of respondents	Pondere (%)	Zootehnie	Agroturis m 8%	í.
Viticulture	24	7,64		1	√iticultură
Fruits and vegetables	s 145	46,17			8%
Apiculture	66	21,03			
Zootechnics	54	17,20	¥		
Agro tourism	25	7,96		F	ructe și eaume
Total	314	100,0	Apicultură 21%		46%

Table no 2. The sample structure by the respondents' activity sector

Source: Authors' own research

 Table no 3. The sample structure by age



Source: Authors' own research

The collected data were processed by means of the SPSS programme. Four working hypotheses were made, H1-H4, which took into consideration eight variables (the age of the respondents, the human resources management policy, the affiliation to a certain county, their expectations regarding the evolution of the social agricultural cooperatives, the activity sector, the social responsibility area, the acceptability degree of the social agricultural cooperatives, the development of local communities).

H1: The age of the respondents significantly influences the adopted human resources management policy regarding the employment of socially vulnerable people.

H2: The affiliation to a certain county from the south-east region, in which the respondents operate, significantly influences their expectations in connection with the evolution of social agricultural cooperatives.

H3: The activity sector in which the respondents operate significantly influences the approach of a certain social responsibility area.

H4: The acceptability degree of the social agricultural cooperatives in Romania significantly influences the development of local communities

3.2 The results regarding the verification of the proposed working hypotheses

The verification of the results' validity was performed by means of the Pearson Test.

Table no 4. The verification of H1 (The age of the respondents significantly influences the adopted human resources management policy regarding the employment of socially vulnerable people)

				Employing :	socially vulner	able people		
			Agree in a very	Agree in a		Agree on a	Agree on a very	
			large mesure	large mesure	Undecided	small scale	small scale	Total
Respondents Age	18-25 years	Count	6 _a	20 _a	6 _a	9 _a	0 _a	41
		% within Employing socially vulnerable people	13,0%	11,9%	13,3%	18,8%	0,0%	13,1%
	26-35 years	Count	21 _a	70 _a	15 _a	17 _a	0 _a	123
		% within Employing socially vulnerable people	45,7%	41,7%	33,3%	35,4%	0,0%	39,2%
	36-45 years	Count	15 _a	54 _a	21 _a	17 _a	5 _a	112
		% within Employing socially vulnerable people	32,6%	32,1%	46,7%	35,4%	71,4%	35,7%
	> 45 years	Count	4 _a	24 _a	3,	5 _a	2 _a	38
		% within Employing socially vulnerable people	8,7%	14,3%	6,7%	10,4%	28,6%	12,1%
Total		Count	46	168	45	48	7	314
		% within Employing socially vulnerable people	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source: Authors' own research

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14,971ª	12	,243
Likelihood Ratio	17,596	12	,129
Linear-by-Linear Association	,704	1	,401
N of Valid Cases	314		

a. 4 cells (20,0%) have expected count less than 5. The minimum expected count is ,85.

Chi-Square Distribution Table



The shaded area is equal to α for $\chi^2 = \chi^2_{\alpha}$.

					_					
df	$\chi^{2}_{.995}$	$\chi^{2}_{.990}$	$\chi^{2}_{.975}$	$\chi^{2}_{.950}$	$\chi^{2}_{.900}$	$\chi^{2}_{.100}$	$\chi^{2}_{.050}$	$\chi^{2}_{.025}$	$\chi^{2}_{.010}$	$\chi^{2}_{.005}$
1	0.000	0.000	0.001	0.004	0.016	2.706	3.841	5.024	6.635	7.879
2	0.010	0.020	0.051	0.103	0.211	4.605	5.991	7.378	9.210	10.597
3	0.072	0.115	0.216	0.352	0.584	6.251	7.815	9.348	11.345	12.838
4	0.207	0.297	0.484	0.711	1.064	7.779	9.488	11.143	13.277	14.860
5	0.412	0.554	0.831	1.145	1.610	9.236	11.070	12.833	15.086	16.750
6	0.676	0.872	1.237	1.635	2.204	10.645	12.592	14.449	16.812	18.548
7	0.989	1.239	1.690	2.167	2.833	12.017	14.067	16.013	18.475	20.278
8	1.344	1.646	2.180	2.733	3.490	13.362	15.507	17.535	20.090	21.955
9	1.735	2.088	2.700	3.325	4.168	14.684	16.919	19.023	21.666	23.589
10	2.156	2.558	3.247	3.940	4.865	15.987	18.307	20.483	23.209	25.188
11	2.603	3.053	3.816	4.575	5.578	17.275	19.675	21.920	24.725	26.757
12	3.074	3.571	4.404	5.226	6.304	18.549	21.026	23.337	26.217	28.300
13	3.565	4.107	5.009	5.892	7.042	19.812	22.362	24.736	27.688	29.819
14	4.075	4.660	5.629	6.571	7.790	21.064	23.685	26.119	29.141	31.319
15	4.601	5.229	6.262	7.261	8.547	22.307	24.996	27.488	30.578	32.801
16	5.142	5.812	6.908	7.962	9.312	23.542	26.296	28.845	32.000	34.267
17	5.697	6.408	7.564	8.672	10.085	24.769	27.587	30.191	33.409	35.718
18	6.265	7.015	8.231	9.390	10.865	25.989	28.869	31.526	34.805	37.156
19	6.844	7.633	8.907	10.117	11.651	27.204	30.144	32.852	36.191	38.582
20	7.434	8.260	9.591	10.851	12.443	28.412	31.410	34.170	37.566	39.997
21	8.034	8.897	10.283	11.591	13.240	29.615	32.671	35.479	38.932	41.401
22	8.643	9.542	10.982	12.338	14.041	30.813	33.924	36.781	40.289	42.796
23	9.260	10.196	11.689	13.091	14.848	32.007	35.172	38.076	41.638	44.181
24	9.886	10.856	12.401	13.848	15.659	33.196	36.415	39.364	42.980	45.559
25	10.520	11.524	13.120	14.611	16.473	34.382	37.652	40.646	44.314	46.928
26	11.160	12.198	13.844	15.379	17.292	35.563	38.885	41.923	45.642	48.290
27	11.808	12.879	14.573	16.151	18.114	36.741	40.113	43.195	46.963	49.645
28	12.461	13.565	15.308	16.928	18.939	37.916	41.337	44.461	48.278	50.993
29	13.121	14.256	16.047	17.708	19.768	39.087	42.557	45.722	49.588	52.336

The analysis of the data leads to a Pv asymptotic significance value of 0.243, which exceeds the maximum permissible limit of 0.05. The determined value of the Pearson Chi-Square coefficient (14.971) is smaller than the df limit value (21.026). According to these results, the hypothesis H1 is invalidated. In the analysed areas, a correlation between the age of the respondents and the employment of the socially vulnerable people can't be established.

Table no 5. The verification of H2 (The affiliation to a certain county from the south-east region, in which the respondents operate, significantly influences their expectations in connection with the evolution of social agricultural cooperatives)

			Ex	Expectations					
			Legislative stability	Fiscal facilities	Subsidies	Total			
	Calati	Count	11 _a	22 _a	36 _a	69			
	Galati	% within Expectations	26,8%	22,4%	20,6%	22,0%			
	X 7	Count	6 _a	19 _a	27 _a	52			
	Vrancea	% within Expectations	14,6%	19,4%	15,4%	16,6%			
	D .	Count	4 _a	14 _a	31 _a	49			
C'i	Buzau	% within Expectations	9,8%	14,3%	17,7%	15,6%			
City	·T1	Count	6 _a	9 _a	27 _a	42			
	Tuicea	% within Expectations	14,6%	9,2%	15,4%	13,4%			
	C	Count	5 _a	16 _a	22 _a	43			
	Constanta	% within Expectations	12,2%	16,3%	12,6%	13,7%			
	וי ת	Count	9 _a	18 _a	32 _a	59			
	Braila	% within Expectations	22,0%	18,4%	18,3%	18,8%			
	Total	Count	41	98	175	314			
	Total	% within Expectations	100,0%	100,0%	100,0%	100,0%			

County * Expectations Cross tabulation

Each subscript letter denotes a subset of Expectations categories whose column proportions do not differ significantly from each other at the ,05 level.

Source: Authors' own research

Chi-Square Tests								
	Value	df	Asymp. Sig. (2-sided)					
Pearson Chi-Square	5,677ª	10	,842					
Likelihood Ratio	5,855	10	,827					
Linear-by-Linear Association	,029	1	,864					
N of Valid Cases	314							

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 5,48.

According to these results, there isn't any connection between the two variables because the Pv asymptotic significance value (0.842) is bigger than the permissible significance value of 0.05, and the Pearson Chi-Square value (5.677) is smaller than the df value (18.307).

Chi-Square Distribution Table



Therefore, we may draw the conclusion that the hypothesis is invalidated and that there isn't any connection between the two variables (the affiliation to a certain county from the south-east region, in which the respondents operate, and their expectations regarding the evolution of the social agricultural cooperatives).

 Table no 6. The verification of H3 (The activity sector in which the respondents operate significantly influences the approach of a certain social responsibility area)

			Environment	Employees	Education	Culture	
			protection	protection	promotion	promoting	Total
Activity sector	Viticulture	Count	16 _{a, b}	2 _{a, b}	5 _b	1 _a	24
		% within Responsability area	8,0%	5,9%	19,2%	1,9%	7,6%
	Fruits and	Count	94 _a	14 _a	9 _a	28 _a	145
	vegetables	% within Responsability area	47,0%	41,2%	34,6%	51,9%	46,2%
	Apiculture	Count	39 _a	9 _a	4 _a	14 _a	66
		% within Responsability area	19,5%	26,5%	15,4%	25,9%	21,0%
	Zootechnics	Count	38 _a	6 _a	4 _a	6 _a	54
		% within Responsability area	19,0%	17,6%	15,4%	11,1%	17,2%
	Agrotourism	Count	13 _a	3 _a	4 _a	5 _a	25
		% within Responsability area	6,5%	8,8%	15,4%	9,3%	8,0%
Total		Count	200	34	26	54	314
		% within Responsability area	100,0%	100,0%	100,0%	100,0%	100,0%

Source: Authors' own research

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14,239ª	12	,286
Likelihood Ratio	13,763	12	,316
Linear-by-Linear Association	,136	1	,712
N of Valid Cases	314		

Chi-Square Tests

a. 7 cells (35,0%) have expected count less than 5. The minimum expected count is 1,99.

According to these results, there isn't any connection between the two variables because the Pv asymptotic significance value (0.286) is bigger than the permissible significance value of 0.05, and the Pearson Chi-Square value (14.239) is smaller than the df value (21.026).

Therefore, we may draw the conclusion that the hypothesis is invalidated and that there isn't any connection between the two variables (the activity sector in which the respondents operate and the approach of a certain area of social responsibility).

Table no 7. The verification of H4 (The acceptability degree of the social agricultural cooperatives in Romania significantly influences the development of local communities)

Acceptability de	egree of social a	gricultural cooperatives * The influence of soci	al agricultural co	operatives to	o local develo	pment Cross	tabulation	
			The influence of social agricultural cooperatives to local development					
			Very high	High	Medium	Lower	Verylower	Total
Acceptability degree of social	Ridicat	Count	3 _a	77 _a	0 _b	0 _b	0 _b	80
agricultural cooperatives		% within The influence of social agricultural cooperatives to local development	100,0%	64,2%	0,0%	0,0%	0,0%	25,5%
	Mediu	Count	0 _{a, b, c, d, e}	22 _{d, e}	31 _c	26 _{b, e}	0 _{a, d}	79
		% within The influence of social agricultural cooperatives to local development	0,0%	18,3%	48,4%	26,3%	0,0%	25,2%
	Scazut	Count	0 _{a, b}	21 _b	31 _a	60 _a	13 _a	125
		% within The influence of social agricultural cooperatives to local development	0,0%	17,5%	48,4%	60,6%	46,4%	39,8%
	Foarte scazut	Count	0 _{a, b, c}	0 _c	2 _{b, c}	13 _b	15 _a	30
		% within The influence of social agricultural cooperatives to local development	0,0%	0,0%	3,1%	13,1%	53,6%	9,6%
Total		Count	3	120	64	99	28	314
		% within The influence of social agricultural cooperatives to local development	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Each subscript letter denotes a subset of The influence of social agricultural cooperatives on local development categories whose column proportions do not differ significantly from each other at the ,05 level.

Source: Authors' own research

Oni-Oquale Tests								
	Value	df	Asymp. Sig. (2-sided)					
Pearson Chi-Square	250,643ª	12	,000					
Likelihood Ratio	266,969	12	,000					
Linear-by-Linear Association	159,622	1	,000					
N of Valid Cases	314							

Chi Square Testa

a. 5 cells (25,0%) have expected count less than 5. The minimum expected count is ,29.

The Pv asymptotic significance value (0.0001) is smaller than 0.05 and the Pearson Chi-Square value (250.643) is bigger than the df value (21.026), fact that indicates a very strong connection between the two analysed variables.

As far as the expectations of the respondents connected with the development of social agricultural cooperatives are concerned, 175 of them (55.73%) would prefer grants, 98 (31.21%) would prefer reduced taxation and 41 (13.06%) legislative stability.

We must emphasize the fact that most European Union countries support the creation and development of social economic entities by means of support policies, which fight for grants and reduced taxation.

For the question related to the adopted human resources management policy regarding the socially vulnerable people employment availability, 55.5% of the respondents chose the answer – to a great extent. From the interpretation of the collected data, we can draw the conclusion that a great percentage of the respondents (68.15% chose the answer to a great extent) accepts the employment of socially vulnerable people.

Also, we may also notice an availability from the part of small farmers to hire socially vulnerable people, but the great majority (55.73%) expect support measures for the development of some social economic entities. 64.2% of the respondents consider that the development of social agricultural cooperatives will greatly influence the economic development of local communities.

4. Conclusions

Social economy plays an increasingly important role in the financial market, because it doesn't exert the pressure exerted by shareholders in a private company regarding profitability. The organisation of social economy contributes to the adjustment of three major imbalances that exist on the labour market, namely: unemployment, the instability of employment and the social exclusion of the unemployed.

The present study stresses the fact that small farmers from the south-east of Romania are willing to hire socially vulnerable people, but they also expect some support from the part of the state, materialised in grants, a reduction in taxation and legislative stability. In this regard, we consider that the development of social agricultural cooperatives may relieve the pressure exerted on the social security budget by attracting the people who are part of vulnerable categories (long-term unemployed people, beneficiaries of the guaranteed minimum income) in the activities of the social economic entities and this fact may lead to local and regional economy development. Our future research direction will focus on determining the economic impact of the social agricultural cooperative development on the social security budget in the south-east region of Romania.

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