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Small Women's Cooperatives in less favored and Mountainous Areas under Economic Instability

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Abstract

Rural development policies in the last twenty years reinforced the development of new, alternative to agriculture, activities in the mountainous and less favored areas, such as agro tourism and small scale processing husbandries. In this context, a significant increase in the number of women's cooperatives founded in Greece was observed, aiming the improvement of women's position in small communities. This type of cooperatives, offers to women the opportunity for a supplementary income apart from their household engagements and activities in family farms. In the current study the role of such small scale women's cooperatives from the mountainous region of Florina area in Northern Greece is examined, along with their response in periods with economic instability. The survey performed showed that the cooperatives face viability problems, mainly due to the effects of the economic instability and the lack of new members. At the same time, a survey addressed to young people in the same area, indicated that young people have a positive attitude in participating in the activities of the cooperatives; though the cooperatives existence and activities were not well known in the area.

Key-Words: Female entrepreneurship, Women's cooperatives, Mountainous areas, Logistic regression analysis, Economic instability, Greece.

1. Introduction

The last years, within the economic instability, the Greek economy faced severe problems that affected all macroeconomic indices. The country's Gross Domestic Product (GDP) during the period 2008-2013 was reduced by 23%, while the domestic demand reduction reached 31%. For the period 2010-2013 unemployment has been increased by 18,6%, while productivity has been reduced by 6,5% for the period 2008-2013 (INE, 2013; Eurostat, 2013). Generally, the Greek economy the last years runs into economic instability with all financial indices, apart from GDP and employment, presenting negative trends (Hellenic Statistical Authority, 2015; Rakopoulos, 2015; KEIIE, 2016; Mattas and Loizou, 2013). Within this environment of instability the

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Greek Small and Medium-sized Enterprises (SME's) were among the victims that affected significantly; issues such as liquidity constraints and reduction in their turnover made difficult and insecure their operation. Six out of ten enterprises recorded profit decrease in 2011 compared to 2010, whereas 150.000 jobs were lost (European Commission, 2012). The domestic entrepreneurship continuously deteriorates and the early-stage entrepreneurship index reached its lowest rate in a period of five years, i.e. 5.3% from 8.8% in 2009; while in the same period the potential entrepreneurs diminished up to 2% compared to 4.5% in 2009 (IOBE, 2012).

The Greek rural areas host more than 43% of the total population of the country (European Commission, 2012); among those areas the mountainous and less favored areas also encounter the effects of the economic crisis, at least to the same extent as the urban areas (Kontogeorgos et al., 2014). The economic crisis and instability affect them significantly despite the fact that during the last 20 years, with the funds of the European policies mainly through agro tourism demonstrate a positive development. Today, the dramatic increase of unemployment and the significant reduction of the internal demand and consumption caused important consequences in the development of local entrepreneurship and in the domestic tourism, affecting the growth of the local economies (Hellstat, 2015; KEΠE, 2016).

Among the actions that supported significantly by EU policies in rural areas were the women's cooperatives. Thus, since 1990 a flourish was observed in the creation of women's cooperatives in the Greek countryside (Gidarakou, 1999; Iakovidou, 2002; Koutsou et al, 2003; Lassithiotaki and Roubakou, 2014). Even today, women's cooperatives represent the main form of female entrepreneurship at local level. Through the cooperatives activities women business potentials were improved and their role and position in small rural communities' was recognized. However, the women's cooperatives, despite their contribution to the development of local economies, run into great difficulties and operational problems. These problems seems to be maximized the last years with the economic instability, as the internal demand for touristic services and leisure activities were reduced substantially (69%, between 2008-2013) along with final consumption expenditures (IOBE-SETE, 2012; SETE, 2015).

Following this context the aim of the present paper is to depict the viability potentials of very small women's cooperatives that operate in mountainous and less favored Greek areas, under the current economic instability. It is examined weather factors related to the economic crisis affected their financial situation and viability. This aim is examined through mainly a presentation and analysis of financial data of the last years. In addition, the paper aims to investigate the recognition and appreciation of the role of these cooperatives by young people in the local communities and their support as an alternative source of income. The study presents next the evolution of the rural development policy and especially in the mountainous and less favored areas and the characteristics of the women's entrepreneurship and cooperatives in the rural areas. Finally the methodology and the results of the research along with a discussion are presented.

2. Mountainous and less-favored areas and female entrepreneurship

Development measures for mountainous and less favored areas are among the most important in the context of the EU rural development policy. These areas account about

28% of the European territory and 8% of the European population. In the case of Greece, these areas cover more than 75% of its territory consisted by more than 4500 communities. Aiming the differentiation of the productive basis of the mountainous areas, with activities closely related mainly to agriculture (Bryden, 2003; MRDF, 2007; Michailidis and Papadaki-Klavdianou, 2008), led to the development of alternative forms of activities such as tourism. Especially in Greece, agro tourism was considered as a local - regional activity that could contribute to the regeneration of rural areas and reverse the population migration to urban areas. It was also considered as alternative activity that would offer a partial solution to the financial problems of small and less favored communities and generally as a tool that would support local development. Through the local and integrated development programmes (European initiatives, regional and sectoral programmes) small investments in processing and trade of local and traditional products were financed (Koutsouris et al., 2014; Loizou et al., 2014).

Due to the limited opportunities for employment in rural and especially mountainous and less favored areas, most women consider the beginning of a business as a unique solution for employment and supplementary income creation (Brush, 1992; Oberhauser et al., 1996; NFWBO, 1998; IFAD, 2000; Sharaunga, 2015). These types of businesses usually have small or very small size, employ none or very few employees and grow very slowly. The women enterprises are usually characterized by low value added per worker, low wages, low incomes, and low capital requirements. Self-financing is most times the main source for the necessary start-up capital (Scannell et al., 2004); rarely manage to borrow from the banking system (Sawicka 2001).

Additional obstacles in the development of women's entrepreneurship is the fear of undertaking a risk, the lack of trust and security as well as the dependence and the reaction from their family (Watson and Robinson, 2003; Kibas, 2005; Anthopoulou, 2010; Lassithiotaki, 2011). During the foundation and operation of their establishment, they usually encounter problems such as the issue of necessary documents, the lack of capital, the difficulties in transportation and marketing, the expansion of their business and commitments towards their families (Little, 1991).

On the other hand women consider a number of factors as advantages to set-up a businesses in a rural area, such that are: the friendly environment, the way of life, the personal freedom/time flexibility and the non-existence of competition (Little and Austin, 1996). Among the main disadvantages are the high transportation cost, the geographical isolation, the difficulty of participation in training courses and the lack of information (Still and Simmons 2005).

The opportunity for women to set-up such a small businesses in the Greek country-side, apart from the family farm activities, offered a new role to women apart from the one they have in the rural activities (Gidarakou, 1999). According to surveys, the Greek woman's profile that deals with business in the countryside is: married, with children in the age of 30-45 (Global Entrepreneurship Monitor, 2005). Though, many of them prefer occupations with smaller financial benefits, but with flexibility regarding their family commitments (Castelberg, 1991).

The information and encouragement of women in rural areas for the creation of women's cooperatives initiated during the decade of the 1950's, with the creation of the Directorate of Agricultural Extensions within the framework of the Rural Household Economy programme (Kotaidou, 2007; Charatsari et al., 2013). Despite that, the crea-

tion of the abovementioned form of women's cooperatives made possible in the beginning of 1980. The promotion of actions and programmes by the European Community regarding equality issues of the two sexes, which were relevant to the professional training of women in the countryside, was the main cause of setting-up in 1983, the first women's cooperative, in the village of Petra in Lesvos Island (Giagou and Apostolopoulos, 1996). Between the years 1985 and 1987 nine new women's cooperatives were established, initially aiming at the social and economic emancipation of women in rural areas. The setting-up of businesses as cooperatives and not as individual enterprises was more appropriate, as the risk for each participating woman was low (Kazakopoulos and Gidarakou, 2003; Charatsari et al., 2011).

The great majority of women's cooperatives consist of micro (small-scale) agroindustries and cottage industries (Anthopoulou, 2010). They are mostly dealing with the processing of local agricultural products, the processing and trade of aromatic plants and herbs and the production of handicrafts and folk art items (Gidarakou, 1999). Also, there is a number of agro tourism women's cooperatives which provide mainly lodging and services to tourists and visitors in the countryside.

Within this framework women's cooperatives, as mentioned above, face considerable problems during their creation and operation. Among the most common obstacles during the set-up of a cooperative is bureaucracy and problems relevant to production, standardization, packaging, organization and management, interpersonal relations-conflicts and marketing, during the operation phase (Koutsou et al, 2003). Apart from the problems during the establishment period, these cooperatives in the less favored and mountainous areas have cope with the problems of the current economic crisis and the instability in the economic situation (Kotzavakali, 2014; Gidarakou, 2015). Such that are the decrease in household incomes, the increase in taxes (both direct and indirect), the reduction in personal consumption expenditures in activities such as those of leisure and tourism. Though, these women's cooperatives despite their weaknesses and problems have the potentials to become viable units in a framework of endogenous development (Ilbery and Bowler, 1998; Chatzitheodoridis et al., 2013; Ashoori et al., 2016).

3. Research area

The current study aiming empirically to examine the viability and developing potentials of women's cooperatives in the current period of economic instability, the mountainous area of Florina was selected as a case study. Florina geographically is located in the northwest part of Macedonia area. Administratively belongs to the Region of Dytiki Macedonia and, together with Kozani, Kastoria and Grevena consist the four regional sections of the Region (Figure 1). Florina consists of three Municipalities and its total population is 51.414 inhabitants according to the 2011 census. The three Municipalities of Florina consist of 90 municipal and local communities and, according to the regulation (EEC) 268/75, 50 of these belong to less favored areas, 40 belong to mountainous areas and none of them to the dynamic.

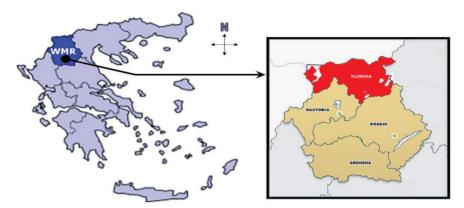


Figure 1. Map of Greece with Dytiki Makedonia Region and regional section of Florina.

The primary sector has a dominant role in Florina's economy. Livestock production contribution is very significant while in crop production the area is specialized in crops such as wheat and corn, beans, viticulture, peppers and potatoes (Region of Dytiki Macedonia, 2014). The region of Florina due to the specific climate conditions, the natural and cultural resources is considered as a pole for winter tourism as well as an emerging agro tourism destination. In the region can be found six natural lakes and high mountains. In the rich ecological reserve of Florina, the wetland of Prespes that is the biggest National Park of the country enjoys an important role. The settlements of Nymfeo and Lehovo are well known for their important architectural tradition, as well as the settlements of Agios Germanos and Psarades; all of them used to attract an important number of visitors. It is worth noting that all four cooperatives are located in less developed, mountainous areas and far away from big urban centers, such as Thessaloniki. The travel time needed for a daily visit is about three hours; the travel cost, the last years, due to the increase in fuels price and the requirement of travel tolls increased substantially. The high travel cost along with the reduction in household incomes made the daily, or weekend visit, "heavy" for the households budget, something that it can be seen below in the results section.

4. Methodology and Data collection

In order the research questions of the study to be answered three methodological approaches were applied. First, based on the collected economic accounts of the cooperatives their financial situation is analyzed for the last years. The second approach, employed in depth interviews addressed to the managing authorities of the cooperatives, in order to identify problems and prospects of the under examination cooperatives, taking into consideration the current economic instability. Finally, the third approach aimed to identify the views and perceptions of the young people in the study area by performing a questionnaire survey.

In the area of Florina four women's cooperatives exist and were selected as a case study to examine their potentials in the local economy and their situation in the current economic status. The development and economic situation of those four women's cooperatives are presented mainly through the description of the collected productive, finan-

cial and managerial data. Specifically, thorough interviews took place with those in charge of the four women's cooperatives, which have established in Florina as well as with eight active members of the cooperatives. At this point, it must be stressed that two out of the four cooperatives had suspended their operation, the first one in 2010 and the second in 2013.

The in-depth interviews by those in charge and the members of women's cooperatives were accomplished between January and April of 2014 and aimed at the collection of qualitative primary data. The analysis of these data was based on the quality approach (Milburn, 1995; Mason, 2002). The interviews were performed through a half-structured questionnaire which contained three sections. The first section included questions relevant to the profile of the cooperative, whereas the second part was about the economic proceeding of the cooperative, the productive capacities and the financial results emerging from its operation. In the third section, there were questions in which the interviewee had to note down opinions and estimations about the problems which the women's cooperatives face, the consequences of the economic crisis, as well as the perspectives which are outlined.

The foremost purpose of the interviews was to record the problems which the women's cooperatives encounter, not only due to the mountainous character of the area, but also due to the financial crisis the country faces.

In addition, a survey, using a questionnaire, in order to identify the views of the young people for the local women's cooperatives and their willingness to participate in their activities. The survey took place in a sample of 115 inhabitants of Florina, between the ages of 18-36. Among the 115 questionnaires which were collected, the 112 were considered valid and reliable and they formed the final sample of the research. The questionnaires consisted of three parts. The first part included demographic questions; the second, questions relative to views and evaluation in relation to the cooperatives and the local development, whereas the third part included questions relevant to the their attributes towards the four women's cooperatives of Florina area.

The collected data were analyzed statistically via binary logistic regression analysis. This method was used to discover the willingness of youth people to be members and to work in a women's cooperative or no. Binary logistic regression is most useful in cases where we want to model the event probability for a categorical response variable with two outcomes. Since the probability of an event must lie between 0 and 1, it is impractical to model probabilities with linear regression techniques, because the linear regression model allows the dependent variable to take values greater than 1 or less than 0. The logistic regression model is a type of generalized linear model that extends the linear regression model by linking the range of real numbers to the range 0-1 (Field, 2005). In this study, the willingness of youth people to work in a women's cooperative is based on a set of personal characteristics and opinions regarding the cooperatives and the local products. The methodological framework of data collection, statistical analysis and obtained results are shown below in Figure 2.

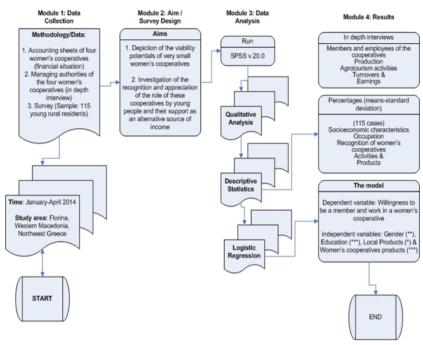


Figure 2. Methodological Framework

5. Empirical results

5.1 Women's cooperatives in Florina

The profile with basic financial data of the four cooperatives, as appears from the economic accounts of the cooperatives and the in depth interviews, is shown below. In the study area, as mentioned, four women's cooperatives exist and are established in villages located in mountainous and less favored areas (Table 1). The two cooperatives, (Psarades and Agios Germanos) are agro tourism cooperatives, operating two agro tourism guesthouses in the municipality of Prespes. The other two cooperatives are micro cottage cooperatives; the first one produces traditional food stuff and beverages in the traditional mountainous village of Nymfeo and the second one with the trade-name "Pelagonia", produces traditional costumes and is located in the village of Ano Kalliniki of Florina.

The agro tourism women cooperative of Antartiko "Agios Germanos", which started its operation in 1985, is the oldest one. The women from the surrounding villages created this cooperative, aiming to provide tourism services, to promote the traditional cuisine and the natural and cultural environment of the area. Their guest house, with a capacity of 25 beds, initially belonged to the Prefecture of Florina, which offered it to the cooperative and later it was bought by the women's cooperative.

The agro tourism cooperative of "Psarades" and the cooperative of "Nymfeo" were established and operated in 1994. In 1994, the hotel "Psarades" was built by the Prefecture of Florina. This hotel has a capacity of 31 beds and is located in a prominent position in the homonymous village. The operation and management of the hotel was offered free of charge to the women's cooperative of Psarades. The establishment of the

Table 1. The four women's cooperatives profile

Name	Women's Agrotourism Coop-	Women's Agrotourism Coop-	Women's Agrotourism Coop- Women's Urban Cooperative of Women's Agrotourism	Women's Agrotourism
	erative of Antartiko «Agios	erative of Psarades Prespon Nymfeo «Nymfi»	Nymteo «Nymti»	Cooperative of Ano Kal-
	Germanos»			liniki S «Pelagonia»
Legal form	Women's agro tourism coop-	Women's agro tourism coop- Women's urban cooperative	Women's urban cooperative	Women's agro tourism
	erative with limited responsi-	erative with limited responsi- with limited responsibility	with limited responsibility	cooperative with limited
	bility	bility		responsibility
Year of establishment	1985	1994	1994	1997
City/area of establish-	Antartiko Florinas	Psarades Prespon Florinas	Nymfeo Florinas	Ano Kalliniki Florinas
ment				
Main activity	Exploitation traditional guest-	Exploitation hotel of 31 beds Production and sale of tradi-	Production and sale of tradi-	Construction of traditional
	house of 25 beds (agro tourism (agro tourism accommoda-		tional food and drinks (jams,	costumes
	accommodation)	tion)	sweets, pasta)	
Other activities	Production and sale of textiles	No	1. Operation of a coffee shop	Made to order manufactur-
			and organizing events in it.	ing embroidery, textiles
			2. Selling books and folk art	and clothing
			items of local interest	
Production	Homemade	No	Homemade	Cottage industry
Trade and marketing	Through the guesthouse, sale of the textiles	No	Through the rented shop	Through orders
Computer existence and No use - internet use	No	1 PC – Not in use	No	1 PC – Rare use
Fixed assets	Traditional guesthouse, 25	1)	No	Mechanical equipment.
	beds	Regional section of Florina		The workshop is offered
				free by the municipality Florina
Funding under EU programme	No	EQUAL	No	LEADER II, EQUAL
Number of members	30	14	18	15

Source: authors elaboration data.

women's cooperative of "Nymfeo" aimed the re-establishment of the, abandoned until the decade of 1980, historic village of Nymfeo. The cooperative, regarding its main activity (production of traditional food stuff and drinks) is purely "homemade", as the production is taking place in the houses of its members. The cooperative of Nymfeo, although it doesn't have fixed assets, is the only one that exercises pure business activity, as it hires its premises; it is activated intensively in various fields (selling folk art products and books of local interest, organization of events).

The cooperative of "Pelagonia" was founded in 1997 by a group of women. The premises of the cooperative were offered free by the Municipality of Florina for the manufacture of traditional costumes. The equipment of the cooperative was purchased from funds provided by the LEADER II and EQUAL programmes (about 4.000 Euros). From the European initiative EQUAL, cooperatives "Pelagonia" and "Psarades" were also received financial support, for purchasing personal computers; though, in both cases computers are rarely or never used by the members. In the case of "Agios Germanos" and "Nymfeo" cooperatives computers do not exist as none of their members or employees have computer operation knowledge.

5.2 Employment and viability of the women's cooperatives

The four cooperatives count 77 members in total, with 36 of them active, while they employee 27 persons with the 25 being members. As it is shown in Figure 3, a relatively low share of members is active. The cooperative of "Psarades" is an exception, as all its members are active, despite the fact that only three of the fourteen members are employed in the cooperative. The cooperative of "Nymfeo" has a high share of active members and all of them are employees of the cooperative; it is also the only one that has non-members as employees. All information presented in the current section are coming from the financial records of the cooperatives and the in depth interviews with the stakeholders.

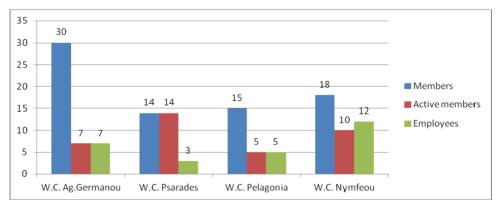


Figure 3. Members and employees of the cooperatives.

All necessary tasks in the production procedure in the cooperatives are carried out by the women. Any knowledge and skills they have, is due to personal experience and the activities in their household. Specially, in the agro tourism cooperatives, the female workers use their knowledge and skills that obtained mainly from their housekeeping activities and activities related to the tradition of their region. The use of new technologies, either in the level of management, promotion or marketing, is almost absent due to the lack of relevant knowledge and experience. Moreover, no training, relevant to their activities, was offered during the last 15 years.

The total production of the women's cooperatives is limited; the same is the situation in the case of agro tourism lodgings, as their capacity is less than 30 beds. The cooperatives limited potentials and activities have as a result the realization of low outcomes in terms of turnover and employment. From the survey, it was noted that the four women's cooperatives until 2008 had a turnover ranging between 15.000 and 35.000 Euros. Despite the low turnovers the cooperatives' members, which participated in the survey, mentioned that the difficult economic situation after 2008 affected significantly their economic position and the low turnovers reduced even further.

The cooperative of Antartiko "Agios Germanos", faced a dramatic decrease in its earnings (over 70%) resulting in the suspension of its guest house operation in 2010, as it was not covering its operating expenses. This was mainly the outcome of the economic instability as the majority of the cooperative's clients were natives and visitors from urban centers of the country that were affected by the economic crisis (income reduction, unemployment, personal consumption expenditures decrease, etc).

Despite the impacts of the economic crisis that affected directly and indirectly the activity of the cooperative, members and interviewed stakeholders believe that they can overcome the difficult economic situation, if new members will register. Almost a similar situation exists in the case of "Psarades" and "Pelagonia" cooperatives; a dramatic reduction in the operating earnings observed after 2010, inducing "Psarades" cooperative to suspend its operation. The "Pelagonia" cooperative members also believe that the economic crisis can soon lead to the closure of the cooperative, along with the non-existence of new members.

The "Nymfeo" cooperative is the only exception among the four. Despite the significant reduction in its turnover (by 30%), the members reacted and diversify to new activities (operate a new café) in order to counterbalance their losses. According to the cooperative members the economic crisis is a serious problem for the survival of the women's remote cooperatives. As in the previous cases, the members of "Nymfeo" cooperative stress the absence of new young members that could offer a dynamic continuance of the cooperative operation.

According to the stakeholders interviews and the financial data of the cooperatives, the economic instability that emerged the last years in the country was the most important factor that affected their viability and financial health. Their turnover and activities were reduced substantially as they were affected by the reduction in consumers incomes and leisure expenses.

5.3 Young people and women's cooperatives

In order to further examine the role of women's cooperatives and assess the perceptions of local young people, a survey was carried out among them, from 18 to 36 years old, residing in the Florina area.

The survey was aiming mainly to investigate the 'recognition' of women's cooperatives of Florina area by the young people and their views for the cooperatives' role. The participants in the survey are singles (67%), female (51.8%), have a graduate degree

(46.4%), are mainly college students (27.7%) and unemployed (25%) and they are residents for longer than 3 years in the area of Florina (82.1%). The demographic profile of the respondents is presented in Table 2.

Table 2. Demographic characteristics	s of the participants in the survey.
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Respondents' features	Count /Mean	Percentage / Standard Dev.
Gender: Female	58	51.8%
Married: No	75	67.0%
Age	25.80	5.2 (years)
Residents (over 3 years)	92	82.1%
Education		
< 9 years (Basic)	2	1.8%
9-12 Years (High School)	48	42.9%
12- 14 years (College)	52	46.4%
15-16 years (Higher)	10	8.9%
Occupation as:		
Permanent employment	21	18.8%
Seasonal employment	18	16.1%
Unemployed	28	25.0%
High school student	9	8.0%
College student	31	27.7%
Other (mainly housekeeping)	5	4.5%

The relatively low "recognition" degree of the women's cooperatives of the area by the local young people is presented in Table 3. More precisely, 54,5% of the total number of interviewees knew about the existence of the cooperatives of "Psarades" and "Nymfeo". A 17% and 11, 6% were aware for the existence of the cooperatives "Pelagonia" and "Agios Germanos" respectively. None of the interviewees had purchased products or services from the cooperatives of "Agios Germanos" and "Pelagonia", while a share of 4,5% of the sample had stayed in the hotel of "Psarades" cooperative and a share of 8% had bought products from "Nymfeo" cooperative.

Table 3. Recognition of women's cooperatives by young people in Florina.

	"Recognition" of the Women's Cooperative		"Activities recognition" of the Women's Cooperative		"Products/services con sumption" of Women' Cooperative	
	Count	percentage	Count	percentage	Count	percentage
W.C. Ag.Germanos	13	11.6%	13	11.6%	0	0.0%
W.C. Psarades	61	54.5%	54	48.2%	5	4.5%
W.C. Pelagonia	19	17.0%	16	14.3%	0	0.0%
W.C. Nymfeo	61	54.5%	61	54.5%	9	8.0%

Despite the fact that only the 35,7% of the total number of the interviewees believes that the cooperatives offer products and services of higher quality compared to private companies, they believe (83,1%) that the women's cooperatives are important for the local communities. They are important for the income they provide as well as for the strengthening of the women's status within the community. A 66,1% of the sample believes that the small and flexible cooperatives can constitute a solution towards unemployment, especially of the young people.

Variables	Description	Range	Mean	Std. Deviation
Dependant Variables				
Willingness	Willingness to be a member and work in a women's cooperative	1	0.5	0.5
Independent Variables				
Sex	Women = 1 Men =0	1	1.52	0.5
Education	< 9 years (Basic) = 1 15-16 years (Higher) = 4	4	2.62	0.67
Q1: Local Products	Local products are safer / healthier than others	7	5.96	1.5
Q3: Women's cooperatives products	Products and services of women's cooperatives are inferior than those	7	3.84	2.1

Table 4: Model's variables description

As an answer, to the question if they would accept to become members and to work after the necessary training in one of the cooperatives for a supplementary income, the half (50%) of the sample answered positively; while the rest 25% answered negatively and the last 25% "would examine it". Their answers in this question have been used as the dependent variable in a logistic regression analysis and the results are presented in table 5 while the description of the variables included in the model is presented in table 4. The statistically significant variables (described in Table 5) that determine the willingness to become a cooperatives' member are presented below:

Sex: It seems that women are keener to become a cooperatives' member and work for the cooperative. In general, for the logistic regression results' interpretation it is a fact that when Exp (B) is less than 1, increasing values of the variable correspond to decreasing odds of the event's occurrence. Thus, when sex changes from men (value: 0) to women (value: 1) then the probability to belong to the willingness group is increasing.

Education: represents the years of formal education. Having in mind that when Exp (B) is less than 1, then an increase in the values of the variable correspond to decreasing odds of the event's occurrence. Thus, when the education level is increasing then the probability for the participants to become more willing to participate in a women's' cooperative is decreasing. It is assumed that participants with higher level of education anticipate that they will have more chances to find a job.

Local products are healthier / safer than others: This is a participants' attitude. It seems that participants who evaluate local products more than others are more willing to

work in a cooperative. Thus, this general perception affects (in a positive way) the participants' willingness to become member of the examined cooperatives.

Products and services of women's cooperatives are inferior than those of other companies: These participants' belief seems to influence statistically their willingness to become members. The more the participants believe that cooperatives' services and products are inferior, the less willing are to participate in a cooperative.

To sum up, it is possible to determine respondents' willingness to become a member in a cooperative depending on the aforementioned variables: Sex, Education, their attitude towards local products and their belief about the quality of cooperatives products and services in general.

Variables (demographics and beliefs about women's cooperatives)	В	S.E.	Statistic Wald	Wald Sig.	Exp(B)
Gender	1.165	0.510	5.212	0.022**	3.205
Education	-1.145	0.394	8.467	0.004***	0.318
Q1	0.276	0.155	3.179	0.075*	1.318
Q3	-0.310	0.127	5.932	0.015**	0.733
Constant Term	3.271	1.440	5.158	0.23	26.337

Table 5. Logistic regression analysis willingness to work in a women's Cooperative

Estimation Method = Forward Stepwise (Likelihood Ratio)

 $R^2 = 0,427$ (Chi² 12.418, df = 8 – Hosmer & Lemeshow), 0.284 (Cox & Snell), 0.379, (Nagelkerke)

Significance: * p<0.01, ** p<0.05, *** p<0.1

6. Discussion and Conclusions

The economic recession and instability in Greece, has affected almost all sectors of the economy. Additionally, deterioration of all the economy's macroeconomic indices such as, GDP decrease, unemployment increase, taxes increase and public expenditures reduction, affected at microeconomic level private companies and households expenditures. Specially, the reduction in the households disposable income, purchasing power and increase of duties affected their consumption and leisure spendings. Among the business that affected significantly and face viability problems, are the micro women's cooperatives, which operate in mountainous and less favored areas of the country.

Many of those micro women's cooperatives that were founded before 2000 had an important financial growth. Though, that initial growth has followed by a radical recession and the cooperatives became only capable to provide a supplementary low income to their members and workers. Moreover, due to their small size, the lack of fixed assets and capitals, the cooperatives were not able to support new investments, to expand their activities and train their members. Additionally, the attraction of new members that could offer a dynamic and perspective to the cooperatives is lacking. The small income that the cooperatives can provide and the preference for a job in the urban centers by the educated young people, are among the factors that make the attraction of new members difficult. Despite the many problems these micro cooperatives encounter are still viable, due mainly to their production way and the conservative form of management.

The micro women's cooperatives of the mountainous and less favored areas, are usually aiming to attract domestic tourists, either for providing lodging services or by selling traditional food and beverages. The clients of these cooperatives are mainly visitors and residents from the big urban centers of the country that were affected by the economic crisis. Thus, both the number of visitors and the incomes spent were reduced significantly affecting further their fragile viability (IOBE-SETE 2012).

In the case of the women's cooperatives of Florina, two out of the four cooperatives have suspended their operation while the other two are operating with great difficulty. All four women's cooperatives of the study area consider the lack of new members, especially of younger ones, as an equally important obstacle as the economic instability. The lack of attraction of new members is closely related to the ignorance of the existence of the cooperatives from the majority of young local people. Though, a significant share of young people expressed its willingness to work in the cooperatives, at least for a supplementary income. The non attraction of new members is mainly due to the marketing policies the cooperatives follow and the non dissemination of information about their activities. As reported by Lassithiotaki and Roubakou (2014) in their survey between, 49 rural women's cooperatives with 983 members, only a very small share of the members (1.6%) were between 18-25 years old and only 18.8% of the members were between 26 - 40 years old, a fact that confirms the problem of non attraction of new members. The two most important reasons that affected the performance and viability of the women's cooperatives in the less developed and mountainous areas, emerged from the analysis are the financial problems encountered from the economic instability and the non attraction of new members (PASEGES, 2012; Gidarakou, 2015). According to the Greek Ministry of Rural Development and Foods from the 140 women's cooperatives many of them presents underperforming, some have suspended their activity and some of them, they are trying to stay in operation (PASEGES, 2016). Kotzavakali (2014) also reported that out of the 119 cooperatives she recorded at her survey, only 90 were in operation.

The viability problem is more obvious in cooperatives of mountainous regions like the region of Western Macedonia, the mountainous parts of Thessaly region and North Aegean (PASEGES, 2016). Though, these two reasons cannot be generalized and considered as those that affect the viability of all types of cooperatives and in all areas of the country. The vulnerability of those small cooperatives in the less favored and mountainous areas is not the same with that of the urban and peri-urban cooperatives. Women's cooperatives around large urban centers with similar activities continue to operate with success, as their target group is greater and they can operate with more flexibility (Hyunjeong, 2011; Sivanesan, 2014; Gidarakou, 2015).

Along with the problems encountered from the negative economic situation the cooperatives stakeholders realized the existences of severe managerial and organizational problems, as the attraction of new members and investments, necessary for their survival. Any measures towards the confront of these problems can help the cooperatives survival and the support of the local economies.

References

- Anthopoulou, Th. (2010), Rural women in local agro food production: Between entrepreneurial initiatives and family strategies. A case study in Greece, Journal of Rural Studies, Vol.26, No.4, pp.394-403.
- Ashoori, D., Bagheri, A., Allahyari, M.S. & Michailidis, A. (2016), "Understanding the attitudes and practices of paddy farmers for enhancing soil and water conservation in Northern Iran", International Soil and Water Conservation Research, vol. 4, no. 4, pp. 260-266.
- Brush, C. (1992), Research on women business owners: Past trends, a new perspective and future directions, Entrepreneurship: Theory and Practice, Vol.16, No4, pp.5–30.
- Bryden, J. (2003), "Rural Development Situation and Challenges in EU-25". In Proceedings of European Union Conference for Rural Development, Salzburg.
- Charatsari, C., Papadaki-Klavdianou, A. & Michailidis, A. (2011), "Farmers as consumers of agricultural education services: Willingness to pay and spend time", Journal of Agricultural Education and Extension, vol. 17, no. 3, pp. 253-266.
- Charatsari, C., Papadaki-Klavdianou, A., Michailidis, A. & Partalidou, M. (2013), "Great expectations? Antecedents of women farmers' willingness to participate in agricultural education programmes", Outlook on Agriculture, vol. 42, no. 3, pp. 193-199.
- Castelberg, M. (1991), "Greek women and tourism: Women's cooperatives as an alternative form of organization". In Redclift, N. and Th. Sinclair (eds.), Working Women: International Perspectives on Labour and Gender Ideology, London: Routledge.
- Chatzitheodoridis, F., Michailidis, A., Theodosiou, G. and Loizou, E. (2013), "Local Cooperation: A Dynamic Force for Endogenous Rural Development". In Karassavoglou A., Polychronidou P., (eds) Balkan and Eastern European Countries in the Midst of Global Economic Crisis, Contributions to Economics, Part 3, Springer Verlag, Germany.
- European Commission (2012), Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank: GROWTH FOR GREECE, COM (2012) 183 final, European Commission, Strasbourg.
- Eurostat (2013), Unemployment News Release June 2013, Eurostat Press Office.
- Field, A. (2005), Discovering Statistics using SPSS, London: SAGE publicarían.
- Giagou, D. and Apostolopoulos, C. (1996), Rural women and the development of the agrotouristic cooperatives in Greece: the case of Petra, Lesvos, Journal of Rural Cooperation, Vol.24, No.2, pp. 143–155.
- Gidarakou I. (1999), Young Women's attitudes towards Agriculture and Women's New Roles in the Greek Countryside: A First Approach, Journal of Rural Studies, Vol.15, No.2, pp.147-158.
- Gidarakou I. (2015), Women's Entrepreneurship in Rural Greece, International Journal of Business and Management, Vol. 10, No. 10, pp.129-142.
- Global Entrepreneurship Monitor (2005), 2005 Report on Women and Entrepreneurship, London: Business School, (Available Online: http://www.gemconsortium.org/document.aspx?id=478)
- Hellenic Statistical Authority (2015), Labour Force Survey (LFS) -1st Quarter 2015, Hellenic Statistical Authority, Athens.
- Hyunjeong, J. (2011), Comparative Analysis of Rural and Urban Start-Up Entrepreneurs, Master's Thesis, Theses and Dissertations--Agricultural Economics. Paper 1, UKnowledge, University of Kentucky.
- Iakovidou, O. (2002), "Women's Agro tourist Cooperatives in Greece: Key Elements for their

- successful Operation", Journal of Rural Cooperation, Vol.30, No.1, pp.13-24.
- IFAD -International Fund for Agricultural Development (2000), "Ghana Rural Women's Micro and Small Enterprises" (Available Online: http://www.ifad.org)
- Ilbery, B. and Bowler, I. (1998), "From Agriculturar Productivism to Post-Productivism". In B. Ilbery (Ed) the Geography of Rural Change, Addison Wesley Longman.
- INE (2013), The Greek Economy and Employment: Annual Report 2013, Institute for Labour GSEE-ADEDY, Athens (in Greek).
- IOBE -Foundation for Economic and Industrial Research- (2012), The Entrepreneurship in Greece 2010-2011. The "Small" Entrepreneurship in Crisis Period, Foundation for Economic and Industrial Research, Athens.
- IOBE-SETE -Foundation for Economic and Industrial Research Greek Tourism Confederation- (2012), Research Economic Conditions in Hotel and Tourism Businesses: October-November-December 2011, Foundation for Economic and Industrial Research and Greek Tourism Confederation, Athens.
- Kazakopoulos, L and Gidarakou, I. (2003), Women's cooperatives in Greece and the niche market challenge. Journal of Rural Cooperation, Vol.31, No.1, pp. 25–45.
- KEΠE –Center of Planning and Economic Research- (2016), Macroeconomic Analysis and Predictions, Greek Economic Outlook, Vol.29, Feb. 2016, pp.4-9.
- Kibas, B. (2005), "Challenges Facing Women Entrepreneurs in Africa", 3rd Africa Resource Bank Meeting.
- Kontogeorgos, A., Chatzitheodoridis, F. and Theodossiou, G. (2014), Willingness to Invest in Agricultural Cooperatives: Evidence from Greece, Journal of Rural Cooperation, Vol.42, No.2, pp.122-138.
- Koutsou, S., Iakovidou, O. and Gotsinas, N. (2003) Women's Cooperatives in GREECE: An Ongoing Story of Battles, Successes and Problems. Journal of Rural Cooperation, 24, 47-57.
- Koutsouris, A., Gidarakou, I., Grava, F. & Michailidis, A. (2014), "The phantom of (agri)tourism and agriculture symbiosis? A Greek case study", Tourism Management Perspectives, vol. 12, pp. 94-103.
- Kotaidou, S. (2007), Women entrepreneurship: The case of women's cooperatives food production in Central and Western Macedonia, Master Thesis, Faculty of Agriculture, Aristotle University of Thessaloniki, Thessaloniki (in Greek with English Summary).
- Kotzavakali, Z. (2014), Female Entrepreneurship in Rural Areas: The case of women's cooperatives in the prefecture of Herakleion, Krete- their dynamic and contribution to local development, Graduate Thesis, Agricultural University of Athens (in Greek with English Summary)..
- Lassithiotaki, A. (2011), Rural Women and Entrepreneurship: A Case Study in Heraklion Crete Prefecture, Greece, Journal of Developmental Entrepreneurship, Vol.16, No.2, pp. 269-284.
- Lassithiotaki, A. and Roubakou, A. (2011), Rural Women Cooperatives at Greece: A Retrospective Study, Open Journal of Business and Management, Vol.02, No.02, Article ID: 45564.
- Little, J. (1991), Theoretical issues of women's non-agricultural employment in rural areas, Journal of Rural Studies, Vol. 7, No. 112, pp. 99–105.
- Little, J. and Austin, P. (1996), Women and the Rural Idyll, Journal of Rural Studies, Vol.12, pp.101-111.
- Loizou, E., Chatzitheodoridis, F., Polymeros, K., Michailidis, A. and Mattas, K. (2014), Sustainable Development of Rural Coastal Areas: Impacts of a New Fisheries Policy, Land Use Policy, Vol.38, pp. 41-47.
- Mason, J., (2002), Qualitative Research, 2nd Edition, Sage Publications Ltd.

- Mattas K. and Loizou E. (2013). Agriculture: a powerful tool of rural development in the current economic crisis. Watch Letter, No 24, pp. 3-5.
- Michailidis, A. & Papadaki-Klavdianou, A. (2008), "The contribution of agricultural extension services to the productivity and socioeconomic profile of dairy cattle farmers", Outlook on Agriculture, vol. 37, no. 2, pp. 119-124.
- Milburn, K., (1995), Never Mind the Quantity, Investigate the Depth, British Food Journal, Vol.97, No.7, pp.36-38.
- MRDF -Ministry of Rural Development and Foods- (2007), Rural Development Programme 2007-2103, Special Secretariat for Planning and Applications CSF, Athens.
- NFWBO -National Foundation for Women Business Owners- (1998), Entrepreneurial ideals motivate women to start businesses, NFWBO.
- Oberhauser, A., Waugh, L. and Weiss, C. (1996), "Gender analysis and economic development in West Virginia", West Virginia Public Affairs Reporter, Vol.13, No.2, pp.2–13.
- PASEGES -Pan-Hellenic Confederation of Unions of Agricultural Co-operatives- (2012), The women's cooperatives demand protection (In Greek Available Online:
 - http://www.paseges.gr/el/news/Zhtoyn-prostasia-oi-gynaikeioi-synetairismoi).
- PASEGES -Pan-Hellenic Confederation of Unions of Agricultural Co-operatives- (2016), Concern for the future of women's cooperatives (In Greek Available Online:
 - http://www.paseges.gr/el/news/Anhsyhia-gia-to-mellon-twn-gynaikeiwn-synetairismwn).
- Rakopoulos, Th. (2014), The crisis seen from below, within and against: from solidarity economy to food distribution cooperatives in Greece, Dialectical Anthropology, Vol.38 (2), pp.189-207.
- Region of Dytiki Macedonia (2014), Special Development Programme (SDP) 2012-2016 for the Region of Dytiki Macedonia Greece (Kozani and Florina areas): in the frame of the development end, Region of Dytiki Macedonia, Kozani.
- Sawicka, J. (2001), The role of rural women in agriculture and rural development in Poland, Journal of Polish Agricultural Economics Universities, Vol. 4, Issue 2, #1(Available Online: http://www.ejpau.media.pl/volume4/issue2/economics/art-01.html).
- Scannell, E., Wang, O. and Halbrendt, C. (2004), Small Entrepreneurial Business: A Potential Solution to Female Poverty in Rural America, The University of Vermont (Available Online: http://sbaer.uca.edu/research/icsb/1997/86.pdf).
- Sergaki, P., Partalidou, M. and Iakovidou, O. (2015), Women's Agricultural Co-operatives in Greece: A Comprehensive Review and Swot Analysis, Journal of Developmental Entrepreneurship, Vol.20 (1), pp.30-44.
- SETE -Greek Tourism Confederation- (2015), The Contribution of Tourism the Greek Economy in 2014 Key Figures, SETE Intelligence, Athens. (Available Online: http://sete.gr/media/3004/simasia tourismou sete intelligence report.pdf).
- Sharaunga, S., Mudhara, M. and Bogale, A. (2015), The Impact of 'Women's Empowerment in Agriculture' on Household Vulnerability to Food Insecurity in the KwaZulu-Natal Province, Forum for Development Studies, Vol.42, No.2, pp.195-223.
- Sivanesan, R. (2014), A Comparative Study on Rural and Urban Women Entrepreneurs Prospects and Challenges, International Journal of Research in Management & Business Studies, Vol. 1, No.3, pp.28-34.
- Still, L.V. and Simmons, V. (2005), "Women's Enterprise in Rural, Regional and Remote Australasia", Discussion Paper Series, University of Western Australia.
- Watson, J. and Robinson, S. (2003), Adjusting for risk in comparing the performances of male and Female controlled SMEs, Journal of Business Venturing, Vol.18, No.6, pp.773–788.