ABSTRACT
Despite being one of the most important productive sectors of the Greek economy, the Greek rural sector has always had significant pathogeneses, significantly reducing its growth capacity. The absence of a strategic plan, excessive support from European and national resources, the lack of expertise in agricultural production, the ailing cooperative organization and the significant entrepreneurship shortfall have turned the rural sector into a problematic sector. The economic crisis along with the increasing international competition has created a highly unfavorable environment for the Greek producers. In this context, it should be noted that important element of the agricultural sector in Greece is the participation of producers in private cooperatives. However, the shortcomings of these cooperatives regarding their organization and management, question their sustainability. This derives on one hand from the absence of private sector features and on the other hand, from the cooperatives missing an entrepreneurship spirit. This paper focuses on the beneficial effect of entrepreneurship in enhancing the economic efficiency of cooperatives thus adding to their productivity tools. The research methodology consists of secondary analysis and comparative benchmarking of successful business practices of various cooperative organizations. The main goal of the paper is to argue in favor of the theory that entrepreneurship may shield agricultural cooperatives by improving their economic performance.

KEY WORDS
Agricultural co-operatives, entrepreneurship, sustainability, rural sector.

Modern adverse working conditions in conjunction with the multi-dimensional possibilities offered by technological development and structural socio-economic changes have led to increased entrepreneurial activity focusing on innovation and entrepreneurship (Karagiannis et al, 2010). The Internet and wider access to diverse forms of financing (often exceeding the domestic borders) increases the possibilities of successful business development projects. The prospect of entrepreneurship development has prevailed in all sectors regardless of productivity. The agricultural sector which has operated for many years with outdated administrative methods, incomplete effectiveness criteria and obsolete technological systems has been significantly affected by the aforementioned changes. Nowadays the trend is the development of rural units following the patterns of modern business models. The business perspective except from the private financing practice has brought about radical changes in the strategic planning of economic units, i.e. gradually breaking down their investment portfolio financing now in addition to their basic farming and non-farming sectors, business activities of the secondary or even tertiary sector. This trend has begun to affect recently - to a significant extent - cooperative organizations of the agricultural sector which indeed display particularly impressive results by creating a
“business activity” stream, shielding their financial viability by limiting the risk arising from perishable agricultural produce (Van Bekkum, 2001).

Rural co-operatives. Cooperatives in Greece consist of autonomous associations formed voluntarily to address common economic, social and cultural needs and aspirations through their co-owners and democratically managed businesses (Papageorgiou, 2004; Papageorgiou, 1999). These principles are voluntary and free membership of persons with similar activities and common geographical location, democratic administration on behalf of members, financial contribution of its members, autonomy and economic and administrative independence, diffusion of information, education and practice, cooperation with other cooperatives, working for the benefit of the community (Nasioulas, 2012).

Rural cooperatives in Greece are a key axis for the development of Greek agriculture. The vast majority of farmers are involved in agricultural cooperatives through which they collect and sell most of their production. However, the serious deficiencies that characterize these organizations at the level of organization and administration, in conjunction with their special “social” orientation, hamper constantly their viability. This phenomenon originates from the very culture of cooperatives from which they removed the entrepreneurial spirit. In Greece, although the cooperative movement has contributed greatly to the battle of farmers for survival, it has been a highly pathogenic form of organization seeking constant support from financial bodies in order to ensure their sustainability. The governments never attempted to equip cooperatives with know-how and entrepreneurial dynamism so as to enable them to cope with the changing socio-economic conditions. More precisely and according to Dr. Iliopoulos, Director of the Institute of Rural Economy mentioned that “The economic vulnerabilities of agricultural cooperatives were created, to an important extent by governmental subsidies policies instead of policies to strengthen collective entrepreneurship. The fact is that throughout the developed world, agriculture ministries are limited to providing technical assistance to cooperatives, training programs, a flexible legal and institutional framework and finance research actions on cooperative economy. Unlike Greece, the relative approach in rural development and food Ministry constantly degraded” (according to the website http://www.agreri.gr/). The fact is that cooperatives being the main assertion of the interests of the farmers and taking into account that farmers are among the most vulnerable social groups, contributed to an increased state interventionism in order to ensure their sustainability. This trend has created a situation of inactivity which dismissed the cooperative organizations from forming an entrepreneurial spirit which could lead to a sound economic course (Nasioulas, 2012).

The main critics of cooperatives focus their comments just to this negative economic path as demonstrated by key financial figures that shape the financial picture co-ops (ie excessive borrowing, the accumulated losses, the result, negative financial results, adverse predictions, negative markers traffic fluidity). As it is evident, the problematic financial picture of cooperatives was created by incomplete business dynamics characterizing the cooperative organizations. Limited distribution channels (zero attempts to export the disposal of customers or entering into strategic partnerships), the complete lack of modern know-how, the impossibility of monitoring market trends, the antiquated forms of cultivation, the lack of essential infrastructure, the lack of training of their members, the early depreciation of fixed assets, are just a few of the “business failures” of administrations of cooperatives. The above-mentioned situation coupled with the numerous phenomena of corruption and mismanagement, led to extremely unfavorable situations for the Greek agricultural cooperatives (Fefes, 2017; Papageorgiou, 2004).

According to the Greek Constitution (article 5, §§ 5, 6) "5. Agricultural and urban cooperatives of all types shall be self-governed according to the provisions of the law and of their statutes; they shall be under the protection and supervision of the State which is obliged to provide for their development. 6. Establishment by law of compulsory cooperatives serving purposes of common benefit or public interest or common exploitation of farming areas or other wealth producing sources shall be permitted, on condition however that the equal treatment of all participants shall be assured".
Law 4015/2011 has attempted to mend some of the deficiencies by forcing cooperatives to submit business plans to their key financiers for evaluation (quoting consolidation plans, future cash flows, restructuring measures, etc), in order to determine their viability. As it can be seen from the political and economic developments, it was in the government’s intentions to turn to entrepreneurship and cooperatives. Nevertheless, the inherit problems of specific organizations have not allowed them to adapt to modern developments and thus embracing their new role (Fefes, 2017).

According to the conclusion of research conducted in 2013 from the Field of Agricultural Economics in Aristotle University of Thessaloniki, entitled “Strategy of unions of agricultural cooperatives in Greece to increase their competitiveness”, agricultural cooperatives “do not love the entrepreneurial risk”. The majority of partnerships (82%) chooses to follow a wait-and-see attitude towards investment and development plans in order to minimize possible errors that would harm their members. 31% of cooperatives do not consider that they have aggressive stance against competitors. The majority of cooperatives in Greece are mainly interested in their ability to offer low-cost products to specific geographic areas and then develop new products. Half (47%) cooperatives are skeptical about the changes they can make to existing products and introducing new products to the market, following mostly other leading food companies, i.e., they rely more on products that have already been accepted by consumers. More precisely, (56.2%) gives greater emphasis in the already proven products, such as fruits, vegetables, olive oil, is cautious, avoiding the risk of introducing innovative products. The turnout of the products of the cooperative, constitutes the criterion for the frequency of introducing new products to the market (according to the website https://www.heritage.org/index/pdf/2019/countries/greece.pdf).

Overall, as indicated by research, cooperatives that opt to sell differentiated products at higher prices, dare to risk, seeking to be pioneers in their industry. Unlike them, cooperatives that sell low-cost products, appear more cautious on the market due to the nature of products traded, and often do not have processing capacities. It is worth noting that cooperatives constitute a particularly important institution because they have always constituted of development actors in the countryside, of significant economic and social contribution at the individual level of their members but also at local level. As supports research, cooperatives contribute to the exploitation of local resources, prevent monopoly practices for the benefit of society, the preservation and promotion of cultural heritage, the support of the social fabric of society and cultivate containment of population Today, they are called to support people who return to the countryside to take up farming (Nasioulas, 2012).

The business of agricultural co-operatives. The development of entrepreneurship in agricultural co-operatives is common in the international scene (Schilthuis et al, 2000). The co-operative organizations in most developed countries evolve into competitive economic units which apply modern business practices as follows:

- Enhance their productive cycle (using modern technology, promoting new crops, developing their infrastructure);
- Adjust the areas and ways of conducting sales;
- Implement strategic management (designing vision and mission, outlining long-term goals, attempting to identify opportunities/weaknesses/risks/threats);
- Focus on modern business management models (using successful models of HRM, ISO etc);
- Attempt to adapt their orientation by aiming on profitability of their funds, to achieve positive financial results, i.e. economic progress and ultimately to the realization of a form of perpetual economic viability.

Many successful European rural cooperatives have used their entrepreneurial spirit to assert business excellence. The additional activation in other business activities constitutes a modern trend of cooperatives internationally, improving their financial results and securing their survival. For instance, a number of cooperatives have developed their business activities utilizing further raw materials from their production operation or downstream or tertiary trade. In recent years particularly innovative cooperative organizations have evolved...
in areas not related to their main products taking advantage of inactive inputs. This paper focuses on the beneficial effect that entrepreneurship may offer in the economic efficiency of cooperatives, strengthening the “quiver” of productive tools and ensuring their viability. These trends are shaping a framework for modern business activity which responds to the necessity of modern rules and private-finance in the Greek agricultural cooperatives in order to survive the domestic and international competition (Rossidis, 2014).

Figure 1 – Number of Agricultural Co-operatives per Region in Greece (Source: Ministry of Rural Development and Food, 2013)

*Best practices.* There are several cases of Greek co-operatives which, thanks to the insight and expertise of their administrations, as well as the undisputed quality of their production, have managed to distinguish themselves in their area, presenting high business perspectives. These cooperatives manage their productive circuit and their assets in such a way that they achieve significant levels of economic efficiency, productivity and quality. Modern management methods turn them into more competitive business units rather than traditional cooperative organizations. Their main objective (*in addition to the promotion of the interests of their members*) is to ensure the economic viability and the development of their business dynamic. The following case studies are elements that make up the progressive business perspective of certain cooperatives (Garayannis *et al*, 2015; Schilthuis *et al*, 2000).

The agricultural cooperative of Zagora. The agricultural cooperative of Zagora is the most important institution of commercial activity and development in the region of Pelion and one of the most dynamic cooperative organizations. On 27 October 1916, 199 Zagorians founded the cooperative called “Selling agricultural products Cooperative of Zagora”. During its first period of operation, the basic crops cultivated were potato and hazelnut. In the course of history, the cooperative experienced many swings, acme and decline, sometimes due to the specific conditions of the region of Zagora and sometimes due to general conditions of the country. The latest phase starts from the mid-60s and is tied to the spread in the region of the apple variety “*Delicious Starkin*”, which has been proved to be ideal for the climate and soil conditions of Zagora, resulting in apples of high quality and taste. Since then, the cooperative has rapidly expanded getting really explosive in the 1980’s gathering today 98% of producers. In 1982, the Cooperative of Zagora was proclaimed “Pilot” Cooperative by the Ministry of Agriculture, while in 1985 the Cooperative enters a new phase of action, turning into a commercial enterprise (*according to the website www.zagorin.gr*).

In the 1990’s, the Cooperative takes a series of highly progressive decisions. With the adoption of a new statute, it changes its brand name to “agricultural cooperative of Zagora” with insignia and logo branding. Apples became amongst the best in the world, recognized in 1996 by the European Union “protected designation of origin” (Regulation 1107/96 Vet), an important distinction given to high quality products (trade name: ZAGORIN – ZAGORIN). At the same time, the Cooperative collected and handled all agricultural products produced in the region, including other varieties of apples, pears, Kiwis, chestnuts, olives, cherries, etc. They designed new product packaging with their logo and the transportation vehicles are circulating with the new corporate identity. The AS applying TQM principles, produces 100% of apples “Zagorin” with the method of “integrated production”, guaranteeing that they are free of residues of pesticides and fertilizers (being certified by the official Greek agency AGROCERT). At the same time, the cooperative due to the limited cultivation area, follows the method of dense planting apple trees, which have a higher yield by 10% – 20%. These production systems succeeded by the intervention of individual production processes of members with nurseries, analyses, cultivation tips of specialized scientific personnel, educational trips in similar productive areas (i.e. N. Italy) and quality policies certified by ISO and HACCP process (according to the website www.zagorin.gr).

The cooperative of Zagora has a sophisticated proprietary refrigerator- Screeners complex, which is among the biggest in the Balkans and demonstrates the continuous investment carried out in the area of modernization of the logistical infrastructure (according to the website www.zagorin.gr). Modern cooling areas of 55,000 m² (ULO controlled atmosphere Chambers in excess of 50%) have storage capability, maintenance over 10,000 tons, while the sorting is done by automatic electronic houses with possibility of 180 tons in 8 hours (depending on the weight and color). Electronic micro-machines also operate at the premises of refrigerators. Today the agricultural cooperative of Zagora collects, preserves, and distributes the packs 100% of Apple production in the region (10.000-15.000 tons/year), as well as of other products produced and is one of the most important economic units of magnesia with annual turnover of over 15.000.000 €.

There are 700 members with cooperative serving 1.200 € and overall cooperative capital 840.000 €. The A.S. Zagora confirms the excellent financial track record by acquitting on 31-12-2008 all of its debt to its exclusive Bank loaner, the Agricultural Bank of Greece. Each year, it implements operational plans of 800.000€ - 900.000€ which are structured as 50% grants and 50% participation of Plus/borne me partner with levy 4 cents/kg of product.

According to Balassas, Director of the Cooperative (according to the website www.paseges.gr), the five-year development program of the Cooperative includes the processing of apples for juice production, in principle by creating a small processing unit. It is estimated that the production of juices after three years, as demonstrated by market research, with the prospect of expansion in the production of sweets, jam, Apple snacks, will allow the A.S. Zagora to annually implement modernization investments of refrigerators – warehouses. These refrigerators- warehouses apply new controlled atmosphere technology, which reduces the rate of oxygen from 21% to 2.5%, thus preventing the ripening of fruit. Until now, the new technology implemented in 60% of storage cubicles area 2.5 acres. It is estimated that an additional 2 million € will be made available for this purpose (according to the website www.zagorin.gr).

A.S. Zagora extends the progressive vision of active business and in other areas other than those directly related to agriculture such as tourism and retail. In particular, the cooperative runs super markets with products of the cooperative and of members of the local community as well as hotel facilities in the region of Zagora, Pelion, thus taking advantage of the high tourist interest in the region. These investments have significantly shielded the economic dynamics of the cooperative forming a sort of “Web” shelter compared to the perishable agricultural products. Regarding the fiscal year 2011, the sales of apples totaled 12 million €. The year 2012 due to adverse weather conditions, the production and the corresponding sales amounted to 9 million pounds of apples affecting the financial results of the cooperative. However, the total turnover increased by the other activities, reaching 18 million (according to the website www.zagorin.gr).
The agricultural cooperative of Kalavryta. The agricultural dairy cooperative, Kalavrita, is the transformation of the Union of agricultural cooperatives of Kalavryta, 34 were former members of the Union (L. 4015/2011 imposed the merging of first level cooperatives). The Union was founded in 1963 by farmers of the region of the province of Kalavryta, through the primary level credit and dairy cooperatives (according to the website www.kalavritacoop.gr). Initially they offered credit and supply services for their members, grants management, accounting services etc. In 1972, it was decided the establishment of milk processing plant for production of dairy products through the collection and exploitation of the region's milk on cooperative basis. In 1974 the factory started its operation with the production of mainly traditional draught slice, known as "FETA Kalavrita". From 1982 until 2007, the Union came under development and investment programs as well as reinvestment available, for the modernization of units and creating modern infrastructure. In this context, inter alia, production plant ferments in Kalavryta was created in 1986, the 2004 corresponding in Klitoria. Adaptation to the provisions of L. 4015/2011, was completed in September of 2013 on which has evolved at primary cooperative, merging/absorbing parallel 34 primary cooperatives (Fefes, 2017).

The A.S. Kalavryta according to the business culture, promotes strategic actions for strengthening economic and business, assuming the role of leading agency who actively contributes to the formulation of sectoral developments. In particular:

- Gathers sheep milk from at least 1,100 farms, producer members and not-, in the wider area of the camp, as well as from neighboring producers in mountain areas, with proprietary isothermal milk tankers fleet;
- Has a modern factory on manufacture of dairy products, which operates in accordance with the requirements of national regulations and the EU, applying HACCP and ISO 9001;
- Uses proprietary complex refrigerators covered an area of about 3.000 square meters and a capacity of 18.000 kg m for the maturation and storage of products;
- Operates modern fully equipped chemical and microbiological control laboratory raw material milk, feed materials and finished products;
- Produces high quality traditional draught FETA protected designation of origin KALAVRYTON as well as goat cheese, semi-hard cheese, cheese, dry myghthra, yogurt and dairy butter;
- Products available in the domestic market, while in the service of producers in the region have: a) 2 complexes storage and feed mixtures production, b) 4 branches feed, fertilizers and marketing of propagating material, Kalavryta, Kleitoria, psophis and Laurel, c) shop the veterinary and agricultural pesticides, Kalavryta, d) retailer of dairy products;
- December 2011 the NDP Kalavryton proceeded to mechanical expansion and modernization of the unit, which increases the production of 62 to 95 tons of raw material per day;
- The partnership has made the strategic choice to sells its products exclusively in the retail chain “Sklavenitis” (according to the website www.kalavritacoop.gr).

The A.S. Kalavryta featuring equity over 8.000.000 €, constant turnover of more than € 18 million (for the year 2013 the turnover exceeded 20.000.000 €) and profitability close to 1.500.000 €, is one of the most profitable and constantly evolving cooperative organizations, constitutes a lever of growth for the region. The Dpt forms a high performance unit displaying excellent levels of quality by offering a select range of products, with top all the FETA of Kalavryta (according to the websites http://www.paseges.gr, www.kalavritacoop.gr).

CONCLUSION

The development of entrepreneurship in agricultural cooperatives could contribute drastically to the viability of cooperative organizations by streamlining administration, aiming to achieve highest levels of efficiency and profitability and not just serve the interests of
members. It should be noted that, the enterprise incitement is not a panacea for the functioning of economic units. It constitutes an important guide and technocratic administration which will contribute actively to the implementation of predetermined objectives. This perspective can bring the necessary economic and entrepreneurial dynamism to agricultural cooperatives in order to enable them to survive and continue growing by forming independent, healthy economic units that can carry out the cooperative role and preserve high levels of competitiveness.

REFERENCES