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Management Approaches of Agricultural Enterprises in Mountainous Disadvantaged Areas: The Case of Agrafa

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Abstract: The management of agricultural enterprises in mountainous disadvantaged areas is a particularly complex and multidimensional issue, which is inextricably linked to production conditions, geomorphology, social dynamics and the institutional framework. This study examines the operating framework of agricultural enterprises in Agrafa, an area that is one of the most isolated and disadvantaged areas of the European Union. The Agrafa area is considered as mountainous and inaccessible, with an aging population and a shrinking economy, and that area is the study area of the present research paper. The methodology applied in the present study, is based on focus groups, involving farmers and agribusinesses located in the area. Through the analysis of institutional, social, economic and environmental parameters, it is crystal clear that there is a need for a holistic approach regarding the management model applied. A management model that should



also integrate innovation, cooperation and the exploitation of the region's unique characteristics. Can businesses, whose operating environment is not favorable, leverage the unique characteristics of their region and turn them into a competitive advantage, ensuring their sustainability?

Keywords: agribusiness, management, rural areas, sustainable development, rural management.

Introduction

Agricultural enterprises constitute the main economic and social pillar of many regional and mountainous areas of Greece. In addition, food industry and agribusiness are considered as the pillars of modern economy for countries and society (Goulas, 2025). Their importance lies not only in their contribution to food security and the local economy, but also in their role in preserving the population, cultural heritage and environmental balance (OECD, 2019). Mountains cover a large part of the world, providing with important public and private goods and having specific challenges (Price, 2015). The population in mountainous areas, both in Greece and in other countries, is decreasing significantly. The change in the lifestyle of modern people, the difficulty in accessing basic needs of the inhabitants of mountainous disadvantaged areas, the lack of critical infrastructure (such as hospitals, schools, etc.) make living difficult, resulting in leaving the area, mainly of young people. This also leads to a decrease in the number of agricultural and livestock farms, as well as businesses operating in these areas. It is worth mentioning that many academics underline a significant decline in the number of farms, seen as one of the main dimensions of agricultural structural change, especially in areas with farming difficulties such as the disadvantaged European mountain regions (Pinter & Kirner, 2014). Mountain regions are particularly vulnerable in terms of limited adaptability due to remoteness or physical and structural disadvantages (Chavas, 2001). Also, the current situation for farms and businesses on those areas is aggravated by the limited range and choice of production alternatives (Pinter & Kirner, 2014), a key factor for further operational business development. Especially in areas such as Agrafa, rural entrepreneurship encounters particular challenges that require specialized management and support approaches. It is crucial to understand that rural business holds a key role for economy and local resilience, since is one of the main contributors to local resilience in both direct and indirect ways (Steiner & Atterton, 2015). Many academics claim that, rural communities often face unique challenges – such as limited access to markets, declining populations and environmental degradation, vulnerability to environmental and economic shocks (Goulas and Papachatzis, 2024; Davidova et al., 2009). All that make entrepreneurship difficult, if not impossible in mountain areas and especially for younger farmers (Goulas and Papachatzis, 2024). Farmers have been increasingly forced to leave their farms and homes in order to seek other jobs elsewhere, resulting in exposing the rural communities in economic, social and environmental decline (Ammirato et al., 2020; McGehee, 2007). That is the reason for structured efforts in order to approach the term ‘development’ in mountain or/and rural areas as a whole, including infrastructure, production, market, population (Ashley and Maxwell, 2001; Yu et. al., 2024). The need to implement policies aimed at the economic and social development of mountainous areas is becoming urgent. Also, mountain development should exploit its territorial



capital provided by the topography, natural resources and socio-cultural features, which differentiate them from more densely populated regions (Blackstock et al., 2025; Dax, 2020). In recent years, the European Union's rural policies have focused on balanced rural development with significant support for less - favored areas, such as mountain areas and communities (Goulas, 2022). On the other hand, agriculture is considered as a fundamental business for the recovery of abandoned land and the start of a process of recovery of marginal areas (Leoni et al., 2021). It is a fact that nowadays the farmer should operate on a business basis in order to understand the evolution of the economy (Theodossiou et. al., 2018). This paper seeks to record these particularities, highlight the dynamics of the local productive fabric and propose sustainable and innovative management solutions.

Research Aim and Research Questions

Four entities (farmers and companies) based in Agrafa, Greece participated in focus group discussion. With the term entity for the present study, is referred a person that is declared as farmer or livestock farmer as the main activity and is based in Agrafa, or a company based in Agrafa. For the purpose of the present study the companies chosen are operating in the sector of accommodation and catering services/activities, e.g. guesthouses or traditional restaurants. All of the participants in the focus groups, were willing to share their experiences and add to the topic their valuable information and insights.

Focus group was conducted from 01-06-2024 to 30-08-2024, approximately over a period of three months. The focus group session lasted approximately two hours and included four participants. Small and solid focus group participation, maintains and cultivates intimacy between the participants.

The focus group session was recorded having participants' consent and additional notes were also taken. In order to analyze the data collected from the focus group, qualitative descriptive analysis was used. After the data collection, three steps were followed in order to examine, analyze and present the collected data. The first step is to start coding and categorizing the entire data set. The second step is to identify patterns and themes and the third steps is to interpret and present the findings.

Research Results

All of the participants' underline as main problem for their operations, the lack of infrastructure and accessibility. The limited access to basic infrastructure, such as safe roads, warehouses, digital network, sometimes even electricity (especially in the winter), has a negative effect for the competitiveness of those companies. Regarding the companies based on services, it affects seasonality, and make their operation period shorter. Also, they claim that they have limited access in the market, in services and information, making their business operation difficult.

Both of the farmers predicted that they will be the last of the family to run their farm, as their children wish to study and work in large urban centers. They see no future for them in the land of their ancestors. They claim that a series of policies should be taken from the government in order to create the conditions for them to continue operating and give to the next generation the motive to stay in Agrafa and invest there. Their villages are shrinking every year, and there is no renewal of the population.



They also claim that they are facing difficulties in accessing for instance veterinary for instant assistance. There is no veterinary close to their farm and for them it is a difficulty. Also, due to lack of technical guidance they are not having access to information for possible opportunities for financial assistance etc. They will have to search for information themselves if they want to be informed about any financial program that may exist. They claim that the state should help them on that matter.

They strongly believe that the recognition and certification of their local products can enhance the added value and also can enhance the reputation of the region. This way all of them can gain profit from the result. The farmers can claim better price for their products and the entrepreneurs can capitalize the reputation and the created brand name of the region. The interconnection of agricultural products with gastronomy and culture is a strategic direction (Tregear et al., 2007). Existing literature claim that local agricultural products and geographical indicators can promote local economic development in rural areas (Crescenzi et al., 2021; Goulas, 2017).

They also believe that the creation of tourist flows will also benefit farmers. Tourists that will come in Agrafa, will stay in Agrafa and will consume in Agrafa. They will seek for traditional flavors and they will consume local products. The promotion of gentle forms of tourism and their interconnection with agricultural production promote multifunctionality and income diversification (Lane, 1994).

Conclusions

The sustainable management of agricultural enterprises in Agrafa is a challenge that requires the application of specific and holistic policies especially for the region. The main problem of that mountainous region is the shrinking of population and the lack of infrastructure and accessibility during the year. Thus they believe that isolation can become a unique asset for them, by becoming a tourist destination for mountain excursions. This can be the core for the main tourist strategy of the region. Businesses will have to adapt to new data, new and innovative approaches to gain competitive advantage and improve sustainability performance (Tsotsas et. al., 2025). This will bring people from the urban centers, that will stay and will consume local agricultural products. Strengthening the resilience and adaptability of enterprises, can contribute to the revitalization of the region and its emergence as a model of rural development in mountainous areas.

References

- Ammirato, S., Felicetti, A. M., Raso, C., Pansera, B. A., & Violi, A. (2020). Agritourism and sustainability: What we can learn from a systematic literature review. *Sustainability*, 12(22), 9575. <https://doi.org/10.3390/su12229575>
- Ashley, C., & Maxwell, S. (2001). Rethinking rural development. *Development Policy Review*, 19(4), 395-425. <https://doi.org/10.1111/1467-7679.00141>
- Blackstock, K., Creaney, R., del Mar Delgado-Serrano, M., Flanigan, S., Ievoli, C., Moretti, M., Nemes, G., Surova, D., Thompson, C., Zagata, L., Allali, T., Belliggiano, A., Carvalho, A., Conte, A. P., Esgalhado, C., Geiser, A., Husak, J., Karner, S., Maestre-Diaz, C., Vicente, R. M., & Zivadinovic, T. (2025). Value chains for sustainable mountain development: A qualitative understanding of 23



European cases. *Journal of Rural Studies*, 118, Article 103640. <https://doi.org/10.1016/j.jrurstud.2025.103640>

- Chavas, J.-P. (2001). Structural change in agricultural production: Economics, technology and policy. In B. L. Gardner & G. C. Rausser (Eds.), *Handbook of agricultural economics* (Vol. 1, Part A, pp. 263–285). Elsevier. [https://doi.org/10.1016/S1574-0072\(01\)10008-3](https://doi.org/10.1016/S1574-0072(01)10008-3)
- Crescenzi, R., De Filippis, F., Giua, M., & Vaquero-Pineiro, C. (2022). Geographical indications and local development: The strength of territorial embeddedness. *Regional Studies*, 56(3), 381–393. <https://doi.org/10.1080/00343404.2021.1946499>
- Davidova, S., Fredriksson, L., & Bailey, A. (2009). Subsistence and semi-subsistence farming in selected EU new member states (School of Economics Discussion Papers No. 09, 20). University of Kent, School of Economics.
- Dax, T. (2020). Neoendogenous rural development in mountain areas. In E. Cejudo & A. Navarro (Eds.), *Neoendogenous development in European rural areas* (pp. 3–19). Springer.
- Goulas, A. (2025). Shaping agribusiness in the new digital era: Bridging tradition with innovation for the agribusinesses in Thessaly, Greece. *Economics and Business Quarterly Reviews*, 8(1), 18–25. <https://doi.org/10.2139/ssrn.5138863>
- Goulas, A., & Papachatzis, A. (2024). Young farmers, small farms and entrepreneurship under the new European Union Green Deal. *Annals of the University of Craiova*, 29(65), 215–220. <https://doi.org/10.52846/bihpt.v29i65.144>
- Goulas, A., & Papachatzis, A. (2024). Farm to Fork strategy: A sustainable solution for rural communities. *Annals of the University of Craiova*, 29(65), 209–214. <https://doi.org/10.52846/bihpt.v29i65.143>
- Goulas, A. (2022). Special markets for local agro food products. *Annals of the University of Craiova*, 27(63).
- Goulas, A. (2017). Local products as a tool of development for the local economies. *ISHS Acta Horticulturae*, 1175. <https://doi.org/10.1080/00343404.2021.1946499>
- Lane, B. (1994). What is rural tourism? *Journal of Sustainable Tourism*, 2(1-2), 7–21.
- Leoni, V., Pedrali, D., Zuccolo, M., Rodari, A., Giupponi, L., & Giorgi, A. (2021). The importance of technical support in the return of traditional crops in the Alps: The case of rye in Camonica Valley. *Sustainability*, 13(24), Article 13828. <https://doi.org/10.3390/su132413818>
- McGehee, N. G. (2007). An agritourism systems model: A Weberian perspective. *Journal of Sustainable Tourism*, 15(2), 111–124. <https://doi.org/10.2167/jost634.0>
- Pinter, M., & Kirner, L. (2014). Strategies of disadvantaged mountain dairy farmers as indicators of agricultural structural change: A case study of Murau, Austria. *Land Use Policy*, 38, 441–453. <https://doi.org/10.1016/j.landusepol.2013.12.007>



- Price, M. (2015). *Mountains: A very short introduction*. OUP Oxford.
- Steiner, A., & Atterton, J. (2015). Exploring the contribution of rural enterprises to local resilience. *Journal of Rural Studies*, 40, 30-45.
- Theodossiou, G., Karelakis, Ch., & Goulas, A. (2018). Perceptions and clustering of Greek farmers on the new CAP: Opportunity or threat? *African Journal of Agricultural Research*, 13(10), 440-451. <https://doi.org/10.52846/bihpt.v29i65.144>
- Tregear, A., Arfini, F., Belletti, G., & Marescotti, A. (2007). Regional foods and rural development: The role of product qualification. *Journal of Rural Studies*, 23(1), 12-22.
- Tsotsas, I., Papanikolaou, Z., & Goulas, A. (2025). Emerging trends in business sustainability: A bibliometric analysis in innovation practices. *International Conference on Next-Generation Innovations and Sustainability 2025*. Futurity Research Publishing. <https://doi.org/10.5281/zenodo.15098298>
- Yu, Y., Appiah, D., Zulu, B., & Adu-Poku, K. A. (2024). Integrating rural development, education and management: Challenges and strategies. *Sustainability*, 16, Article 6474. <https://doi.org/10.3390/su16156474>