



SHERPA
Rural Science-Society-Policy
Interfaces

A VISION FOR RURAL AREAS

MAP Position Paper



LONG-TERM VISION FOR RURAL AREAS: CONTRIBUTION FROM 20 SCIENCE- SOCIETY-POLICY PLATFORMS

MAP POSITION PAPER

SOUTH AEGEAN MAP

GREECE

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1. Headline message

The current Position paper of the South Aegean MAP provides insights with regard to the challenges that will need to be addressed within the next twenty (20) years (till 2040) and the opportunities that may potentially arise within the same time period, the future vision for the region (up until 2040), and the enablers that will serve as the drivers for achieving this vision and making it a reality. In order to elicit the MAP members' opinions, insights, and views on these issues, a fit-for-purpose, three-phase methodology, based upon the Delphi approach, has been put in motion. The methodology employed consisted of: (i) three sessions of online interviews implemented in June 2020 with the participation of the members of the MAP (twelve in their total); (ii) a MAP survey conducted in September 2020, where 33 respondents were able to reflect on the findings obtained from the interview results analysis; and (iii) a final consensus meeting (held in October 2020), where the MAP members were able to validate the results of the previous two phases. The validated results are presented in every detail in the following sections.

The key messages that can be extracted from the process of investigation and analysis undertaken in the context of the South Aegean MAP are: (i) the need to further support and strengthen the primary sector by considering a shift towards organic farming and the exploitation of renewable energy sources; (ii) the importance of taking further steps in the sector of tourism by considering its growth potential in a close association with that of Agriculture's; (iii) the necessity to encourage and empower the female entrepreneurship in the region; (iv) the significance of a sustainable growth and development by fully respecting the region's environment and natural habitat, as well as its rich cultural heritage; (v) the need to improve the provision of healthcare services and work towards a robust network of marine transports; and (vi) take steps towards the achievement of a substantial change in the culture and mindset of the local population through a ground up reform of the formally provided education.

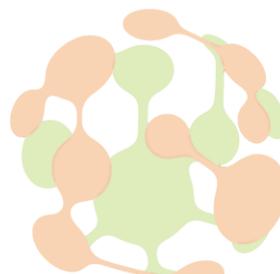
Keywords: *development of the primary sector, tourism, shift towards organic farming, exploitation of renewable energy sources, sustainable development, improvement of infrastructures and services, change in mindset.*

2. Key scientific evidence

This section focuses on the trends, challenges and opportunities, which appear to be dominant at the moment for the region of the South Aegean, as they have emerged from the desk research and the conclusions drawn from the interviews with the MAP members (undertaken instead of physical meetings, due to the Covid-19 pandemic). To begin with, the region of the South Aegean has suffered in the decade from 2009 to 2019, as most regions in Greece, from a considerable migration of the local population to urban areas, because of the economic crisis, in pursuit of a better quality of life. In addition, there have been significant changes in the region's productive tissue and the primary sector, which needs to be further supported and strengthened. The raise in the Internet use and the increase in the exploitation of e-commerce tools and services¹ hold a great potential for the further development of a range of production sectors including Agriculture. Yet, this growth potential will not be realised unless a number of problems are efficiently faced. Such a problem relates to the region's poor water quality attributed to the old and badly maintained water pipe network. Moreover, the primary sector suffers from the climate change's consequences such as the high air temperatures and low relative humidity.

All these trends have opened the way for a number of challenges needing to be addressed. First and foremost, there is a need to identify and use alternative water sources (for instance, water massively produced through

¹ Hellenic Statistical Authority, 2019. Survey on the use of information and communication technologies by Households: 2019. Retrieved from: https://www.statistics.gr/en/statistics?..._WAR_publicationsportlet_INSTANCE_qDQ8fBKKo4IN_locale=en



desalination processes), as well as protect the environment and natural habitat. It also needs to be considered that, in the South Aegean, the primary sector suffers from considerable land fragmentation. Therefore, finding viable ways to increase the arable land is a great challenge. As far as the provision of infrastructures and (digital) services are concerned², all the healthcare units of the region need to be staffed with experienced personnel and appropriately equipped. The marine transport network needs to be strengthened, given that it is the only intra-regional transport network available. In addition, the Covid-19 pandemic has increased the need for broadband access and quality web-based services (e.g. e-governance and e-commerce services).

The efficient confrontation of the above challenges will eventually lead to a number of opportunities stemming from the exploitation of alternative energy and water sources, as well as the adoption of circular economy approaches such as the processing of the waste/by-products produced as the output of agricultural activities. There should be a gradual shift to organic farming with the support of experienced advisors, the systematic development of fishery and aquaculture, the establishment of cooperatives, and promotion of women's involvement in Agriculture. Female entrepreneurship may be also strengthened through the active involvement of the female population in the local agricultural products' processing, packaging, and marketing. Given that tourism is the most significant developmental factor in the region, growth may be also achieved via the promotion of alternative/new forms of tourism such as maritime tourism, fishing tourism, gastronomic tourism, and religious tourism.

3. Summary of the outcomes of the Delphi

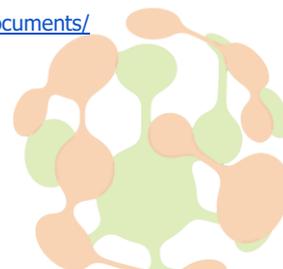
This section should provide the outcomes of the Delphi approach combining the results from the interviews, from the survey and from the consensus meeting. Specifically, the axes on which the MAP members' insights have focused relate to: (i) the challenges and opportunities for the region of the South Aegean in the next 20 years; (ii) the desirable future for 2040; and (iii) the enablers to achieve the vision.

3.1. Challenges and opportunities in the next 20 years

With regard to the domains in which challenges and opportunities, for the South Aegean region, may arise in the next 20 years, the members of the MAP have referred to the agricultural production and tourism sectors, the protection of the environment and natural habitat, as well as the provision of services and infrastructures. As far as the agricultural production is concerned, emphasis has been posed on the need to better promote the local products and further development of organic farming. Specifically, what has been mentioned during the interview sessions is that the gradual shift of the agricultural production to the direction of organic farming products, together with the support of qualified and experienced advisors and agronomists, may result in the production of top-quality agricultural products of high nutrient value. This conclusion has been also confirmed by the results of the survey, given that 81% of the survey respondents have agreed upon the potential of such a shift. Moreover, 87% of the survey participants have reported the need for expertise acquisition and utilisation of technology to optimise production in agriculture and animal husbandry. In the same context, the interviewees have emphasised the need to further develop fishery and aquaculture in the region as indicated by a rate of 67% of the survey respondents. The establishment of appropriately organised, large-scale aquaculture-related initiatives can be greatly favoured by the weather and climatic conditions in the region. Thus, the systematic establishment of fishery and aquaculture may significantly contribute to the raise in employment rates and the increase of the local population's income.

Following the above ideas, the importance of the local agricultural products' processing and packaging has also been highlighted. The establishment of producer groups/cooperatives may pave the way towards efficient and sustainable channels for distributing the local PDO products to a wide range of consumers and markets. Specifically, 78% of the respondents have underlined the significance of the establishment of groups/cooperatives of local producers. During the interviews, it has also been stressed that ITs can boost advertisement campaigns for the local products in a cost-efficient way. As a result, a new socio-economic landscape may become prevalent and new job opportunities may

² Hellenic Statistical Authority, 2019. Greece in Figures: April -June 2019. Retrieved from https://www.statistics.gr/documents/20181/1515741/GreeceInFigures_2019Q2_GR.pdf/6dec9800-0b7b-877d-0a5f-6469ccb5504a



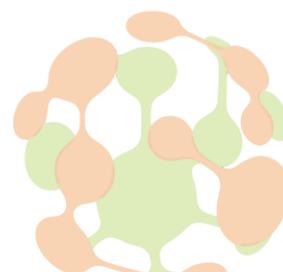
arise. According to the survey, 81% of the survey participants have agreed upon this, while an 88% rate has indicated the potential for new job opportunities for young people and women and the growth in female entrepreneurship. This has been also pointed out in the interview sessions in conjunction with the benefits that can be reaped from a shift of focus towards a region-based empowerment and further development of the local products' processing, packaging, and marketing. In addition, there are multifunctional farms involved in activities such as educational programmes related to the gastronomic and environmental areas and hospitality services, as well as contributing to the entrepreneurial development by raising awareness in the local population. Finally, clusters and partnerships can be further developed to ensure a more effective distribution of the local products to the markets.

From the discussions that have taken place, it has been also stressed that tourism is a domain with a potential to significantly grow in the next twenty years. This growth potential can be viewed under the perspective of promoting alternative and/or new forms/types of tourism. Such types are maritime tourism, fishing tourism, gastronomic tourism, and religious tourism. These alternative tourism types can be promoted and strengthened, in the South Aegean region, within the next twenty years, however this has to take place by fully respecting the environment, the character of the region, as well as its rich cultural heritage. A point that has also raised considerable attention is that of the promotion of the local agricultural products via targeted promotional activities. Such activities should be part and parcel of the experience offered to the region's visitors. According to the survey, the promotion of alternative forms of tourism (for instance, marine, fishing, gastronomic and religious tourism, as well as mountaineering and sailing in traditional vessels) together with the provision of quality services to tourists, combined with the promotion of local products, have been very popular among the respondents by receiving 96.9% and 97% of the total number of responses respectively.

The protection of the environment and the natural habitat are also important challenges to address in the next twenty (20) years. More specifically, the South Aegean MAP members have particularly stressed the importance of the natural environment's protection in the years to come. Within this context, the exploitation of renewable energy sources (e.g. solar and wind power, as well as hydro-power geothermal energy) need to be considered for covering the energy needs of the local community especially with respect to agricultural activities. However, only 40% of the survey respondents have reported the necessity of utilising renewable energy sources. It has also been suggested that investments in environmental protection should also focus on the construction of units processing the by-products/waste coming from agricultural activities (e.g. waste from olive mills) as part of an effort to further contribute to the circular economy of the region. The need for processing units for the by-products of agricultural holdings has been also highlighted by 84% of the survey participants. This reported, by the MAP members, requirement to recycle waste water from biological purifications and use it for irrigation purposes can adequately serve as a rationale for the need to establish and exploit by-product processing units. In parallel, the bioclimatic planning for sustainable development of touristic and agricultural production units has been emphasised by 82% of the participants.

As far as the challenges and opportunities regarding the provision of services and infrastructures are concerned, the members of the Greek MAP have referred to the need for creation of electric power supply stations where electric vehicles (e.g. electric bicycles/cars) will be charged, the establishment of waterways to further attract airline companies to the region's islands, the upgrading of the local public healthcare system and services, and the provision of a more stable and reliable marine transport system to better connect the islands of the region. As the survey has shown, a robust healthcare system, the availability of a reliable telecommunications network, and an efficient maritime transport network are the most important types of services and infrastructures reported by receiving 100%, 88.8%, and 84% of the respondent's interest respectively. It is worth mentioning that providing support to the regional, primary healthcare system is crucial in order to decongest the health units in other regions in Greece that appear to also serve the healthcare needs of the South Aegean region's population. Apart from that, it has been also emphasised that there is a need to compensate the local population when using the marine transport system to travel to other islands in the region or to the mainland and improve the existing marine transport system, especially if we consider that there are islands in the South Aegean region with no air transportation infrastructure available (meaning that transport to other islands in the region of the South Aegean and the mainland can only take place by the sea).

Finally, in order to address the above stated challenges and opportunities, there needs to be support by the local authorities and the government. As far as the agricultural and tourism sectors are concerned, support may be offered by providing funding opportunities to farmers for the processing and packaging of their products, as well as through the implementation of education/training programs targeting both the farmers and people involved in the sector of tourism.



3.2. Desirable future for 2040

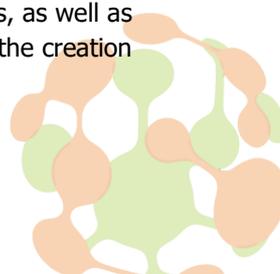
What has become evident from combining the interview results with those obtained from the MAP survey is that a desirable future may be easily imagined, however the path to that desired vision is not necessarily easy. The discussions held during the online interview sessions helped us draw conclusions on the desirable future for 2040 and highlight the MAP members' vision for the region of the South Aegean. More specifically, the representatives of the Science, Policy, and Society domains had the opportunity to report on what the desired future for different actor types, organisations, and societal entities could be. Based on these discussions, we have been able to get informed that the members of the local community envision a sustainable and balanced growth of the region with an emphasis on the citizens' safety and quality of life. As an example, they have mentioned the need for provision of quality educational services and a robust healthcare system. Such a balanced and sustainable development necessitates the reduction of bureaucracy towards an efficient and flexible governance model offering the local population the opportunity to express their needs and opinions and be heard from the "bottom" and up to the "top". Taking steps for the digitisation of the activities and practices involved in the productive tissue (i.e. Agriculture and tourism) is, of course, a requisite for the achievement of the sustainable development goal. The local community's modernisation together with the systematic promotion of entrepreneurial initiatives and activities are considered to be the key ingredients of the future imagined for the South Aegean region. All the above can significantly contribute to the reconstruction and upgrading of the productive and social tissue, the social cohesion's strengthening, and the provision of motives to keep the local population in the region. According to the survey results, the improvement of healthcare-related structures and services, the development of a more reliable marine transport network, as well as an efficient telecommunication network have been the most popular issues by attracting 100%, 89% and 84% of the respondent's interest respectively.

However, it should not be neglected that the protection of the natural environment and the conservation of the region's biodiversity are also at the core of how the MAP members conceptualise the desirable future for 2040. There is indeed a need for further development of the primary sector. Nevertheless, it needs to take place by fully respecting the landscape and natural habitat, as well as the region's long cultural heritage. In other words, there is no point in achieving progress without preserving and protecting the character of the region. In this context, the members of the South Aegean MAP imagine a future in which growth and evolution will be achieved via a sustainable exploitation of the natural resources with the community members and stakeholders actively contributing towards this direction.

3.3. Enablers to achieve the vision

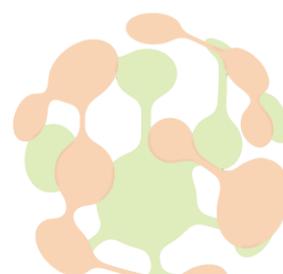
One of the main challenges that has been identified by the South Aegean MAP members on the way to the materialisation of their vision is the need for a shift in the local community members' mindset and culture and the role that education can play. These statements were also confirmed by the survey, receiving 78.1% and 93.8% of the total responses. All the MAP members have pointed out that moving forward necessitates a shift in the local population's culture and mindset and that this has to occur at both the individual and collective level. It has been stressed that there is a lack of a culture of collaboration and entrepreneurial mindset in the local population. People appear to be afraid of working with each other and, therefore, it is crucial to empower and incentivise them to start networking at the local, regional, national, and international level. It is important to help people realise the importance of developing synergies and facilitate the establishment of a sense of mutual trust among the members of the community. Moreover, the importance of actions to effectively cope with climate change and achieve an environmentally balanced development has been highlighted by the 91% of survey participants.

In order to help towards a substantial change in the culture and mindset of the local community members, the role of formally provided education is of paramount importance. There should not be a focus solely on the transmission of declarative knowledge, but rather a change of direction towards helping young people broaden their horizons, have access to information and knowledge relevant to their preferences and needs (to also empower them make decisions for their lives and careers), become well-informed and active citizens, as well as develop an entrepreneurial mindset and skills. A major challenge needed to be addressed relates to the creation



of a local community of people appreciating their place of origin and the surrounding environment, being eager to contribute to the community's evolution by fully respecting the region's natural habitat and cultural heritage, being able to reap the benefits of the globalised economy while, at the same time, taking a critical stance on it, and, of course, having the capacity to quickly adapt to the rapidly changing socio-economic landscape. However, as it has specifically been stressed, working towards the attainment of such objectives requires a significant educational reform penetrating all the levels from primary to tertiary education.

The local economy needs to be strengthened by taking all the measures necessary to keep the local production units going and make them sustainable. Financing is a critical aspect of this endeavour. In other words, financial resources need to be allocated, yet in a transparent way by having their appropriate exploitation being monitored (especially in the case of EU-funded projects). The proper use of funds for the development of private initiatives and professional/research activities has been also emphasised in the survey, receiving the interest of 87.8% of the participants. The region of the South Aegean consists of a big number of islands. Enabling growth and progress necessitates that the inhabitants of these islands do not migrate to other places. In order to address this challenge, specific motives need to be provided. As an example, we can mention the provision of jobs and facilitation of pleasant living conditions, as well as the empowerment of entrepreneurship in an attempt to strengthen and increase the local production. Within this context, the local authorities need to reconsider their everyday relationship and interaction with the local citizens. A rate of 93.8% of the survey participants have agreed that the local actors and government need to be more active and take decisions for their region. At the same time, 94% of the survey respondents have agreed on the need for an improvement in the infrastructure and services provided, whereas 87.8% have emphasised the fact that the telecommunication-related infrastructures need to be upgraded. The Covid-19 pandemic has helped to realise that people can indeed follow the rules and contribute to the common good. This is a key message to consider with regard to the measures needed to be taken, at the policy level, to help the local community members evolve at both the individual and group level. Finally, the MAP participants have stressed that many of the islands of the region should acquire more visibility given that they are unique touristic destinations offering memorable experiences to their visitors. Nevertheless, this visibility needs to be pursued in a way fully respecting the character and profile of the region.



Annex 1. Methodology used in the MAP

The process followed in the context of the South Aegean MAP for investigating and analysing the trends, challenges, and opportunities for the area, in order to conclude to the vision for the next twenty (20) years, has been based on the well-established Delphi method³ allowing groups of domain experts to identify and fine-tune the aspects related to a topic of interest after a number of iterations on insight and input provision. Given this framework, the process of identifying and deeply investigating the main drivers and challenges related to growth and development in the region of the South Aegean was launched with a number of activities related to the assembly of the MAP. More specifically, by being based on the networks of personal contacts of both the MAP's facilitator and monitor, an initial list of potential MAP members was drafted in May 2020. That list consisted of 17 candidate members adequately representing the academic/research and policy domains, as well as the local society. The next step was to come in contact with each of the potential MAP members by emailing them and providing all the necessary documentation and consent forms. The contacts were also made in May 2020. The number of the positive responses received came up to the number of twelve (12). From those individuals who responded positively, two (i.e. 16.7% of the total) came from the academic/research domain, three (i.e. 25% of the total) were representatives of the policy domain, and the remaining seven MAP members (i.e. a rate of 58.3%) were representatives of the local community.

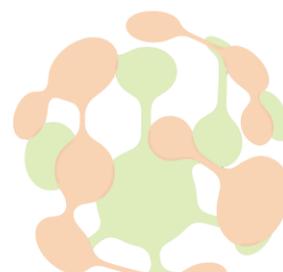
Given that Greece also suffered from the Covid-19 pandemic in the spring of 2020 and the precautionary measures that were in effect during the whole summer of 2020, it was not feasible to organise and implement a physical, face-to-face meeting as initially expected. Thus, all the MAP-related interactions were taken online. To this end, it was decided to host online meetings (through Skype) and divide the group of the MAP members into three sub-groups (of four members each) for better managing and moderating the online discussions. The online discussions with each of the MAP sub-groups took place on the 3rd, 4th, and 6th of June 2020. Prior to the online sessions, all MAP members were sent a doodle poll so as to select the dates and time slots of their preference. In addition to that, they were also sent a document presenting the main findings of the desk research that had been already undertaken.

The MAP participants were asked to grant our team with the permission to record the conversations so as to be able to extract all the information necessary for the needs of creating the MAP Discussion paper. The analysis of the discussion transcripts made in the online sessions was undertaken in June 2020 by a team of five members of the research team of the Agricultural University of Athens (including the MAP facilitator and monitor). The analysis results together with the findings of the desk research were used for the development of the South Aegean region's MAP Discussion paper, which was delivered to the SHERPA project's coordinator on the 10th of July 2020.

The "second round" of our Delphi-based methodology involved the creation and administration of a questionnaire to the MAP members. The questionnaire contained a number of items summarising the key points derived from the online discussion transcripts analysis. Before administering the survey to the members of the MAP, an internal review process was implemented. This process allowed for fine tuning the questionnaire before sending it to the survey participants. The survey was launched on the 7th of September, 2020. The MAP participants were encouraged to invite more people, from their personal networks, to take the survey. Until the closing of the survey (2nd of October, 2020), a total number of 33 responses was collected. The survey allowed the MAP members to further reflect upon the issues brought up in the online sessions. Furthermore, by inviting more people to take the survey, there was potential to derive even more insights.

The desk research results together with the results of the online discussion transcripts analysis and the survey results were used for creating the first draft of the MAP Position paper (the first draft of the MAP Position paper was ready on the 9th of October, 2020). The first draft of the MAP Position paper was sent to the MAP members prior to the implementation of the consensus meeting, which constitutes the "third phase" of the Delphi approach. The purpose of the consensus meeting has been to validate the results obtained from the survey and conclude

³ <https://www.rand.org/topics/delphi-method.html>

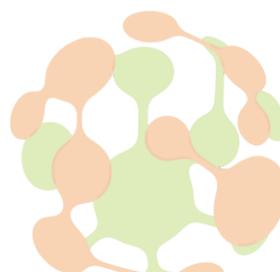
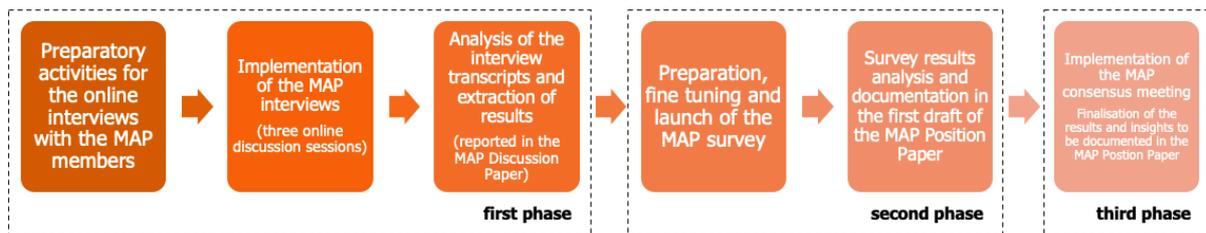


to a number of final results in regard to: (i) the challenges and opportunities in the next 20 years; (ii) the desirable future for 2040; and (iii) the enablers to achieve the vision.

A number of preparatory actions were taken prior to the consensus meeting (namely, a contact with the MAP members informing them about the meeting and the administration of a doodle poll for deciding upon the most convenient date and time). The MAP members were sent the first draft of the MAP Position paper in advance in order to have an overview of the conclusions drawn from the previous steps. This way, the discussion made during the consensus meeting was significantly facilitated. The outcomes of the consensus meeting were used for the purpose of finalising the MAP Position paper.

The methodology adopted for the needs of the MAP-based interactions and the extraction of results is shown in Figure 1 below.

Figure 1 The methodology employed in the context of the South Aegean MAP



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