

The Regenerative Farming Support Program Greece, The Southern Lights

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Resilience and adaptation to climate change through regenerative agriculture

Greece is particularly susceptible to the impacts of a changing climate (Barros 2014). Today, these vulnerabilities are manifesting in extreme and erratic weather conditions, including heat waves, droughts, floods, decreasing precipitation, loss of infrastructure, and increased wildfire risks, among other phenomena. For instance, the first comprehensive study on climate impact by the Bank of Greece (2011) claims that precipitation levels nationwide will decline 19% by 2100. Eastern and Central Greece will experience more frequent heavy rainfall, while the Eastern mainland and Northern Crete will experience an increase in droughts. Furthermore, sea level is projected to rise 200 cm by 2100, making 1000km of the country's 18400km coastline highly vulnerable, and creating a shortage of fresh water.

As agriculture is one of the main human interfaces with the environment, it is essential that we rethink and redesign farming approaches. Not only does industrial agriculture exacerbate the effects of climate change evident in Greece, it is also expected to be one of the sectors most severely impacted by climate change. Industrial farming approaches deplete soil and water tables, while harming the health of farmers and the environment, as well as the population in their respective regions. The use of chemical treatments and fertilizers devastate valuable biodiversity, while leading to increased food allergies and nutrition-borne chronic health issues. At the same time, farmers increasingly find themselves in precarious economic situations. They lack tools in the face of a changing climate—resilience, which hinges

on biodiversity and holistic systems approaches. Furthermore, the farming population in Greece is ageing, as young people typically see farming as a future to escape from. According to EC agricultural data (2021), a mere 3.7% of the farming population in Greece is under the age of 35. Across age groups, farmers in Greece lack proper training (less than 7% of Greek farmers have training compared to 35% of their European counterparts). Given these factors, in addition to Greece's persistently high unemployment rates (18% in 2020), there are many possibilities for improvement.



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"SDGs and Southern Lights: A multifaceted answer to counter tomorrow's challenges"

The effects of the Southern Lights project are in phase with tomorrow's challenges as their work aligns with an array of Sustainable Development Goals defined by the United Nations to facilitate sustainable development for the international community. If we take some SDGs as examples, particularly SDG 2 (No hunger), 3 (Good health and well-being), 4 (Quality Education), and 11 (Sustainable cities and economies) we can see a

part of the multifaceted answer the Southern Lights can bring to a farm and to rural communities.

By promoting food forests, regenerative farming techniques and facilitating the sale of these products through Silver Leaf, the project encourages proficiency in sustainable production, which enhances food resilience and security but also helps mitigate the effects of climate change by accompanying communities transition towards soil health and sustainable practices more broadly.

The Southern Lights project shares knowledge and experiences, and provides mentorship to farmers and rural communities. Its agroforestry site in rural Skala brings awareness to different generations about the various benefits of implementing regenerative practices. Southern Lights also engages in Erasmus+ youth worker mobility training and the Erasmus for young entrepreneurs' program. Through these programs their team supports young people to acquire vital vocational skills and to even create sustainable and equitable businesses of their own. Please see here for more information on The Southern Lights and SDGs [here](#).

Supporting the transition to a regenerative farming through the inclusion of youth

The Regenerative Farming Support Program was initiated in order to bring a change to this reality in Greece. Its aim is to enable and support the transition of industrial farming in Greece into a regenerative one. By redefining the image of farmers, the program inspires young people to stay or return to farmland, and to do so in meaningful and sustainable ways. Our goal is to inspire others regarding the potential of farming to restore the health of soils, plants, and

interconnected ecosystems by following principles of circularity and biodiversity. Our team implements regenerative farming techniques, such as agroforestry, to achieve food resilience, soil health, increased biodiversity, as well as resilience against drought and erosion. This is accomplished through various scales of activities. We steward a regenerative farming operation on our own site, promote local, plant-based diets, and implement energy-efficiency into our daily designs. We also participate in Erasmus + Youth Trainings, strive for outreach in our local region of Laconia and throughout Greece, as well as continue to work toward sustainable cities and communities. The Regenerative Farming Support Program is a key way our team promotes Greece's transition to regenerative land stewardship and resilience to climate challenges.

An interdisciplinary team designing the conversion of 6 Pilot farms

For this purpose, we recruited a skilful team with a vast background in similar movements throughout Europe, bringing their experience to Greece. With our interdisciplinary team, we designed and implemented the conversion of 6 Pilot farms all over Greece, representing the most common cultivations of the Mediterranean, into regenerative farming operations. Each farm conversion was done through open events, for the local and national public to join, while illustrating the farm conversion on a dedicated website¹ that was created for the program. At the same time, we created a video² for each farm that we converted, going into depth regarding the design, but also the background and motivation of each farmer. In this way a new paradigm for farming is being created for young farmers, in an easy to share, inspiring and immersive format.

Furthermore, we teamed up with highly trained academics across various fields to monitor crucial

¹ <http://thesouthernlights.org/>

² https://www.youtube.com/channel/UCWddSjfsrCPWDqTnaRjC_MA/videos

parameters of each farm, like soil and plant health, biodiversity, nutrient density of the crop and economic performance of the farmer. This dimension adds value, not only by providing data to be collected and analyzed, but by presenting new opportunities for students and researchers interested in engaging the regenerative approach.



**Discovering
Charis
Basiliou's
farm, a pilot
farm of the
Regenerative
Farming
Support
Program**

Recently graduated as an Agricultural Engineer, Charis has a pilot farm in the suburbs of Sparta at the foot of the Taygetos mountain. His land produces pomegranate and olives on 4,8 ha; with 3 ha for olives and the rest for pomegranates.

His parents used to practice conventional farming which depleted the land he took over a year and a half ago with more organic practices. The land welcomes about 650mm of annual rainfall and has to face several challenges: soil compaction, tree diseases, lack of micronutrients and microbiological diversity, environmental stress...

Thanks to the Regenerative Farming Support Program initiated by The Southern Lights Project, his farm was redesigned following regenerative farming practices. Biodiversity of plant species was increased following agroforestry principles to occupy different canopy layers and other fast-growing species intercropping with existing tree lines that will produce fruit, timber and fuel and

thus diversify the crops, adding resilience to the farming operation.

Charis' objective is to produce for his own consumption and consumers interested in preserving their health. Furthermore, he wants to create a great example for other like-minded young farmers to follow, co-learn and co-develop further the practices, to pave the way towards a future where farming doesn't harm the farmer's and consumers health and regenerates the planet. To attain his goal, different practices will come into play: compost production, liquid biofertilizers, green manures as cover crops, upcycling farm waste...

New challenges in the context of the COVID-19 pandemic and opportunities: awareness of the consumers and implementation of direct distribution as key elements

While the program started in June 2021, finding the suitable farms and designing their transition happened in August 2021, and implementing the designs in November-December 2021; we can now see how big the demand for this program is. Several farmers request to learn how to transform their own farm, but also to connect to like-minded farmers and practitioners in their region and beyond. There is an insight from professionals that the shift is coming, thus they seek to join the movement. This fuels us with optimism.

To speak and inspire the particular audience of farmers, we knew we had to create real examples, in Greece, being operated by real farmers, with which interested people could relate, connect and exchange. Practice ultimately speaks more powerfully than statistics and theory. In the future, we plan to create more pilot farms representing other common farming operations in Greece, in order to create even more examples that are accessible to and replicable by other farmers. Furthermore, we will create new

opportunities for farmers, ready and eager to change, to meet with like-minded peers and operations, since networking and support have been identified as important movement-boosting factors.



Sheila Darnos and Chan Sac Balam – Photo credits: The Southern Lights project

Another point will be to create awareness on the side of demand; in other words, the consumers. Our vision is to support our pilot farmers, and others working toward regenerative practices, to find more direct access to buyers, eventually to the final customer, and to use market channels that let them set the right price of their product as well as the conditions of the exchange. Through our social enterprise “Silver Leaf,” which has been exporting organic products from local small scale organic farmers since the beginning of the organic movement in Greece 35 years ago, we gain great insight into the multitude of very diverse market channels throughout the globe. This work grants us advantages in identifying the most potent markets in terms of being compatible with a regenerative farming approach, including resilience of the farming operation but also the food supply itself. With this network of clients, we can co-shape existing market channels or create completely new ones that can live up to the promise of regenerative farming and food.

The COVID-19 pandemic and ensuing lockdowns made the urgency of direct distribution channels even more evident. Like much of the world, Greece faced restrictions in movement, selling,

and production. Many individuals switched to e-commerce, putting further strain on small businesses, transforming consumer’s perceptions, and causing dire economic uncertainty for households. Online shopping, large supermarket chains, and reliance on processed foods dominated consumer demand, all the while accelerating issues like climate change through these new practices; by generating plastic pollution, for example.

We will need many more learning opportunities for young farmers, training programs, and practical learning experiences to support this shift to regenerative farming and broader practice. Furthermore, there is a language barrier that leaves many young farmers who often lack sufficient English language skills, unable to access literature on topics of regenerative farming. This is an issue that we will continue to tackle in the future through various approaches.

In order to support our work toward regenerative futures, we aim to establish collaborations with a myriad of key actors. For instance, we co-initiated the REGEN network in 2019 which further unites us with our partners in Greece and from around the world. While some of our more recent collaborators are not advocating for regenerative farming specifically at this time, our efforts mark shared goals for the future across different sectors—enabling us to identify and act on the ways we can support each other and overcome common obstacles. We are currently expanding our network and engaging with actors such as university professors and other leading academic figures, as well as various local and international organisations that focus on civil society, youth engagement, healthy nutrition, education and environmental activism. Furthermore, we are exploring the political atmosphere on these topics in Greece specifically, while also mobilising the Greek diaspora, as different tools to advance the regenerative farming movement. Our sphere of outreach is vast, as we consider these different dimensions and actors – such as youth, migration, economic depression in agriculture,

the lack of democracy and civic engagement- to be meaningful and intertwined. Greece is ready for a change, and we are ready to support it.

www.regenerativefarminggreece.org
www.thesouthernlights.org

Sheila Darnos is the co-founder of The Southern Lights and initiator of Regenerative Farming Greece, Sheila has a degree in sociology and has always been dedicated to regenerating systems - either social or ecological. She's concerned about animal rights, child labour but also fair trade and social entrepreneurship. With her cousin Panos Darnos, they created the Southern Lights to help and accompany the must-needed shift towards more sustainable practices and dynamics. The family company, Silver Leaf, was the first to apply these living systems. Within the Southern Lights Project, she works on project management, communication but also design and management of the regenerative farm Southern Lights. She's always working on strengthening the synergies between Greek eco-projects to create momentum, and co-initiated the REGEN network in 2019