



THE WAY WE PRODUCE OUR FOOD. SOMETHING TO IMPROVE?



**Key drivers
of agriculture
ecological footprint**



**Sustainable
solutions for the
olive grove sector**



**Key messages and
recommendations**

A booklet related to Deliverable 6.1.
‘Recommendations to overcome barriers
for STS implementation’



**SUSTAIN
OLIVE**



PRIMA
INSTRUMENT FOR RURAL DEVELOPMENT
IN THE MEDITERRANEAN AREA



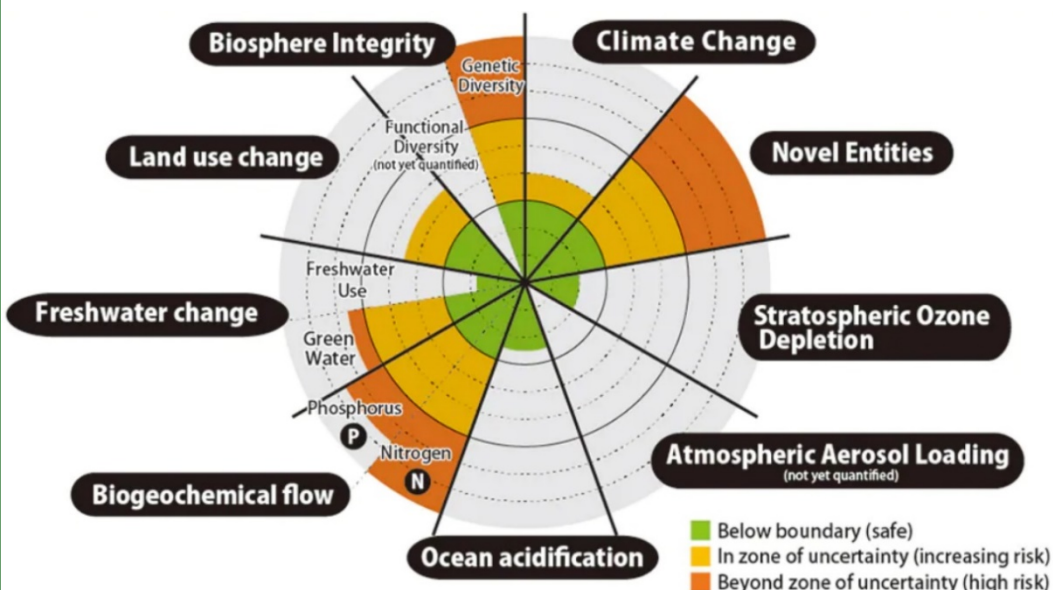
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CURRENT STATUS OF PLANETARY BOUNDARIES



Five of the 9 planetary boundaries are in the high-risk zones, with agriculture being the main driver for four of them. The need for large-scale food production is an unquestionable fact, as is the need to move towards a more sustainable agricultural model.

Source: Azote for Stockholm Resilience Centre, based on analysis in Wang-Erlandsson et al 2022



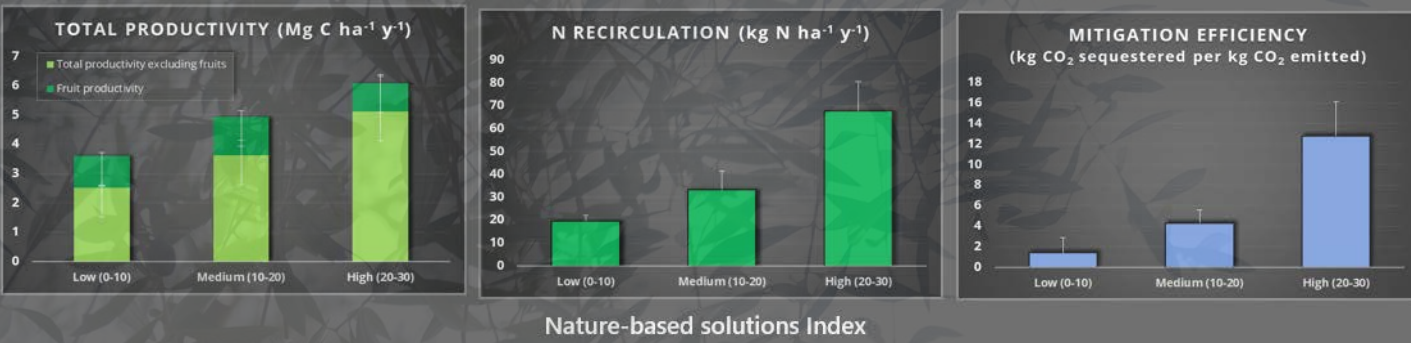
KEY DRIVERS OF AGRICULTURE ECOLOGICAL FOOTPRINT

There is an urgent need for governments, farmers, local communities, NGOs and academics to work together to support effective local solutions involving an improvement in the olive grove sustainability, not only at the environmental but also social and economic.

The information collected and the research developed by the SUSTAINOLIVE project may help to clarify some of the key strategies and levers of change to definitively drive the transformation of the olive grove and olive oil sector.



sustainolive.eu



The SUSTAINOLIVE project team has conclusively demonstrated how the implementation of a combination of eco-friendly technological solutions leads olive farms to competitive advantages.



SUSTAINABLE SOLUTIONS FOR THE OLIVE GROVE SECTOR



The overwhelming amount of scientific evidence compiled by SUSTAINOLIVE should be a compelling incentive for politicians to make decisions aimed to promote and foster the implementation of sustainable technological solutions in the olive cultivation. Ultimately, new guidelines on ecological transition of olive grove should be treated as a key priority across the Mediterranean olive grove sector.




Besides the research grounded in science, collaboration with social sectors involved in researching is crucial to making efficient decisions.



KEY MESSAGES AND RECOMMENDATIONS

At SUSTAINOLIVE, a number of participatory events (workshops and meetings) with all the stakeholders of olive oil sector allowed us to select the recommendations to overcoming the barriers that farmers face when implementing sustainable technological solutions.

To process the valuable information provided by stakeholders, multi-criteria methods were used. These methods support decisions based on a comparative assessment of alternative options, allowing us to identify the preference order into a policy recommendations list.



Stakeholders of the olive oil sector believe that among the most important policy actions to foster a sustainable agriculture are initiatives to...

1

... carry out effective processes to communicate updated information on environmental and health impacts of intensive agriculture.

It is important to raise awareness on how our actions and activities produce impacts on the environment and how those also impact our health. The Paris Agreement recognizes the “**right to health**”, and also the “social, economic and environmental **value of voluntary mitigation actions** and their co-benefits for adaptation, health and sustainable development”.

2

... accelerate the training and formation of farmers with courses on cover crop identification and implementation.

Cover crop is recognized as one of the most effective agronomic solutions to be implemented in olive cultivation. It improves soil organic matter content, prevents from soil erosion, reduces nutrient leaching, etc. How to manage cover crops should be a **basic knowledge accessible to olive farmers**.





Stakeholders of the olive oil sector believe that among the most important policy actions to foster a sustainable agriculture are initiatives to...

...invest in training courses for farmers on reusing/composting the by-products generated by olive groves.

3

A training program for organic composting would reduce the lack of specific skills of olive farmers on this issue. Regional and local governments are called to design **specific courses** to improve rural development under the European agriculture policy (CAP Pillar II).

...promote specialized training for advisor technicians on sustainable technological solutions.


4

Investing in **agricultural technician training** is an effective approach to sustainable agriculture. The know-how involving sustainable technological solutions would be carried out by universities, colleges and research centers specialized in applied agroecology.

...invest in communicating potential cost savings using sustainable technological solutions.

5

It is important to aware farmers on how sustainable agriculture can lead to **increased productivity and profitability** by reducing costly inputs (e.g. fertilizers and herbicides) and boosting a better use of renewable energy sources. Additionally, sustainable agriculture practices lead to **mitigate climate change** by sequestering carbon in the soil and reducing greenhouse gas emissions.



Stakeholders of the olive oil sector believe that among the most important policy actions to foster a sustainable agriculture are initiatives to...

6

...arise awareness on farmers on the advantages of heterogeneous agroecosystems through specific target courses.

Under the climate change future scenarios, heterogeneity in agroecosystems will be beneficial to farmers as a **low risk betting strategy**. However, the policies for the adaptation to climate change need to **include and favor the heterogeneous agroecosystems** approaches and initiatives.

7

...promote and protect cultural heritage of local ecological knowledge related to olive groves.

Knowledge on sustainable management of olive groves **acquired by local communities over generations** contributes to preserve and boost the provision of ecosystem services which, in turn, may assure the resilience of the socioecological system to disturbances.

