



### Annual Science Days 2023 Riga 13 June 2023

# Investigating policy pathways to enact soil-based agroecological principles in the European and Turkish farming systems

By Francesca Varia, Francesco Galioto, and Giovanni Dara Guccione CREA Research Centre for Agricultural Policies and Bioeconomy, Rome, Italy

### **Overview of the study**



# WP4: Participatory initiatives in the formulation of policies on soil-based Sustainable Agroecological Systems

**Task 4.1.** Analysis of regional, national, EU and Turkish laws, and competencies to incorporate soil-based principles into their laws (Partners: CREA, CSIC, CZU, IUNG, LAMMC, TAGEM, UL)

Deliverable 4.1: "Soil-based agroecological policies and measures analysis" (by December 2023) Annex I : "Investigating National and regional soil-based policies"



Sustainable Agroecological Systems are, until now, not promoted by specific policies at the EU level. Furthermore, the measures promoted are often ineffective due to overly complex patterns of targeting measures and instruments, making it difficult for national policies to match local priorities





### The 13 Principles of Agroecology

Integration layer

Society

Community in food system

-----

\_\_\_\_\_

-----

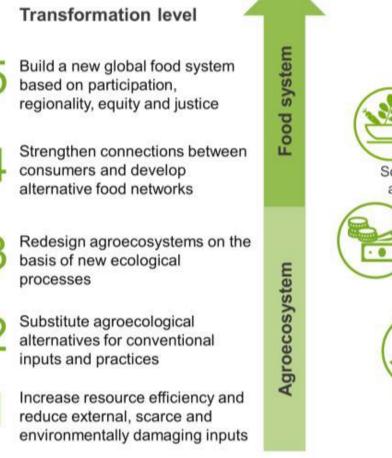
. . . . . . . . . . . . . . . . . .

Transformative

Incremental

Landscape / water catchment areas

Farms





Source: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (2020) from HLPE (2019), FAO (2018), and Gliessman (2014).





### **Scope and Objective**

The study aims at investigating the different policy instruments which can currently contribute to addressing agroecological **land use challenges** in the European Union and Turkey.

Agroecological land use challenges are meant as challenges addressed at recovering degraded soils due to intensive farming in order to allow the development of more resilient and sustainable farming systems.



Sourse: https://www.fao.org/land-water/land/sustainable-land-management/en/

**Land degradation neutrality (LDN)** has been defined by UNCCD (2016) as "a state whereby the amount and quality of land resources necessary to support ecosystem functions and services to enhance food security remain stable, or increase, within specified temporal and spatial scales and ecosystems."





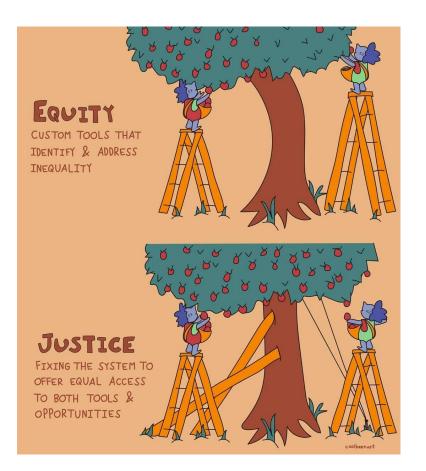
### **Evaluating Policies on Soil management**







### **Evaluating Policies on Soil management**



- Does everyone get the supports they need?
- Have systemic barriers been removed?

### Diversity

Differences in perspectives, identity, and background are taken into account Everyone is given room to bring their unique strengths and full selves to the table

Inclusion

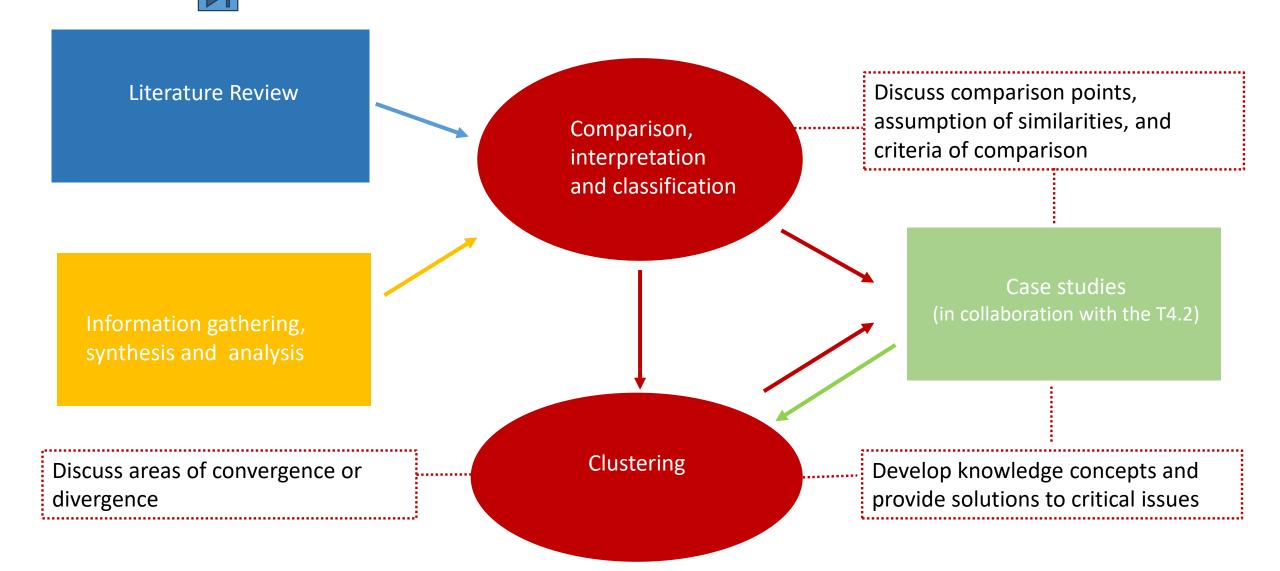


- Are there stakeholders at risk of discrimination?
- Is public participation ensured from an early stage of the decision-making process?





### **Policy Research Design**



### Soil policies in the UE and Turkey





#### **Funding opportunities for farmers**

Local funding resources addressed to promote the adoption of sustainable farming practices and approaches



#### Supporting participatory and innovative processes

A wide range of instruments supporting projects for farmers, associations, partnerships and local communities through multi-actor, multi-level and cooperative/collaborative initiatives



#### **Regulating land uses**

Minimum requirements farmers must comply with when operating in areas with specific environmental issues

#### Policy initiatives contributing to the agroecological management of agricultural soils





• Incentivizing the adoption of sustainable practices **O**-Subsidies for sustainable practices (CAP Green Architecture) **O**-Subsidies for investments – grants for the equipment

#### <sup>®</sup>Triggering new market opportunities **O**- Short food chain initiatives (public procurement and farmer markets) **O**-Typical products (Denomination of origins) **O**- Voluntary certification schemes (Carbon credits

schemes, Carbon certifications,

Source: Our elaboration on Gava et al., (2022).

participatory and innovative

Supporting

processes

### **D** Enabling participatory

#### processes

**O**- Cooperation actions (Eco regions and Biodistricts, Land associations, producers' organisations, etc.) **O**- Collaboration actions (Rural districts, and Local Actions Groups)

#### • Promoting knowledge dissemination

- Applied research , information and advisory services (CAP AKIS strategies, EIP-AGRI **Operational groups)**
- Demonstration campaigns- Living labs and lighthouses, LIFE projects, etc.)



uses

**Regulating land** 

#### Regulating the protection of environment **O**- Protected areas (Natura 2000 sites, other protected areas) **O**- Vulnerable zones (Nitrate Vulnerable Zones, river basins under the Water Framework Directive, and other regions subject to pressure)

**O**Regulating management **O**-National and

regional

landscape

```
landscape laws
```





### Incentivizing the adoption of sustainable practices (Good Agricultural and Environmental Conditions)

This information is obtained from the section 3 of the CAP National Strategic Plans (Reg. EU n. 2021/2115)

https://agriculture.ec.europa.eu/cap-my-country/cap-strategic-plans-country\_en)

Country code	List of GAEC related to the protection agricultural soils	Provide a short description of the measure	Provide explanation of the scope of application and of key exceptions and derogations.
Π	GAEC 5 – Tillage management	Construction of temporary furrows to convey water into collector ditches and natural riverbeds, arranged at the edges of fields. Contour lines field works together with the prohibition of unauthorized leveling. Prohibition of soil refinement following plowing, for a period of 60 consecutive days between September 15 and February 15 for field slopes higher than 10%.	Permanent crops are exempted from the measure. Water drainage works are exempted for fields with very high slopes. Soil refinement is allowed for winter cereal seedlings.
іт	GAEC 6 – Minimum soil cover	Maintaining green cover or the residues of previous crops for 60 consecutive days within the commitment period, running from September 15 to May 15.	The measure applies nationwide, but it can be adapted regionally depending on the prevailing cropping order and rainfall.
ΙΤ	GAEC 7 – Crop rotation in arable land	Crop rotation with at least 1-year interval (except in the case of multi-annual crops, permanent grassland, and land left fallow).	The measure applies nationwide. Secondary crops are allowed to accomplish with measure requirements, provided they cover a significant part of the period between two main crops (90 days). Two consecutive years are allowed for extensive crops and three years in mountain regions. Other exceptions apply for farm below a size of 10 ha, with more than 75% of permanent grassland and/or forage crops. The measurement will be activated in 2024.
іт	GAEC 8 – Maintenance of non- productive areas	At least 4% of arable land at farm level must be devoted to non-productive areas, including land left fallow.	Exeptions apply for farm below a size of 10 ha, with more than 75% of permanent grassland and/or forage crops. The measure will be activated in 2024.





### **Regulating Land Use**

Country code	Regulation references	Brief description in relation to soil management
CZ	Operational Program Environment	Improvement of waste management and removal of old environmental burdens e.g. building composting plants and Axis 6 (Improving the state of nature and landscape), where projects that contribute to slowing down or stopping the decline in biodiversity, by protecting endangered plant and animal species.
CZ	Landscape Care Program	Sub-program for the implementation of measures resulting from the care plans for specially protected areas and their protection zones and the provision of measures to support the objects of protection of bird areas and sites of European importance. Sub-program for the improvement of the preserved natural and landscape environment
IT	Legislative decree n. 42, 22/01/2004 introducing the Code of cultural heritage and landscape.	Aims at protecting Italian landscapes and defines rules to identify and protect landscape public interest. The Code stipulates that regions cannot plan the development of their territory with urban planning choices that do not respect the constraints placed by the State to protect landscape assets. The environmental and landscape spatial information system (SITAP) was instituted in light of this Code.
TR	National Strategy Document and Action Plan for Combating Desertification (2019-2030)	Promote sustainable land management to combating desertification/land degradation.





### Focus on the institutional competences on soil and land policies

"At EU level, there is currently no binding overarching framework that strategically defines policy priorities or parameters for soil protection. Soil protection outcomes in the other laws are mostly derived as a consequence of delivering environmental objectives that are not explicitly soil focused, such as reducing contamination, offsetting greenhouse gas emissions, and preventing other environmental threats".

Source: https://environment.ec.europa.eu/topics/soil-and-land\_en



Farnesina Palace, Rome.

#### The Treaty on the Functioning of the European Union

**Article 2 - Categories and areas of EU competence:** *The European Union (EU) only has the competences (powers) conferred on it by the treaties (principle of conferral).* The competences between the EU and its Member States are divided into three main categories:

#### •exclusive competences of the EU

•shared competences (e.g. the economic, social and territorial cohesion area, agriculture, environment, consumer protection) and

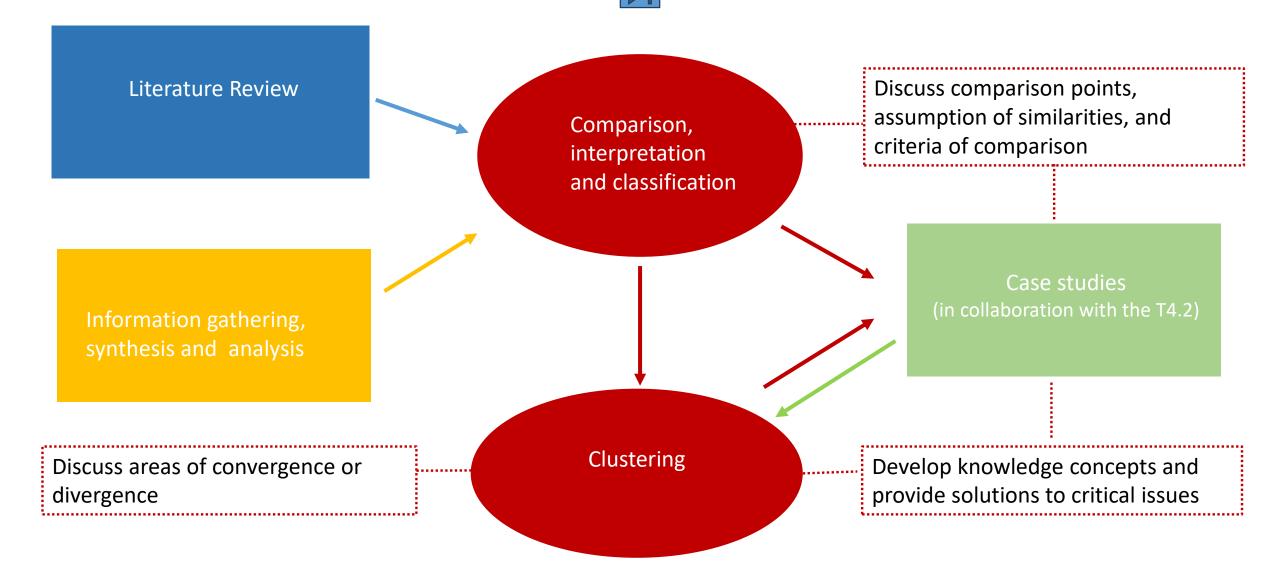
•supporting competences (e.g. protection and improvement of human health, culture, education, vocational training)

According to the **Subsidiarity principle**, in the area of its non-exclusive competences, the EU may act only if – and in so far as – the objective of a proposed action cannot be sufficiently achieved by the MS, but could be better achieved at EU level.





## **Policy Research Design (next steps)**







### Thank you for your attention!

