



# BEATLES

BEHAVIOURAL CHANGE TOWARDS

Climate-Smart Agriculture

Dr. Marilena Gemtou  
Agricultural University of Athens



Visit our website

[www.beatles-project.eu](http://www.beatles-project.eu)



Funded by the European Union under GA no. 101060645. Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or REA. Neither the European Union nor the granting authority can be held responsible for them.



Funded by  
the European Union

# In a nutshell

**PROGRAMME:** Horizon Europe

**GRANT AGREEMENT:** No. 101060645

**CALL:** HORIZON-CL6-2021-FARM2FORK-01

**TYPE OF ACTION:** HORIZON-RIA

**START DATE:** 1 July 2022

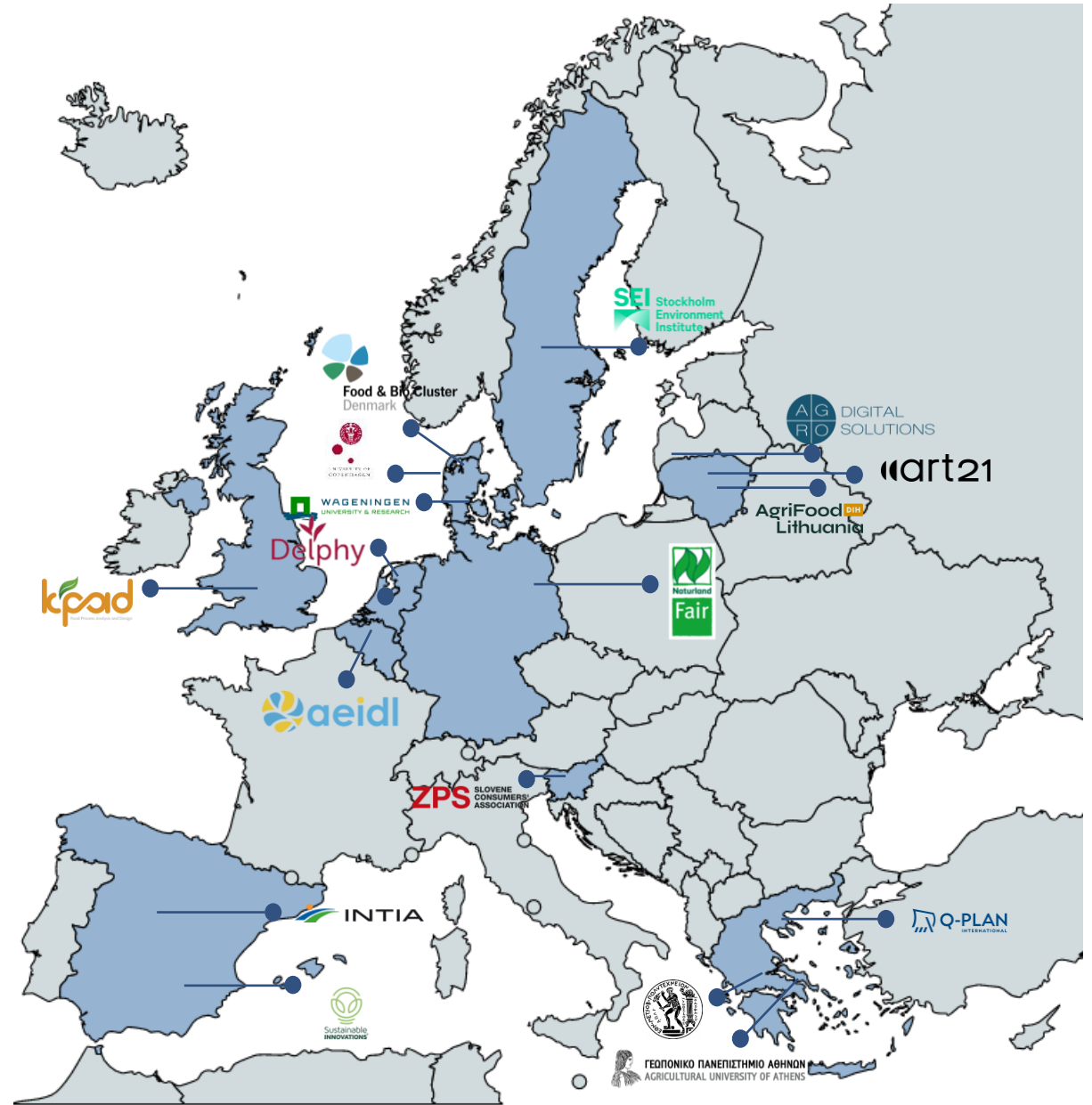
**DURATION:** 48 months

**BUDGET:** 3,911,528.25€



# Our consortium

➤ 18 partners across 10 European countries.



# BEATLES Key activities (1/2)

**1** Investigate **agri-food systems transition** towards **climate-smart agriculture** & **smart farming technologies**.

**2** Study **5 different food systems** representing the major **crop** and **livestock** farming systems in **Europe**.

**3** Identify **individual, systemic and policy factors** that **enable** or **impede** the transition to sustainable practices among agri-food actors

**4** Design & implement **behavioural experiments**.



# BEATLES Key activities (2/2)

5

Assess **environmental, social & economic sustainability** of practices.

6

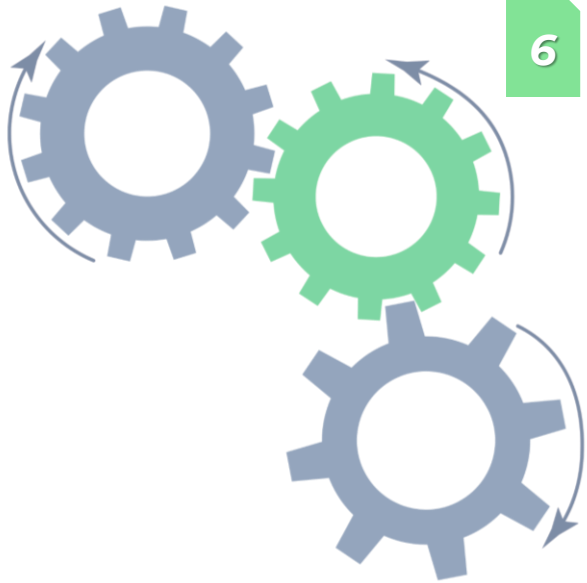
Design **fair value propositions for sustainable solutions** & develop a **portfolio of business models**.

7

Formulate **fair policy recommendations** & develop **policy tools** to enable the **adoption** of **sustainable practices**.

8

Design and implement **dissemination, communication & exploitation** activities and **synergies** with other projects.



# Our Use Cases

➤ BEATLES has set up **5 Use Case pilots** across **EU** regions & **agricultural** systems.



**Lithuania**  
Wheat



**Denmark**  
Pig Sector



**Spain**  
Fruit

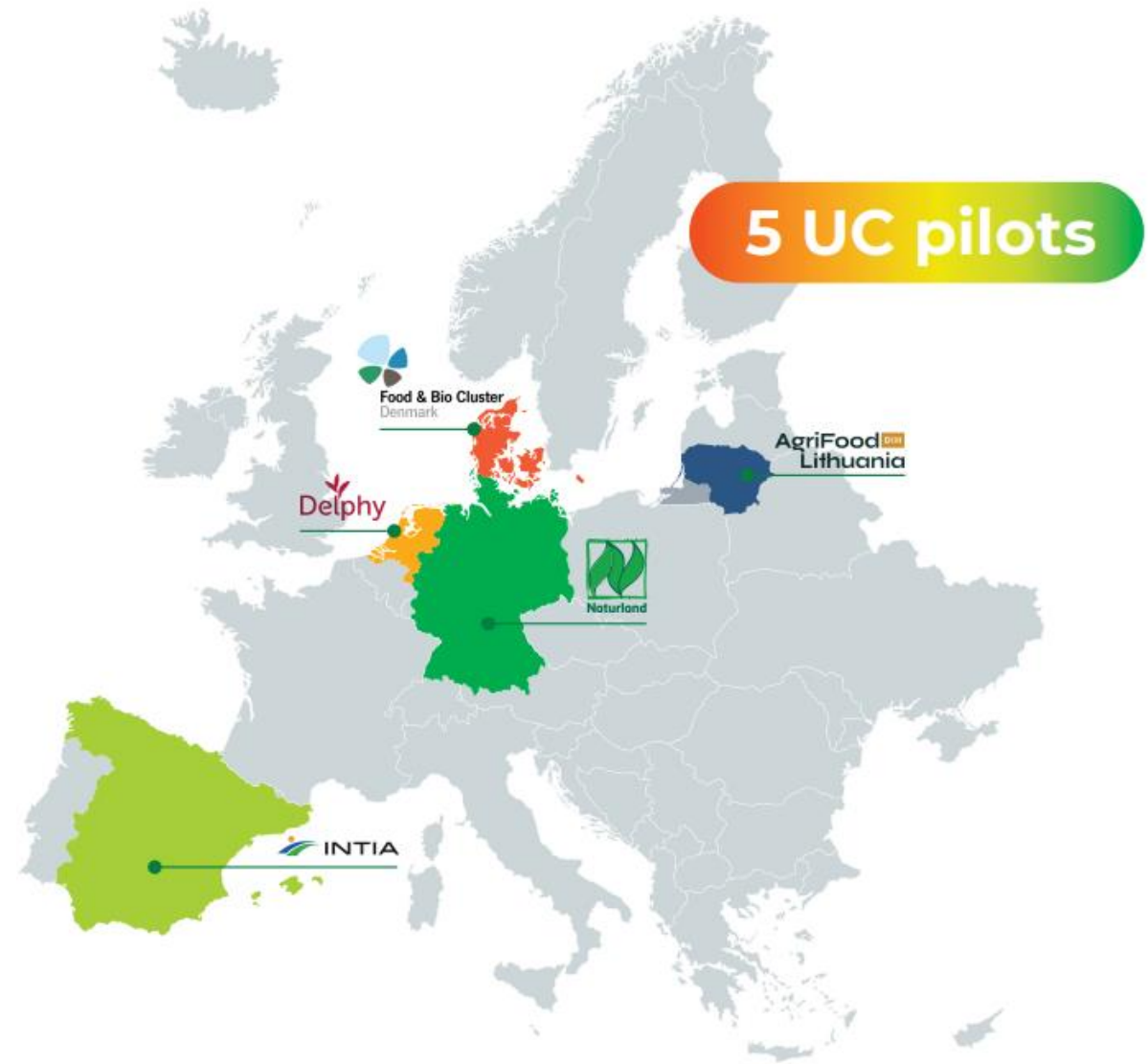


**Germany**  
Dairy

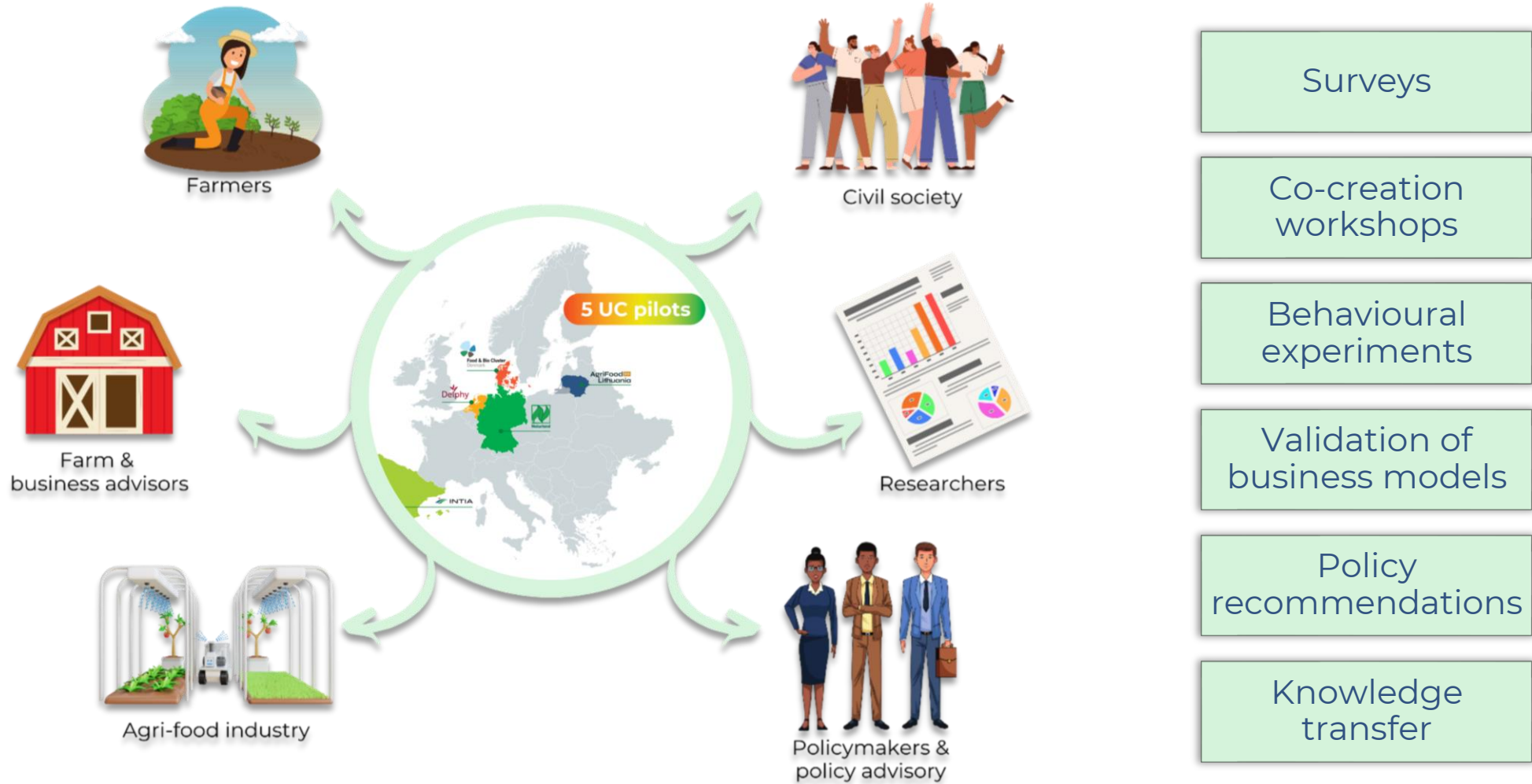


**The Netherlands**  
Onion & Potato

➤ These systems represent the majority of **EU agricultural exports** & cover **45%** of **agricultural land**.



# Stakeholders & their involvement



# Expected outcomes



**10**

lab & field experiments



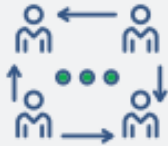
**10**

business models  
identified and validated



**10**

key actionable policy  
recommendations produced  
(including per UC and EU level)



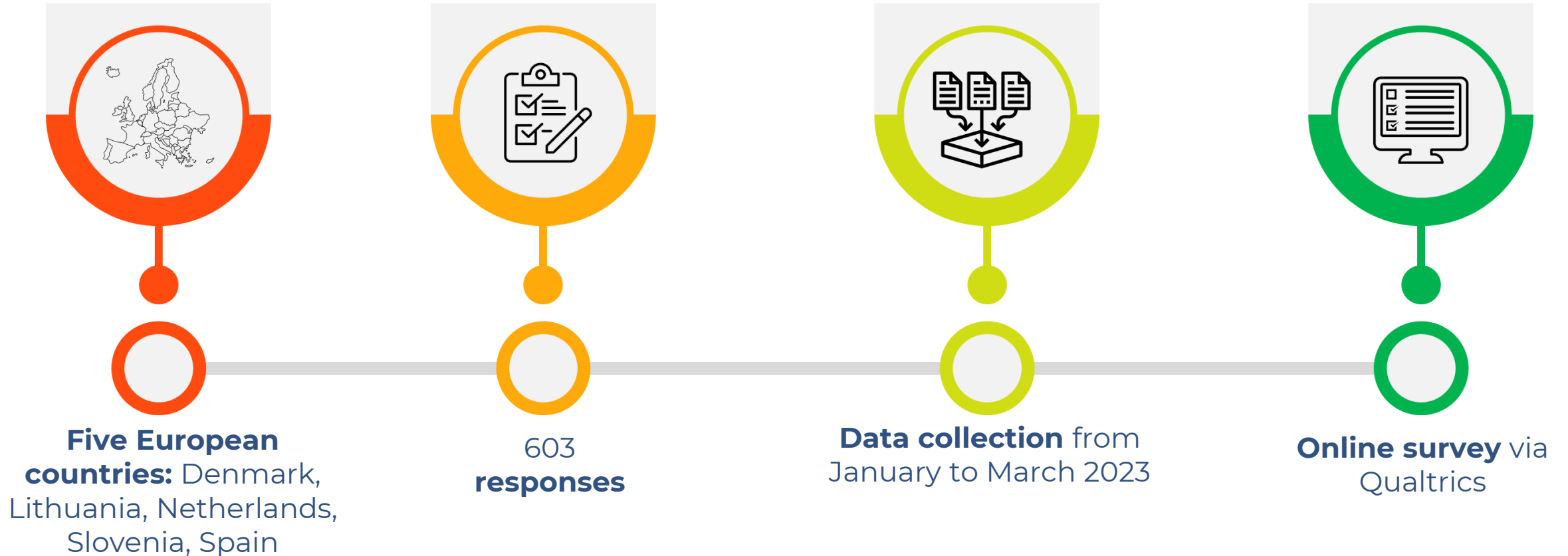
**10.000**

stakeholders reached through  
communication channels



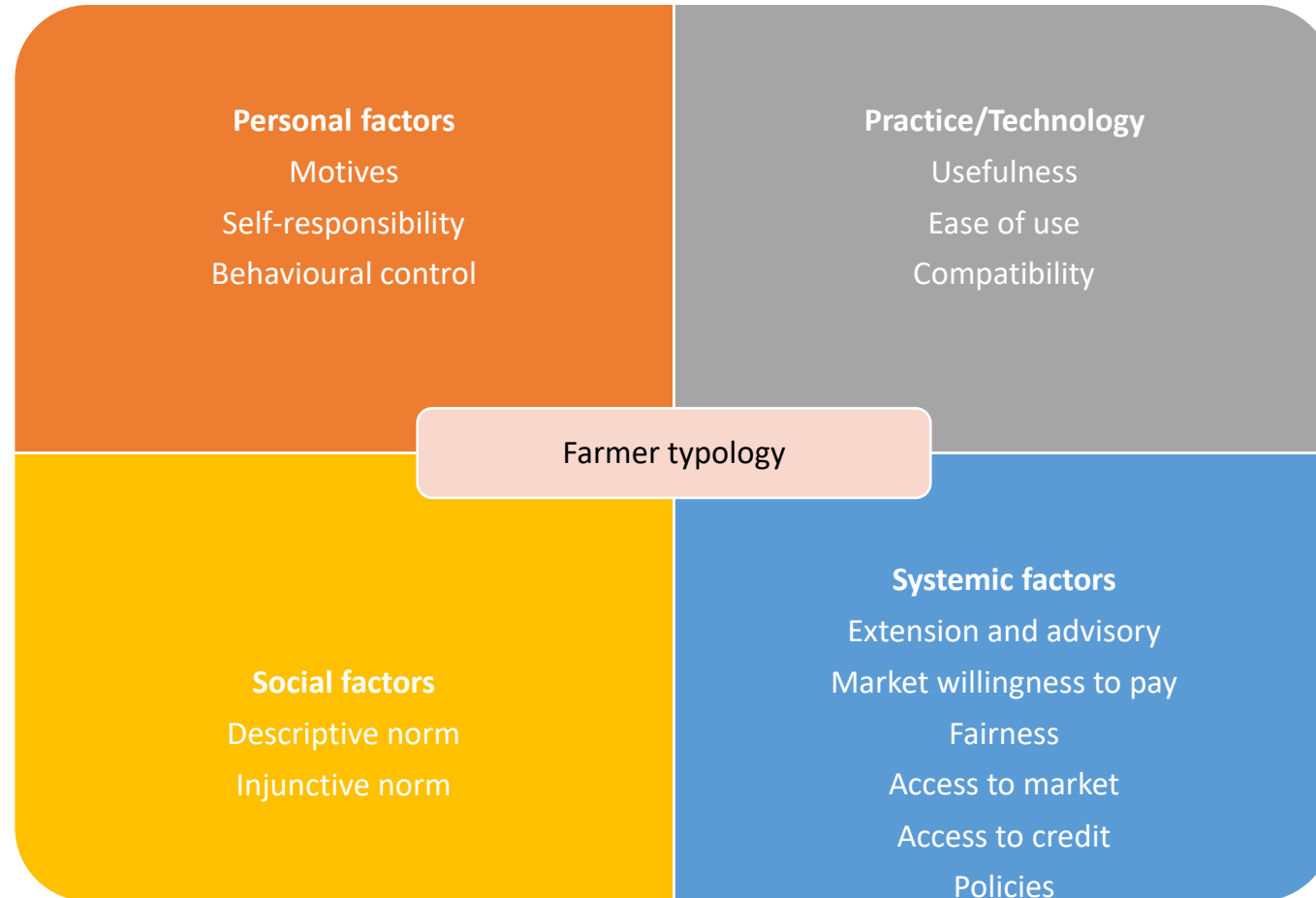
# Farmer typology methodology

**Aim:** to provide a holistic European farmer typology to allow for tailored strategy and policy interventions, based on the characteristics of farmer segments, to increase the adoption of CSA



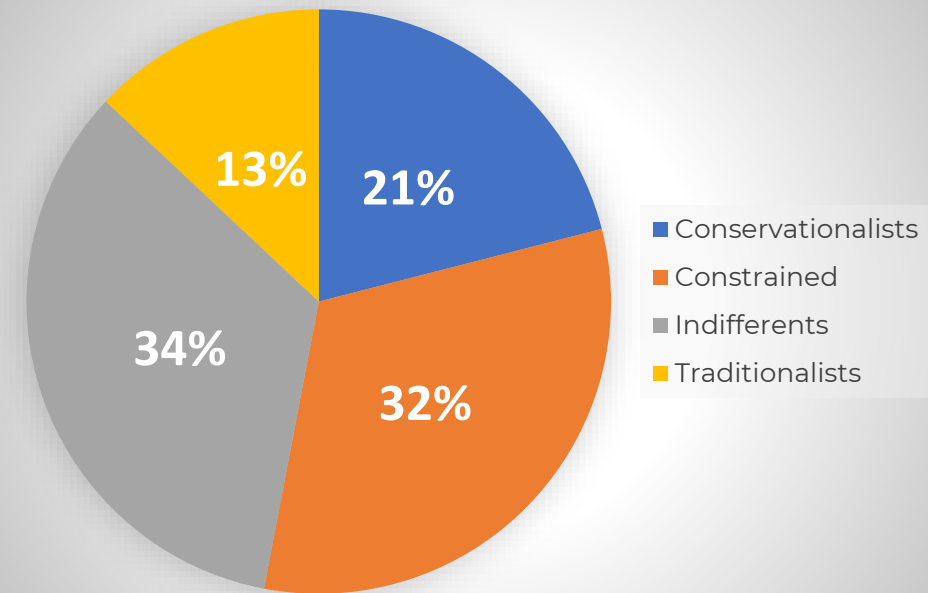
# Farmer typology methodology

**Aim:** to provide a holistic European farmer typology to allow for tailored strategy and policy interventions, based on the characteristics of farmer segments, to increase the adoption of CSA





## FARMER TYPOLOGY



# Farmer typology

## Conservationists (21%)



- Highest intention to adopt climate-smart agriculture
- Driven mainly by **non-economic** (e.g., environmental protection, animal welfare) but also **economic farming motives**
- **Highest sense of responsibility** about the environmental, social and economic impact of their farming activities
- Believe they have the **control, ability and resources** to implement CSA
- Believe CSA practices/technologies are **useful, easy to use and compatible** with current farming operations
- Feel enabled by the food systems in which they operate having the most favourable views about **access to market, access to credit, market willingness to pay, extension and advisory services as well as policy framework**
- **High perceptions of unfairness in the value chain**, as they feel they contribute more to environmental protection than other stakeholders
- Higher levels of income, education, mainly from Denmark and Spain, use both mass media and farm-related sources to get informed
- Overall, this type indicates a conservation stance which is also enabled by the food systems conditions.

# Farmer typology

## *Constrained (32%)*



- High intention to adopt climate-smart agriculture
- Driven mainly by **economic farming motives** but also by **non-economic** (e.g., environmental protection, animal welfare)
- **High sense of responsibility** about the environmental, social and economic impact of their farming activities
- Believe CSA practices/technologies are **useful, easy to use and compatible** with current farming operations
- **Feel constrained by the food systems** in which they operate having the second lowest scores in aspects, such as access to market and credit, policy framework and market willingness to pay
- **Highest perceptions of fairness in the value chain**, more satisfied with the contribution of other actors in sustainable food systems compared to the other types
- Lower income, higher education, mainly come from Lithuania, mainly use mass media to get informed
- Overall, this type shows attitudes amenable to adoption of CSA but are impeded by the conditions in the food systems

# Farmer typology

## *Indifferents (34%)*



- Medium intention to adopt climate-smart agriculture
- Low **economic** and **non-economic farming motives** (e.g., environmental protection, animal welfare)
- **Low sense of responsibility** about the environmental, social and economic impact of their farming activities
- **Lowest perceptions of usefulness, ease of use and compatibility** of the CSA practices/technologies for their farming operations
- **Feel constrained by the food systems.** With the exception of extension and advisory services, institutional factors such as fairness in the supply chain, market willingness to pay, access to market, access to credit, policies and regulations are viewed negatively.
- Belong to a cooperative, higher income, vocational training, mainly come from Denmark, Netherlands and Slovenia, mainly use farm-related sources to get informed
- Overall, this type appears disengaged with both low interest in the CSA practices/technologies and an unfavourable institutional and regulatory framework.

# Farmer typology

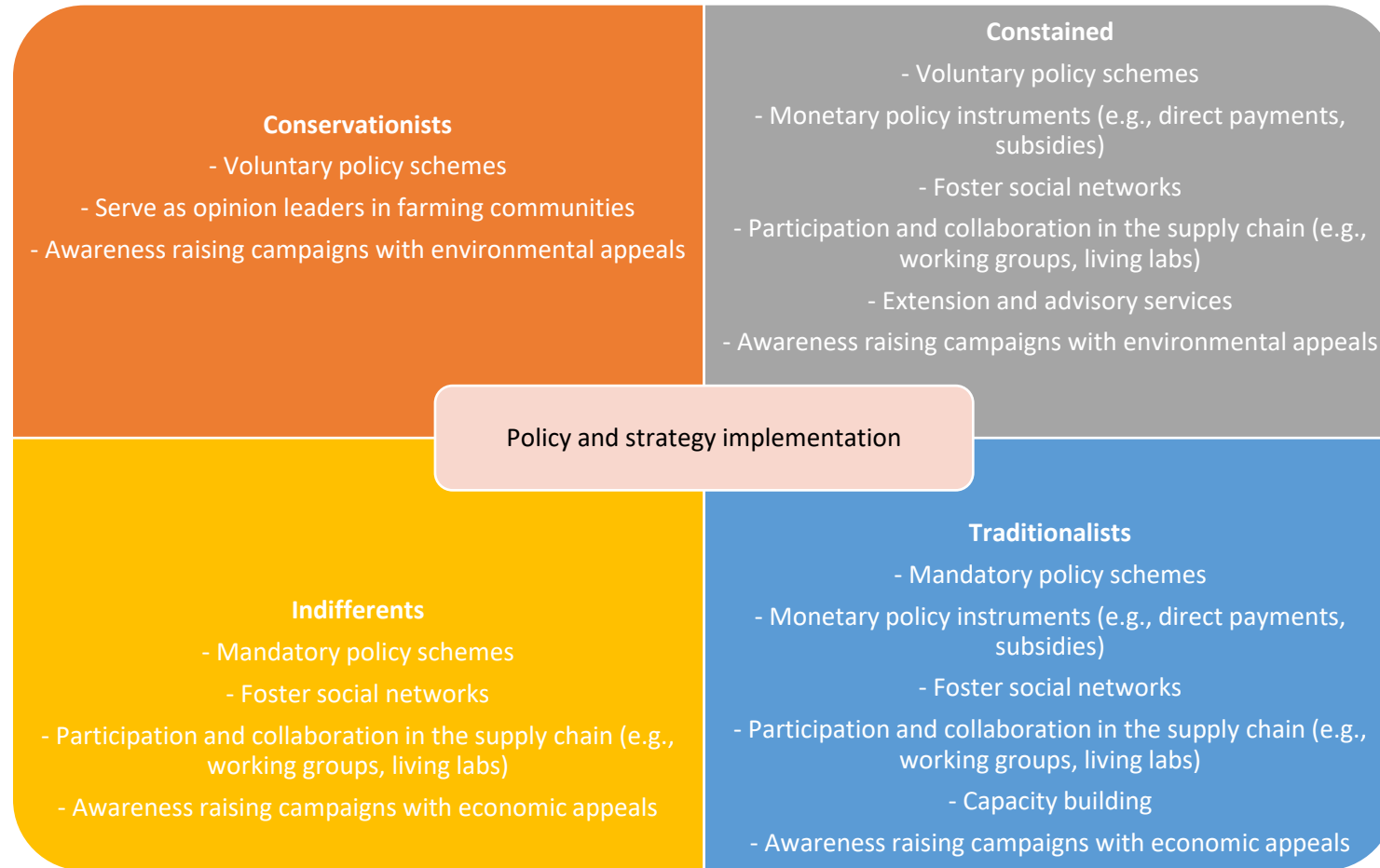
## *Traditionalists (13%)*



- Lowest intention to adopt climate-smart agriculture
- Lowest **economic** and **non-economic farming motives** (e.g., environmental protection, animal welfare)
- **Lowest sense of responsibility** about the environmental, social and economic impact of their farming activities
- Believe they do not have the **control, ability and resources** to implement CSA
- **Low perceptions of usefulness, ease of use and compatibility** of the CSA practices/technologies for their farming operations
- **The most constrained by the food systems group** showing the lowest scores in institutional factors including access to market, access to credit extension and advisory services, market willingness to pay and policy framework.
- Lower income and education, mainly come from Spain and Slovenia, do not use any information sources to get informed
- Overall, this type appears to face various barriers and is the most difficult type to approach.

# Farmer typology

These insights can be used for strategy and policy



# Questions & Answers

Dr. Marilena Gemtou

[mgemtou@aua.gr](mailto:mgemtou@aua.gr)



Event  
DD/MM/YYYY  
City, Country



# Thank you!



Funded by the European Union under GA no. 101060645. Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or REA. Neither the European Union nor the granting authority can be held responsible for them.



Funded by  
the European Union