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GREEN HORIZONS WEBINAR SERIES

Digging into soil health Policy and practice



17 JULY 2025

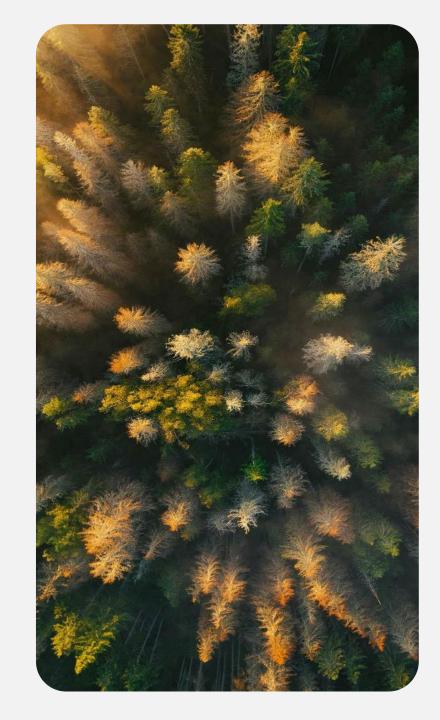
16:00-17:00 CEST | 15:00-16:00 GMT

WE ARE STARTING SOON



Housekeeping

- This session is being recorded.
- Recording and slides will be available on our website.
- Questions are welcome, we will address some as part of the panel discussion.
- Please share your feedback with us at the end!





Agenda

- Welcome
- Presentation on Soil Policy Drivers
- Presentation on Soil Health in Practice
- Invitation to our Green Horizons network
- Story from the field
- Q&A with the audience
- Feedback and close



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Today's speakers



Caroline Heinzel

Policy Officer, European Environmental Bureau



Gian Luca Bagnara

President, ASSOAVI & AIFE Member, Investment Committee, IDEA AGRO



Saskia Visser

Lead for Resilient and Climate Neutral Regions, Climate KIC



Saskia Keesstra

Designer and Producer, Land Use Transformation, Climate KIC



Tessa Finch

Designer and Producer, Strategic Foresight, Climate KIC (Moderator)





Policy Drivers: What EU policies mean for your farm

Presentations by:

Caroline Heinzel; European Environmental Bureau (EEB)

Saskia Visser; Climate KIC





Soil is the glue the binds the strategies of the European Green Deal







Soil Monitoring Law





Negotiations on the Soil Monitoring Law

- EU institutions reached an agreement in April
 →Final text of the law
- Challenging political climate lead to extremely watered-down law
- Widespread dis-/ and misinformation, particular regarding alleged obligations for farmers (which are not part of the law)
- Final adoption of the law in Autumn

ANNEX

2023/0232 (COD)

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on Soil Monitoring and Resilience (Soil Monitoring Law)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof.

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee1,

Having regard to the opinion of the Committee of the Regions2,

Acting in accordance with the ordinary legislative procedure,

Whereas:

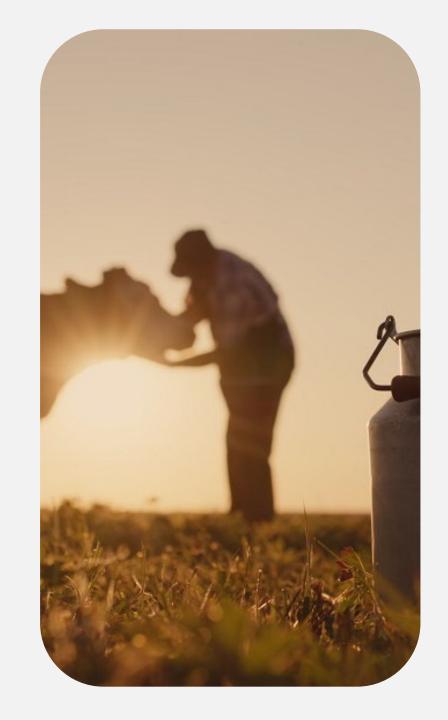
 Soil is a vital, limited resource, and considered non-renewable and irreplaceable at human time scale that is crucial for the economy, the environment and the society.



What does the Soil Monitoring Law mean for farmers?

The law puts no obligations, no bureaucracy, management requirements or costs on farmers.

- 1. Improved monitoring and knowledge about the state of soils in Europe (including but not limited to agricultural soils)
- 2. Improved access to soil health data (whilst respecting legal data protection requirements)
- 3. Support to landowners and managers to improve soil health and resilience
- 4. Efforts to reduce soil sealing





Achieving healthy soils across the EU by 2050

Infrastructure to support





Nature Restoration Law

- Overall target: Putting in place restoration measures with the aim to jointly cover at least 20% of land areas and at least 20% of sea areas by 2030, and all ecosystems in need of restoration by 2050.
- Soil ecosystems relevant throughout the Directive
- Success hinges on thorough implementation and sufficient financial resources





Common Agriculture Policy

Strong support for Soil Health through

1) Enhanced Conditionality (mandatory)

Soil cover, Tillage managements, crop rotation, buffer strips along water

2) Eco-schemes (voluntary, direct payment)

Practices to go beyond compliance; reduced tillage, catch/cover crops, Aggro forestry, improved nutrient management

3) Rural development (pillar 2)

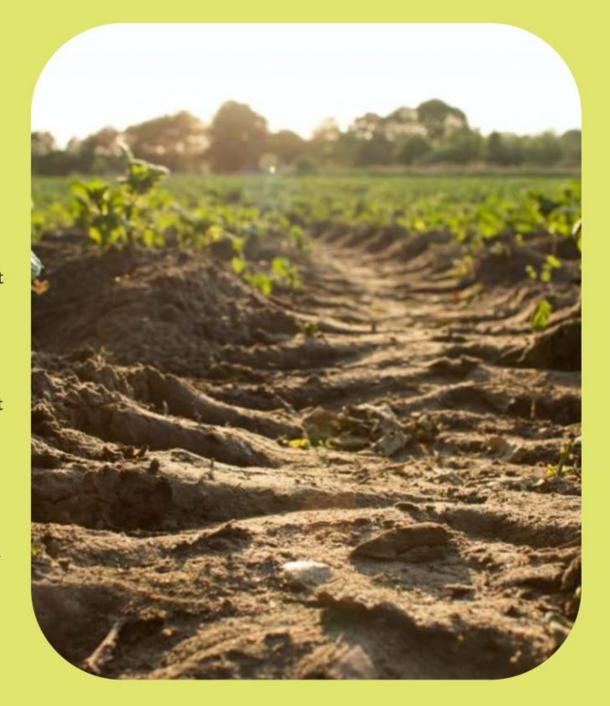
organic farming, Investments in conservation tillage machinery, advisory services, agri=natural measures => Designed to build organic matter, reduce erosion, increase biological activity and enhance long-term fertility and resilience at farmlands

4) Fertiliser & nutrient management tools

Farm sustainability tools

5) Country-level strategic planning

Member states tailor the mix of measures based on soil conditions and local challenges



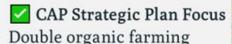
SOIL Health CAP support per country

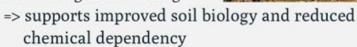
Ireland



- ✓ Eco-Scheme (Pillar 1)
- Soil sampling & liming to optimize pH
- Limiting chemical nitrogen use
- Planting break crops, multi-species swards
- Native tree/hedge planting, 'space for nature' buffer zones
- GPS-controlled spreading and extensive livestock production
- Conditionality
- Buffer strips near water, ban on burning, crop rotations
- Soil cover & tillage limits, permanence grasslands & non productive features
- ACRES (Pillar II Rural Dev.)
- Results based ecoscheme
- Supports landscape-level outcomes (Soil, water, biodiversity)

Greece





Measures for forest & permanent plantation restoration,

- => protect soil on sloping lands
- Eco-Scheme (Pillar I)

Greece supports organic fertiliser uptake via eco-schemes helping reduce reliance on synthetic inputs

Research

Support uptake of research findings: E.g. SOILCARE project in Crete vineyards and olive groves:

Vetch cover crops cut erosion by ~20%, increased earthworms, reduced weeds

No-till practices reduce erosion by ~22%, support soil biodiversity, although may need weed/pH management

Poland



- ✓ Eco-Scheme (Pilar 1)
- Carbon farming; compensated for implementing climate-friendly practices that enhance carbon sequestration
- Rapid incorporation of manure into soil (within 12 hours)
- ✓ Conditionality & Greening

Set aside 4 % of arable land for nonproductive zones (biodiversity features), restrictions to protect carbon-rich peatlands.

Strong fertiliser controls near water bodies

✓ Living Labs & Research

Grójec Living Lab (apple orchards) tests cover crops, organic mulches, microbial amendments to boost soil structure, pH balance, and organic carbon



What does this mean for farmers?

- Growing demand for soil-friendly practices
- More support & tools (data, funding, training)
- Increased accountability: Monitoring, audits, compliance
- Risk & Opportunity:

Adapt early to secure funding and market access

How to prepare?

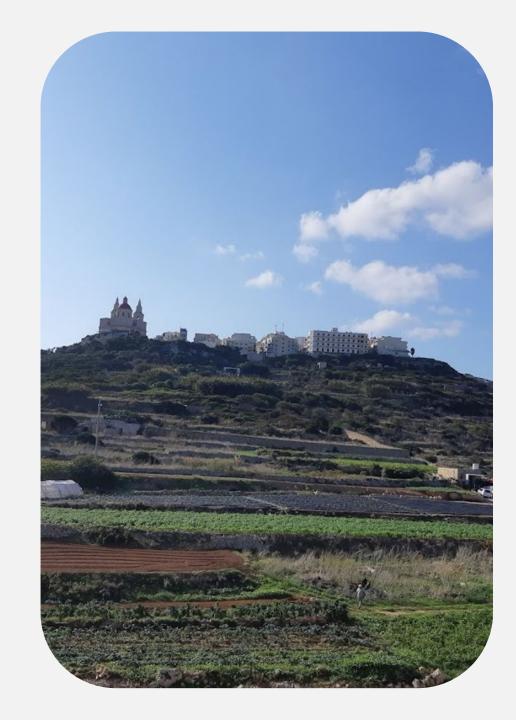
- 1. Know your soil: testing, mapping, monitoring
- 2. Engage in local soil health programs => Living Labs
- 3. Apply for eco-schemes and environmental funding
- 4. Follow updates on Soil Health Law/ CAP consultations





Let's work together

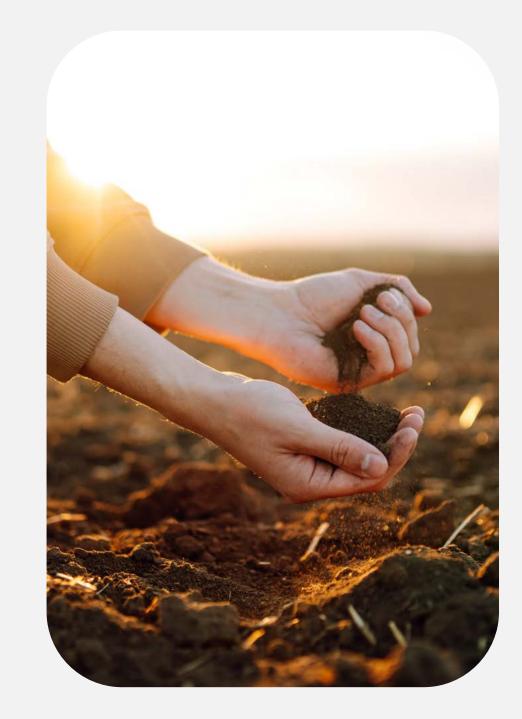
- Farming is part of the solution
- Soil health = farm health
- Connect with:
 - National agricultural advisors
 - Farmer networks & cooperatives
 - EU programs (e.g., LIFE, Soil Mission,)





Soil Health in Practice: working towards healthy soils

Presentation by: Saskia Keesstra; Climate KIC





Working towards healthy soils

Definition:

"the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans"

Content:

- Links processes, management options and socio-economics and policies
- Options for sustainable soil management
- Example of mulching
- Invitation to Green Horizons Farmers network





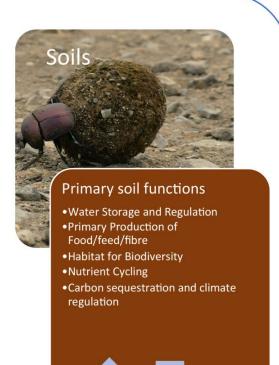




- •Improved water storage and water use efficiency
- Control soil erosion and land degradation
- •Improved soil biodiversity
- •Improved soil structure management
- •Improved nutrient management
- •SOM management and C sequestration

Land Management categories

- Agricultural systems
- •Buffer strips and small landscape elements
- Crops/crop rotations
- Organic matter and nutrient management
- •Tillage and traffic
- Crop protection
- Water management



Soil challenges

- Maintain/increase SOC
- Avoid N₂O/CH₄ emissions
- Avoid peat degradation
- Avoid soil erosion
- Avoid soil sealing
- Avoid salinization
- Avoid acidification
- Avoid contamination
- Optimal soil structure
- Enhance soil biodiversity
- Enhance soil nutrient retention/use efficiency
- Enhance water storage capacity



- 2. Preserving and restoring ecosystems and biodiversity
- 3. Farm to Fork: fair, healthy and environmentally friendly food system

European Journal of Soil Science





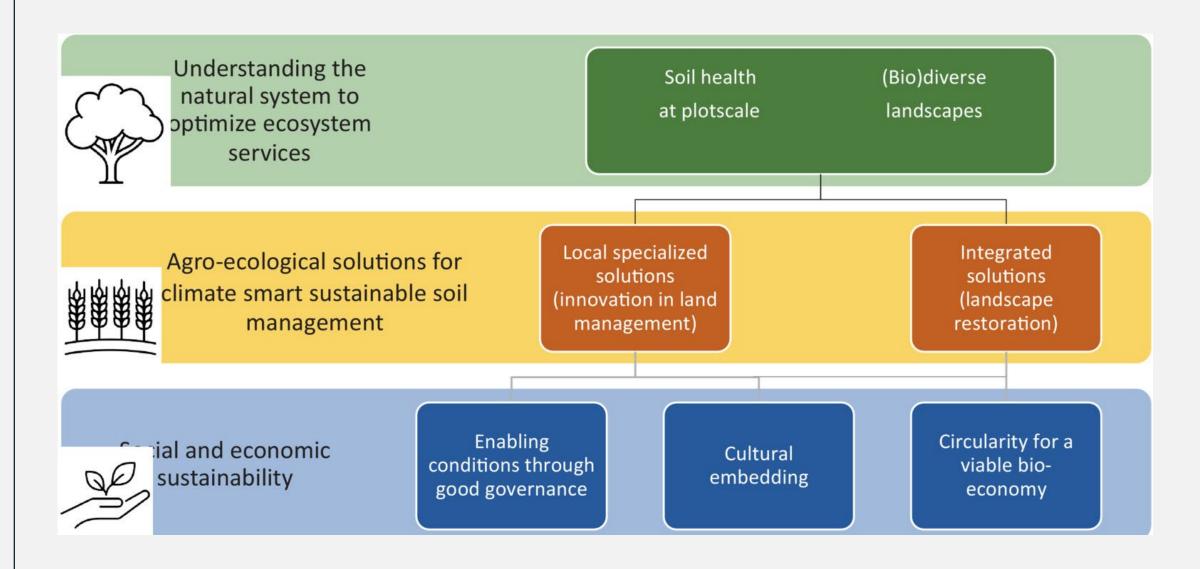


European agricultural soil management: Towards climatesmart and sustainability, knowledge needs and research approaches

S. D. Keesstra 🔀 C. Chenu, L. J. Munkholm, S. Cornu, P. J. Kuikman, M. H. Thorsøe, A. Besse-Lototskaya, S. M. Visser

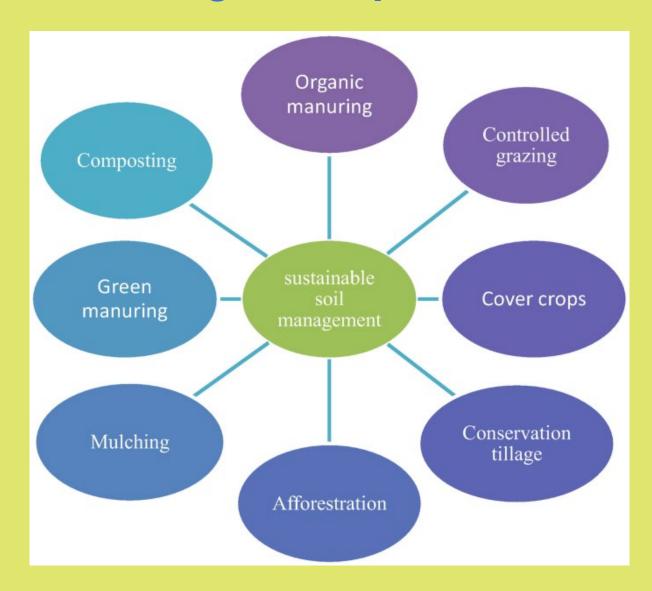


Sustainable soil management options: working with basic process understanding





Sustainable soil management options



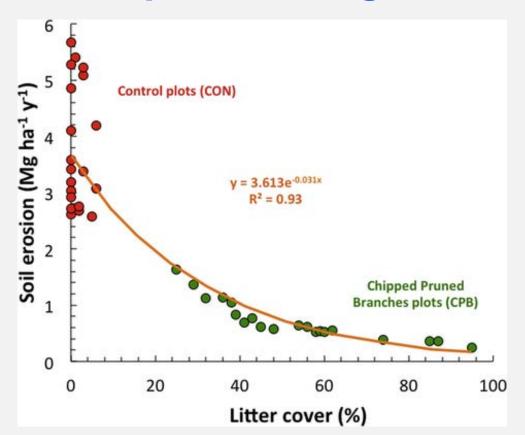


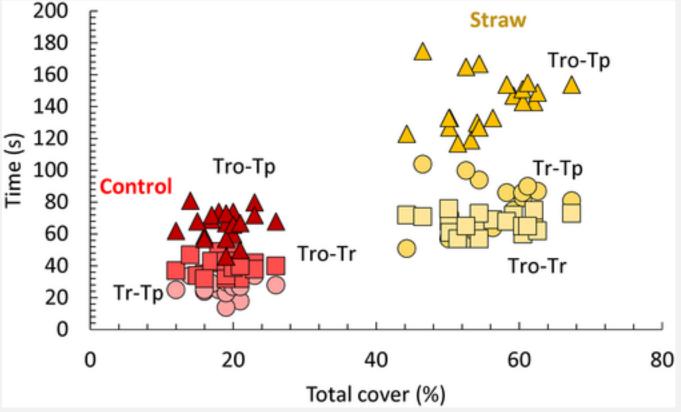
Sustainable soil management options





Example: Mulching





ELSEVIER

Land Use Policy
Volume 75, June 2018, Pages 734-745



Policies can help to apply successful strategies to control soil and water losses. The case of chipped pruned branches (CPB) in Mediterranean citrus plantations

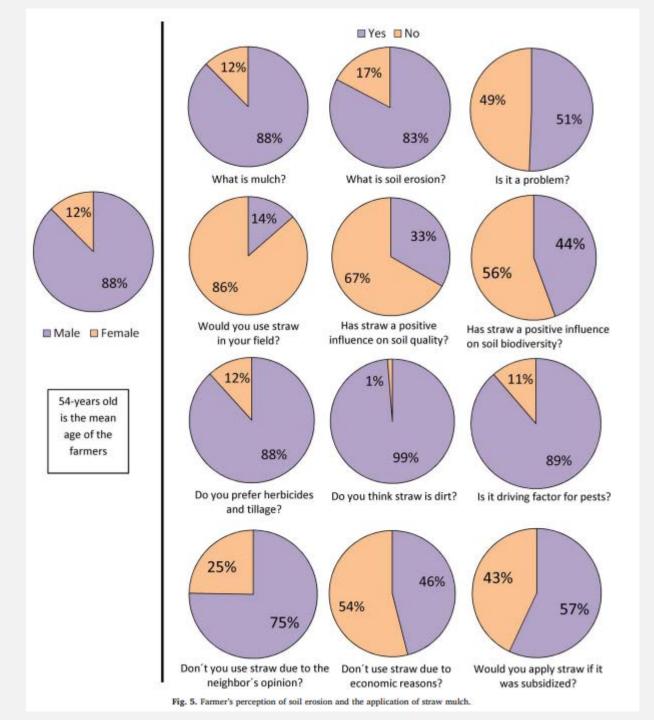
Cerdà A. ^a 오 점, Rodrigo-Comino J. ^{b c}점, Giménez-Morera A. ^e점, <u>Novara A. ^d점</u>, <u>Pulido M. ^f점</u>, Kapović-Solomun M. ^g점, Keesstra S.D. ^{h i}점



Straw mulch as a sustainable solution to decrease runoff and erosion in glyphosate-treated clementine plantations in Eastern Spain. An assessment using rainfall simulation experiments

S.D. Keesstra^{a, b}, J. Rodrigo-Comino^{c, d, *}, A. Novara^e, A. Giménez-Morera^f, M. Pulido^g, S. Di Prima^h, A. Cerdàⁱ





Ecological Engineering

Volume 108, Part A, November 2017, Pages 162-171

An economic, perception and biophysical approach to the use of oat straw as mulch in Mediterranean rainfed agriculture land

Artemi Cerdà ^a ⊠, Jesús Rodrigo-Comino ^{b c} ♀ ⊠, Antonio Giménez-Morera ^d ⊠, Saskia D. Keesstra ^{e f} ⊠

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https://doi.org/10.1016/j.ecoleng.2017.08.028 オ



AN INVITATION:The Green Horizons Farmer Network

- European network
- For: Farmers with an innovative mindset
- To: Transition to sustainable and climate-smart agricultural practices
- By:
 - Discover opportunities for collaboration, funding and participation in trials or innovation networks to help build resilience against climate change
 - Access knowledge, tools and pilot results from climatesmart agriculture projects across Europe
 - Make voices and experiences heard to shape better agricultural policy.





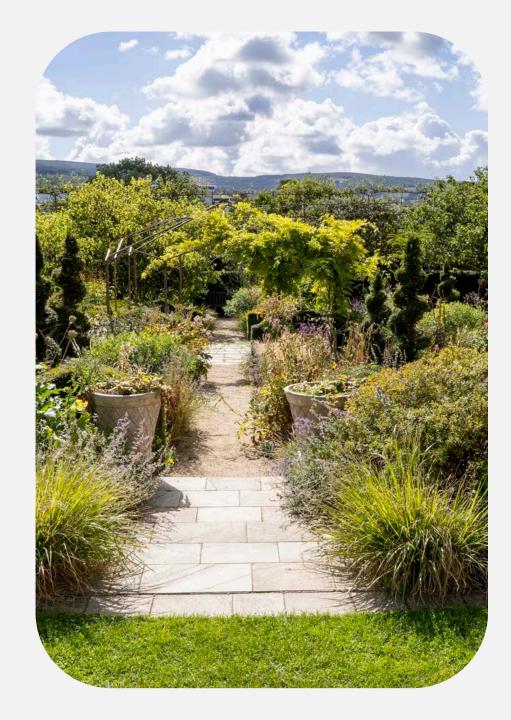
Face to Face: network of networks

Purpose:

- Assess challenges and opportunities
- Peer to peer learning
- Tailor made capacity building

Method:

- In-person workshops
- Online learning opportunities
- Farm visits





Farmers network ambassadors

- Online training for supporting local stakeholders (advisors, governance, cooperatives etc.) to help their local farmers with their challenges
- Online capacity needs can be supported by new elements on the platform

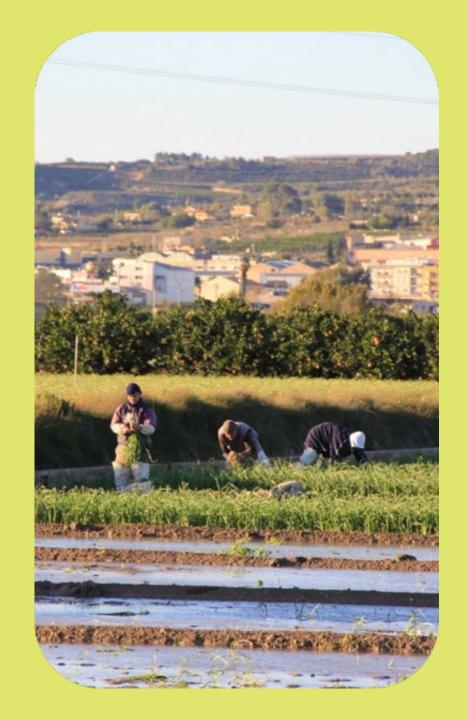




Join our network

Visit www.climate-hive.org/page/
Green-Horizons or scan the QR code:







Story from the field



Gian Luca Bagnara

President, ASSOAVI & AIFE Member, Investment Committee, IDEA AGRO





An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine



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Thank you for joining!

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