



20th Summer Academy of Euracademy Association
and Széchenyi István University

Győr, Hungary, 27-31 August 2023

The role of demo farms in climate change mitigation

Implementation of the Climate Farm Demo project in Hungary

András VÉR

Climate Farm Demo in a nutshell

A EUROPEAN-WIDE NETWORK OF PILOT FARMERS IMPLEMENTING AND DEMONSTRATING CLIMATE SMART SOLUTIONS FOR A CARBON NEUTRAL EUROPE

HORIZON-CL6-2021-CLIMATE-01-04; HORIZON Coordination and Support Actions

- Duration: 01.10.2022 - 30.09.2029 (7 years)
- Partnership: 80 partners from 27 countries
- Lead partner: IDELE (France)
- Project budget: EUR 21 487 132
- SZE budget: EUR 197 812,50



About Climate Farm Demo...

Climate Farm Demo is a unique **pan-European network of Pilot Demo Farmers (PDFs)** covering 28 countries and all pedo-climatic areas.



MULTI-ACTOR AND MULTI-STAKEHOLDER NETWORKS:

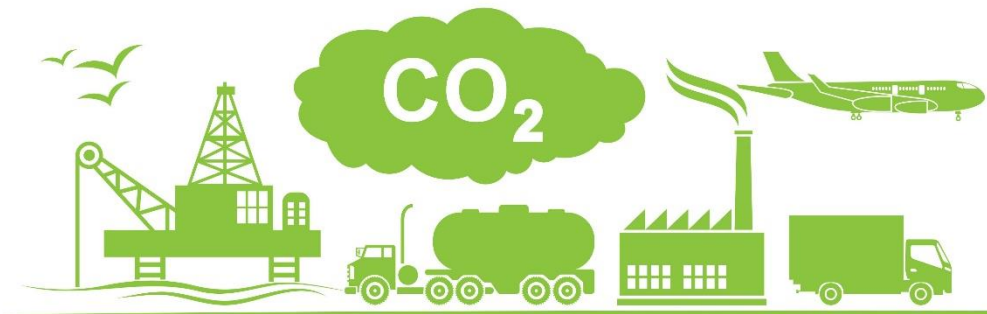


About Climate Farm Demo...

CFDs overall aim it to accelerate the adoption of Climate Smart Farming (CSF) practices and solutions by farmers and all actors of the Climate Smart AKIS with a view of **adapting agricultural production systems to climate change.**

Aim of the CFD project

- Climate Farm Demo will **strengthen European farmers' capacities to implement, demonstrate and uptake Climate Smart Farming (CSF) practice** across the EU and
- **reduce their GHG emissions by 35%** along the project life thus achieving the EU 2030 Climate Target Plan



MEMBER STATE GREENHOUSE GAS EMISSION REDUCTIONS PURSUANT TO ARTICLE 4(1)

Cutting EU
greenhouse gas
emissions:

Examples for
national targets
for 2030

	Member State greenhouse gas emission reductions in 2030 in relation to their 2005 levels determined in accordance with Article 4(3)	
	Column 1	Column 2
Belgium	- 35 %	-47%
Bulgaria	- 0 %	-10%
Czechia	- 14 %	-26%
Denmark	- 39 %	-50%
Germany	- 38 %	-50%
Estonia	- 13 %	-24%
Ireland	- 30 %	-42%
Greece	- 16 %	-22.7%
Spain	- 26 %	-37.7%
France	- 37 %	-47.5%
Croatia	- 7 %	-16.7%
Italy	- 33 %	-43.7%
Cyprus	- 24 %	-32%
Latvia	- 6 %	-17%
Lithuania	- 9 %	-21%
Luxembourg	- 40 %	-50%
Hungary	- 7 %	-18.7%

Source: [European Commission proposal for update to Regulation \(EU\) 2018/842](#)

Specific objectives of CFD

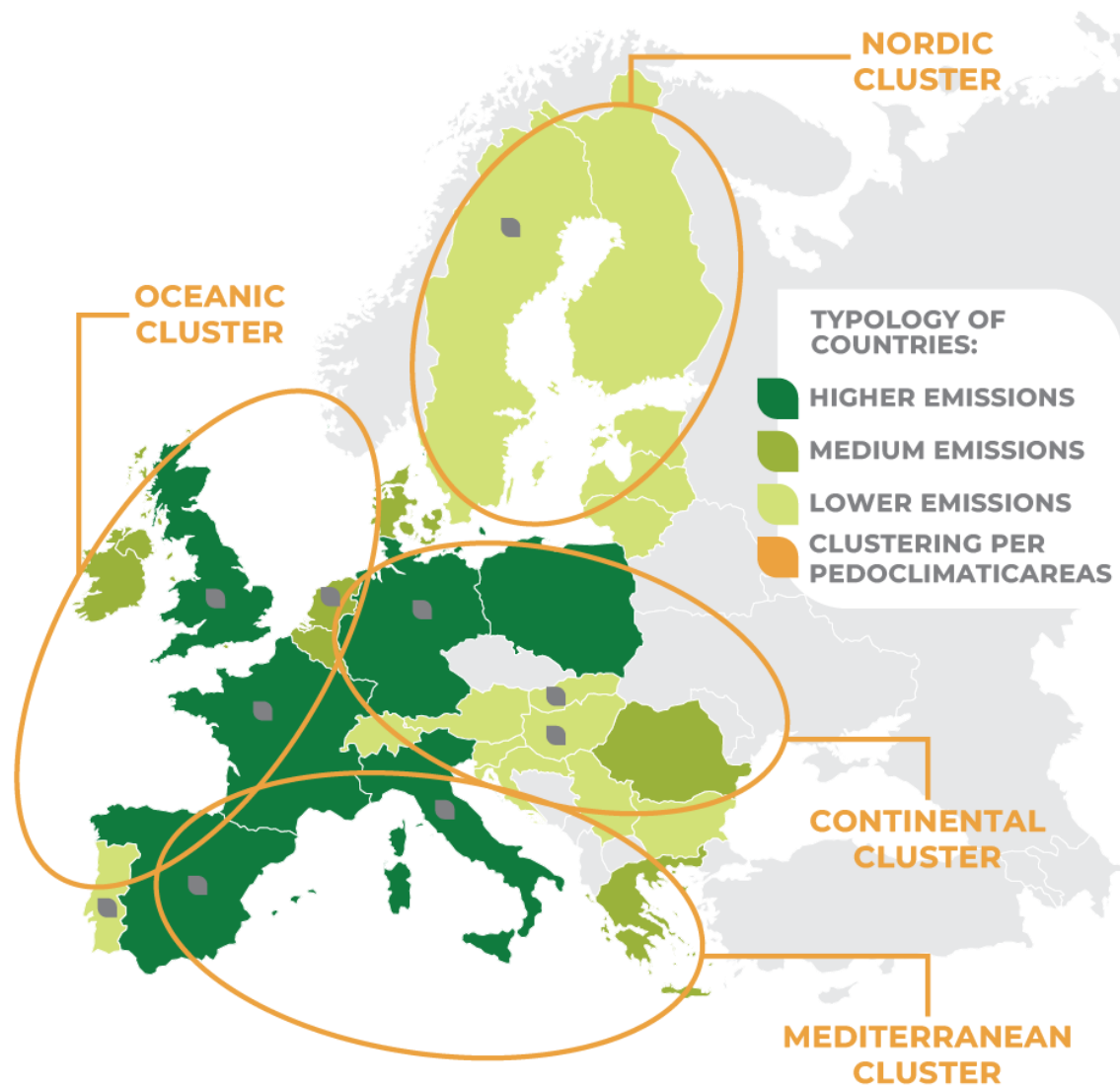


- Network Pilot-Demo-Farmers (PDFs)
- Boost climate smart farming knowledge exchange
- Support PDFs in implementing Climate Smart Farming practices
- Increase innovation uptake
- Incentivise the adoption of Climate Smart Farming practices across Europe

EUROPEAN NETWORK AND TYPOLOGY OF COUNTRIES

CLIMATE SMART FARMING LIVING LABS

- UK** HOW DO AGROFORESTRY SYSTEMS COPE WITH CLIMATE CHANGE
- IT** BIOGAS IN CLIMATE SMART AGRICULTURE
- PT** FIGHTING DESERTIFICATION WITH SMART MIXED FARMING
- NL** CLIMATE-PROOF FUTURE FARMING ON PEAT SOILS
- HU** INCREASED CLIMATE ADAPTABILITY THROUGH ORGANIC SOIL-BUILDING STRATEGIES
- SE** COOPERATIVE PRODUCTION OF BIOGAS AND BIOFERTILIZERS
- FR** DAIRY CATTLE FARMERS FACING CLIMATE CHANGE
- DE** OPPORTUNITIES TO MITIGATE FARM GHG EMISSIONS AND INCREASE FARM RESILIENCE
- ES** AN INNOVATIVE NEXUS APPROACH FOR SMALL FARMS TO BE CLIMATE SMART
- SK** REGENERATIVE FARMING AS ANSWER TO CLIMATE CHANGE



Adaptation and Mitigation Thematic Areas

- Grassland management
- Forage production
- Crops management
- Soil health and biodiversity
- Agroforestry and relation to landscape
- Energy management
- Biogaz production
- Water management
- Herd management
- Manure storage and spreading
- Additives for reducing enteric methane emissions
- Rewarding mechanisms



IMPACT

AT LEAST **30%** REDUCTION IN GHG EMISSION DURING THE PROJECT

4500

ON-FARM DEMONSTRATION EVENTS REACHING **150 000** FARMERS

250 000

ACTORS ENGAGED IN PEER-TO-PEER LEARNING

27

NATIONAL DISSEMINATION AND COMMUNICATION STRATEGIES

HIGH-POSITIVE IMPACT ON FARMERS, AGRIBUSINESS, CONSUMERS AND SOCIETY



EUROPEAN & INTERNATIONAL PARTNERSHIP

Strategic and operational cooperation with:

H2020 / GREEN DEAL PROJECTS/
EIP-AGRI SERVICE POINT

NATIONAL PROJECTS,
EIP-AGRI OPERATIONAL GROUPS
IN **27** COUNTRIES

"SISTER PROJECTS" FUNDED
UNDER HORIZON EUROPE

"SOIL HEALTH AND FOOD"
MISSION PARTNERSHIP ON
"AGROECOLOGY LIVING LABS"

INTERNATIONAL ORGANISATIONS
DEALING WITH **CLIMATE CHANGE**

National networks

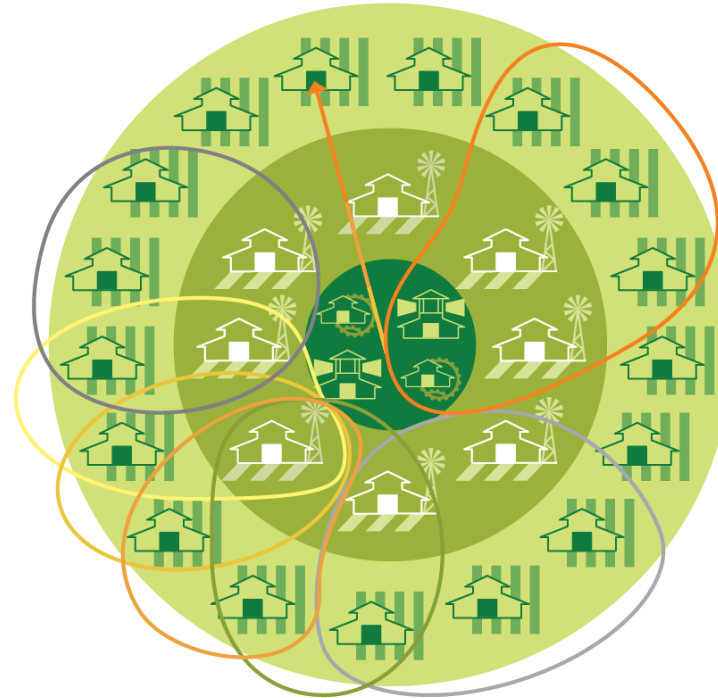
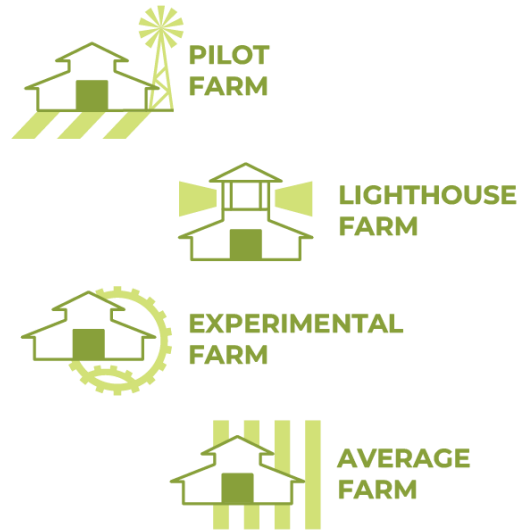
Each country establishes a network composed of

- **Pilot-Demo-Farms (PDFs),**
- **Experimental Farms (EFs)** linked to universities, research institutes and advisory services,
- **Lighthouse Farms (LFs)**

Number of farms to be involved in the project per partner country:

Emissions	Countries	Number of farms per country
Higher	FR, DE, ES, IT, PL, UK	130
Medium	IE, NL, RO, BE, DK, EL	60
Lower	AT, BG, EE, HR, LV, LT, LU, HU, PT, SL, SK, FI, SE, RS, CH	25

EXAMPLE OF NATIONAL NETWORK




DIFFERENT NETWORKS OF A SINGLE FARM FOR DEMOS:

-  ADVISORY NETWORK
-  COOPERATIVE NETWORK
-  SUPPLIER NETWORK
-  AGRO-INDUSTRY NETWORK
-  EXISTING DEMO NETWORK
-  EIP-AGRI OPERATIONAL GROUP

 CO-INNOVATION AND CREATION OF NEW SOLUTIONS (WP4)

 TRANSITION & INNOVATION PATHWAY

PROJECT ACTIONS SCALES:

 EXPERIMENTAL & LIGHTHOUSE SCALE: INNOVATION, RISKS, TEST, DEMONSTRATION

 PILOT DEMO FARM SCALE: IMPLEMENTATION, DEMONSTRATION, MONITORING

 AVERAGE FARM SCALE: TARGETS, END-USERS

ROLES IN THE NETWORK...



**Pilot
Demo
Farmer
(PDF)**



**Climate
Farm
Advisor
(CFA)**



**National
coordinator
(NC)**



**Thematic
leader
(TL)**

SZE project activities

- WP 1 Networking farms and managing knowledge exchange

Co-leader: SZE

- Task 1.3: Managing knowledge exchange on the national level

Lead: SZE

Development, implementation and evaluation of annual national network plans and knowledge exchange

Development of basic guidelines/documents:

- **Guidelines for national KE plans & meetings** - SZE
- **How to set up a national network?** – cooperation with other tasks

SZE project activities

- D1.1 Conceptual framework for network management and knowledge exchange on CSF
- D1.2 Database of 1500 pilot demonstration farms on climate-smart farming
- D1.3 Good practices for LH farm development
- D1.4 Recommendations for CSF-related networking, knowledge exchange and capacity building

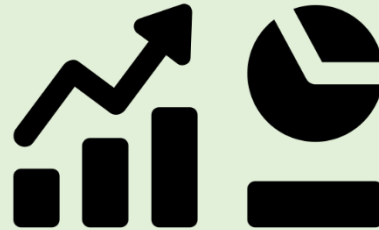


PILOT DEMO FARMERS (PDF)



AMP

Develop, implement and monitor/evaluate an Adaptation and Mitigation Plan with CFA



Provide farm data for the database and for measuring progress towards AMP objectives



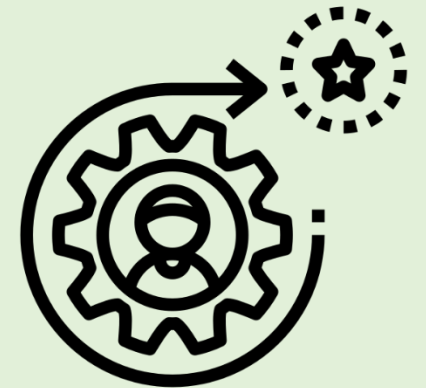
Participate in annual meetings



Host 3 demo farm walks



Participate in network activities with other farmers



Participate in training



CLIMATE FARM ADVISOR (CFA)



Be the direct contact point for the farmers in the project



AMP

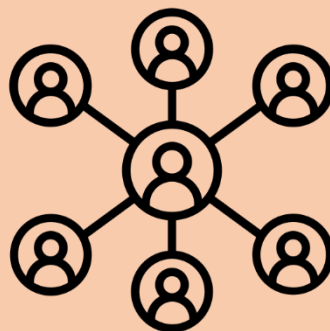
Assist the PDF in developing, implementing and monitoring/evaluating the Adaptation and Mitigation Plan



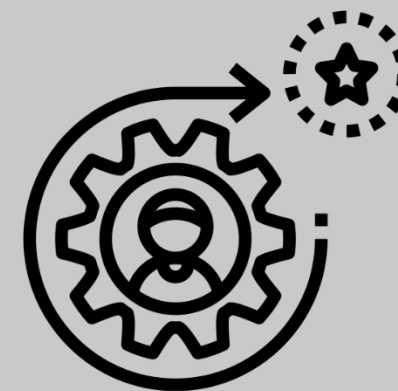
Use M&E checklists to monitor PDF progress and activities; report to NCs and upload to the platform



Organise demo events, activities and trainings with and for farmers



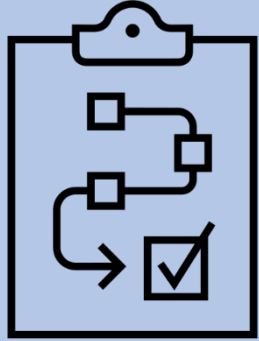
Participate in national and thematic network meetings



Participate in trainings



NATIONAL COORDINATOR (NC)



Develop, implement and monitor/evaluate national network plans and KE



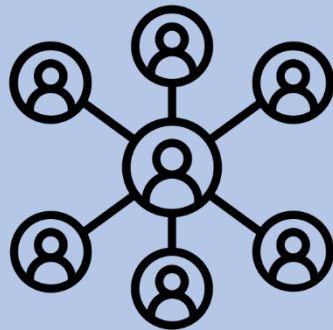
Support and follow up on CFAs in their tasks and report on the platform

NMB

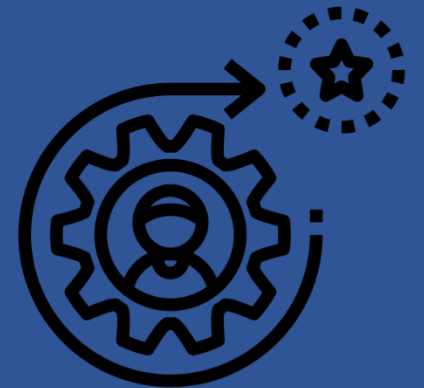
Participate in 3 monthly meetings with the NMB



Organise annual meetings and trainings for CFAs and PDFs



Link to national and regional policy makers and contribute to the strategic plan for PIPs



Participate in trainings



Thank you for your attention.

VÉR ANDRÁS

SENIOR RESEARCH FELLOW

SZE Albert Kazmer Faculty of Mosonmagyaróvár

ver.andras@sze.hu

mek.sze.hu