TransforMed results and outcomes

Technical and practical progress: Documentation of successful agroforestry experiences, enhanced seedling quality in nurseries, and context-specific restoration and monitoring plans ensuring survival in newly planted areas.

Socio-Cultural and economic insights: Identification of sociocultural barriers to agroforestry adoption, facilitated community dialogue to address implementation challenges, and evaluation of the economic and environmental benefits of agroforestry systems.

Policy and knowledge dissemination: Development of result-based models (RBM) tailored to national contexts, evidence-based and learning materials distributed through various media and tools, and multi-stakeholder dialogues fostering knowledge sharing and AFS scaling-up.

A restored silvopastoral site in central Tunisia





Carob nursery, Morocco.

TransforMed approach

TransforMed brings together farmers, social and environmental scientists, agronomists and economists, practitioners, the private sector, decision and policy makers and civil society (NGOs) in a transdisciplinary and multi-actor environment, to create an enabling context for AFS adoption.

Contact

Project coordinator: Rosa Vilaplana Ventura, BETA UVic rosa.vilaplana@uvic.cat www.transformed-prima.eu

Project partners

BETA, Beta Technological Center, Spain

ULE, Univeristy of Leon, Spain

FiBL France, Research Institute of Organic Agriculture, France

BDIARI, Bahri Dagdas International Agricutural Research Institute, Türkiye

DKM, Nature Conservation Centre, Türkiye

AGENDA, Agriculture, Environnement et Développement pour l'Avenir, Marocco

UM6P, University Mohammed VI Polytechnic, Morocco

SOM, Société L'Ouest Marocain, Morocco

ICARDA, International Center for Agricultural Research in the Dry Areas, Tunisia

CTAB, Technical Center of Organic Agriculture, Tunisia

UEvora, Univeristy of Evora, Portugal

UK, University of Kassel, Germany

UB, University of Barcelona, Spain

DAC, Dryland Agroforestry Center, Portugal

Linked third parties

FiBL Germany, Research Institute of Organic Agriculture, Germany

ANDZOA, Agence Nationale pour le Développement des Zones Oasiennes et de l'Arganier, Morocco DGF, Agriculture Ministry of Tunisia, Forest Department, Tunisia

The project TransforMed is supported by PRIMA under Grant No 2311, a programme supported by the European Union.

Funding: Partnership for Research and Innovation in the Mediterranean Area (PRIMA), a programme supported by the European Union.

Call: PRIMA S1 2023 Farming System

Funding scheme: IA - Innovation Action

Action Topic: Actions to restore and return degraded lands in the Mediterranean region into productive agroecosystems

Grant Agreement: No 2311

Duration: September 2024 to August 2027, 36 months





PRIMA programme is supported by Horizon 2020, the European Union's Framework Programme for Research and innovation.



TransforMed – Transforming the Mediterranean Region through Agroforestry

Large scale restoration of degraded lands by overcoming the socioeconomic and sociocultural barriers for agroforestry adoption



ugninouse Dar al Caroube, Nnemisset province, Morocc

About TransforMed

Based on the experiences of several agroforestry lighthouses in Morocco, Tunisia, and Türkiye, TransforMed aims to support and promote a large-scale adoption of successful agroforestry systems (AFS) in saline and degraded areas to restore soil health, increase biodiversity and productivity of the agroecosystems by overcoming the socioeconomic and sociocultural barriers.

Due to years of successive droughts, heat waves, and intensive agricultural practices, many regions in the Mediterranean area are experiencing deterioration of soil, resulting in a loss of agricultural production potential.

Agroforestry Systems offer an excellent multidimensional restoration strategy to tackle these challenges and facilitate farm recovery. AFS improve soil quality and enhance the biodiversity and productivity of agroecosystems. Additionally, beyond the biophysical benefits, AFS can improve the livelihoods of smallholders and contribute to job creation by developing value chains for AFS products.

What is agroforestry?

Agroforestry Systems are land-use systems in which woody perennials (e.g., trees, shrubs) are integrated in the same unit of land with other agricultural crops and/or animals in a spatial arrangement or temporal sequence. AFS improve soil fertility, reduce soil erosion, and increase water availability.

Local experience of setting up an agroforestry system, Morocco.



TransforMed seeks to scale up four successful AFS experiences (lighthouses) across eleven areas in the selected Mediterranean countries to promote soil restoration and sustainable agriculture.



A Morocco

Khemisset province

Dar Al Caroube is a pioneer is a pioneer carob farm which encompasses all the levels of carob production and processing. A local nursery enables the production of thousands of seedlings for on-site planting or sale. The farm aims to develop the cultivation of other species in the inter-rows of the carob trees. They processes carob into various products.

A Tunisia

A very arid region in the

province of Essaouira,

where since 2018, the

planting of argan trees

and capers, combined

agricultural revitalization

of the area. The goal for

this site is to promote the

cultivation and production

of argan trees, capers,

and aromatic plants.

with some pastoral

Lahyatla region Sbaihia region

A state-owned land managed by the forestry department used by the local community for grazing. Silvopastoral improvements are made activities, has enabled the through a participatory approach involving the full cooperation of locals. After successfully establishing various plant species, farmers began beekeeping.

A Türkiye

Konya province

TIGEM is a large government farm in an area highly vulnerable to soil erosion. In 1984, several parcels were planted with various tree species and tree lines to prevent wind erosion. Given the positive effects of the trees, the farm aims to expand the tree lines and planted areas.



Wind-breaker, Türkiye.

Agroforestry based on native species

TransforMed promotes AFS based on native and locally adapted species managed without synthetic external inputs and that can survive in prevailing extreme drought, saline and heat conditions. More than 15 plant species/crops are used into 11 new areas to be restored:

- Wind shelters: cedar, almond, acacia and maple
- Trees producing high added products: carob, argan, cactus pear, rosehip, caper, and sulla
- · Medicinal plants such as rosemary, lavender or thyme in association with drought resistant shrubs and trees
- Halophytes in salty areas

TransforMed key activities

- co-create and implement communal governance models that can ensure the protection of tree and bush seedlings;
- assess costs and benefits of agroforestry practices by building up business models to enhance investments and create new market opportunities;
- determine the feasibility of incentive schemes (Result-Based Models) and policy adaptations to create an enabling political context for AFS adoption;
- provide scientific-based evidence on the positive AFS impacts on biodiversity, soil, water and nutrient cycles;
- facilitates the dissemination of knowledge and fosters collaborative efforts toward the adoption of AFS in the Mediterranean region by engaging a wide diversity of stakeholders