



Kythera Island

Becoming Smart(er) and (more) Sustainable

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Municipality of Kythera

- ▶ Belongs to **Region of Attica**
- ▶ Consists of two islands:
 - ▶ **Kythera**
 - ▶ **Antikythera**, world known for the “Antikythera Mechanism”
- ▶ Has a Population of **4.041** people
 - ▶ But just ~25 in Antikythera!
- ▶ **56** inhabited **settlements**
- ▶ Economy based on **Primary Sector** (Agriculture & Fishing) and **Tourism**



Major challenges

- ▶ **Ageing population and immigration of young people**
 - ▶ The youth leaves for Universities and work opportunities
 - ▶ The elderly return after their retirement
- ▶ **Connection to mainland and cost of transport**
 - ▶ From October to May, connection is scarce
- ▶ **Limited educational facilities**
 - ▶ Lack of afterschool activities
- ▶ **Decreasing quality of water resources**
 - ▶ High consumption of the limited water resources



Assets

- ▶ **Unspoiled natural environment**
 - ▶ Mountainous and forested areas, beautiful beaches
- ▶ **Cultural Heritage**
 - ▶ Monuments from all historical periods
 - ▶ Significant religion monuments
- ▶ **Sufficient public infrastructure**
 - ▶ Hospital
 - ▶ Airport and port facilities
 - ▶ Good broadband network
- ▶ **High quality local products**
 - ▶ Natural salt, honey, olive oil, wine
- ▶ **Active local community**
 - ▶ Many associations and organizations assist voluntarily in the development of the island



Planning

We prepare **short- & medium-term strategies** in order to be ready **for any available funding**

- ▶ **Sustainable Energy Action Plan**
Reduce energy consumption and increase energy efficiency
- ▶ **Sustainable Urban Mobility Plan**
Access to jobs and services for all
- ▶ **Water Resources Management Plan**
Cover the water needs of the island in the short, medium and long term



Monitoring & Management of Water System

The need: Old distribution network which causes quality & quantity problems

The Solution: Use of **ICT technologies** and specialized equipment to **monitor remotely** the quality and quantity and to **locate malfunctions** and reduce losses.

Results:

- ▶ Sufficient and **steady supply of high-quality water**
- ▶ **40% Less lost water** due to infrastructure faults

Funding: 3.141.00€ co-funded by European Structural and Investments Funds



Kythera Trails

The idea: Use of old paths around the island as a mean of tourist attraction

The Solution: Development of an integrated trail network of 100Km of old paths with focus on the protection of the natural and cultural heritage of the island

Results:

- ▶ Extension of tourist season
- ▶ Employment opportunities for the young (e.g. guides)

Project is supported and implemented by the association Kytherian Foundation for Culture and Development



Access to sea for people with mobility issues

The idea: Become friendly to people that face mobility issues

The Solution: Installation of **innovative technology** SEATRAC that give people with mobility issues the opportunity to **enjoy swimming, completely unassisted**

Results:

- ▶ **Integration and inclusion** of elderly and people with disabilities
- ▶ **Attraction of tourist** that belong to these communities

Funding: 167.493€ co-funded by European Structural and Investments Funds



More projects coming!

- ▶ **Energy Efficiency improvement in 3 schools**

- ▶ 229.000€ funded by ESIF

- ▶ **Reuse of 5 old buildings for Culture, Theatre and Conferences**

- ▶ 350.000€ funded CLLD/Leader
 - ▶ 1.370.738€ funded by a national fund

- ▶ **eBike-Sharing System**

- ▶ 247.816€ funded by ESIF

- ▶ **Sustainable redesign of Avlemonas village**

- ▶ 4.000.000€ funded by NextGenerationEU



Kythira's Smart Village Strategy

SMART RURAL
KYTHERA
GREECE



Main Objectives

Keep its youth on the island

✓ Improve agriculture and promote local production

✓ Improve environmental sustainability

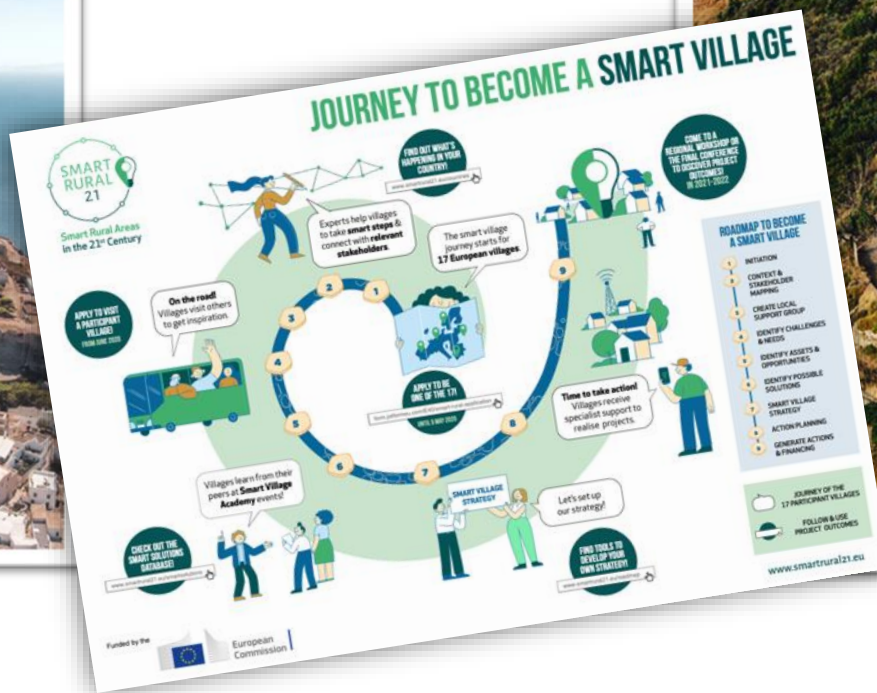
✓ Increase quality tourism



Smart Village Strategy Development

Pre-selected village Kythera

- ✓ Built on existing strategies
- ✓ Stakeholder engagement



Community Participation In Strategy Development

Active citizens willing to collaborate

- ✓ Active associations and organizations on the island



Smart Actions Implemented

Improve agriculture and promote local production

- ✓ Introduction of Smart Farming technologies



- ✓ Introducing standards, certificates and labelling on local products (olive-oil and honey)

Smart Actions Implemented



KYTHERA'S SMART VILLAGE
STRATEGY IMPLEMENTATION



AGRICULTURAL UNIVERSITY OF ATHENS
ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ



SMART
FARMING
TECHNOLOGY
GROUP



Supporting Terra Kytheria

A smart farming & certification system

- ✓ Empowering olive oil producers
- ✓ Promoting high-grade Kytherian olive oil
- ✓ Conserving on-farm biodiversity

terra
kytheria

SUSTAINABLE AGRICULTURE ON KYTHERA

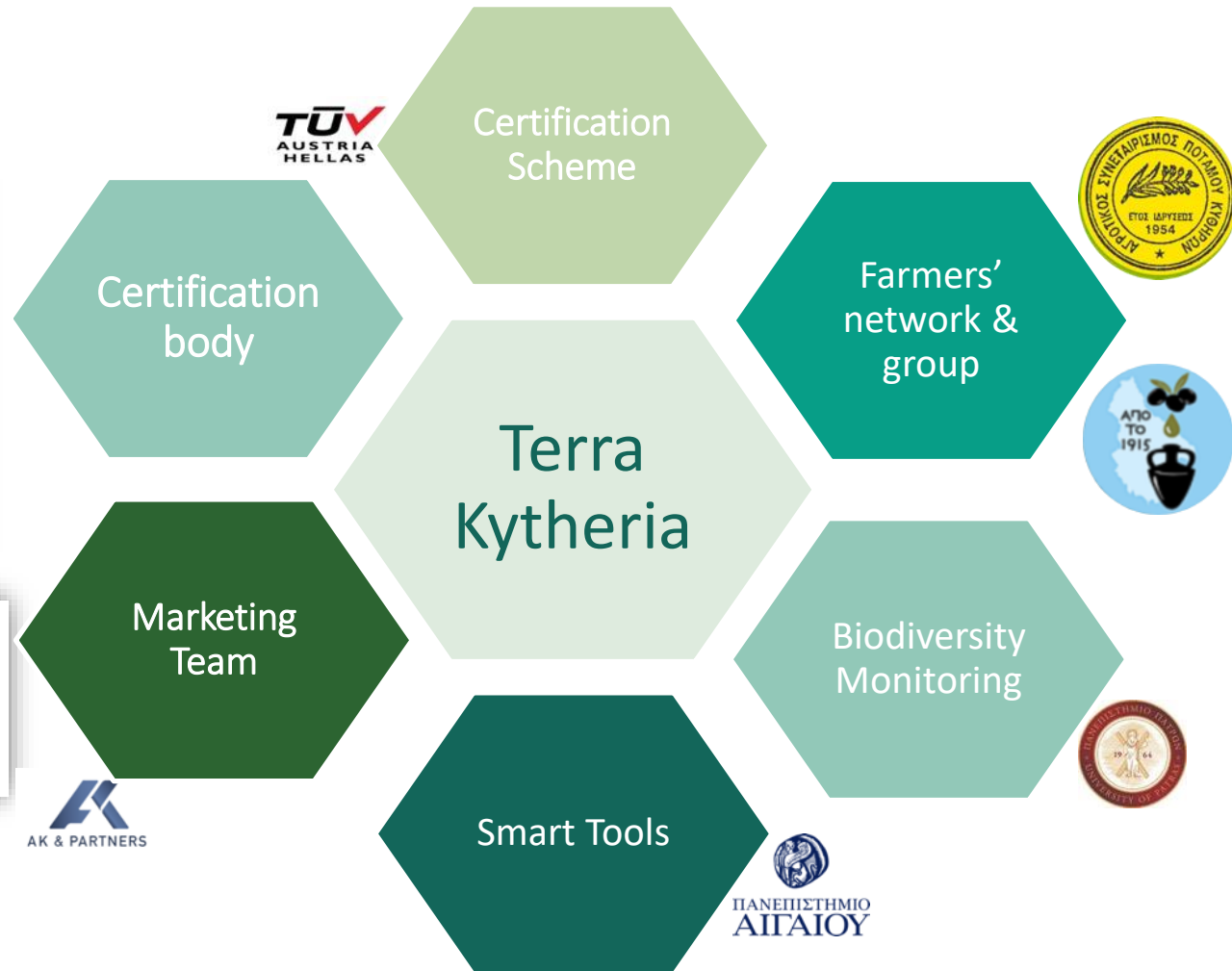
MedINA
MEDITERRANEAN INSTITUTE
FOR NATURE AND ANTHROPOS



KYTHERIAN FOUNDATION
FOR CULTURE & DEVELOPMENT



The 6 Ingredients



Online Workshops For Smart Tools



5-step Process For Farmers

Application

Use of tools
(geodatabase)

Implementati
on of criteria

Auditing

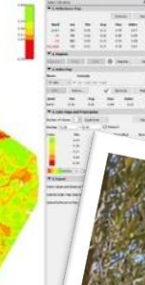
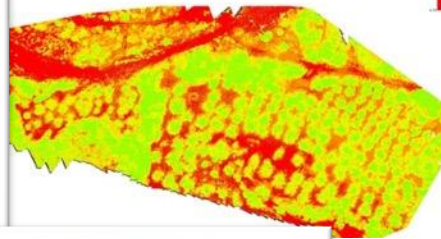
Certification



Obtaining Data From Olive Orchards

Enriching the "Terra Kytheria" dataset

- ✓ On-field biodiversity monitoring
- ✓ Data collection with the use of drones





Thank you for your attention

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