

TERRACESCAPE Final Event  
Athens - 30/06/2022

# Cinque Terre National Park: strategies and actions for the management of a *cultural landscape*: the Stonewallsforlife project

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**Cultural landscapes** have been inscribed on the WH List to reveal and sustain the great diversity of the interactions between humans and their environment, to protect living traditional cultures and preserve the traces of those which have disappeared.

They represent the "*combined works of nature and of man*".



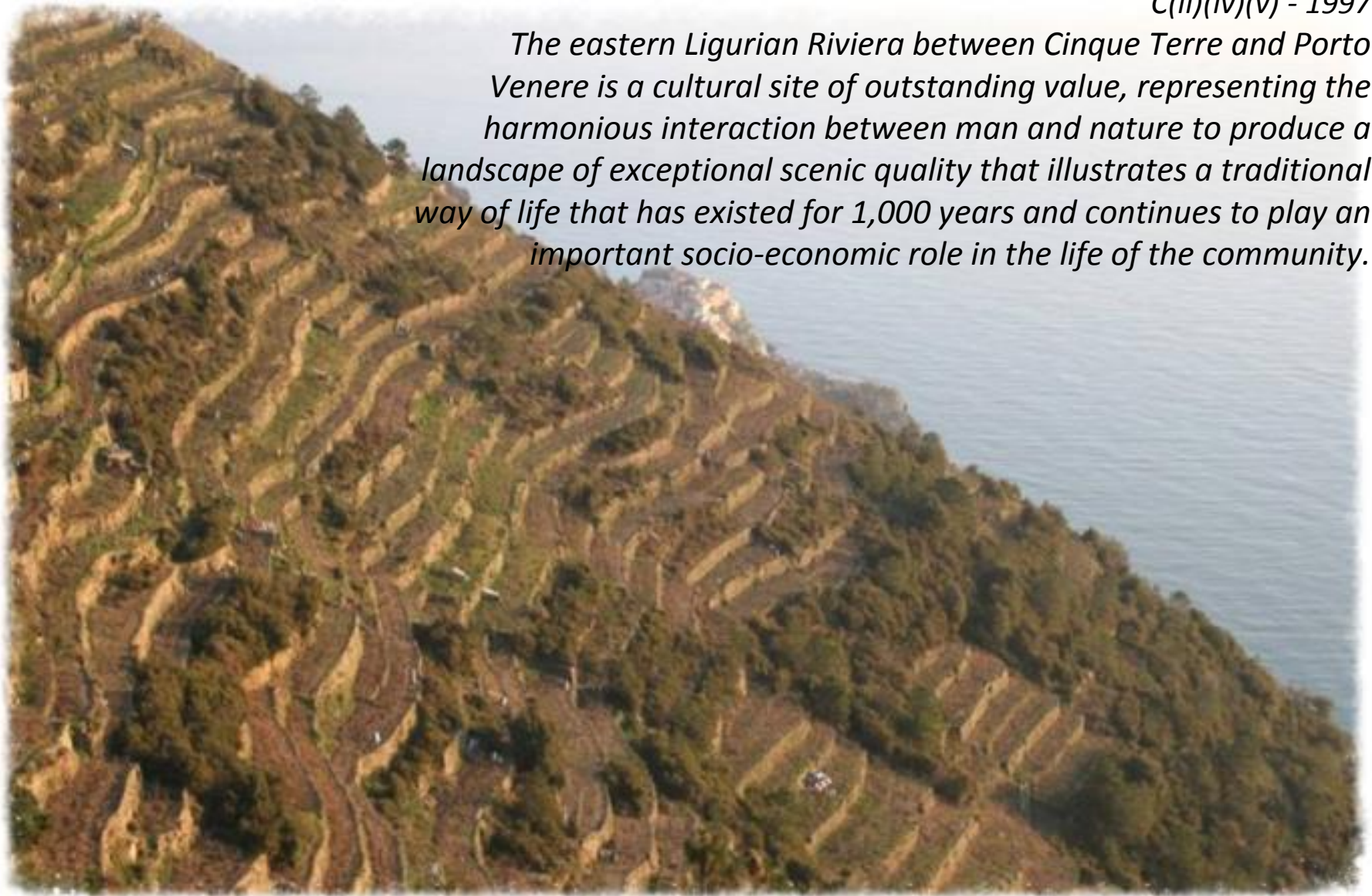
The conservation (and the strategies for the enhancement) of these sites should be adopted to the **changing conditions** of the socioeconomic development of the **communities** that live in them.



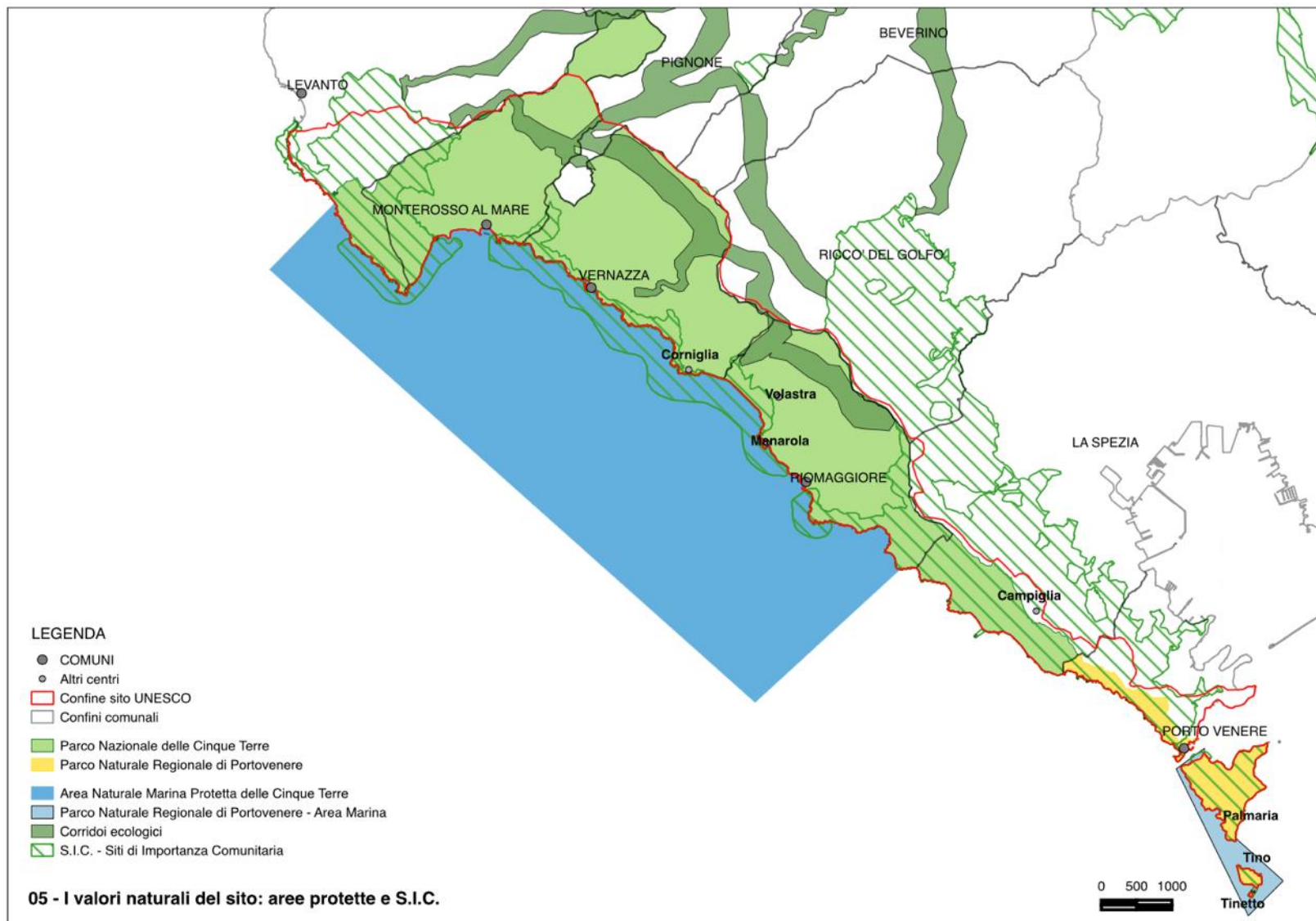
## Porto Venere, Cinque Terre e le Isole (Palmaria, Tino e Tinetto)

C(ii)(iv)(v) - 1997

*The eastern Ligurian Riviera between Cinque Terre and Porto Venere is a cultural site of outstanding value, representing the harmonious interaction between man and nature to produce a landscape of exceptional scenic quality that illustrates a traditional way of life that has existed for 1,000 years and continues to play an important socio-economic role in the life of the community.*







## Landscape as a complex system of values

# 2016

Signature of a **Programme Agreement** by all the institutional stakeholders that operate in various capacities for the management and conservation of the site and its buffer zone: the Liguria Region, the Italian Ministry of Cultural Heritage and Activities and Tourism, the Cinque Terre National Park, the Municipality of Porto Venere - Regional Natural Park of Porto Venere, and the Municipalities

[www.portovenerecinqueterreisle.com](http://www.portovenerecinqueterreisle.com)

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Full Solution

A model for institutional governance: shared and coordinated management approach for the cultural landscape of Portovenere, Cinque Terre, and the Islands (Palmaria, Tino and Tinetto)



Organizations:  
Ministry of Cultural Heritage and Activities and Tourism  
Ministry of Regional Affairs and Infrastructure  
Ministry of the Environment, Land and Sea



View from Cinque Terre towards the islands

© UNESCO Site Office

<https://panorama.solutions/en/solution/model-institutional-governance-shared-and-coordinated-management-approach-cultural>

# Cinque Terre National Park

**Area:** 3.800 hectares

**Municipalities:** Levanto;  
*Monterosso al Mare; Vernazza*  
*(Corniglia); Riomaggiore*  
*(Manarola); La Spezia*  
(4.200 inhabitants)

**Marine Protected Area:** 1997

**National Park:** 1999





An impressive and unique landscape produced by **local community** that was able to draw opportunities for a peculiar agriculture from the difficulties of the natural environment.

It combines the value of art coupled with capacity and knowledge and it is the fruit of a **collective project** put in place by the inhabitants who united the reasons for living, producing and generating communities over a period of a thousand years.

Until the beginning of the last century but even the sixties and seventies this can be considered the story of an "*operationally closed*" self-adjusting ecosystem.



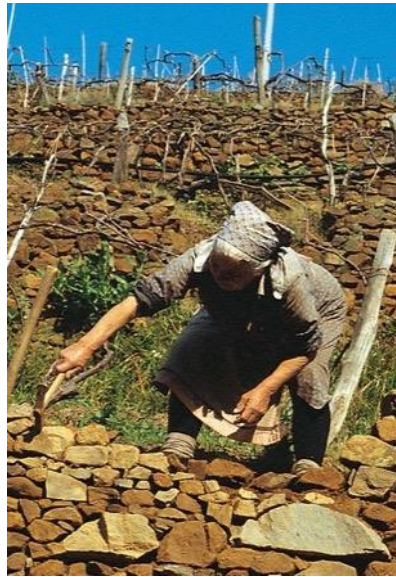
The vine-dressers in the Cinque Terre have been producing for many centuries not only the celebrated wine, but mostly **geo-hydrological stability**



The first terraces were built to obtain:  
**new cultivable spaces in better locations**

Other two effects became much more important than the original aim:

**they make the landscape being peculiar;  
the geomorphological stability is connected with the  
maintenance of the dry-stone walls.**





Each hectar contains as average 4200 squared metres of walls and 3360 of linear metres

The terraces occupy a surface of about 1600 hectares

The total volume of stones is about 8.400.000 of cubic metres

The total length of walls is about 6000 kms



A generalised tendency to abandon agricultural practices has long been evident: at the beginning of the 1900s, over 1000 hectares were cultivated compared to just over 150 today

Landslides, hydrogeological instability, collapses, loss of productive terraces

The main causes for the crisis of agriculture was the railway built; new job opportunities in La Spezia because of the shipyard; **land property fragmentation** and phylloxera attack

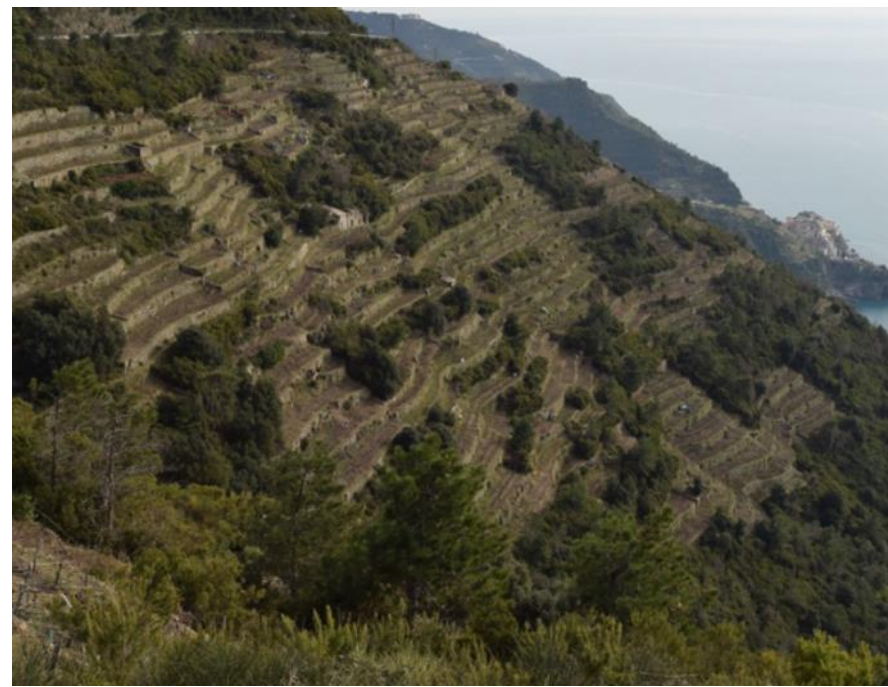




# “Re-naturalization” process

*Rural structures:* terraces; buildings; footpaths and accessibility

Property system fragmentation







1980



PARCO NAZIONALE  
DELLE CINQUE TERRE  
Area Marina Protetta delle Cinque Terre

PATRIMONIO MONDIALE DELL'UMANITÀ



STONEWALLS  
DRY-STONE WALLS FOR CLIMATE CHANGE ADAPTATION



NATURA 2000



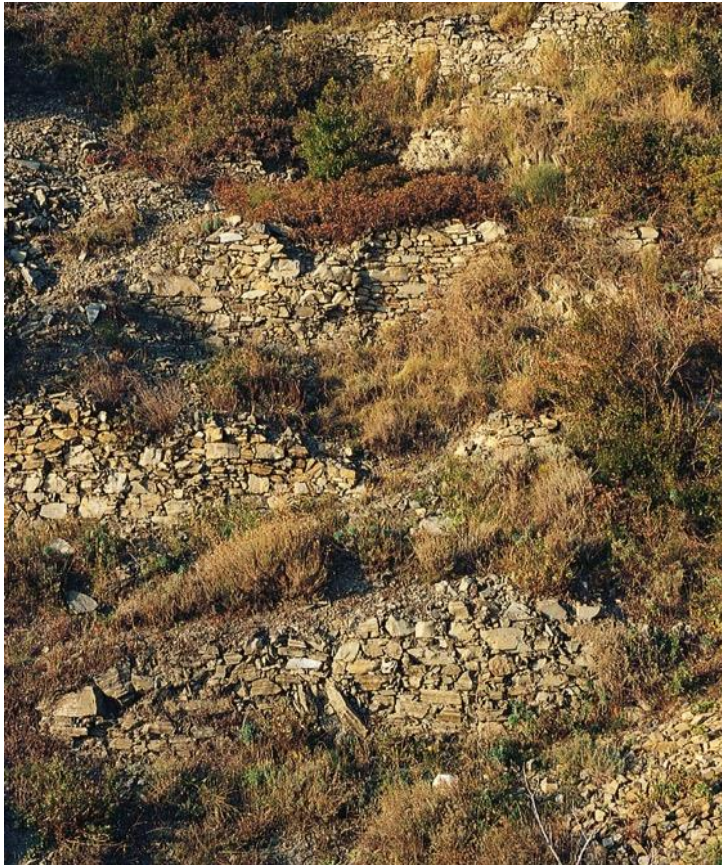
2015





Key role by the **farmers cooperative** that introduced the monorail system (end of '70) and avoided the complete abandonment: basis for the future

The impossibility of introducing mechanical machines in the area, other than through the little monorail that brings the boxes full of grapes during harvest time, contributed to preserving the **traditional ecological knowledge**.





# Actions undertaken by the National Park

Introduction of Cinque Terre Card

Reuse of closing railway ticket offices

Environmental quality brand for accommodations

Promotion

Maintenance of the footpaths («*manutentori*»)

Training courses



In abandoning an agriculture that was no longer remunerative, local communities found new opportunities in tourism and services

Public role fundamental to support rural activities for landscape values conservation and management and safety (flood, 2011).

Direct helps and involvement of farmers (stones, monorails, grafted vines, ...)

Opportunities from EU fundings: **Stonewallsforlife**





**PROJECT LOCATION:** Parco Nazionale delle Cinque Terre (Liguria - Italy); Parc del Garraf (Catalonia - Spain).  
Grant Agreement no. LIFE18 CCA/IT/001145

Sub-programme:  
**CLIMATE CHANGE ADAPTATION**

## BUDGET INFO:

Total amount: 3,714,493 €  
% EC Co-funding: 2,039,748 € (55%)



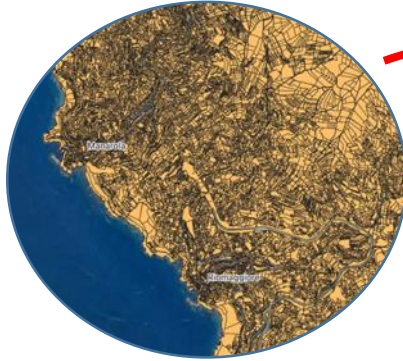
July 2019 – September 2024

[www.stonewalls4life.eu](http://www.stonewalls4life.eu)

# The strategy

Extreme parcelling of the  
cadastrian system

Development of the farms



High  
frequency of  
natural  
phenomena



Risk awareness



# Adapting to climate change: history meets the future

## Objectives

### DEMONSTRATE

long term climate change adaptation effectiveness of drystone walls in Manarola, Cinque Terre National Park

### INNOVATE

improve resilience to climate change through sustainable innovative solutions, whose effects will be monitored

### TRANSFER KNOWLEDGE

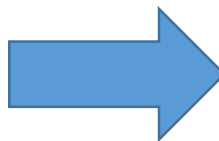
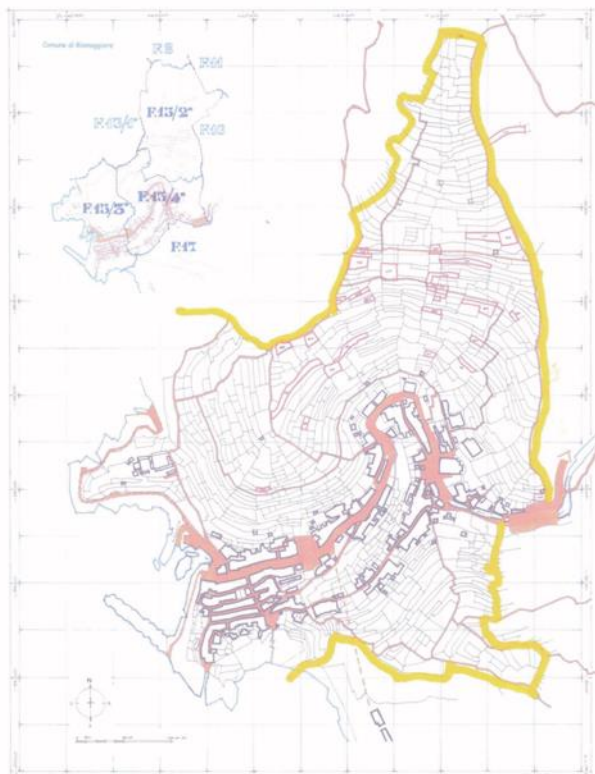
create adaptation strategy for local authorities, create and foster capacity and expertise among local stakeholders: associations, construction workers, agricultural sector

### REPLICATE

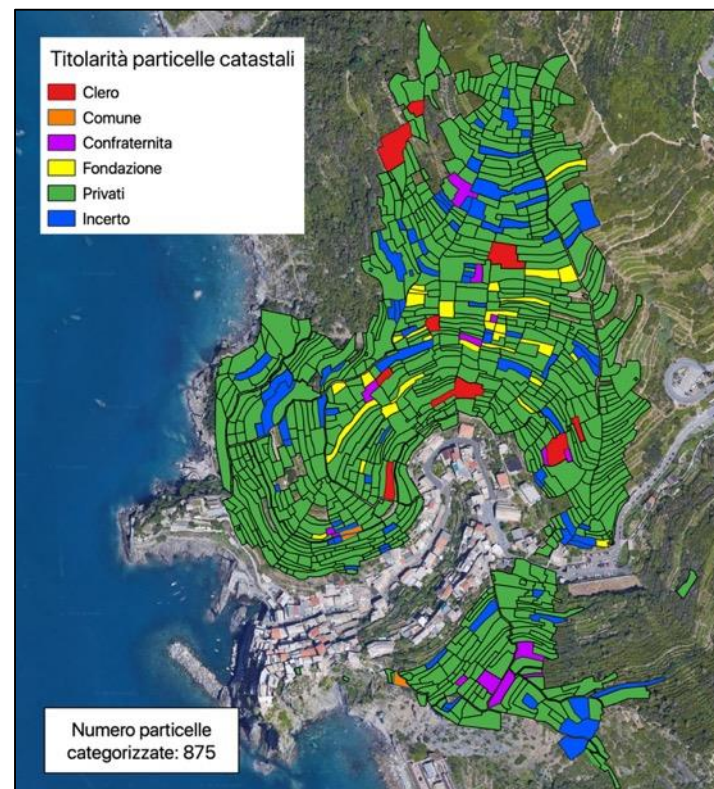
perform the scientific, technical and social preparatory work for replication interventions in 3 additional sites (40 hectares)

# Activities carried out (2019 – 2022)

## Cadastral research by Fondazione Manarola



## Digitalization process of geographical information





# Activities carried out (2019 – 2022)

## Invasive vegetation removal and dry-stonewalls topographical survey



**December 2021**



**February 2022**

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## Invasive vegetation removal and dry stonewalls topographical survey



February 2022