

STONEWALLSFORLIFE

Using Dry-Stone Walls as a Multi-purpose Climate Change Adaptation tool

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

BUDGET INFO:

Total amount: 3,714,493 €

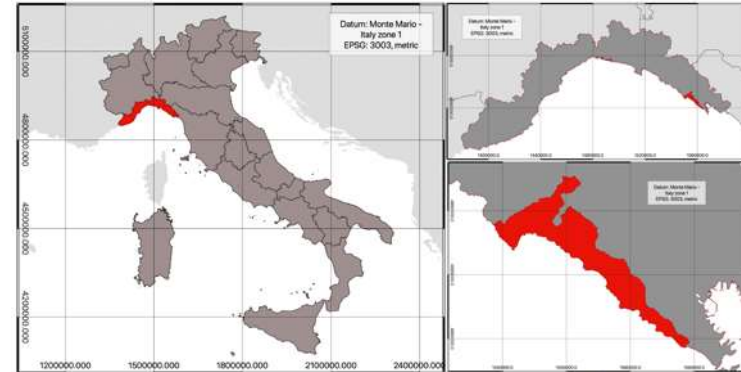
% EC Co-funding: 2,039,748 €

DURATION: Start: 01/07/2019 - End: 01/07/2024

PROJECT'S IMPLEMENTORS:

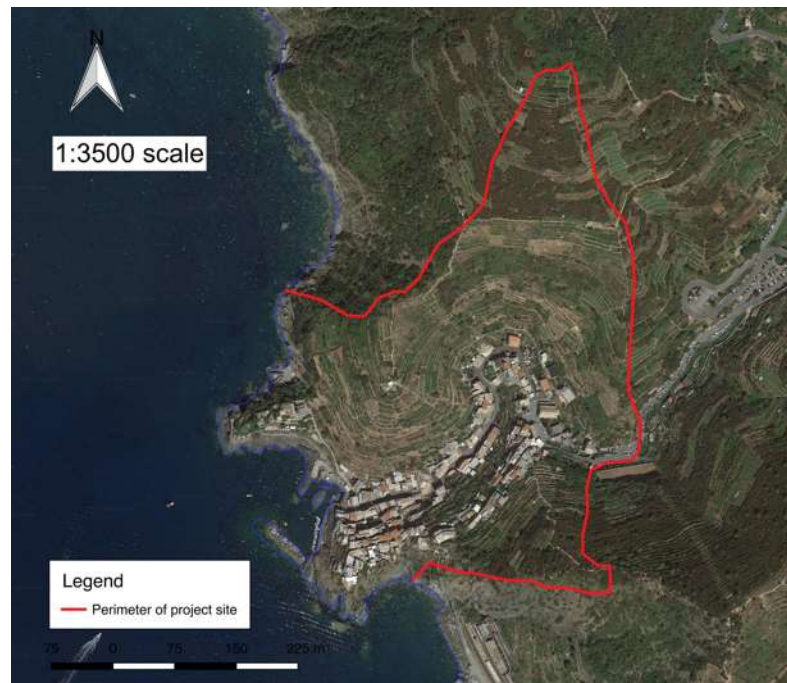
Coordinating Beneficiary: Parco Nazionale delle Cinque Terre (Italy)

Associated Beneficiaries: DISTAV – Università di Genova (Italy), DIBA – Diputació de Barcelona (Spain), Legambiente (Italy), ITRB consulting (Cyprus), Fondazione Manarola ONLUS (Italy)



OBJECTIVES & SCOPE

- **Demonstrate** climate change adaptation effectiveness of drystone walls on a specific site (Manarola, Cinque Terre, Italy) for the long term.
- **Identify** three (one in Catalonia with dissimilar conditions to test different circumstances, the other two inside the Cinque Terre National park) additional sites; perform the scientific, technical and social preparatory work for replication interventions.
- Evaluate the impact of **innovative approaches** (construction, farming).
- Develop a **Handbook** on the use of drystone walls terraces for climate change adaptation.
- Produce for local authorities and stakeholders a detailed **adaptation strategy** inserting terraces restoration within a broader climate change adaptation plan.
- Foster and create **capacity** and **expertise** among local stakeholders (associations, construction workers, agricultural sector).
- **Exploit** the vast **communication potential** of the Cinque Terre and terraced landscapes to inform, make aware, showcase LIFE project and EU programmes, and raise social and financial support for further interventions.



EXPECTED IMPACTS

- Demonstration intervention: **5 hectares** of terraces and **4,000 square meters** of drystone walls recovered for long-term sustainable agricultural use with improved soil surface, preserving a unique habitat. **9.7 hectares** with strongly improved resilience to flooding (intervention area and village), protecting **353 inhabitants** and **5000 daily visitors**.
- Through the replication strategy and studies, up to **40 hectares** of drystone walls terraces will be identified for replication interventions and the preparatory analysis (environmental, technical, social, economic) performed in full.
- **9 innovative techniques** (4 construction, 2 soil consolidation, 3 farming), with potential to increase resilience to climate change, tested and their impact monitored (at least 25 indicators).
- Knowledge exploitation: a **Handbook** on the use of terraces for adaptation, **three Case Studies** for replication, at least **three scientific papers** and a **scientific report** (on water drainage, soil solidification, farming methods), two **Adaptation Plans**, a drystone walls **Course Booklet**.
- Through a targeted communication strategy, **80,000 people** informed plus **2,000 individuals** from selected target groups (farmers, land owners, donors, etc) reached via workshops, meetings, and seminars; at least **12 presentations** at events (Covenant of Mayors, ITLA, LIFE events, etc).
- Creation of **12 jobs** during recovery; **55 permanent ones** afterwards, plus indirect ones. Replication areas have potential to create 230 jobs; plus vast potential impact of further replications.



POLICY IMPLICATIONS

- Strong on **Sustainability** (continuation, replication, transfer)
- **Clear and consistent intervention logic**: the links between root causes, problems, objectives, actions and results are adequately explained and clear.
- **Multipurpose** (not only water, also other Climate Action work areas such as fire risk, resilience of agriculture etc.)
- Many **synergies**: jobs, GAP/CAP, integration of migrants, biodiversity, transnational.



CONTINUATION (REPLICATION, TRANSFER, MARKET UPTAKE)

- A detailed and well thought **replication, transfer and dissemination strategy** will be produced and implemented during and after the project; many supportive stakeholders and organisations have state their willingness to continue to pursue this objective also after the end of the project.
- The replication-interested stakeholders will be able to use the **extensive studies** performed on the **three replication sites** identified
- The **knowledge** (e.g., Handbook) on the use of stonewalls for adaption will be easily employable elsewhere: the division in sub-chapters (techniques, climate issues, financing etc.) will allow its use both as replication model for and to transfer single aspects.
- The **communication material** (website, smart-phone app, etc) will be made available as far possible for continued use after the end of the project.



Pictures of replication sites: Monterosso and Vernazza (5terre) Parc del Garraf (Catalunya))