

WEAVERS OF THE FUTURE

EMPOWERMENT OF LOCAL ACTORS FOR HERITAGE
AND BIODIVERSITY REGENERATION IN TIMES OF
CLIMATE CRISIS



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Messages of commitment

APOYOnline: Building Regional Bridges to Empower, Connect, and Transform Communities in Times of Climate Crisis

Beatriz Haspo

APOYOnline-Association for Heritage Preservation of the Americas is a multilingual, grassroots, volunteer-driven organization that has spent over 35 years building bridges of communication and breaking barriers in cultural heritage preservation. Since 1989, we have been fostering connections and knowledge exchange among professionals and communities across the American Continent, the Caribbean, and other Portuguese- and Spanish-speaking countries.

APOYOnline's work recognizes culture heritage as a key driver of resilience, social justice, and environmental sustainability. In the context of accelerating climate crises, the preservation of heritage and biodiversity is no longer solely a matter of memory or scholarship; it is integral to community empowerment, resilience-building, and sustainable development. APOYOnline stands at the forefront of this intersection, building regional bridges that empower communities, connect knowledge networks, and transform both cultural and environmental landscapes.

The organization's approach is grounded in the belief that communities themselves are central actors in preservation and sustainability. Through initiatives such as MANOS A LA OBRA, APOYOnline engages local communities directly in hands-on activities that safeguard cultural heritage. Participants are not passive recipients of knowledge; they become active agents in documenting, preserving, and interpreting their own heritage. From caring for family collections and local archives to recording oral histories and safeguarding tangible and intangible cultural assets, APOYOnline empowers local actors to recognize the value of their heritage while building practical skills that contribute to broader regional resilience. By equipping communities with the tools, knowledge, and confidence to act, APOYOnline

transforms preservation from a top-down activity into a collaborative, inclusive, and sustainable practice.

Central to APOYOnline's work is multilingual communication and translation as equity. Heritage and environmental knowledge often face linguistic, economic, or geographic barriers that limit community access and participation. APOYOnline translates critical resources, including training manuals, webinars, documentation, and policy guidance into Portuguese, Spanish, and English, enabling equal participation. This approach turns preservation into inclusion and empowerment, validates community memories, fosters intergenerational dialogue, and strengthens regional cohesion and knowledge exchange.

APOYOnline will continue advancing partnerships with both collections-based and non-collections-based global organizations to place cultural heritage at the center of sustainable climate action, promoting best practices, knowledge sharing, and integrating heritage into strategies that strengthen resilience, social cohesion, and environmental stewardship.

Over the next twelve months, APOYOnline will implement a range of initiatives aligned with the principles of the Belém Agreement and the EcoLivre framework. The organization is expanding its Oral History Project to capture community stories through interviews, videos, and social media dissemination. These narratives highlight the ways communities adapt to environmental and social changes, preserving knowledge that is critical for both cultural and environmental sustainability. At the same time, APOYOnline continues to provide professional training and open-access resources, strengthening the capacity of regional actors to document, preserve, and manage collections while integrating sustainable practices.

Our MANOS A LA OBRA initiative remains central to community engagement, providing hands-on collections care training while fostering inclusion, empowerment, and intergenerational learning. This community-led model, combined with our translation initiatives, makes knowledge accessible across linguistic, economic, and geographic barriers, turning the preservation of family treasures and community history into inclusion, memory validation, and community building: one collection, one memory, one helping hand at a time.

APOYOnline also addresses the intersection of cultural heritage and climate action. Through workshops, webinars, and campaigns, the organization promotes the understanding of heritage as a key factor in community resilience and environmental stewardship. By documenting local practices,

linking heritage preservation to sustainable development goals, and advocating for integration of cultural and environmental strategies, APOYOnline positions cultural heritage as a driving force for climate-conscious social transformation.

To achieve the goals of the Belém Agreement collectively, the organization recognizes three critical challenges: persistent inequities in access to professional development, fragmented collaboration across cultural and environmental projects, and limited recognition of volunteer-driven initiatives. APOYOnline offers over three decades of experience in inclusive, multilingual communication and capacity building, open-access resources, interdisciplinary partnerships, and advocacy for funding and policies that value volunteer-driven preservation work. Its network of more than 6,000 members across 39 countries enables interregional dialogue, amplifying the voices of local actors and creating a robust platform for sharing knowledge, strategies, and experiences.

Through translation initiatives, open-access resources, and virtual platforms, APOYOnline fosters equitable access to information and training, ensuring communities can participate fully in preservation and climate resilience efforts. The organization advocates for policies and funding mechanisms that recognize the value of volunteer and grassroots contributions. By providing actionable solutions to systemic challenges, APOYOnline creates sustainable pathways for engagement and knowledge sharing.

In alignment with the Belém Agreement, APOYOnline will expand regional training and mentorship programs, promote cultural heritage as a human right and tool for regeneration, document community-based practices, and strengthen collaboration with partners to integrate heritage into climate action agendas. These efforts reflect APOYOnline's commitment to working with the community, for the community, and through the community, transforming heritage preservation into inclusion, empowerment, and resilience, while ensuring practical and impactful preservation of cultural heritage and biodiversity. Looking ahead, APOYOnline envisions a future where heritage and biodiversity preservation are fully integrated into strategies for climate resilience and sustainable development. By empowering local actors, connecting communities across borders, and transforming knowledge into action, the organization aims to create networks that are resilient, inclusive, and capable of responding to the unprecedented challenges posed by climate change. In this vision, communities are not only custodians of culture but also active participants in shaping a sustainable future.

In conclusion, APOYOnline exemplifies how a volunteer-driven, multilingual organization can build regional bridges that empower, connect, and transform communities, turning the principles of the Belém Agreement into actionable outcomes. By prioritizing inclusion, capacity building, and collaboration, APOYOnline creates sustainable pathways for heritage preservation and biodiversity regeneration in times of climate crisis, ensuring that communities are equipped, connected, and inspired to safeguard both their cultural and environmental legacies.

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Threads: https://www.threads.net/@apoyonline_association

TikTok: Link: www.tiktok.com/@apoyonline_association

Climate Museum UK

Climate Museum UK is a group of artists, designers and educators who help people make sense of environmental issues through creative conversations. We run pop-ups and workshops in partnership with museums and community spaces across the UK. We do not have a venue of our own. Inspired by art, stories and heritage sites, we help people open their imaginations to possible futures and know how they can take action. The collective is now a network of 55 practitioners, with centres of activity in Norfolk, London, Sunderland and the West Midlands.

For Weavers of the Future we contributed:

- a case study for the exhibition of good practices, focused on our activities in Norwich
- speaking at the Ecolivre Roundtable
- a short statement and a longer paper for the project publication.

Climate Museum UK was established in 2019 out of a sense of commitment that aligns with the Agreement of Belem. In 2019, our founder, Bridget McKenzie, also co-founded the movement Culture Declares Emergency to accelerate an effective Cultural response to the Earth Crisis. Signing this Agreement has not changed our plans, but has given us a renewed enthusiasm and urgency for our work.

We exist to provide creative practitioners and cultural partners with a platform for experimental participatory interventions in places across the country. Our members are testing new approaches to working with people: taking various forms of art-making, walks, games, role-play and more. With a wealth of expertise in the best ways to do this, we also run training for arts, education and heritage professionals, bringing people together across different disciplines to focus on what matters.

Our projects aim to design inclusive experiences which:

- Enable people to explore the historic or systemic causes of the Earth Crisis (ecological overshoot and social shortfall) and its impacts on culture and society
- Allow expression of emotions including grief, reflection on coping strategies such as denial, and different framings of nuanced issues

- Create opportunities for people to imagine positive futures and encourage agency, regenerative activism and resilience in local communities.

Strategic aims aligned with the Agreement of Belem include:

- High quality practices in engaging people with environmental history, in museums and educational curricula.
- Developing capacities across the Cultural sector, through our professional development programmes to engage and activate the public towards regenerative system change.
- Contributing to strategic advocacy through our partnerships with movements such as Culture Declares Emergency and Culture Unstained. We encourage an approach to Cultural Environmental Responsibility that expands beyond mitigation and decarbonisation.
- Growing our social and conversational activities that encourage a Possitopian approach to the future, and regenerative shifts from mindsets that normalise Everyday Ecocide, consumerism and racist ideologies.

We hope that professional friendships will arise amongst other signatories of the Agreement of Belem, and that our renewed commitment will help us build more international partnerships, for example, through ICOM Sustain and environmental movements.

Our primary need is grant funding that is not tied closely to contracted outcomes. We wish to grow our capacity to deliver thoughtful design of public engagement with environmental histories and futures, and to expand the reach of this work. Towards this goal, we seek funds for a replicable and sustainable pop-up space for use in climate emergency centres, museums, natural heritage sites, libraries and arts centres.

Our primary offers include:

- A digital collection, including articles, learning resources and story collections.

- Invitation to join the Earth Talk Community - training courses, a planned podcast, rich resources and gatherings.
- Mutual support and advocacy about the potential role of museums and arts - for a commons-based economy, ecological restoration and resilience in the face of Earth Crisis impacts.

DROPS

Raul Dal Santo

DROPS, the International Platform for Museums and Community Museums founded after the ICOM General Conference held in Milan in 2016, has played a pivotal role in the Weavers of the Future initiative as a hosting and coordinating platform, fostering dialogue among museums and community-based institutions worldwide. Our mission is to strengthen community museology and cultural practices that address socio-ecological challenges such as climate justice. Through the weavers of the future activities, DROPS facilitated exchanges between diverse actors, ensuring that voices from different territories were heard and integrated into the Belém Agreement. The platform provided technical coordination, visibility, and networking opportunities for partners, reinforcing the idea that museums are not only custodians of heritage but active agents cultural regeneration.

In the next 12 months, DROPS commits to:

- Expand the weavers of the future international network by onboarding new partners in particolare from underrepresented regions.
- Develop a shared digital repository for the weavers of the future project proceedings and regenerative practices for example practices exhibition, including toolkits and participatory governance models aligned with the Belém Agreement.

EcoLivre confirmed the urgency of integrating cultural dimensions into climate strategies. DROPS observed strong convergence between bioregional approaches and global frameworks, highlighting the need for shared standards and participatory governance. The Belém Agreement provided a unifying reference for cultural organizations to act collectively on climate justice, while the roundtable discussions emphasized the importance of capacity building and intergenerational dialogue.

As the needs are greater institutional recognition of community museums, funding for digital infrastructure, and multilingual resources to ensure

inclusivity DROPS can provide coordination tools, a collaborative platform for sharing methodologies, and expertise in community museology.

Amidst fragmentation of efforts and lack of comparable indicators we will help in Co-creating a standard set of cultural impact metrics and foster peer-learning ecosystems to scale regenerative practices.

DROPS envisions a future where cultural organizations act as catalysts for systemic change, embedding climate justice into cultural policies and practices. We aim to strengthen partnerships with global networks, develop training programs on regenerative future, and advocate for culture's role in the climate action. By connecting local actions to global agendas, DROPS will help organizations to build resilient communities and shared governance models that prioritize ecological and social regeneration.

ICOFOM's Partnerships for Climate Action and Social Inclusion

Karen Brown

ICOFOM is the museology committee of the international Council of Museums (ICOM) created in 1977. It currently has over 2,200 voting members, making it one of ICOM's largest committees. In October 2025, the ICOFOM Board (2022-25) agreed to support Weavers of the Future by promoting its activities on its social media in the run-up to COP30 at Belém. The activities of the Weavers of the Future, EcoLivre and the Belém Agreement align very well with many of the missions and activities of ICOFOM, which has promoted the social role of museums and ecomuseums for decades through its research, conferences and publications, including a series on decolonising museology. ICOFOM's recent actions address the Belém Agreement in many ways, particularly in international partnership work and sustainability education. For example, during the 27th General Conference of ICOM, held in Dubai, UAE, November 2025 our committee's proposed Resolution No. 4, titled "Empowering Museums in Achieving the SDGs through Youth by Means of Social Inclusion and Climate Action," was formally adopted by ICOM's membership (Brown and Brown 2025). This policy document aligns well with the mission of the Belém Agreement, with an added focus on empowering museums through youth action. The Resolution has been written drawing on the voices of young people from around the world who participated in a global series of bespoke SDG workshops since 2023.

Young people are disproportionately affected by the climate crisis, yet many are also leading global efforts to address it. Supporting their need for - and right to - the intergenerational transfer of ancestral cultural and ecological knowledge helps create opportunities for them to share and apply that knowledge. Museums can play a vital role by showing policymakers how culture contributes to achieving the SDGs, particularly through meaningful engagement with youth. During the EcoLivre meeting, the work of the Barbados Museum and Historical Society (BMHS) was highlighted, including their involvement in the Shared Island Stories project (UKRI grant no. EP/X023026/1). A meaningful collaboration between BMHS and the University of St Andrews has taken the form of a transnational youth exchange organised by Jamie Allan Brown in collaboration with Kaye Hall of BMHS (Brown and Hall, 2025). At ICOM Dubai, BMHS was awarded the

inaugural ICOM Award for Sustainable Practice in Museums (2025). The impact of this work on youth action for climate adaptation through museums and other cultural organisations, including a future toolkit, could be sharpened by the Belém Agreement and network, which seeks to highlight the contributions of local communities, participatory practices, and traditional knowledge to climate challenges.

Cultural action advocating for limits to growth will be increasingly important in times of climate emergency. The Weavers of the Future network will enhance visibility of the importance of heritage in this process. The sharing of Best Practices brought together in this edited book and the surrounding EcoLivre resources will be a valuable resource for museum theorists and practitioners alike. Through international networks such as ICOFOM and Weavers of the Future, museums and other cultural organisations can further demonstrate their capacity to serve as respectful channels not only for advancing the SDGs worldwide, but also for fostering peace.

ICOM-MINOM International: Weaving Communities, Regenerating Territories

Nathália Pamio Luiz, Beatriz Haspo

For more than four decades, International Movement for a New Museology (MINOM) has been a global reference point for community-centered, socially engaged museology. Established in the early 1980s within the ICOM framework, MINOM emerged from a shared conviction that museums must go beyond the preservation of objects to embrace social participation, territorial empowerment, cultural diversity, and collective responsibility. Rooted in the principles of the Santiago Declaration, our movement has consistently promoted a museology that responds to local needs, supports democratic participation, promotes equity and contributes to social transformation.

Over the years, MINOM has built a diverse network across Latin America, Europe, Africa, and North America, bringing together community museums, ecomuseums, local initiatives, researchers, and cultural activists. Throughout its history, the organization has supported participatory methodologies, collaborative governance, and holistic approaches to heritage: understanding museums as living processes rather than static institutions. Today, MINOM continues to advocate for museums as civic platforms where culture, environment, and community intersect to generate fairer and more sustainable futures.

It is therefore essential for MINOM to be associated with the ECOlivre initiative and with the broader call to action represented by the Belém Agreement. As an international association committed to social museology, we view this collaboration as a natural continuation of our mission: strengthening the agency of local communities, amplifying their knowledge systems, and ensuring cultural institutions act as catalysts for inclusive, regenerative, and climate-resilient futures. Participating in ECOlivre enables MINOM not only to contribute its longstanding experience but also to join a powerful collective movement working to reposition culture at the center of global climate action.

During the ECOlivre 2025 Session 2, dedicated to Institutional Commitments and Partnerships, MINOM reinforced its alignment with the Belém Agreement, especially its call to empower local actors for heritage and biodiversity regeneration. We emphasized that social museology provides

concrete tools for communities to articulate their territorial knowledge, mobilize collective memory, and develop grassroots responses to the climate emergency. MINOM highlighted its commitment to nurturing participatory governance, promoting intergenerational dialogue, and valuing Indigenous and traditional knowledge as key drivers of transformative cultural action.

In the discussion of needs and offers for the Network, MINOM offered its extensive experience in community-based museology as a living laboratory for participation and empowerment. Our network can contribute methodologies of co-creation, practical cases of regenerative cultural action, and access to practitioners who work daily in contexts of vulnerability and socio-environmental pressure. At the same time, we identified the need to deepen cross-institutional collaboration, especially with environmental and educational organizations, and to strengthen shared platforms for training, funding, and impact assessment. The greatest challenge remains bridging the gap between ambitious global cultural policies and the realities of small, under-resourced community museums; many of which already embody regenerative principles but lack visibility and structural support, in addition to suffering from other urgent social problems, such as violence and lack of access to basic resources, like health and education."

When addressing challenges and Solutions, MINOM stressed that real transformation depends on placing communities at the center of decision-making processes. Co-designed governance models, long-term partnerships, and horizontal collaboration are fundamental to ensuring that commitments made under the Belém Agreement translate into meaningful local impact. MINOM advocated for the integration of community museums and ecomuseums into climate policy implementation frameworks, highlighting that these institutions often act as hubs for social innovation, environmental stewardship, and local resilience. Solutions must focus not only on projects but on strengthening cultural ecosystems that enable continuity, autonomy, and shared responsibility.

Looking at the future perspectives for cultural action in times of climate crisis, MINOM proposed dedicating the next 12 months to building synergies across networks in Latin America, Africa, Europe, and the Americas. Our aim is to facilitate the circulation of knowledge and experience between community museums, academic partners, cultural institutions, and civic movements working on climate justice. We emphasized the importance of collaborative work with initiatives such as Weavers of the Future, ICOM-SUSTAIN, ICOM-SOMUS, ICOM-ICMEMOHRI (International

Committee of Memorial and Human Rights Museums) and APOYOnline-Association for Heritage Preservation of the Americas to co-create strategies aligned with the Paris Agreement and with the Glasgow Work Programme on Action for Climate Empowerment (ACE). Culture must not be an accessory to climate agendas; it must be recognized as a driving force in social and environmental transformation.

In conclusion, MINOM strongly encourages initiatives such as ECOlivre and the Belém Agreement, which promote cooperation, visibility, and the empowerment of local actors at a global scale. We believe that climate action rooted in cultural practice becomes stronger, fairer, and more resilient. The weaving of networks (between people, institutions, and territories) is indispensable for shaping a future founded on care, justice, and collective responsibility. MINOM reaffirms its commitment to continue working alongside partners, communities, and fellow cultural actors to build this future together.

Part 1: Perspectives and Frameworks

Chapter 1

The museum–territory relationship historical review: transformations of living heritage into political actions in service of new sustainable development perspectives

Catalina Gonzalez Tejada and Hugues de Varine

Abstract: Ecomuseums, in their diverse and evolving forms, serve as tools for mediation, participation, and territorial transformation. They support communities in negotiating their histories, identities, and futures through a lived and dynamic approach to heritage. Their effectiveness depends not only on participatory practices but also on the personalities and visions of key actors who shape institutional direction. In contexts marked by social change and climate crisis, ecomuseums demonstrate that there is no single model; instead, they offer adaptive processes where exhibitions and museums function as means for constructing collective narratives, strengthening territorial resilience, and redefining development with communities at the center.

Introduction

Since the creation of the first museum spaces and protected areas, their origins reveal a political intention from an individual or a group seeking to provoke change or to defend an existing order.

The cabinets of curiosities, focused on collecting natural and/or artificial objects, embodied the political, intellectual, and professional aspirations of their owners. These collections served to establish and maintain social status and to convey interests and stances. Owners not only exercised full authority over their collections but also over who could visit them. Some gradually opened to the public, while others were created explicitly for that purpose.

One example is Peter the Great's initiative in St. Petersburg in 1719, whose aim was that "the people may see and be instructed"¹.

These cabinets of curiosities were a first step toward new spaces where the notion of heritage incorporates the idea of the museum as a means to *illustrate the French Republic and consolidate the Revolution* (Davallon, 2006; Poulot, 1997). During the French Revolution, "heritage" gained significant prominence and became central to societal debates. Its meaning diversified alongside evolving uses. In this context, speaking of heritage referred to the desire to safeguard monuments and objects—particularly those belonging to the monarchy and clergy—against vandalism and looting. The "trauma of collective memory" (Poulot, 2001) caused by these destructive acts fostered the idea that such material traces of the past had to be preserved and reappropriated by the population in building a new national identity, a process closely tied to the democratization of knowledge. Thus, recognizing something as heritage is inherently a political act, one that stabilizes identities across time and space.

The museum thus became the place where the past was preserved, legitimizing collective memory and national identity through its collections. With the Louvre (1793) as an example, Babelon and Chastel (1994) note the first use in France of the term "*heritage*", in the sense of fundamental, inalienable assets) applied to works of art, even though for a long time this word remained closely tied to the notion of "monument" (Choay, 1999). This was true not only in France but globally through UNESCO, which applied the term to both cultural and natural heritage (Desvallées & Mairesse, 2011). The question of conserving this heritage became the driving force behind the creation and development of the museum institution, aimed at preventing dispersion, standardizing classifications, and organizing knowledge.

This process gave a sacred dimension to scientific knowledge and artistic works housed in museums, which nonetheless remained inaccessible to most people. Museums were not intended as interfaces with the public; visitors had to write a letter explaining why they wished to visit (Poulot, 1993). The issue at stake was, above all, that of conserving collections. Museums served as sources of inspiration for artists and as sociability spaces for elites. However, some artists sought inspiration outdoors, migrating to the countryside outside

¹https://historia.nationalgeographic.com.es/a/museos-casa-gabinetes-curiosidades_19730

Paris, particularly the Forest of Fontainebleau, where they formed what became known as the “Barbizon School.”

Artists such as Théodore Rousseau, Paul Huet, Jean-François Millet, and Jean-Baptiste-Camille Corot promoted a romantic and realist observation of nature and landscape in their “natural state.” In defending the natural beauty of the Forest of Fontainebleau against planned reforestation (Girault & Alpe, 2011), these artists launched a campaign that led, in the mid-19th century, to the first decision to protect a natural site: the “artistic reserve” of Fontainebleau (Guéant & Lindecker, 2003). This episode transformed humanity’s relationship with nature, turning the forest into a work of art that was no longer hostile, and elevating territory—physically speaking—into heritage worthy of conservation. It became a place of leisure for social elites, expanding the very concept of the museum. A vision later echoed in the creation of natural parks, often described as open-air museums of nature.

These cabinets of curiosities and artistic reserves paved the way for other spaces and areas—under different names—where elements of nature, culture, and art acquired the status of heritage. These are elements to be protected, conserved, or safeguarded in response to political actions, which have grown increasingly complex in the context of globalization and the institutionalization of heritage and environmental concerns. Clear correlations can be seen between the emergence of different forms of protected areas and of museums (de Varine, 2017) within this effervescence of heritage, each with its own goals, interests, and representations depending on the actors involved, and each producing social, cultural, environmental, and economic impacts at multiple scales (Dominique Juhé-Beaulaton et al., 2013; Juhé-Beaulaton & Girault, 2016).

From ecomuseums at the local level to UNESCO Global Geoparks, these forms embody the polysemy of terms that, when used as a label to classify a territory, can lead to ambivalent practices and impacts (Gonzalez Tejada & Girault, 2020). Many of these labels gained popularity, like other museological milestones, thanks to the charisma, action, or management of visionary designers, facilitators, and directors who were elevated as emblematic figures of their movements. Ecomuseums and Geoparks are deeply interconnected, shaped by the historical evolution of practices, issues, and debates surrounding the relationship between heritage, territory, and community as tools for development and conservation.

But in the meantime, the major museums, museum models and standards, and the academic bases of museology and museography evolved towards the

accumulation, care, study and presentation of "collections", with less and less reference to territory. It is the so-called new-museology movement, since the 1970s, which created new forms and practices of museums, closely linked to territories, like ecomuseums, community museums, native museums, originating from the local communities and serving them (Santiago declaration, 1972).

These are ambivalent objectives in which priorities, scenarios, and futures are continually redefined under the logic of global governance—an evolving system that has added new concepts, methods, actors, and issues over time but continues to focus on mitigating consequences rather than addressing causes, often relying on standardized narratives of progress centered on economic growth as the path to development and well-being. Although these “normalized” narratives appear universal, they are in many cases the source of epistemological and territorial conflict.

Museums, understood both in their territorial extensions and in their institutional forms, agree today on their responsibility toward society, including participation in knowledge exchange around global issues such as the climate crisis. In this context, in June 2025 the idea emerged to organize an international meeting of natural science museums and territorial museums during COP30, as it was done by Fernanda Camargo in Rio 1992. To be held in November 2025 in Belem, Brazil, aligning with the Sustainable Development Goals for “socially equitable, environmentally safe, economically prosperous, inclusive, and predictable development by 2030.”

This idea was taken up by a group of Italian and South American friends from ecomuseum and community museum practitioners and academics, to which others from different countries gradually joined. Considering how to contribute to COP30 on climate change, we developed the idea of a virtual exhibition on climate-related museum practices, a shared statement, a conference, and an open-access book. A set of actions that became “Weavers of the Future”, aimed at co-creating regenerative futures aligned with the UN 2030 Agenda.

Through this process, we understood that there are many participatory approaches to global change; we also realized that climate-change narratives differ according to local realities, generating diverse ontologies and epistemologies that call for the decolonization of knowledge, practices, and policies. These narratives encompass visions of conservation but also of development, often essential for survival in the Global South. This reflection leads us to ask **how is territorial heritage transformed, and in response to**

which narratives of development, particularly in the context of the climate crisis?

However, to get in to this question, we must first understand the historical dynamics that have shaped the current relationship between museums, territories, and society within a framework of global governance, where ecomuseums played a fundamental role.

The Global Rise of the Conservation Paradigm and the Emergence of the Ecomuseum

The conservation paradigm originated in the United States of America deeply influenced the creation of national and later transnational environmental policies. As Roosevelt declared after the Second World War, “I am more and more convinced that conservation is a basis of permanent peace” (quoted in Holdgate 1991:15 in Van Dyke 2008, 19). It was an effervescence moment of the world, where the initiatives for nature protection left behind because of the geopolitical situation, gained momentum and so the environmental conservation became a matter of global concern. This period set the foundations for new international institutions and, later, for the major environmental summits that produced global action frameworks.

Although “conservation” became the dominant term, its meaning varied depending on the underlying philosophy, what explains the need to speak of a conservation paradigm shaped by protectionism, conservationism and newer ethics, diverging on the finalities and objectives for the conservation of nature, that we will find also in the initiatives of culture conservation, by the heritagization but also used for culture when we start to use the concept of heritage.

The philosophies of the conservation paradigm

The preservationist philosophy—defended most prominently by John Muir—viewed nature as something that must remain “undisturbed” to be fully appreciated (Philippon, 2005). Muir’s spiritually infused view of wilderness positioned him as a “fierce advocate of protecting nature from development and exploitation” (Van Dyke, 2008)

This model of national parks spread rapidly across countries, especially in the “New World,” during the interwar period. The British Empire pioneered the establishment of early protected areas in Australia, Canada, New Zealand, and South Africa. The process accelerated after the 1933 London Convention,

which produced the first internationally recognized definitions of national parks and strict nature reserves.

This close relationship between conservation governance and colonialism remains a subject of debate, especially in current movements to decolonize nature and climate change politics. As well as the neo-colonialistic role of mass tourism and its influence on heritage preservation, conservation and exploitation.

Contrasting Muir, Gifford Pinchot articulated a utilitarian conservation ethic grounded in public good: “the greatest good for the greatest number for the longest time” (Pinchot, 1910). Conservation, for Pinchot, required equitable and efficient management of natural resources to ensure both present and future well-being.

Aldo Leopold expanded the conservation paradigm by introducing a “new environmental ethic,” calling for harmony between human activities and ecosystem health: “Conservation is a state of harmony between men and land” (quoted in Pepper et al., 2003). Leopold also highlighted issues still central today: land ownership conflicts, community rights, and the moral status of nature. His idea of wilderness as a distinct “land use” category inspired later international models, particularly the UNESCO Biosphere Reserves, which “de-Americanized” the wilderness ideal and positioned these areas as laboratories for sustainable development.

The influence of Pinchot’s and Leopold’s “new ethics” became foundational to twentieth-century global environmental policy and later reappeared in the Brundtland Report “Our Common Future” (Brundtland et al., 1989), which defined sustainable development, by the economists in answer to the need of new development models to continue the economic growth (Aubertin & Vivien, 2006). The international effort for conservation through sustainable development was facilitated by international programs as UNESCO, UICN and others.

Conservation becomes global: International Institutions and Governance

By the mid-twentieth century, conservation had become an international effort. The concept of national parks spread to Europe, though unevenly. Switzerland established its first park in 1914, adopting an American-inspired model in which nature evolves freely while tourism remains regulated.

Swiss naturalist Paul Sarasin played a key role in globalizing the concept after the colonial era. His vision for a world commission on nature protection contributed directly to the creation of the International Union for the

Conservation of Nature (IUCN) in 1948, initially the International Union for the Protection of Nature (IUPN). Over time, these initiatives reflected a shift from strict preservation to a more utilitarian conservationist approach, aligned with economic development and global governance priorities, and so in 1956, it seemed “absolutely *nécessaire*” de remplacer protection par conservation (Harroy, 1969).

The creation of UICN was supported by The United Nation Educational, Scientific, and Cultural Organization (UNESCO), mobilizing artists, scientists, naturalists, and “nature lovers” (Girault & Alpe, 2011). UNESCO was founded between 1945 and 1946 with the mission of: “to build peace in the minds of men” (Batisse, 1999) and nations that “was equivalent to an experiment in social engineering on a global scale, which consisted of working out and disseminating a new worldview based on a revised vision of humankind”².

UNESCO understood heritage as a matter of human rights (Silverman & Ruggles, 2007). Probably inspired by the French uses of “historical monuments” as a political tool for identity-building. The 1972 World Heritage Convention, defined cultural and natural heritage as unique, irreplaceable, and of “Outstanding Universal Value,” belonging simultaneously to local communities and all humanity (The Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972). This Convention solidified UNESCO’s legitimacy in natural and cultural heritage conservation in an historical moment in which the political will and the world growing environmental consciousness evidence the importance of coordinated global action.

The same year of the Convention, in 1972, was held the first world conference to make the environment a major issue, the United Nations Conference on the Human Environment in Stockholm. This Conference marks the beginning of global environmental governance. Its declaration emphasized the need for international cooperation and shared principles for environmental action. The United Nations Environment Program was created as a result of the Conference and became the leading global authority on the environment³.

It was within this moment that the word “ecomuseum” emerged in France in the intention to reveal to the museums their role within environmental debates, as tools for education, participation, and reflection. Historically,

2 <https://www.unesco.org/en/articles/75-years-ago-unescos-constitution-adopted>

3 <https://www.unep.org/who-we-are/about-us>

natural history museums had played important roles in early conservation efforts, for example, the MNHN in Paris during discussions leading to the creation of the IUCN (Jaffeux 2010), or the U.S. national park museums that framed parks themselves as “the real museum” (Albright, 1983). But there was a lack, especially in Europe, of museums in environmental education.

The Minister of the environment was the mayor of Dijon, Robert Poujade, where the participants of the General Conference of ICOM in 1971 needed to make a stop as the between city of the two places for the conference. As it was needed to prepare its speech, the idea of asking him to link in the speech museums of sciences and natural history with the global emerging priorities for the environmental governance emerged. The idea was to open new reflections of the museum’s role for society. It is in the discussion with the advisor to the minister that its proposition demand to find a new word that could replace the old fashion “museum” perception of the minister and be related to environment, and it is the word “ecomuseum” that is adopted.

In 1972, Poujade replaced the name of the museums and the interpretation centers of the natural parks as “ecomuseums”. Then he created a Ecomuseums Service within the ministry, inspired by Scandinavian open-air museums influenced by the work of George Henri Rivière (de Varine, 2017). There was no formal definition, but interpretations of the word that needed several meetings with different actors, visits of practices, to find a definition from the uses of the word with an intention to be international since it was promoted by ICOM.

The first ICOM definition of an ecomuseum described it as a museum seeking a “total symbiosis with the community it serves” (de Varine 2017) a new type of museum rooted in its environment, territorial in scale, interdisciplinary, and participatory. Rivière further developed this definition across three successive versions until the 1980s, centered on the French context. However, at the international level, the definition of the ecomuseum was shaped largely by the “Round Table” organized by UNESCO in cooperation with ICOM in the same effervescent year of 1972 in Santiago of Chile. The ecomuseum later became one of the flagship currents of the “new museology”, even if the the Santiago meeting never mentioned the word “ecomuseum”.

The concept of ecomuseum and the new museology, a decolonial movement

The organization of the UNESCO–ICOM Round Table on the Role of Museums in Contemporary Society (Santiago, Chile, 1972), marked a change on the format used, inspired by the need of “decolonizing museology”, as it was defended by Mario Vazquez at the ICOM Conference in 1971, who will be a key actor of the Round Table (de Varine 2017). The decision was to replace the European and Nord American experts, that commonly were invited to the Round Tables to “educate in museology” and give the place to Latin-American experts to do so. Paulo Freire is invited to think museums as instruments for the liberatory education of the Latin-Americans. He was not able to participate because of the geopolitical situation but his learnings will be present as source of inspiration of the ecomuseums movement in Latin America, especially in Brazil.

The most important outcome of the Round Table was the collective initiative of defining a “integral museum”. Rooted in the socio-economic, cultural, and anthropological context of the communities it serves. It promoted multidisciplinary participation in exhibition design and emphasized the need for ongoing evaluation within communities. What shifted the museum paradigm: from a museum centered on collections to a museum understood as a social action instrument. This perspective, combined with community-based initiatives then emerging worldwide, helped consolidate the social role of museums, catalyzed the new museology movement and inspired new forms of territorial cultural projects worldwide, including cultural parks, community museums, territorial museums, neighborhood museums, and the most recent label of UNESCO the Geoparks.

In this perspective, museums are no longer seen solely as static institutions that preserve the nature and culture collections, but as agents of transformation, as spaces that stimulate sociocultural change. As Desvallées notes (2015), this approach places heritage before objects, focusing on what the population, rather than the visitor, already knows. It begins with the community’s own heritage, the one they know best because it is theirs and embedded in their everyday lives. That is why they are called “experts ès-patrimoine” (de Varine 2003), as the ones that could create new forms of action through the ecomuseum as a territorial project or the “territory as a museum” (de Varine 2000). And with the territory pillar, the (eco)museum activity is understood not as an intellectual exercise but as a community-driven initiative (Scheiner, 2008).

In the world there is still misunderstandings, misappropriations, and the eventual banalization of the term ecomuseum, that keep traditional practices of museums conserving collections, when other not called museums are more likely to its transformative philosophy for local development. What reproduce the conservation paradigms of nature that we say before between the preservationist that keep the heritage “unmodifiable” and the conservationist that looks for its uses for development, but that is extended to newest ethics that include the interconnexion of culture and nature, open to the participatory, ontological, and epistemological dialogues. As ecomuseums, some protected areas became catalyzers of transformation as political actions for democratization (Dumoulin Kervran 2005).

However, beyond terminology, what is most inspiring is the work carried out in and with the territory, through actions conducted with, for, and by its inhabitants. This approach requires multidisciplinary perspectives and egalitarian dialogue among all territorial actors. One of the main consequences of failing to involve local communities is that territories become mere tourist traps, using “heritagization as a marketing mechanism to sell places to tourism” (Capel 2014, 8).

For practical reasons, we continue speaking of the ecomuseum from its philosophy, sometimes described as utopia, according to which its purpose lies in “its capacity for evolution and transformation” (Mayrand, 1989). As Guillot-Courteville states, “if the utopia has fizzled out, it still offers us irreplaceable tools to rethink it, rebuild it, and adapt it. We simply need to determine what we are—or more precisely what we want to continue to be: museums that are different because they are evolving and participatory, or museums known and recognized for the excellence of their collections, for their economic impact, and for their role in territorial promotion. And those who claim this is not incompatible should reflect carefully, because very few institutions manage to harmoniously navigate this ambivalence between missions” (Guillot-Courteville, 2007).

In this sense, the ecomuseum, future-oriented, uses “global heritage” (natural and cultural) to interpret the present rather than to idealize the past. Its role is to support change and foster innovation. By understanding cultural origins and transformations, communities gain clarity about who they are today and avoid being constrained by inherited determinisms. Thus, the ecomuseum becomes a space of negotiation between past and future, a place for critical analysis and territorial interpretation, a “counter-power”(Chaumier, 2003), going beyond the initial environmental-educational purpose of its creation.

Even global discussions on the environment owe much to the various evolutions of the ecomuseum as an alternative to traditional museums.

Today, environmental issues surround museums everywhere. Although museums in the U.S. had already been engaging with environmental concerns since the 1970s (American Association of Museums. Environmental Committee, 1971), it was during the 1992 Caracas meeting that museums in Latin America truly embraced the environment: “Finally, it plays an essential role in raising awareness about the preservation of the environment, where human beings, nature, and culture form a harmonious and indivisible whole” (Sistema Nacional de Museos de Venezuela, 2013). In Europe, natural science museums found in environmental discourse a path toward renewal: “the environmental paradigm, from which they benefited, provided an opportunity to rethink their museography and their approach to visitors” (Davallon, Grandmont et Schiele 1992).

Museums, by transforming elements of nature into heritage, contribute to shaping new ways of understanding the environment. In this shift, museum logics and ecological sensibilities converge, giving rise to a museology centered on the relationship between humans and nature. The museum’s role thus goes beyond treating the environment as a simple exhibition theme; it requires engaging with the wider social representations underpinning environmental discourse and with the institution’s own missions and practices (research, education, social change, critical thinking). These choices ultimately shape the narratives museums promote: Do they question the idea of progress? Do they legitimize official and hegemonic narratives? Whose voices are included in the construction of these narratives? How they respond to the territorial narratives?

Territorial narratives, heritages, participation, and transformation: “ecomuseums in plural” as tools

Territories are not merely geographical spaces; they are social constructions shaped by one or several territorial narratives that define boundaries, identity, and power relations (Damonte, 2011). These narratives do more than describe a place: they articulate political projects through which actors seek to exercise control over a socio-physical space. By privileging certain narratives, territories delineate their borders and consolidate their territorial authority.

As Di Méo (1995) argues, territories have a dual nature: a material dimension (the geographical space), and a symbolic or ideational dimension (the systems of representation through which societies interpret their environment). In this

sense, a territory is simultaneously a social space and a cultural space: “Social space is produced; cultural space is animated. One concerns organization and production; the other concerns meaning and symbolic relations” (Bonnemaison 1981).

This duality underscores the importance of considering actors, power relations, memory, sites of memory, and heritage as core elements in territorial construction. Within this framework, the ecomuseum emerges as a tool: in service of what, and for whom?

The utopia of the ecomuseum

In their ideal form, ecomuseums conceive the territory itself as the museum, a living, evolving heritage system. While they may have a headquarters or an exhibition space, their real structure is decentralized, consisting of multiple “nuclei”: small existing museums, monuments, farms, mills, landscapes, itineraries, and viewpoints. These are identified and studied by the ecomuseum team together with local communities, integrating both scientific knowledge and lived experience. Because heritage evolves with the territory, the ecomuseum becomes a cooperative management structure, enabling communities to use their living heritage as a resource for holistic development.

Ecomuseums act as mediators at the heart of living heritage. They mediate conflicts among different stakeholders, but also within communities themselves, who are simultaneously owners and users of heritage. These communities must decide whether to share, preserve, transform, exploit, or sell their heritage. The role of the ecomuseum is to support informed, collective decision-making, enabling critical reflection on the past from the standpoint of the present, and allowing communities to project themselves into the future. Decisions about heritage thus become political choices about the community’s future.

To think of the community ecomuseum as a territorial project that “aims to build the future of society, first through awareness, then through engagement and creative initiative” (Mairesse 2000) implies creating a dialogical space where all territorial actors can contribute to shaping the future of the territory and its heritage. In this sense, experts and scientists act as “educators” who help local communities develop “their power to grasp and understand the world not as a static reality but as a reality in transformation and in process” (Freire 1970). And so, the ecomuseum can be a “liberating force”, enabling communities to view heritage not as an object of contemplation but as a major resource for development. This liberation requires both: community

empowerment in territorial action and heritage-making, and expert participation to facilitate democratic and egalitarian dialogue. Together, they co-construct the territorial narrative to the practice of the "educated educator", where we are all educators and learners.

Participation: Levels, Challenges, and History

Heritage has increasingly become a lever for collective action, as seen in the growth of associative movements since the 1980s (Glevarec & Saez, 2002). Yet participatory heritage initiatives have deeper roots, such as those of the following examples.

Musées cantonaux (district museums) in France (late 19th century)⁴: These institutions emerged under the initiative of Edmond Groult, a lawyer involved in a broader movement to democratize museums in contrast with the major national institutions that had defined European museology. His aim was to open museums to workers and rural populations, groups largely excluded from the major urban museums. These museums sought to provide rural and working-class audiences with a summary of practical 19th-century knowledge, organized around four main sections: art, agriculture and industry, science, and history. The first cantonal museum was created in Lisieux in 1876, a small town in northwestern France. Cantonal museums relied heavily on voluntary contributions: knowledge, private collections, financial support, and logistical help. The idea was that everyone could contribute according to their abilities since citizens were considered the creators of the museum and its exhibitions. But who were these "citizens"? According to Mairesse (2000), most organizers of these museums did not belong to the working populations they claimed to serve. Instead, they were members of the local bourgeoisie whose goal was to educate lower-income communities. Many were mayors, schoolteachers, notaries, doctors, or pharmacists. The idea spread quickly: by 1877, there were already twelve cantonal museums in France, and the model helped reshape existing museums. Similar initiatives existed in England, Belgium, Russia, and the United States.

⁴

<https://geopark.mnhn.fr/fr/methodes-participatives/participation-innovation/museologie>

Brazilian ecomuseums: The first Brazilian ecomuseum initiative (1972), according to José Marajó Varela⁵ one of the earliest initiatives resembling an ecomuseum in Brazil dates to 1972: O Nosso Museu de Santa Cruz do Arari, later called Museu do Marajó after 1983. It was created by Father Giovanni Gallo, who described his vision as follows:

“Why an ecomuseum? If a simple little museum, like a parish nativity scene, can inspire people to see farther ahead through memories of a lost past, how much more inspired could they be by the muses and spirit-beings of the vast territory of the ancient Nheengãbas...?”

Gallo imagined the museum as a development hub. It emerged as an alternative to a failed project for a fishing cooperative in the Jenipapo community. Both the early museum in Santa Cruz and the Museu do Marajó in Cachoeira can be understood as gateways to a larger territory—consistent with later ecomuseum concepts. Gallo, the color-blind son of an Italian worker who came to the Amazon after Vatican II to help the poor, eventually clashed with diocesan authorities and local political powers due to his commitment to marginalized communities. Without formal museological training, he learned what was necessary from the community itself, which taught him how to build this *sui generis* “museum at the end of the world”—a museum “to be seen with the fingertips.”

These initiatives reveal longstanding attempts to recognize local knowledge and involve communities in heritage-making. Participation, however, raises questions about: levels of participation (Who decides? At what stage?), and representativeness (When can we truly call a museum or exhibition participatory?).

In ecomuseums, participation can take several forms:

- Creation – communities decide, create, and shape the museum or heritage policy.
- Collaborative activities – communities participate in specific projects or exhibits.

⁵ Personal writings: O “Nosso Museu de Santa Cruz do Arari” terá sido primeiro ecomuseu brasileiro? vendredi 22 décembre 2017. Especial de José Marajó Varela para Hugues de Varine.

- Participatory inventories – communities identify and document living heritage, combining democratic, participatory, and scientific processes (e.g., the Ecomuseo di Parabiago community map⁶)

Despite advances, participation remains the Achilles' heel of ecomuseums (Navajas Corral, 2012). Activists recognize the difficulty of involving all residents, with participation often limited to organized groups (Davis, 2011)

Utopia: Mediating Decisions on Living Heritage—A Political Act of Collective Futures

Ecomuseums mediate decisions about living heritage, which is inherently political because it concerns the community's shared future. Ecomuseums mediate debates about heritage uses, through inclusive processes, helping communities to make thoughtful, future-oriented decisions about their heritage.

The Parque Cultural (Cultural Park) del Maestrazgo is considered one of the most remarkable territorial-museology achievements (De Varine, 2000b; Mayrand, 2004). Though not labeled an ecomuseum, it incorporates ecomuseum principles (Real López, 2013), integrating diverse heritage elements and local initiatives to build territorial identity and stimulate rural development. Here, as his promoter said, heritage functioned as an instrument for territorial planning, a means of empowering inhabitants to reclaim their culture and a resource for shaping the future (Orencio 2000).

The initiative began as a small local museum project in the village of Molinos and progressively evolved into a broader territorial project, eventually becoming the Cultural Park del Maestrazgo, which today encompasses 43 villages. This is not an administrative unit but a culturally constructed territory, formally recognized by the 1997 Cultural Parks Law of Aragón (Spain). The notion of a “cultural park” aims to connect diverse natural and cultural heritage assets and local initiatives in order to build a shared territorial identity and promote rural development.

The origins of the project date back to Spain's democratic transition, when the idea of creating the Eleuterio Blasco Ferrer Museum emerged around 1979. At the same time, an association of emigrants from Molinos living in Barcelona envisioned a museum to revive local memory, traditions, and

⁶<https://ecomuseo.comune.parabiago.mi.it/ecomuseo/MAPPE.htm>

heritage. The museum project, drafted by Mateo Andrés, with strong affinities to new museology, quickly expanded. As the community realized that the entire village held valuable heritage sites, the idea of the Molinos Cultural Park was born, formally established in 1985.

An example that inspired the new museological movement, with several visits from Pierre Mayrand, who was both a practitioner and a theorist of ecomuseology (Mayrand 2004), particularly since the creation of the Ecomuseum of Haute-Beauce in 1978. He is also a leading figure in the International Movement for a New Museology (MINOM), which has existed since 1984. He contributed to the organization of Conferences and Workshops in Molinos. The 1986 Molinos Declaration, prepared for the IV MINOM workshop, emphasized the right of people to control their own cultural life, highlighting from the start a participatory and empowerment-oriented vision. This spirit encouraged local initiatives, particularly those related to geological heritage. A fossil collection in Galve led to the creation of the Paleontological Park of Galve, followed by the Geological Park of Aliaga in the 1990s. These initiatives, though disciplinary in origin, were gradually integrated into a broader territorial logic.

Through EU Leader funding, Molinos created the CEDEMATE development center (1991), enabling direct management and expansion of heritage initiatives. The convergence of local development goals and geological valorization ultimately inspired the idea of the Cultural Park del Maestrazgo in 1995, one of the first cultural parks prior to the 1997 regional law. Cooperation with similar European projects later contributed to the creation of the European Geoparks Network (1999–2000), with the first conference held in Molinos. As Mateo said, the Geopark is a natural consequence of the process that began in the 80's.

This transformation raises questions about whether geopark recognition revitalized the Maestrazgo project toward a “post-museological” utopian vision (Mayrand, 2009), or whether it distanced it from its original community-based foundations. A fieldwork in 2016 showed the lack of participation and coordination between the actors and facilities that gave form to the Cultural Park, that was even withdrawn from the Global Geoparks List while the transition to the UNESCO label, by decision of the Spanish Government (Gonzalez Tejada, 2019). On one of the last talks with Mateo⁷, he agrees that the management of the Cultural Park under the Geopark's

⁷ Interview in 2017 on the frame of the PhD fieldwork of Catalina Gonzalez Tejada.

umbrella has been institutionalized and so the participation has been limited, reducing sometimes the territories activities to Dinopolis (a thematic parc in Teruel that is not even in the territory limits). Even though he insisted in the importance of the dynamics in the territory co-constructed for years, that are still running without intervention of the Cultural Park or the Geopark:

“Beyond labels, what truly matters is the reality in which we live, create exhibitions, and preserve heritage. We have improved access, taken care of visitors, and carried out the work. From my perspective, new social or cultural dynamics involving other administrations do not concern me; I don’t mind if the association no longer exists or if the cultural park is no longer officially recognized. As long as there is a minimal political framework of support and the dynamics continue, that is enough for me. After all, these are processes that are born, grow, and eventually fade away — what matters is planting the seed.”

Conclusions

Ecomuseums, understood in their plural, evolving, and context-specific forms, provide powerful tools for mediation, participation, and territorial transformation. They enable communities to negotiate the histories, identities, and futures of the places they inhabit, activating a form of heritage that is lived rather than merely displayed. At the heart of this approach lies a democratic principle: responding to community needs requires working with communities, not simply for them. No process of innovation can emerge when those who inhabit a territory—its primary stakeholders—are ignored or excluded.

This perspective invites us to reconsider certain terms that continue to shape museum practice, notably the word conservation. Within conventional museum vocabulary, conservation is closely tied to the protection and safeguarding of collections: preventing deterioration, restricting use, placing objects in storage, or removing them from everyday life to ensure their survival. While these objectives may be legitimate in certain contexts, they can also provoke tensions within territories where communities wish to keep heritage alive, adaptable, and integrated into contemporary practices. In such situations, conservation conceived as immobilization becomes a source of conflict, as it contradicts the dynamic, lived heritage that ecomuseums strive to support.

In line with the hypothesis developed museologist authors (Bergeron et al., 2020) concerning monographs on influential figures in museology, it is clear

that much of a museum's functioning and reach depends on the personalities of the individuals who lead, shape, and represent it. The cases of Marajó and Molinos, alongside well-known examples such as Le Creusot or Haut-Beaucem illustrate how the vision and commitment of particular actors profoundly influence the character, originality, and social role of their institutions. Yet a crucial question remains: to what extent are these leaders willing to share their initiatives, authority, and decision-making processes with their communities? And which narratives of identity, development, or memory are privileged—or silenced—through these choices?

For this reason, we propose an active reading of this book guided by the initial question of the article: **how is territorial heritage transformed, and in response to which narratives of development, particularly in the context of the climate crisis?** The practices presented on this book offer multiple, diverse answers. They show that there is no single model, no ideal or universal method for mobilizing heritage to rebuild development pathways or strengthen territorial resilience. Instead, there are committed individuals and teams who explore how to integrate broader perspectives, sometimes more, sometimes less participatory, into processes in which the museum or exhibition becomes a tool, a medium, or even a pretext for collective construction.

As Bergeron, Debary, and Mairesse (2020) remind us, each generation seeks models and predecessors from whom it can claim descent, while also attempting to craft new archetypes or distinguish itself from them. Our actions today will, in turn, inspire and influence others, just as those who came before having shaped our thinking. In this sense, we are collectively co-authoring the next steps. The development of this article is an example of that dialogue between generations, where we are both educators and learners.

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Chapter 2

Beyond Outputs: Measuring Cultural Impacts for Regenerative Futures

Douglas Worts, Raul Dal Santo & María Soledad González-Reforma

Abstract: This chapter examines how cultural institutions can act as agents of adaptation in the ecosocial crisis and presents tools that can support this process. The *Inside–Outside Model* and the *Critical Assessment Framework* are introduced as methods to articulate visions of change, connect action and impact, and design transformative processes, showing how they were applied in a real project. The experience of *Weavers of the Future* reveals that many practices still lack solid impact evaluation, highlighting the need to strengthen capacities. The chapter proposes combining indicators and narratives to foster coherent cultural projects oriented toward regenerative futures.

Introduction

‘Culture’ can be understood as the way(s) that a group thinks, imagines, plans, organizes and behaves, over time, as well as in relationship to the contexts in which it exists. These contexts will always involve the natural, dynamic systems that support all life. If a culture is ‘adaptive’, it changes in ways that ensures the maintenance of balances with natural systems, as well as in relationship to other human cultures. If a culture is non-adaptive, it will fall out of touch with changes in its environment, thereby creating crises and causing destabilization.

Human cultures have evolved in ways that enabled individuals and collectives to achieve extraordinary things. Our species has been successful at innovating in remarkable ways, however, many of those successes have also generated unintended consequences on such a scale that Earth systems have been pushed beyond their ability to remain in balance.

The climate crisis is a case in point. Earth's climate is a complex phenomenon, in which environmental, social, political, and relational dimensions are intertwined. If humanity, in all of its diversity across the planet, is unwittingly threatening to collapse key aspects of Earth's natural systems, then how can our species adapt in order to bring human systems into balance with those of the planet? The short answer is that profound cultural change is required. And for the culture to change, it must involve shifts at multiple levels, including individuals, groups, communities, organizations, cities, countries, as well as in multiple human systems (e.g. economics, governance, education, business, and more). Given the large and fragmented nature of human cultures on the planet, meaningful change constitutes a significant challenge.

Humanity must embrace cultural change, or face the consequences (which are already underway). Currently, existing political, economic and business systems have an inertia that has only deepened the crisis. One might wonder whether the 'cultural sector', which exists around the globe, can play an effective role in fostering cultural adaptation in these fast-changing times? Experimentation with new forms of public engagement and co-creativity may provide some new answers. But one of the challenges is that the cultural sector has always been relegated to the margins of the leisure-time economy. Humanity may be well served to adopt a deeper sense of the term 'culture', which involves examining and shifting how values, principles, traditions, structures and more, all serve the evolving needs of our species, especially within Earth's ever-changing contexts. In this sense, art forms and co-creation committed to the wellbeing of territory, ecosystems, people, and the bonds that connect them have a radical power to open cracks in the established order, activate other ways of relating, and facilitate situated and affective thinking.

Throughout this chapter, we explore possibilities for ecomuseums and the museum sector to become catalysts for cultural adaptation, while introducing practical tools for cultural organizations and their allies to imagine scientifically viable and ethically desirable cultural futures.

Contexts: Culture in Relation to Ecological and Social Trends

The crisis associated with Earth's changing climate is not an isolated, ecological phenomenon. Rather, Earth's dramatically changing climate has been shaped and driven by human behaviours and activities. For about 12,000 years, Earth has enjoyed a relatively stable climate - a period known as the Holocene. It began after the most recent ice age. It is during the Holocene

that humans have flourished and spread out across the globe. It's possible that, at the beginning, nobody set out to damage Earth's natural systems. There was a kind of naivety rooted in the idea that "society" and "nature" were separate constructs. In many ways, this mindset still persists today. Even though we acknowledge that we are part of a natural cycle, we do not apply that awareness to our systems of production. As a result, we have lived with a sense of unreality regarding the consequences of our actions.

The success of our species, *Homo sapiens*, had a cost that is now clearly visible. The ecological crisis can no longer be understood as a metaphor or a warning; it is a concrete, measurable, and well-documented reality that manifests across multiple interconnected layers:

- At the **ecological level**, it appears through the increase in extreme weather events, accelerated melting of ice caps and glaciers, the warming of oceans, pollution, habitat loss, freshwater scarcity, and the mass extinction of species.
- At the **social level**, it is reflected in conflicts, health crises, systemic inequalities, food insecurity, and forced displacement.
- At the **community level**, it generates a growing sense of vulnerability, frustration, and uncertainty rooted in systemic inequities.
- And at the **individual level**, it gives rise to a sense of disempowerment, with emotions such as climate anxiety, eco-paralysis or solastalgia, among many others.⁸

We live in a time when over eight billion people, are unintentionally generating sufficient greenhouse gas (GHG) emissions to alter Earth's atmosphere. These unprecedented processes have intensified over recent decades, driven by an economic model based on a belief that financial growth, based on endless extraction of resources and the consumption of products, are all unlimited. Sadly, our planet has distinct bio-physical limits. The problem of both human-caused pollution and eroded natural systems exists in a human blind spot. Or, is it willful ignorance?

What is clear is that humanity, unbelievably, has no clear (or even a fuzzy) vision of what a sustainable world might look like Political and business status

⁸ Solastalgia: the distress or emotional suffering caused by environmental change impacting one's home or sense of place (Albrecht, 2019, p. 38). Unlike nostalgia, which is associated with being physically distant from home, solastalgia refers to the degradation of a place while one is still living in it, revealing a form of suffering closely linked to the destruction of one's environment.

quos have based their plans and actions on neither a full analysis of current trend realities, nor on projections of what is scientifically feasible on our planet and ethically desirable for human wellbeing (i.e. equitable and inclusive). Globally, businesses and governments have created an overarching 'culture of UNsustainability'. At its core, the globalizing effect of current economics has compelled most countries to embrace political and economic status quos that are damaging Earth's ability to regenerate itself, and societies abilities to embrace diversity, equity and inclusion. 'Successes' in GDP growth and attracting corporate investments and driving 'efficiencies' at the expense of human health and well-being are, in fact, damaging both human and planetary wellbeing.

Countries around the world have created a variety of systems to manage themselves. Neoliberal economics' is a term describing the dominant system of capitalism that has become the driving force behind most national economies. Its belief in the tenets of maximizing profits for shareholders, minimizing government regulation and the centrality of the 'marketplace' in human societies, is deeply flawed - and yet it continues to prevail. The collateral damage generated by the lust for profit and power rooted in neoliberal economics leads directly environmental degradation, including widespread pollution, the loss of Earth's biodiversity and of species, the deepening of societal inequity, the warming of oceans and more. The underlying societal commitment to neoliberal economics dominates current socio-economic norms on Earth, thereby powering our existential poly-crisis. However, there are viable alternatives to neoliberal economic approaches (e.g. Raworth, *Doughnut Economics*; *Wellbeing Economics Alliance*, etc). The challenge of our time, at least in part, demands supplanting neoliberal economic systems with ones based on fostering wellbeing and equity for all.

One important strategy for addressing our 'culture of UNsustainability' involves realigning the visions and activities of cultural organizations as catalysts for cultural adaptation. To accomplish this, the cultural sector needs to become much more than the centres of leisure-time edutainment, as has been the case in the past.

Taking Stock within Cultural Institutions

For a culture to move towards a future that embraces the vision and values of sustainability, or better yet, regeneration, at least during the 'anthropocene', it is essential to build a clear picture of the trends and directions that are actively shaping the present. As has been made clear by climate scientists, it

often requires scientific measurements of air-borne emissions, waste-water, soil degradation and more. These measurable realities in the environment reveal a great deal about how our world has changed in recent times - and help to understand the implications of how natural systems will evolve further, especially when strategic interventions are planned that have environmental and/or social implications.

In recent years, museums, art centers, and cultural policy frameworks have widely embraced the discourse of sustainability. What was once an abstract ethical principle has become an institutional, political, and operational requirement within the museum sector. This shift has brought with it the need for shared criteria, measurement systems, and organizational conditions that can translate sustainability discourse into concrete institutional practices (NEMO, 2022, pp. 8–10).

Although sustainability frameworks vary depending on context and degree of formalization, many share a set of dimensions for assessing ecological impact. One of these is *environmental governance*, which refers to the integration of sustainability within a museum's mission, vision, and organizational structures. This includes explicit institutional policies, strategic plans, and mechanisms for environmental leadership. From an operational perspective, evaluations often focus on energy, waste and water management through efficient technologies, the use of renewable energy, the responsible handling of natural resources, waste management based on reduction, reuse, and recycling, and mobility patterns related to staff, visitors, and collections.

However, these protocols stray from the holistic vision that sustainability should have and tend to prioritize strictly technical indicators, energy efficiency or mitigation actions implemented after museum activities have taken place. While necessary, these measures fall short when confronted with the deep and irreversible transformations required by ecological collapse. They also reinforce a managerial model that lacks awareness of the broader web of relationships within which cultural institutions are embedded. These indicators are partial and overlook non-quantifiable dimensions such as: ecological balance, territorial relations, or the social and environmental dynamics of the communities involved.

This partial view also reveals a fragmentation that reflects a broader challenge in this field: the tendency to talk about “environmental sustainability,” “economic sustainability,” or “cultural sustainability,” as if sustainability could be clearly divided into separate categories. As Douglas Worts has pointed out, sustainability must be understood holistically: “everything is

connected to everything else.” When sustainability is reduced to sectoral labels, the resulting picture becomes partial and incomplete, obscuring the relational and systemic nature of the challenges at stake. When sustainability is reduced to sector-based labels, the resulting picture becomes partial and incomplete, obscuring the relational and systemic nature of the challenges at stake. Therefore, the fragmented use of sustainability could also limit the ability of institutions to respond meaningfully to ecological and social crises.

Although internal transformations within cultural institutions are necessary for them to act as catalysts for broader cultural adaptation, internal change alone is insufficient. Cultural adaptation depends on shared visions, trust-based relationships, collaborative processes, and systems capable of monitoring impacts across ecological, social, and symbolic dimensions. As De la Torre notes, sustainability should not be reduced to quantifiable indicators but must also account for “the more subtle and invisible footprints—those related to emotions, care, and the sense of community” (personal communication, September 15, 2025). This underscores the need to move beyond functional approaches to sustainability—often oriented toward institutional viability or visibility—and toward what might be called *relational sustainability*: an approach attentive to ecosystems, interdependence, and the lived experiences of communities.

From this perspective, museums and exhibition spaces should not function as closed entities, but rather as living systems aligned with nature and with the needs of their communities, capable of generating life and inspiring transformation (Letelier, 2025, p. 4). This vision requires leaving behind the notion of the museum as a container of objects or narratives and transforming it into a relational organism shaped by the ethics of care, climate justice, interdependence, and repair.

This process of ‘taking stock’ is something that cultural organizations, in collaboration with community-based partners, can offer ways for the public to be involved in the ongoing processes of reflection and visioning. An example of what this could look like for ecomuseums involves the use of ‘citizen science’ by science museums to monitor the sightings of animals, birds and insects. If the public is involved in documenting the patterns emerging from life in community, they become active stakeholders who see themselves in relationship to other parts of our complex web of interdependent systems.

Part of the necessary vision of change involves clarification about what needs to change up through the chain of cause/impact relationships that span the entire human world of behaviours and systems. To be effective this societal

aspect of the sustainability vision needs to include a stratified approach to identifying what and how the transformations will involve individuals, groups, communities, organizations, cities, regions, countries, and the global population. Each of these levels has essential roles to play in understanding the many forces that are driving humanity's current UNsustainability as well helping to bring human footprints⁹ into a functional balance with Nature's systems. Perhaps the biggest and hardest part of this review and change process is examining the existing human-created systems (e.g. economics, governance, business, trade, education, justice, health, and more). These systems were designed to persist, and will require to be transformed into systems that serve goal of wellbeing on our planet. The scale of this process is all-encompassing. It is through this kind of change that it is possible to develop a set of theories of change that can be tested and implemented. It seems self-evident that this approach to culture is not what has informed cultural organizations of the past. Rather, culture must be seen as more than a set of services that are delivered to the public through centralized, leisure-time-oriented sites of edutainment. The living culture pulses through the veins of everyday life - at every level of society. While clearly daunting, it is possible to see existing ecomuseums and related organizations, as catalytic agents that engage entire communities in cohesion-building and co-creative entities that can operate mindfully and responsibly within their local context.

This seems like the place to start - and to build from the grassroots up, harnessing the wisdom that exists in the community.

Framework for planning and monitoring the cultural impacts of cultural organizations

This chapter introduces practical tools for cultural organizations and their partners to envision scientifically viable and ethically desirable cultural futures. The Inside-Outside Model (I-O) and Critical Assessment Framework (CAF) have been developed over the past 25 years to help cultural organizations think more precisely about how they can co-create meaningful cultural impacts. When museums and their collaborators create a 'theory of change', it can help staff connect vision to resources, processes, outputs, outcomes and impacts.

⁹ for discussions on footprints, see "Our Ecological Footprint" by Wackernagel, M and Rees, W, New World Publishing, 1994 and the work of the Global Footprint Network at <www.footprintnetwork.org>.

The Inside-Outside (I-O) Model by Douglas Worts emerges as a key tool for rethinking the role of museums in the face of today's poly-crisis, based on the understanding that cultural organizations are not isolated entities, but interdependent cultural nodes embedded within complex ecological, social, and economic systems. Their function as catalysts for transformation involves reorganizing both their internal structures and their relationship with the living culture that surrounds them (Worts & Dal Santo, 2022, pp. 74–76).

When thinking about a cultural organization that is attempting to foster adaptive change in the world, The Inside-Outside model articulates two dimensions - inside and outside. The internal dimension is based on ensuring that the organization has the necessary community connections, resources and skillsets to function as a catalytic agent of co-creative adaptive change. It is vital to ensure that there is an ongoing review of institutional vision, values, priorities, partnerships, skills, and labor policies, as well as the ability to identify and assess the ever-evolving trends that are actively shaping the local culture. It is not enough to mount "green exhibitions". Rather, it involves embracing principles of sustainability as an integral praxis that cuts across every decision —“from the choice of materials to the forms of relationship between cultural agents” (De la Torre, 2023, p. 27). Worts and Dal Santo emphasize the need to replace hierarchical structures with more collaborative models, invest in continuous staff training, and use appropriate evaluation tools to inform future decisions, while also ensuring economic management is consistent with the institution's publicly stated values (2022, pp. 75–76).

In its external dimension, the model promotes building sustained relationships with communities through co-design practices for all public dimension activities and collective mapping processes that recognize local knowledge as heritage. All these values can be fundamental when designing a project, especially when it emerges from an ecomuseum, a community museum, or similar structures rooted in civic participation. The I-O Model can provide essential guidance for developing a project based on a community's actual needs.

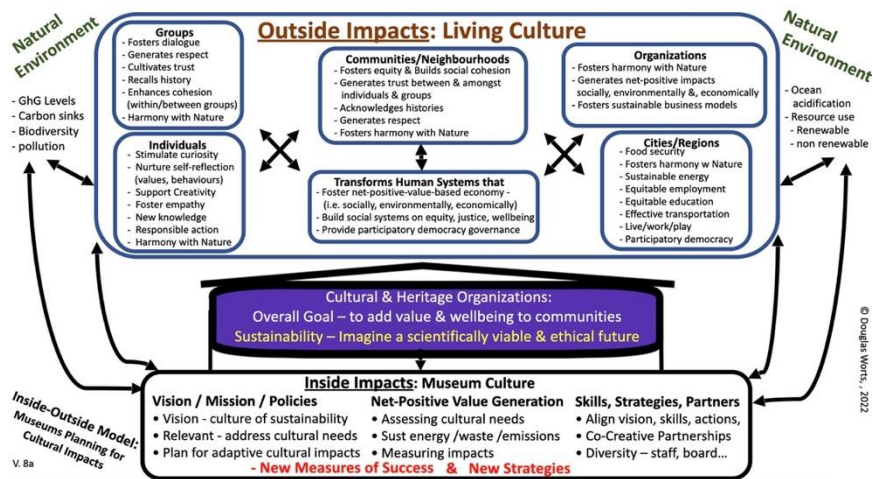


Figure 1. A schematic representation of the Inside-Outside model

With the cultural organization placed at the centre of the I-O Model, the rests on a set of assets and processes that enable it to connect to the living culture. The six categories of potential ‘outside impacts’, plus the all-encompassing realm of natural systems that embraces all of humanity, are not a complete list of categories or their attributes. Instead, museums and the like will always need to understand the fundamentals of how to optimize their ability to relate to Individuals. Understanding how individuals exist in groups, communities, cities, organizations or systems all add additional layers of complexity. While a museum may focus on 1, 2 or more categories, the most important thing for them is to remain mindful of additional categories that can be affecting what is happening in the living culture. The I-O Model is an evolving tool, that can and should be adapted as needed.

For this reason, starting from the Inside–Outside Model and the Critical Assessment Framework helps us consider the potential impacts of projects even before they are designed, which significantly increases their transformative capacity. The Critical Assessment Framework provides some key elements needed to translate both internal and external activities into concrete actions, as well as to design and monitor innovations capable of generating catalytic impacts across multiple levels: individuals, communities, municipalities, regions, organizations, nations, and human systems (economic, social, and governance).

In addition to the internal dimension, which, as we have seen, aligns with sustainability policy approaches, the Inside–Outside model also provides tools for working on the external dimension.

The Critical Assessment Framework (CAF) operationalizes this vision through a set of measurable indicators. Developed by Douglas Worts around 2004 during his participation in the Canadian Working Group on Museums and Sustainable Communities (WGMSC), the CAF was first published with three levels of analysis: individual, community, and organizational. As the framework began to be used, it became evident that a fourth level “regional/global” was necessary, as well as the possibility of adding additional levels depending on the needs of the project and the territory in which it is implemented. This developmental trajectory underscores a central premise of the CAF: assessment tools must be adapted to the specific needs and opportunities of each context rather than applied uniformly.

The CAF was designed to use Likert Scales to collect the subjective views of individual team members regarding how well a particular, proposed programming strategy would achieve public impact outcomes at a range of levels —individual, community, organizational/institutional, and global— although we will examine this in greater depth in the next section.¹⁰

These should not be understood as a set of measurements regarding actual public impacts. Instead, they provide a project development team with a prompt to think deeply and discuss each team-member’s assumptions about how well certain programmatic strategies will generate public impacts. The CAF framework is intended as a flexible tool for programmers as they bring biases and assumptions of the team into view.

The CAF can be useful to identify potential measurable impacts on the public, at a range of levels, but that demands an extra step beyond what is in the CAF. Perhaps the greatest value of the CAF is its potential to underscore that cultural processes are complex and co-creative. Project teams often involve people who have different ‘expertise’. Some traditional museum programmers assume that the purpose of an exhibit or public program is to explain a phenomenon, an object, a moment, a place, etc.. Such intentions of specialized staff ‘experts’ who aim to explain something to ‘non-experts’ in the public can unintentionally thwart the potential creative and co-creative

¹⁰ Likert Scales: It is a type of rating scale used in surveys and questionnaires to measure attitudes, opinions, and perceptions. Respondents indicate their level of agreement or disagreement with a series of statements.

processes of encouraging the public to grapple and grasp the significance of ideas, objects, stories and more.

While there is absolutely a role for expertise, the core cultural goal of public engagement may be more fundamentally understood as fostering relationships and communication that build trust. Building skills of reflection, dialogue, compassion, curiosity, creativity and co-creativity can result in trust and relationships capable of tackling the challenge of envisioning possible futures, as well as compassionately understanding the many pasts that make up our pluralist cultures.

Adapting these models to a concrete practice in Italy

In this section, we will analyze a possible application model through the development of a real project, which can be found in Chapter *Essere parte del fiume*.

The methodology of *Essere parte del fiume* is grounded in a research-based and participatory approach in which artistic mediation serves as the central tool. Its development drew on both the artist María Soledad González-Reforma's modes of intervention and those of the Ecomuseo del Paesaggio di Parabiago, led by its coordinator Raul Dal Santo, as well as an adaptation of Douglas Worts' Inside–Outside model. This adaptation involved transferring the model—originally conceived to guide museum management and planning—toward the projection and design of an artistic project.

Based on these principles, the methodological design was structured into four complementary phases. The first phase consisted of a contextual study that not only aimed to diagnose the interests and perceptions of local residents but also incorporated an analysis of the natural environment and the identification of issues whose attention could directly benefit local ecosystems.

Stage 1 - Questionnaires

This initial stage combined documentary sources with territorial observation. It included a literature and archival review at the Ecomuseo del Paesaggio di Parabiago, the study of previous projects, the consultation of community maps, and the analysis of data and statistics from earlier experiences. Notably, the project *I Luoghi del Cuore* (*The Places of the Heart*) provided key information that helped orient our proposal. Its questionnaires—designed to gather diverse perspectives and identify intergenerational points of interest—revealed particularly significant insights: although “nature” appeared among the most valued elements (22% for children, 16% for adults, and 8% for older

participants), only 3.2% (12 people) mentioned the Olona River as a meaningful place, despite it running through the town. Even more striking, 4% (20 people) identified it as an element to be removed from the landscape. These findings, combined with historical knowledge of the area, clearly exposed the deep disconnection and collective forgetting surrounding the Olona River, highlighting it as a priority area for intervention.

In parallel, a territorial study was conducted from historical, anthropological, and social perspectives, in order to situate the Olona River within its cultural and environmental complexity. Additionally, following the ecomuseum's methodology, intergenerational questionnaires were designed and implemented to gather perceptions, memories, and emotional connections associated with the river.

As in previous ecomuseum questionnaires, this instrument was designed to capture the perspectives of three generational groups—children, adults, and older people—thus enabling an intergenerational analysis of the community's connection (or disconnection) to the river.

1. The first section included questions taken from the previous questionnaire and allowed us to compare results.

"ESSERE PARTE DEL FIUME" PROJECT

in collaboration with the artist Marisol González-Reforma

DEAR CHILDREN, PARENTS, AND GRANDPARENTS,

The "ESSERE PARTE DEL FIUME" project is a participatory initiative that involves the community in the conservation of the Olona River and the surrounding wetlands.

The project includes both artistic and environmental activities, such as building filtering islands and embroidering a map of the city's water cycle. To develop these activities, we need to implement a questionnaire addressed to local residents to better understand their current relationship with the Olona River ecosystem. Based on the results, we will design and organise participatory workshops.

INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

We ask students first to carefully fill out the questionnaire about their relationship with a place they hold dear and with the Olona River, and then to interview their parents and grandparents/great-grandparents.

1. Do you think there's any place around your town that you feel is worth visiting?

You	Parents	Grandparents
<input type="radio"/> YES <input type="radio"/> NO Which one? -	<input type="radio"/> YES <input type="radio"/> NO Which one? -	<input type="radio"/> YES <input type="radio"/> NO Which one? -

2. What is the place in Parabiago you feel most attached to? Please write the name and, if possible, the address of your "luogo del cuore" ("special place").

You	Parents	Grandparents
I am not emotionally attached to any place because: -	I am not emotionally attached to any place because: -	I am not emotionally attached to any place because: -

Capture of fragment of the questionnaire from Essere parte del fiume translated.² The second section aimed to understand the degree of knowledge, relationship, emotions, and memories associated with the Olona River.

5. What would you like to restore or bring back from what has been changed?		
You	Parents	Grandparents
6. Do you know the Olona River?		
You	Parents	Grandparents
<input type="radio"/> YES <input type="radio"/> NO	<input type="radio"/> YES <input type="radio"/> NO	<input type="radio"/> YES <input type="radio"/> NO
7. Try to describe the Olona River.		
You	Parents	Grandparents
8. Do you remember any story, rhyme, or tale related to the Olona? Try to share it.		
You	Parents	Grandparents
9. How often do you visit the river?		
You	Parents	Grandparents
<input type="radio"/> NEVER <input type="radio"/> RARELY <input type="radio"/> REGULARLY <input type="radio"/> ALMOST EVERY DAY	<input type="radio"/> NEVER <input type="radio"/> RARELY <input type="radio"/> REGULARLY <input type="radio"/> ALMOST EVERY DAY	<input type="radio"/> NEVER <input type="radio"/> RARELY <input type="radio"/> REGULARLY <input type="radio"/> ALMOST EVERY DAY
Where do you usually go?		
10. What emotions do you feel when you're there?		
You	Parents	Grandparents

Figure 2. Capture of fragment of the questionnaire from Essere parte del fiume translated.

3. The third section gathered proposals and collective aspirations for the regeneration of the Olona River with a forward-looking perspective

11. What could we do to spark your interest in the river again?		
You	Parents	Grandparents

12. How do you imagine the river in the future?		
You	Parents	Grandparents

Figure 3. Capture of fragment of the questionnaire from Essere parte del fiume translated.

4. Finally, a space was included to invite participants to join the artistic Project.

13. Would you like to help us continue this work?
<input type="radio"/> YES <input type="radio"/> NO

14. In what way?
<input type="radio"/> Providing old photographs, postcards, stories, or information <input type="radio"/> Providing audio or video recordings of grandparents or ancestors <input type="radio"/> Making drawings <input type="radio"/> Cataloguing the collected materials <input type="radio"/> In other way:

Figure 4. Capture of fragment of the questionnaire from Essere parte del fiume translated.

The questionnaires allowed us to confirm the consistency—and the worsening—of the data previously recorded in the *Mappa di Comunità* of the Ecomuseo di Parabiago. The repetition of this pattern in the new questionnaire demonstrates that the disconnection is not circumstantial but persistent, and that it is deepening over time.

The analysis of the collected data was carried out using two spreadsheets that compiled 33 questionnaires from the municipality of Parabiago and 113 from the municipality of Legnano, with responses gathered in triads (Child–Parent–Grandparent). The questionnaire results show that although participants in all groups (children, adults, and older adults) reported knowing the Olona River—with 65 out of 76 valid affirmative responses in Parabiago (85.5%) and 256 out of 277 in Legnano (92.4%)—they did not identify it as one of the places of interest to visit in their immediate surroundings. The Olona River was mentioned only rarely, both in responses about places to visit and in those referring to emotionally significant places (González-Reforma, 2025, p.215).

In the case of “emotionally meaningful places,” this trend becomes even more pronounced. More than 60% of participants across all groups answered “none” or did not indicate any place at all, revealing a lack of emotional attachment to specific locations in the territory—a tendency even stronger in Legnano. This absence of connection with the river aligns with the earlier findings of the *Mappa di Comunità* project carried out by the Ecomuseo di Parabiago, where it had already been observed that, although “nature” was valued by all generations, the river was selected as a “place of the heart” by only 3.2% of respondents—a figure that has now decreased even further. The repetition of this pattern in the new questionnaire confirms that this disconnection is not circumstantial but persistent, and that it is worsening over time (González-Reforma, 2025, p.215).

The combination of the river’s limited presence in the local imagination and its historical association with pollution and the landscape transformations brought about by industrialization has relegated the Olona River to a secondary role in the collective perception.

Among the youngest generations, a greater diversity of positive emotions appears, such as happiness, relaxation, and even hope. In contrast, older groups—who experienced the periods of greatest pollution in the river—show significant percentages of negative feelings, including sadness and nostalgia. This scenario can be considered promising, because although there is a clear lack of recognition of the river as an emotionally meaningful place for the community, younger generations present a margin of opportunity for strengthening those bonds (González-Reforma, 2025, p.216).

This foundation allowed us to design a project that, on the one hand, offered a community-wide understanding of the territory’s needs and, on the other,

incorporated individual perspectives. It also helped us identify how we could begin to define and shape the design of the activities with participants.

In addition, an ecosystem analysis was carried out to identify specific sites suitable for intervention and to delimit the area of action based on the needs identified in the previous research. This work was conducted through field visits with local environmental associations, as well as with Raul Dal Santo himself, which not only facilitated ecological understanding but also generated a sensory experience that brought us closer to places that hold meaning for local residents.

Stages 2 and 3 - Reaction card

In the second phase, we worked in a more defined way on the community level. This stage involved establishing the network of collaborators and identifying potential participants, forming the working groups that would guide the process. Once these groups were formed, we proceeded to design the set of activities, conceived on the basis of the findings from the initial research. The design was then adapted to the characteristics of the individuals and groups involved, ensuring the relevance and suitability of each proposal.

The third phase focused on the implementation of artistic mediation, conceived as a transversal area. Work was carried out both internally—through the adoption of new working methodologies—and externally, through creativity and co-production as driving forces. Participants explored various expressive techniques that allowed them to translate prior research and the memories collected in the questionnaires and during the process. Additionally, we incorporated small tools into these dynamics that enabled us to gather qualitative feedback on the impact of the activities, such as the use of “reaction cards”, a tool also adopted from those used by Worts in museum mediations.

DESCRIBE YOUR FEELINGS

WHY DID YOU DECIDE TO PARTICIPATE?

WHAT HAVE YOU LEARNED FROM THIS EXPERIENCE?

HOW WOULD YOU DESCRIBE WHAT WE HAVE CREATED TOGETHER?

YOU CAN USE A DRAWING, A TEXT, A PHRASE...

ESSERE PARTE DEL FIUME

Figure 5. Capture of our reaction card.

But it's important to integrate these tools in such a way that participants do not perceive them as something additional or as an evaluation, as this may generate resistance. They must feel like an organic part of the activity itself.



Figure 6. Image of the process.

As shown in Chapter X – *Essere parte del fiume*, the activities in which the reaction cards were applied used different methodologies, and incorporating this tool allowed us to assess the impact generated by each activity, identifying the strengths and weaknesses of each approach.

In the cyanotype and replanting workshop, the responses emphasized the playful and collective dimension of the activity. Words such as *fun*, *joy*, and *happiness* appeared frequently, along with drawings of trees, hands in the soil, or groups planting together. The experience of “getting our hands dirty” emerged as a positive discovery, tied to the idea of “creating new life” and “helping the environment.” The sequence of the experience strengthened the connection between artistic practice and concrete ecological action.

RACCONTA LE TUE SENSAZIONI RIPARO AGLI ANIMALI ↗

PERCHÉ HAI DECISO DI PARTICIPARE?

PERCHÉ COSÌ POTEVAMO RENDERE LA TERRA PIÙ VERDE E DARE

CHE COSA TI HA LASCIATO QUESTA ESPERIENZA?

MI HA INSEGNATO A PIANTARE NEL TERRENO

COME DESCRIVERESTI CIÒ CHE ABBIAMO CREATO INSIEME?

PUOI USARE UN DISEGNO, UN TESTO, UNA FRASE...

ABBIAMO CREATO DEI FUTURI ALBERI CHE CRESCERANNO INSIEME A NOI.

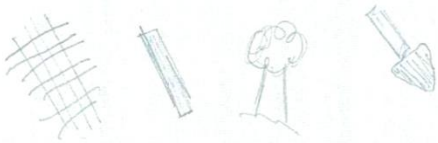


Figure 7. Reaction card from the first activity.

In contrast, the poetic narrative workshop generated responses with a stronger symbolic and reflective dimension. Children expressed feelings such as love for the environment, commitment, and responsibility, accompanied by more abstract imagery —hearts, figures acting as “guardians” of the river, representations of the island, or the Olona itself. Thanks to the initial sensory walk, the subsequent collective writing process led to reflections on the river’s future and the need to protect it.

RACCONTA LE TUE SENSAZIONI

PERCHÉ HAI DECISO DI PARTICIPARE?
 Perchè può aiutare l'ambiente

CHE COSA TI HA LASCIATO QUESTA ESPERIENZA?
 Una sensazione di gioia perchè forse in futuro l'ambiente
 può migliorare

COME DESCRIVERESTI CIÒ CHE ABBIAMO CREATO INSIEME?

PUOI USARE UN DISEGNO, UN TESTO, UNA FRASE...

ESSERE PARTE DEL FIUME

Figure 8. Reaction card from the second activity.

The comparison between both workshops reveals complementary dimensions of ecosocial learning: the first highlights collective action and shared doing, while the second fosters symbolic elaboration and affective awareness. In this way, the order of activities directly influences the type of relationship participants build with the ecosystem.

Stage 4 - Interactions in the exhibition and *Critical Assessment Framework*

The fourth phase focused on “returning” the results through an exhibition that brought together and integrated the materials generated in the workshops. This exhibition fulfilled a dual function: on the one hand, acknowledging and giving visibility to the work carried out by the participants, and on the other, expanding the project’s reach by fostering dialogue with a broader audience. The exhibition was also conceived as an open space for interaction, capable of generating new participatory processes and extending the impact of the collective experience over time. The participation linked to the exhibition visits allowed us to observe the community’s level of engagement with the project. In particular, members of all the participating associations made the effort to visit the exhibition space—even the volunteers from the retirement home.

Additionally, to evaluate the impact of *Essere parte del fiume*, in addition to all the elements described above, we applied an adapted version of Douglas Worts’s *Critical Assessment Framework* as a self-evaluation tool. Its use responded to the intention of assessing not only the social and cultural

transformation generated by the artistic practices, but also the effects on the Olona River ecosystem and on participants' environmental understanding.

The questionnaire was structured, as in Douglas's original framework, into sections corresponding to each level of analysis, with items formulated in evaluative terms that collaborators were asked to rate on a scale from 1 to 5 (where 1 meant "strongly disagree" and 5 meant "strongly agree"). Each section concluded with an open-ended comment space, allowing participants to elaborate on their rating or add qualitative insights.

Personal level: this section included items aimed at assessing whether the project had stimulated new perspectives on the relationship with the river, encouraged creativity, curiosity, or the capacity for critical reflection.

What was the effectiveness of the <i>Essere Parte del Fiume</i> project?	Nothing 1	2	3	4	A lot 5	I don't know
Reflections from the members involved in the project:						
1. Personal level (community members)						
The project contributed to and/or generated new perspectives or reflections on the participants' relationship with the Olona River through art.						
It encouraged personal reflection.						
It stimulated curiosity.						
It stimulated imagination and creativity.						
It improves your ability to think critically and creatively						
Observations:						

Figure 9. Fragment of the Critical Assessment Framework.

On the personal level, the scores are unanimously high, ranging from 4 to 5, indicating that participants experienced the project as a meaningful process of learning and awareness-building. In the qualitative comments, Raul Dal Santo highlights the role of art as a tool for perceptual transformation.

The perspective introduced in the project, as well as the use of art as an instrument for shifting perception, represent a novelty within the ecomuseum's cultural offerings. According to Dal Santo, the project first helped the working group and later the community to develop "lateral thinking," meaning the ability to imagine closer and more sustainable forms

of relationship between people and the environment (Dal Santo cited in González-Reforma, 2025, p. 257).

This reflects the idea that the project opened up new ways of imagining the relationship between individuals and their surroundings.

Community level: this section included questions about the extent to which the project supported the building of social ties, the inclusion of diverse voices, the emergence of shared memories, and intergenerational dialogue.

2. Community level						
The project addressed relevant needs, problems, and opportunities within the community						
It generated information and connections at the personal, community, territorial, national, and global levels						
It involved a diverse audience in the creation of a shared vision for the future						
It brought out ideas, voices, and emotions from different groups, enriching and deepening the collective conversation.						
It created social interactions, dialogue, and debate						
Through artistic practices, it fostered moments of connection and exchange, acting as a catalyst for actions that have an impact on the community and the territory						
Observations:						

Figure 10. Fragment of the Critical Assessment Framework.

At the community level, the evaluations also remain high, between 4 and 5. All the participating entities gave the highest rating to the project’s ability to respond to the needs, problems, and opportunities of the community and the territory. Legambiente emphasized the value of artistic practices as catalysts for shared memories and collective visions. Similarly, Dal Santo highlighted the impact of intergenerational dynamics in awakening memories and imagination, while also noting that artistic practices help generate shared visions and foster intergenerational and territorial engagement.

Although we could have expanded the project’s reach even further by involving secondary schools and communities of non-Italian origin, it is

important to consider that this limitation was largely due to the short timeline of the project, as we had only three months for its development.

Organizational/Institutional level: This section examined how the project influenced the internal dynamics of the Ecomuseum and the collaborating associations. It explored whether the experience encouraged new working methodologies, whether it effectively responded to real community needs, whether the planned objectives were achieved, and whether the final exhibition successfully made the process visible and accessible.

3. Organizational Level (Ecomuseum, city Council ... and associations...)						
The project is grounded in the needs of the community						
It encouraged the ecomuseum and the artist to reconsider their ideas and working methods through input from the community and through collaborative work with it						
It was guided by clearly defined goals, aims, and expected outcomes						
It supported collaborative learning, using appropriate tools to reach those objectives						
It created a learning community composed of institutional staff, volunteers, and the public						
It ensured plurality and freedom of ideas and content, even though it was developed in collaboration with an institution						
It effectively presented the results through an exhibition, highlighting and valuing the work carried out						

Figure 11. Fragment of the Critical Assessment Framework.

The scores and comments received at the organizational and institutional level contain the main constructive criticisms. Although the methodological affinity between the project and the Ecomuseo del Paesaggio di Parabiago is acknowledged—as well as the value of tools such as community maps for fostering territorial dialogue—several practical limitations were also highlighted.

Raul pointed out difficulties in involving volunteers in the mediation of the exhibition. In parallel, suggestions were made to strengthen communication and dissemination of the results, and to enhance an online version of the exhibition—elements that are essential to ensuring the project's continuity

and accessibility. However, it is important to note that these aspects have evolved and improved in the year following the project’s completion.

Global level: this section posed questions about the project’s ability to connect with broader ecosocial issues, ranging from social justice to the Sustainable Development Goals, while also addressing awareness of the interdependence between local actions and planetary consequences.

4. Regional/Global Level						
The project addressed globally relevant issues connected to local realities						
It promotes the health of the global ecosystem (UN 2030 Sustainable Development Goals — climate, water, soil, air, etc.)						
It supports understanding of the environmental impact of human activities and contributes to the UN Sustainable Development Goals (2030 SDGs)						
It promotes social and economic justice and equity at both regional and global levels (SDGs), through innovation						
It fosters public awareness that local choices have global impacts						
Observations:						
(Optional) Suggestions or general comments:						

Figure 12. Fragment of the Critical Assessment Framework.

Beyond these constraints, the experience offers an action model with strong potential for replication in other contexts, provided it is adapted to the social and ecological specificities of each territory. In this sense, the project does not end with its immediate implementation; rather, by becoming integrated into the ecomuseum’s framework, it leaves behind a methodological and community-based legacy that supports the possibility of continuing the initiative and of further connecting art, community, and sustainability as key drivers of cultural transformation.Applying the Framework to the WEAVERS

The conceptual tools analyzed in this chapter were applied to the different phases of the WEAVERS OF THE FUTURE project (see chapter 5). Both the I-O model and the Critical Assessment Framework (CAF) provided a structure for formulating the questions included in the call for practices, guiding the design of the assessment criteria, and shaping the way the project understood cultural impact. However, rather than being an evaluation method, the questions are designed to help participants reflect systematically on their work and understand the broader cultural, ecological, and social dynamics in which their projects are embedded. Each question responds to a specific need identified through the I-O and CAF models and reflects an effort to foster more reflective and situated cultural practices.

The decision to ask about participation, as well as about the Vision of Change, arises directly from this conceptual foundation. The CAF emphasizes that cultural action unfolds across multiple layers—individual, community, organizational, and systemic—and helps make visible the need for cultural practitioners to outline the shifts they aspire to generate at those levels. These questions prompt participants to examine whether their proposals are genuinely rooted in the needs of the territorial and social contexts in which they operate, and to reflect on how they might meaningfully contribute to their regeneration. From this same point of departure emerge the questions concerning the relationship between community, knowledge, and territory, which derive from the relational orientation of the projects. The invitation to identify systemic barriers reflects another central lesson of both the I-O Model and the CAF: cultural work always takes place within complex structures—economic, institutional, political, or temporal—that shape both its possibilities and its limits. Recognizing these constraints does not imply failure; rather, it is a necessary precondition for imagining strategies of resistance, adaptation, and collaboration. It also helps participants understand that cultural transformation requires working with—and sometimes against—the systems that structure everyday life. The ultimate purpose of these frameworks and questions is to help us recognize both the benefits of our practices and the points from which we can continue working and improving in order to keep contributing to a regenerative culture.

Conclusions

This chapter has explored the urgent need for cultural institutions to move beyond outputs and embrace a transformative role in shaping regenerative futures. The climate and social crises we face are not isolated phenomena; they

are deeply intertwined with cultural patterns, values, and systems. Museums and ecomuseums, as cultural nodes embedded in complex ecological and social networks, have the potential to catalyze adaptive change—provided they adopt frameworks that connect vision, action, and impact.

The Inside–Outside Model and the Critical Assessment Framework offer practical tools for planning and monitoring cultural impacts. These models help institutions articulate a clear vision of change, identify desired impacts across multiple levels (individual, community, organizational, systemic), and design strategies that foster co-creation and feedback loops. By integrating these approaches, cultural organizations can shift from a logic of isolated outputs to a systemic perspective that prioritizes relationships, equity, and sustainability.

However, the experience of the Weavers of the Future project reveals a critical insight: many practices submitted to the call did not fully consider the guidance provided. While creativity and community engagement were evident, the articulation of impacts and long-term vision was often vague or missing. This gap underscores the importance of capacity-building within the cultural sector. Institutions need support to internalize the logic of impact evaluation—not as a bureaucratic requirement, but as a learning process that strengthens their ability to act as agents of change.

The Agreement of Belém (2025) reinforces this perspective. It calls on cultural institutions to embrace regeneration, adaptation, and visioning as guiding principles, aligning with the frameworks presented in this chapter. It urges organizations to measure cultural impacts using both qualitative and quantitative methods, ensuring accountability and continuous learning. This is not about reducing culture to numbers; rather, it is about combining indicators with narratives, stories of change, and relational evidence that capture the complexity of cultural transformation.

To operationalize these principles, the Impact Evaluation Grid developed for the Weavers of the future call for practices provides a concrete example. Its seven criteria—Alignment with themes, Creativity, Vision of Change, Community Engagement, Cultural/Ecological Impact, Innovation, and Feasibility—invite institutions to think critically about their projects. The grid serves a dual purpose: it enables evaluators to select practices for dissemination, and it empowers organizations to design initiatives that are coherent, impactful, and future-oriented. Scoring on a scale from 1 to 5 is not an end in itself; it is a prompt for reflection and dialogue within project teams.

Looking ahead, the Weavers of the Future process can play a pivotal role in helping cultural actors implement impact measurement criteria in their projects. By fostering shared learning, offering methodological guidance, and creating spaces for exchange, this initiative can strengthen the cultural sector's contribution to climate justice and social resilience. The challenge is significant, but the opportunity is greater: to transform cultural institutions into living systems that generate care, creativity, and collective action for a sustainable world.

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Chapter 3

The Process Behind the Project: EcoLivre and the Agreement of Belém

Victoria McMillan, Isabel Hernández, Raul Dal Santo

Introduction: Why a chapter on the process

In the face of the interconnected crises of our time, the "Weavers of the Future" project has launched an appeal to cultural, social and environmental actors. The aim is to activate living culture and heritage as powerful forces for climate justice, bioregional regeneration and community empowerment and empowerment. We live in a reality that must be changed and quickly. This is why conservation is not enough and in some cases it is harmful and it is necessary to co-create regenerative futures in line with the United Nations 2030 Sustainable Development Goals (SDGs).

The context in which the *Weavers of the Future* project was born is marked by a long international work of cooperation and informal networking between community museums and ecomuseums.

With the beginning of the 20s, networking has focused in particular on the SDGs and climate action.

As already happened at COP 26 in Glasgow, COP30 in Belém, hosted in the heart of the Amazon, was the pretext for the launch of a long-term cooperation project.

The creators of Weavers of the future conceived an evolutionary project, not as a simple series of events, but a way to strengthen the informal networks already established to continue to combine local experiences with a global perspective and to give voice to the crucial role of culture in the debate on climate and the 2030 development goals.

The limitations of the project (limited time, no budget, physical and cultural distance of the working group) imposed on the organizers the need to pay special attention to the **quality of the process** and the motivation of the

working group to maximize the impacts of the project. This chapter aims to explain **how** the various phases of the project have been developed so far and **how** we will continue to work and monitor the results of the process.

The Weavers of the future project followed the timeline indicated in the figure which, although very limited, allowed the project to evolve through a path of participation. The project was finally divided into five integrated actions:

1. **Position Paper** – to define the conceptual and methodological framework
2. **Agreement of Belém** – to establish shared commitments and mutual responsibilities (see annex 1).
3. **Call for Practices** – to collect and evaluate experiences of regenerative cultural change (see annex 2).
4. **Exhibition of Good Practices** – to make approaches and solutions visible (see Part 2 and 3 of this book).
5. **EcoLivre Conference** – to consolidate the network and launch the three-year program 2026-2029.

The goal of the project evolved during the participation phase and ultimately is to build a global network that will continue well beyond COP30, with a three-year program of cooperation, training, shared learning and analysis of the impacts of the actions carried out.

The key concept that emerged last during the debates and finally in the Ecolivre meeting is "**From event to movement**": we are only at the beginning of a long-term journey. COP30 was not the end—it was a catalyst.

Project Timeline

December 2024 – after an Argentinian colleague proposed the idea of joining forces for an event on the occasion of Brazil's COP30, ecomuseums in Italy and Brazil mobilize to organize it

June 2025 Formation of the Coordination Group. Participatory drafting of the first draft of the position paper and the project program. Translations of the drafts and start of the participatory phase; Expansion of the Coordination Group.

July - August 2025: dissemination of the proposal to possible partners

September 2 Coordination Group plenary meeting to discuss the draft of the Position Paper, Agreement of Belém, EcoLivre Meeting program and approve the Timeline, Call for Practices, the website and the IT Infrastructure

September 30 First deadline for receipt of proposals for the Call for practices

October 10, 2025 - new Deadline for receipt of proposals for the Call for practices

October 17, 2025 - Notification of results to the participants

October 30, 2025 - Submissions of short paper for chosen practices

October 30, 2025 - Deadline for receipt of amendment proposals for the Agreement of Belem

November 4, 5, 6 - International meeting "EcoLivre" and exhibition good practices

November 5 - Call on Governements

December 5 - Full paper submission

December 31 - Open access book publishing

Shared methodological framework

"Measuring not how much we produce, but what life we enable." (from the Position Paper)

The methodological framework is the heart of the project. The first phase of the process was the sharing of a **Position Paper** by a Coordination Group which defined principles and tools that guide all phases:

- Regenerative Cultural Change: culture as an infrastructure for ecological and social regeneration.
- Bioregionalism: acting on scales consistent with natural systems (river basins, ecosystems).
- Cultural Feedback mechanisms: learning mechanisms based on qualitative and quantitative indicators.
- Community Empowerment, Inclusion and Cultural Rights: Ensuring the empowerment of the population, intergenerational participation and marginalised voices.

The position paper also discussed operating models:

- To interpret change not only as output, but as outcomes and systemic impacts, the Inside–Outside Impact model (Worts & Dal Santo) has been adopted, which distinguishes internal impacts (organization, governance, skills) and external impacts (living culture: values, relationships, behaviors) on short and long-term horizons (Chapter X).
- Integration of knowledge: traditional/indigenous ↔ scientific ↔ artistic and participatory practices
- Ecopedagogy (Paulo Freire) for development and climate justice.
- Cultural feedback loops and indicators of relationship health.

The Five-Step Process

Position Paper – from the conceptual framework to actions

The Position Paper was prepared by the members of a Coordination Group made up of researchers, representatives of networks and institutions that had already worked in the past and that mostly belong to the world of museology. The heterogeneous group in terms of geographical and cultural origin (Europe, America, Asia) defined a common language, a shared methodological basis and the objectives of the project. He also defined the graphic concept, a glossary of common terms, the actions to be carried out and the timeline of the project.

The Coordination Group has also prepared criteria and tools to develop the project actions and defined the communication plan by identifying the channels (DROPS online platform for ecomuseums and community museums, social networks), the graphic concept and the communication method for the collection and dissemination of information.

A "provisionally final" draft of the position paper was subsequently sent to a number of possible "Main partners" consisting of networks or groups of place-based, community-led participatory and collaborative cultural organisations, including, but not restricted to ecomuseums, community museums, geoparks, and bioregioning groups. As the partners joined, they were also involved in the definition of the position paper and invited to involve other possible partners.

All this took place through **remote iterative consultations** via email, through comments on a shared document and finally through specific online meetings, recording amendments and comments on the document from time to time.

The list of the coordination committee is given in appendix 3. Thanks to a long work of involvement, developed by the Brazilian Main partner Associação Brasileira de Ecomuseu e Museus Comunitários (ABREMC), two ministries of the Brazilian Government (SEDES- Secretaria de Ciência e Tecnologia para o Desenvolvimento Social) have also joined. Ministerio da Ciência, Tecnologia e Inovação and IBRAM Instituto Brasileiro de Museus - Ministério da Cultura)

The Government did not participate in the drafting of the position paper, but only in the Ecolivre meeting.

As new subjects were added to the coordination group and among the Main partners, a technical secretariat was defined composed of the most active and

reactive subjects of the Coordination Group which favored participation and developed the executive aspects of the project.

Agreement of Belém — Cultural Organizations for a Regenerative Era

The Belém Agreement - Cultural Organizations for a Regenerative Era - was initially conceived as a long-term collaboration agreement. In the past, some members of the working group and some Main Partners experimented with this type of agreement. It basically follows the framework of the Aalborg Commitments for shared vision of a sustainable future for EU communities that were defined in 2004 and signed by over 700 local communities and European cities¹¹.

The draft agreement was defined by the coordination group and the Main partners together with the position paper. It has been published on the project website for accession as it is or for accession by means of a suggestion of amendments. The amendments were processed by the coordination group and included in the provisionally final version of the Agreement.

The agreement was discussed and voted on via online form during the three days of the Ecolivre meeting from 4 to 6 November and for 48 hours after the meeting. All voters voted in favor of the final text.

The participatory process gave shape to the Belém Agreement, a policy-oriented document with recommendations for cultural institutions' roles in bioregional contexts, calling on governments to act decisively on climate commitments (annex 1).

The Belém Agreement is a collective call to action, affirming the role of culture as an agent of change in the face of the climate crisis. It sets out shared principles, strategic recommendations, and concrete commitments for cultural institutions and practitioners worldwide.

The agreement is more inclusive than those developed so far and is dedicated to: place-based, community-led participatory and collaborative cultural organisations, including, but not restricted to, ecomuseums, community museums, geoparks, and other bioregional actors including artistic collectives, mediators, creators, academics, and activists

The signatories adhere to the framework of the "Weavers of the Future" to develop 3-year initiative that affirms a common commitment to work with culture as a force for regenerating and adapting life — in their territories and

¹¹ <https://sustainablecities.eu/the-aalborg-commitments>

communities — amidst times of climate, ecological and social crisis (Belem agreement, premise).

The agreement defines 1. shared vision 2. Challenges 3. The call to the COP30 4. response and commitments 5. Modalities of accession 6. Coordination, Shared Learning and Supportive Accountability

A crucial point emerged from the Ecolivre meeting that led to the total rewriting of point 6. **The final agreement provides for Accountability but unlike the initial draft, the signatories** have not chosen a "big brother" monitoring mode, but monitoring through mutual support and periodic review. Annual meetings should encourage the sharing of progress and difficulties.

"Weavers of the Future aims to be an international collaborative network of community-led cultural organisations and practitioners who commit to help and support each other envision and enact community agency and action for social and environmental wellbeing, with mutual motivation and accountability through periodic sharing of actions and progress, challenges and problem solving within the network [see also Section 4]. An international coordination group will facilitate voluntary exchange of experiences and tools and may publish an annual note highlighting learnings".



Figure 13. Map of the 62 parties to the Belem Agreement (updated at the end of November 2025)

Call for Practices — collection and selection

Weavers of the Future's Call for Good Practices invited cultural institutions, researchers, artists, and community organizations to share projects that connect local culture, heritage, and knowledge with climate action and a regenerative future.

Projects could use different artistic approaches, such as visual, sound, performative, textile, narrative or hybrid, and include traditional, indigenous, popular or experimental forms. The initiatives could also focus on environmental or anthropological issues, among others, so not only on climate action. The main requirement was collaboration with the community.

For maximum inclusivity, projects could use non-traditional presentation formats, including video and audio multimedia technologies, as well as written, verbal or image materials.

The selected initiatives had several possibilities of visibility:

- be presented in an international digital exhibition. The international exhibition aims to present ongoing and completed initiatives in which living cultures, heritage, artistic practice and local knowledge are integrated to strengthen community engagement, promote climate justice and promote meaningful connections between people and territory. We particularly encourage the submission of projects by young people, women and intergenerational groups.
- be presented at the international meeting "EcoLivre"
- be published in this open access book

The coordination group has also defined together with the position paper the call for practices, the criteria for the selection of projects, the online form with mandatory and optional questions.

The group of evaluators has defined an in-depth document for the participants, the evaluation grid. The 36 applications received by the deadline defined on 30 September and extended to 10 October were evaluated by at least two evaluators according to defined criteria (see box below), with scores from 1 to 5 for a maximum score of 35. The scores assigned vary between 16 and 35.

Finally, the evaluators analyzed the average score and standard deviation of the scores assigned to each practice. The final choice of 10 practices and 5 reserves to be shown at the Ecolivre meeting was based not only on the

quantitative score but also on the geographical balance between Europe and Global South. The critical issues detected and the mitigations adopted are indicated in the box below

Criteria for evaluating practices

Does it fit the topics of the call? (not at all = 1, completely =5)

Creativity and Participatory Approach (1-5)

Vision of desired Change (1-5)

Community Engagement (1-5)

Cultural/Ecological Impact (1-5)

Innovation (1-5)

Feasibility (1-5)

Critical issues encountered in the evaluation of the submitted practices and mitigations

- Incomplete data: ask for additions
- Unmeasured impacts: introduce guiding questions and minimum indicators (individual→community→policy scale).
- Heterogeneity of evaluations: use SD and, for cases with high SD, ask for additions or 3rd evaluator.
- Geographical imbalance: balanced choice and reserves for replacements on the same continent.

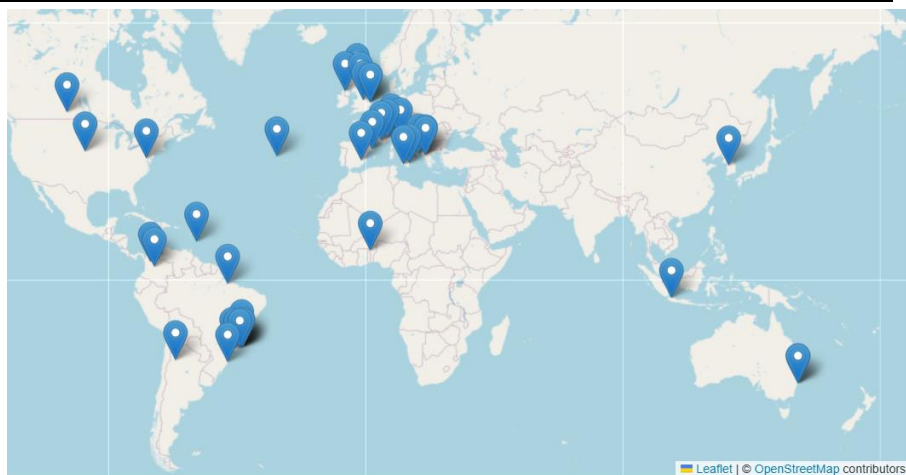


Figure 14. Map of the files received updated at the end of November 2025



Figure 15. The flyer for the call designed by the Spanish artist Marisol Gonzales Reforma.

Exhibition of Practices

The evaluators accepted all the paperwork received for their inclusion in the digital exhibition. This exhibition is conceived as a **living archive**. For this reason, after the Ecolivre meeting, the call for the exhibition was reopened and other practices were submitted and are being evaluated. The exhibition is currently in provisional form and is published on the project's service website¹². The site shows in real time all the files presented by drawing the texts from the databases mentioned above.

The provisional nature of the exhibition is due to the fact that the Coordination Group has given priority to the drafting of this book,

¹² <https://ecomuseo.comune.parabiago.mi.it/cop30/practices.html>

postponing the exhibition to 2026. In addition, as the evaluators detected deficiencies in the description of numerous practices The Group decided to ask all authors to submit the descriptive texts for the book with the intention of using these texts for the exhibition in 2026 as well.

EcoLivre Conference

EcoLivre was the international meeting of the Weavers of the Future initiative, which brought together cultural institutions, professionals and networks from all over the world. The online forum took place over the three days from 4 to 6 November 2025 for a duration of about 3 hours each. The time (next box) was defined by the Coordination Group in such a way that the meeting could be used from almost all time zones in the world.

Ecolivre-schema

Time (Belém, BRT/UTC-3): 10:30 | Rome (CET, UTC+1): 14:30 | London (GMT, UTC+0): 13:30
| New York (EST, UTC-5): 08:30 | Bogotá (COT, UTC-5): 08:30 | Seoul (KST, UTC+9): 22:30

The purpose of the meeting was to:

- Share strategies and best practices for climate justice and cultural regeneration.
- Address systemic barriers to sustainability.
- Co-create a shared vision and a three-year operational commitment for cultural action
- Involve the Brazilian government hosting COP30 in Belem

The theme chosen is inspired by the international meeting, held in Belém in 2012 between ecomuseums and community museums, organized by one of the Main partners of Weavers of the Future (Associação Brasileira de Ecomuseu e Museus Comunitários - ABREMC).

In addition to the physical location of the 2012 meeting, EcoLivre also shared the theme of that time: "Heritage and Empowerment of Local Development Actors" which has been reoriented to today's urgencies: strengthening community capacities and integrating culture into climate strategies. The updated theme then emerged: "Empowerment of local actors for the regeneration of heritage and biodiversity in times of climate crisis".

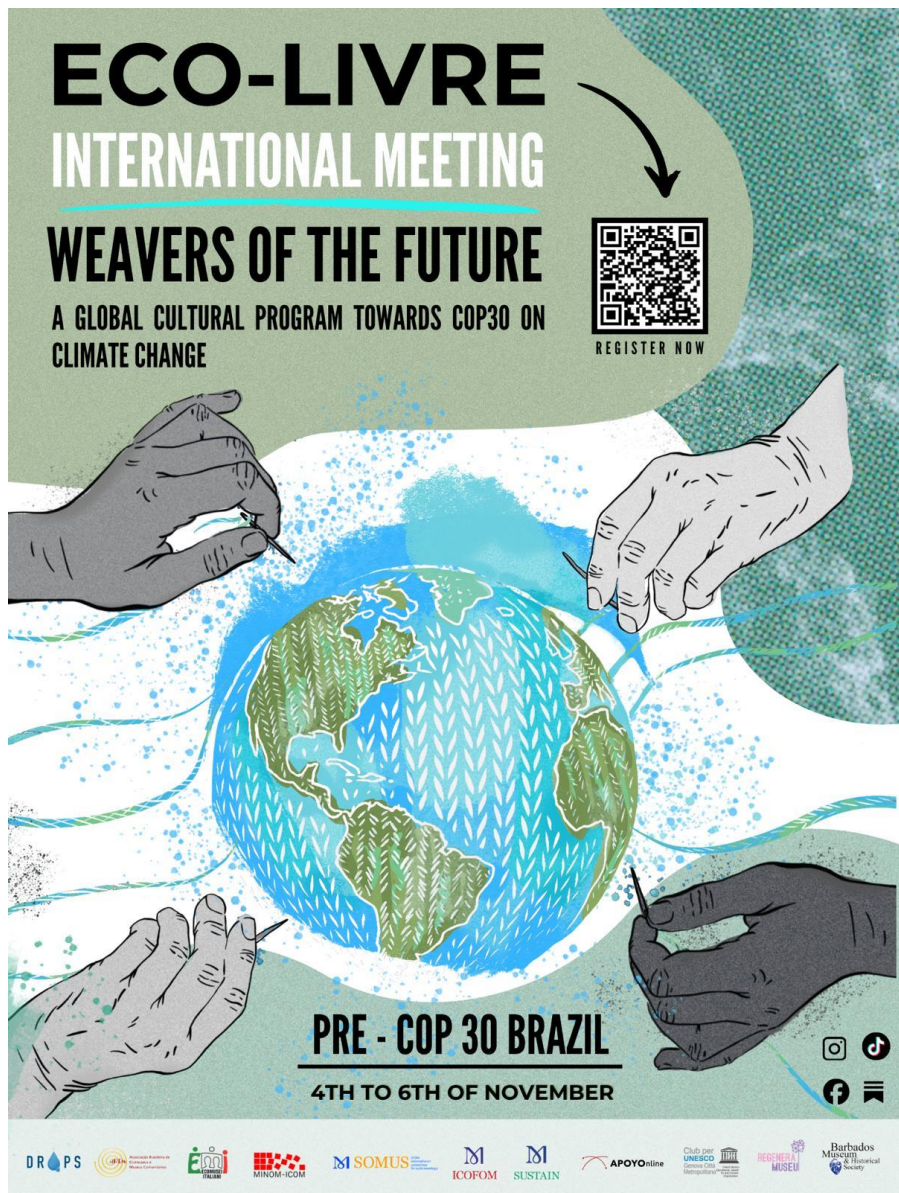


Figure 16. The flyer for Ecolivre designed by the Spanish artist Marisol Gonzales Reforma.

Day 1 – 4 November 2025: The "Weavers of the Future" project and institutional commitments

The first day, in English, opened with institutional greetings from the representative of the Ministry of Science and Technology of the Government

of Brazil, followed by Raul Dal Santo (Italian Ecomuseums Network) and Terezinha Resende (Associação Brasileira de Ecomuseu e Museus Comunitários - ABREMC). The **Keynote Panel**, led by Lucimara Letelier, introduced the central theme: **culture as a catalyst for climate action and regeneration**, delving into concepts such as **regenerative cultural change** and **bioregionalism**. **Session 1**, led by Victoria McMillan, presented the **Position Paper**, the **Agreement of Belém** and the strategic lines of the "Weavers of the Future" project. **Session 2**, moderated by Henry McGhie, featured a **roundtable** with numerous representatives of the Main Partners to ensure their maximum involvement in the meeting even in a short time.

The roundtable was a guided conversation, where each participant shares their institution's role and commitments within the *Weavers of the Future* initiative. McGhie approach was to focus on what participants and organizations want to do and need, rather than telling them what they "should" do. This helps emphasize action and accountability, avoiding the fatigue that often comes with commitments that lack follow-through.

The speeches clarified **the roles and commitments of the partners**, discussed the **next steps for the Agreement of Belém** and started the **Interactive Workshop** with all the participants of the meeting dedicated to building a **shared vision for regenerative futures** via messages sent via chat. The day ended with the **wrap-up** and preview of the second day's program.

Roundtable questions

Question 1: what commitments has your organisation made towards the Belem Agreement, and what concrete actions will you will be doing in the next 12 months to meet these? [you can focus on a main action]?

Question 2: what does your organisation need, and what can it offer, so that the network can achieve the aims of the Belem Agreement together? What challengers are there, and what solutions?

Please try to keep to 2 minutes per person, so focus on main points

Interactive workshop questions

Q 1. Please share in the chat where you are based/where you work, and how your organisation is committed to the Belem Agreement?

Q 2. What are the main actions you will take in the next 12 months?

Q 3. What do you need from the network and community of practice, and what can you offer?

Q 4. What challenges are there, and what solutions, to achieving the Agreement together?

Day 2 – November 5, 2025: Digital exhibition and voices from the field

The second day, also in English, opened with speeches by Giulia Mura, who summarized the results of Day 1. Session 3, led by Marisol González-Reforma, launched the digital exhibition "Weavers of the Future", presenting the provisional online platform and the selected practices better described in the part 2 of this book. Session 4, "Voices from the Field", moderated by Isabel Hernández and Catalina González, gave space to the 9 international good practices selected through the call for practices. Each speaker was asked to present his or her practice highlighting some aspects considered essential by the Coordination Group (Context, Vision of desired change, Creativity and community engagement, Cultural and ecological impact, Feasibility and next steps)

The Coordination Group, in order to ensure conciseness of the interventions and direct them to the topics of interest, has drawn up a template of the presentation.

The Closing Panel, led by Raul Dal Santo, linked local practices to global frameworks, outlining the next steps for the network and including the reopening of the call for practices and this publication. The day ended with the formal adoption of the Agreement of Belém.

Day 3 – 6 November 2025: Focus on the Portuguese-speaking world and education

The third day, in Portuguese, saw the participation of a representative of the Instituto Brasileiro de Museus (IBRAM). Subsequently, the role of popular and liberating education for climate justice was explored, with a session dedicated to Paulo Freire. This was followed by the presentations of 5 files from Italy and Brazil. Also for the illustration of these practices, the use of the template mentioned above has been suggested.

The meeting concluded with a focus on lessons learned, the transferability of practices and network perspectives.

Onsite Visits to Belém: Culture and Territory

In parallel with the online sessions, EcoLivre offered participants present in Belém the opportunity to discover the Ecomuseu de Belém and the Center for Art, Culture and Education (NACE). Activities included:

- Guided tour of the "Ateliê Coletivo" and the exhibition "Mestre da Cerâmica Marajoara", with a focus on the Amazonian ceramic tradition.
- Exploration of the "Laís Aderne" Gallery, an exhibition space dedicated to memory and cultural sustainability.

- Pottery workshops and handcrafted souvenirs in the Paracuri district, to enhance the local heritage. These experiences made it possible to connect the themes of the forum to the territorial reality, strengthening the link between culture, community and environmental regeneration.

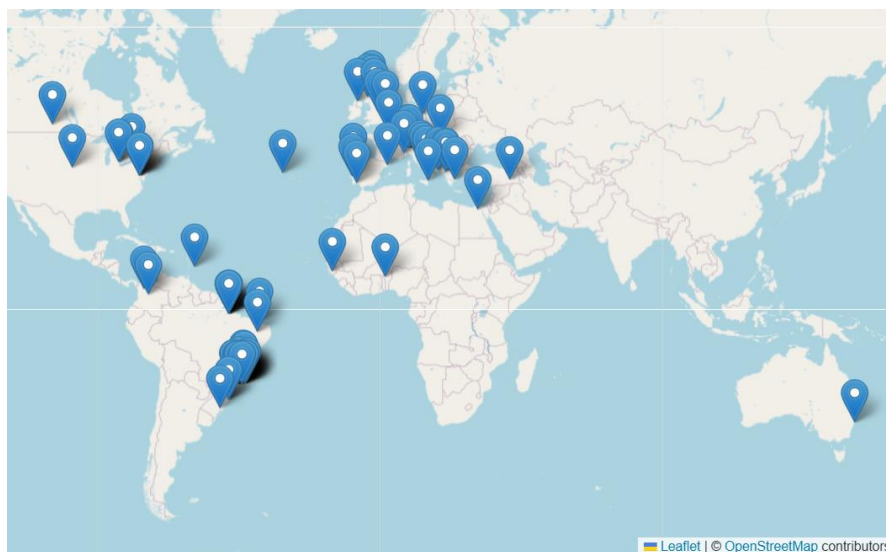


Figure 17. Map of the participants of the Ecolivre meeting

Cross-cutting Actions and Methods

IT and communication

The IT infrastructure was created by the Coordination Group without any construction and management costs. For the definition of the code, the help of AI systems was fundamental. Although it still required IT skills (present in the Coordination group), the help of AI made it possible to customize and optimize the data sharing and real-time restitution system. The web pages of the Weavers of the Future project are contained in the DROPS Platform website. This is a Google Workspace site in the free version that allows participatory content management. On this site there are links to the data collection web page containing the form for submitting the paperwork, joining the Belém agreement and registering for the Ecolivre meeting. For content management reasons, the data collection web page is contained on the website of the Ecomuseum of Parabiago (Italy). The texts entered via the aforementioned web page entered by the user are recorded on Google's

Firebase, while the images are recorded on Supabase.com. The free versions of these two services proved to be suitable for the specific use of the project. Each file/project entered is automatically georeferenced by the Geoapify.com service in the free version. Georeferencing is used for the creation of maps with real-time updates. The maps are displayed via an opensource Leaflet system with the open access cartographic base of Openstreetmap. The texts and media are provided by the Authors under a creative commons license. By submitting photos and texts in the call for good practice, the user grants "Weavers of Future" an irrevocable CC BY-SA 4.0 Attribution-ShareAlike 4.0 International license (<https://creativecommons.org/licenses/by-sa/4.0/deed.en>) to use, reproduce, distribute, modify, and publish such texts and images for purposes related to the 'Weavers of the future' project and its initiatives, including publication and dissemination purposes, without any compensation. User ensure his/her own all necessary rights to grant such a license.

Isabel Hernández, a member of the technical secretariat designed and managed the communication on the following social networks: [Facebook page](#), [Instagram](#), [TikTok](#), [Substack](#), [Linktree](#) . Together with the website and email contacts, social networks were essential for the dissemination of the project's activities.

The graphic concept of the project, which also appears on the cover of this book, was conceived by the Spanish artist Marisol Gonzalez Reforma, who is part of the Coordination Group.

The graphic concept is inspired by the title of the project "Weavers of the future" and the position paper. Each piece of land represents a bioregion, and underneath, the layers symbolize the cultural and natural heritage, the traditional roots, woven with fabrics typical of those traditions. The hands represent the communities that manage and care for the heritage, and the threads that connect the hands are the networks of relationships created thanks to the "Weavers of the future" project.

Cross-sectional methods

The process was supported by cross-cutting methods that ensured its robustness:

- **Participation & Inclusion:** design for participation, attention to Global South networks, marginalized groups.

- **Evaluation & Evidence:** qualitative mix (stories, maps) and quantitative mix (minimum indicators).
- **Governance & Accountability:** international coordination group, annual note, transparent dashboard.
- **Digital tools:** DROPS platform, Teams for EcoLivre, open licenses.

From the Ecolivre meeting, the need to align the project with the standards of the **Glasgow Work Programme emerged:** policy coherence, training, monitoring, communication.

Process Results

The process produced:

- Key documents (Position Paper, Belém Agreement, evaluators' vademecum).
- Selections (36 applications evaluated, 10 presented at EcoLivre).
- Online exhibition (living catalogue, including post-deadline practices).
- Expansion of networks (ICOM, Ibermuseum, UNESCO Geoparks).

Critical issues encountered & mitigation strategies

Criticality:

- Incomplete data despite templates and mentoring → integration requests
- Unmeasured impacts → minimum indicators
- Limited resources → partnerships and lightweight tools
- Inclusion of marginalized voices → linguistic mediations and non-textual formats

A risk emerges from the meeting: declarations without verification mechanisms. Proposed solution: collaborative accountability and annual milestones. *This addition is interpretive, but consistent with discussions.*

Conclusions: the value of the process and future challenges

The *Weavers of the Future* project has shown that culture is not an accessory to climate action, but its strategic infrastructure. The quality of the process – based on inclusive participation, co-creation, mutual accountability and integration of knowledge – has made it possible to transform an idea born as an event into a global movement. The five phases completed so far (Position Paper, Agreement of Belém, Call for Practices, Exhibition, EcoLivre Conference) have created an ecosystem of tools and relationships that strengthen the capacity of the cultural organizations participating in the project and consequently the communities linked to them to act for climate justice. Methods such as the *Inside–Outside Impact* model and cultural feedback loops have introduced innovative evaluation practices, oriented not only to outputs but to systemic impacts.

A key principle emerged from the EcoLivre meeting: **agency** and **accountability** are the basis for credibility and impact. It's not enough to sign an agreement: you need to create opportunities to tell stories, share progress and support each other.

The process has made visions, practices and commitments coherent, providing reusable methods and activating inclusive governance. The practices exhibited in EcoLivre and in this book demonstrate that implementation happens in places, through workshops, maps and narratives that realign imaginaries and practices to planetary boundaries.

The three-year 2026–2029 program of the Belem agreement will be the test bed of this vision. Future actions will have to continue to pay particular attention to the process and consolidate the network of relationships woven so far. Only through this will it be possible to ensure that the concept of "regeneration" does not remain rhetoric but becomes daily practice. In times of climate, social and cultural crisis, *Weavers of the Future* reminds us that transformation is primarily narrative, relational and communal, while also benefiting from advanced knowledge and technologies. COP30 was not the goal, but the catalyst for a change that must continue.

Part 2: A tour of the world's good practices

Chapter 4

Africa

Regeneration through Community, Culture, and Earth

Ibrhaim Tchan

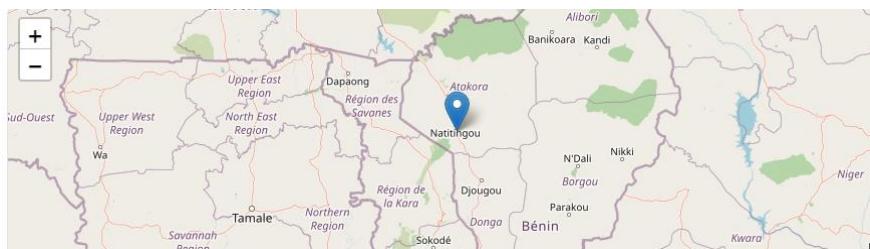


Figure 18. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>

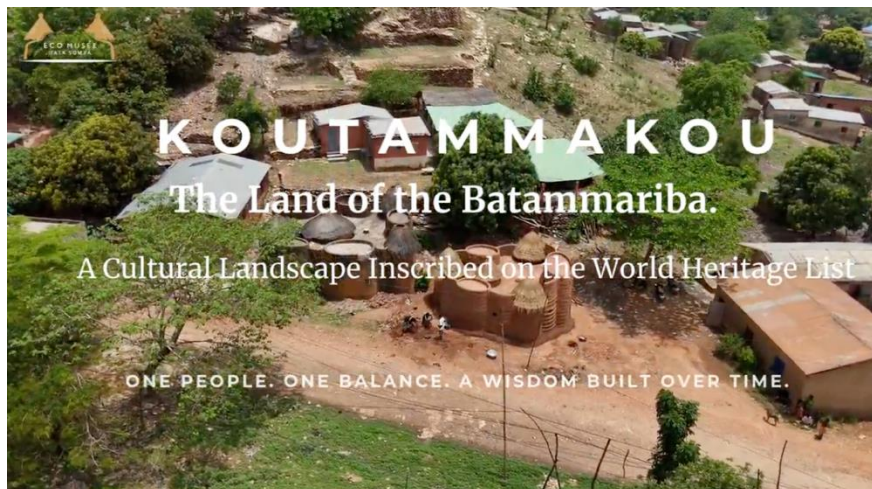


Figure 19. screenshot of a video presentation of the project

Project details

Website	https://web.facebook.com/ecomuseetatasomba.bj/?locale=fr_FR&_rdc=1&_rdr#
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Period	2022 - In progress
SDG's	No Poverty Quality Education Sustainable Cities and Communities Climate Action Life Below Water Life on Land

Organization Biography / Description

The Écomusée Tata Somba is a community-driven cultural institution dedicated to safeguarding, interpreting, and revitalizing the heritage of the Batammariba (Otammari) people in the southern part of the Koutammakou Cultural Landscape (Benin). Rooted in the internationally renowned Tata Somba earthen architecture (sikien), the ecomuseum functions not as a static collection, but as a living museum without walls, where heritage is experienced in daily life, rituals, knowledge transmission, and ecological practices.

Short description of the experience

The Tata Somba Ecomuseum is a community-led initiative in the Koutammakou (Benin) that regenerates Batammariba heritage through traditional architecture, cultural transmission, and environmental resilience. By linking training schools, women cooperative, and digital storytelling, the ecomuseum empowers youth and communities to safeguard the iconic Takienta (sikien) while building sustainable futures rooted in culture and land.

Vision of Change

- Ecological and environmental regeneration
- Strengthening identity and collective memory

Expected Impacts and their evaluation

A. Internal impacts for the organization:

- energy efficiency
- reduction of carbon emissions
- integration of sustainability policies

B. External impacts:

-

Figure 20. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>

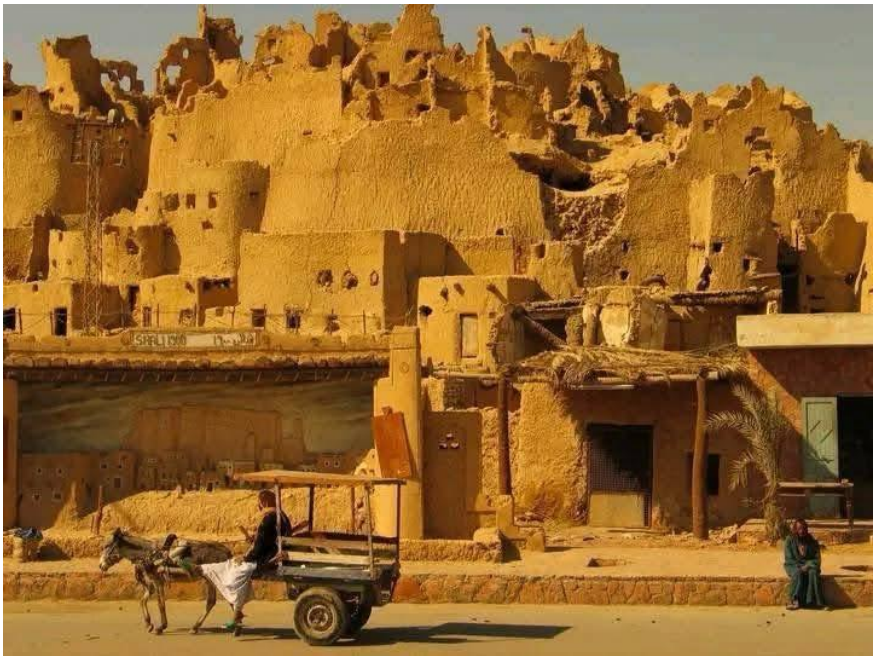


Figure 21. screenshot of a video presentation of the project

Project details	
Website	https://web.facebook.com/ecomuseetasomba.bj/?locale=fr_FR&_rdc=1&_rdr#
Period	2022 - In progress
SDG's	Quality Education Gender Equality Affordable and Clean Energy Decent Work and Economic Growth Reduced Inequalities Sustainable Cities and Communities Responsible Consumption and Production Climate Action Life on Land Partnership for the Goals

Organization Biography / Description

The Siwa Ecomuseum is an independent, community-based heritage project designed and coordinated by researcher Shaimaa Matar. Originating from her master's thesis and a peer-reviewed Springer Nature publication, the proposal integrates participatory heritage documentation, renewable energy, and sustainable tourism to safeguard the cultural and natural heritage of Siwa Oasis and strengthen local socio-economic resilience.

Short description of the experience

The Siwa Ecomuseum is an independent community-based initiative designed and coordinated by Shaimaa Matar to safeguard the unique cultural and natural heritage of Siwa Oasis, Egypt. Originating from academic research and fieldwork (Master's thesis and Springer publication), the project applies SWOT–TOWS analysis to integrate heritage conservation, climate adaptation, renewable energy and year-round sustainable tourism. It aims to empower the local community, strengthen identity, and provide a transferable model for other fragile landscapes.

Vision of Change

To safeguard Siwa's unique Amazigh cultural and natural heritage while improving local livelihoods. The ecomuseum vision integrates community stewardship, renewable energy, and year-round tourism so that cultural identity and climate adaptation become mutually reinforcing drivers of sustainable deve

- Ecological and environmental regeneration
- Community empowerment and participation

Expected Impacts and their evaluation

A. Internal impacts for the organization:

- energy efficiency
- reduction of carbon emissions
- development of future-oriented organizational models
- localization of supply chains
- integration of sustainability policies

B. External impacts:

- Groups

- Individuals
- Communities and neighborhoods
- Transforms Human systems
- Organizations
- Cities and regions

Community-Knowledge-Territory Connection

Concrete example: Through participatory workshops and community mapping, elders, artisans and youth co-documented heritage sites and crafts. Intergenerational dialogue preserved oral history, while traditional building skills and ecological knowledge shaped renewable-energy and tourism strategies.

Approaches used:

- Participatory workshops
- Community mapping
- Community empowerment
- Intergenerational dialogue
- Collaboration with traditional/indigenous knowledge

Systemic Barriers and Strategies

How were they overcome? Built scientific credibility through master's research and a Springer-published chapter; documented field evidence and strategic plans (SWOT–TOWS diagrams) to demonstrate feasibility; continued presenting the proposal at academic and professional forums to attract future support.

Obstacles encountered:

- Lack of resources including funding
- Lack of institutional recognition

Chapter 5

America

Building Climate Active Community Museums: A Case Study of the Community of Curatorial Practice at the Barbados Museum

Kaye Hall

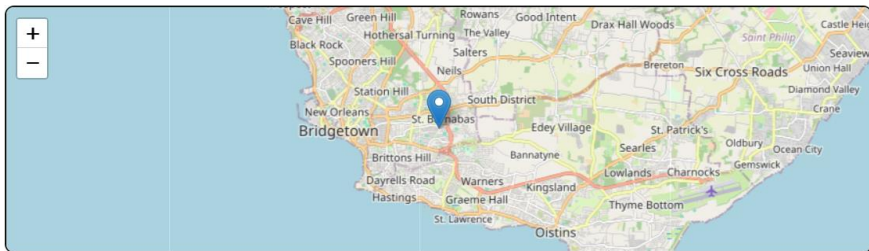


Figure 22. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 23. Image of the project.

Project details	
Website	https://www.barbmuse.org.bb/ https://sharedislandstories.wp.st-andrews.ac.uk/
Period	2016 - In progress
SDG's	No Poverty Zero Hunger Good Health and Well-being Quality Education Gender Equality Clean Water and Sanitation Affordable and Clean Energy Decent Work and Economic Growth Industry, Innovation and Infrastructure Reduced Inequalities Sustainable Cities and Communities Responsible Consumption and Production Climate Action Life Below Water Life on Land Peace, Justice and Strong Institutions Partnerships for the Goals

Organization Biography / Description

The Barbados Museum was established in 1933 with a natural heritage collection and has served as the national repository of the national memory and the "Home of Barbadian History, Heritage and Culture" from its inception. The museum boasts, in addition to the initial natural history gallery, galleries which explore social history, an African gallery, an art gallery and a children's gallery which introduces children to STEAM concepts through play and learn education through a lens of Caribbean culture. The collection boast over a half million objects ranging from documentary heritage to art and memorial ephemera, audio visual content objects linked to the exploration of intangible cultural heritage. The Museum also holds the title of the Enslaved Burial Ground at Newtown which forms the basis of continued examination and exploration of difficult histories and a research library which forms the basis for ongoing research into Caribbean history heritage and culture. The museum provides ongoing research support through

dynamic history and genealogy groups which provide frequent public presentations from ongoing heritage research, climate action and activism support through our sustainable museums initiative (launched in May 2023) and our climate action hub (established in June 2024) which provide opportunities for capacity building, real time interventions such as UNESCO geo-heritage tagging and continued learning opportunities for sustainable living. The Museum is also a recognized NGO under the 2003 Convention for the Intangible Cultural Heritage (June 2024) and a finalist for the 2025 ICOM Award for Sustainable Development Practice in Museums for our work in the project Shared Island Stories between Scotland and the Caribbean. The Museums award winning programming work is based on the Community of Curatorial Practice Model Developed at the Museum by Dr. Natalie McGuire which has been implemented across our programming platforms formally since the 2016 EULAC Museums Project (The Horizon 2020 funded and 2021 ILUCIDARE special prize award winning project Museums and Community: Concepts, Experiences, and Sustainability in Europe, Latin American and the Caribbean (EU-LAC Museums, 2016-2021, University of St Andrews). The Museum is currently working with our colleagues at St Andrews University to develop a toolkit for climate actions in Museums in SIDS and across the Global South

Short description of the experience

The museum provides ongoing research support through dynamic history and genealogy groups which provide frequent public presentations from ongoing heritage research, climate action and activism support through our sustainable museums initiative (launched in May 2023) and our climate action hub (established in June 2024) which provide opportunities for capacity building, real time interventions such as UNESCO geo-heritage tagging and continued learning opportunities for sustainable living. The Museum is also a recognized NGO under the 2003 Convention for the Intangible Cultural Heritage (June 2024) and a finalist for the 2025 ICOM Award for Sustainable Development Practice in Museums for our work in the project Shared Island Stories between Scotland and the Caribbean. The Museums award winning programming work is based on the Community of Curatorial Practice Model Developed at the Museum by Dr. Natalie McGuire which has been implemented across our programming platforms formally since the 2016 EULAC Museums Project (The Horizon 2020 funded and 2021 ILUCIDARE special prize award winning project Museums and Community: Concepts, Experiences, and Sustainability in Europe, Latin

American and the Caribbean (EU-LAC Museums, 2016-2021, University of St Andrews). The Museum is currently working with our colleagues at St Andrews University to develop a toolkit for climate actions in Museums in SIDS and across the Global South.

Drawing on history, heritage studies, sustainable development, art history and memory studies, the project asked:

- Which collections from the islands tell unfinished stories of Empire?
- What is the role of heritage communities for sustainable development?
- How can island community museums partner with NGOs, policy and local organisations and businesses for climate action?
- How can health and well-being be understood in relation to community heritage, traditional ecological knowledge and island life?
- What does this new knowledge bring to debates on climate justice, especially as they relate to the role of youth?

The project utilised the lens of the sustainable development goals as a way to examine topics such as regional integration, the impact of world heritage status on communities and the environment and the legacies of colonialism and the transatlantic trade on climate vulnerable communities among others. A key outcome has been a resolution (4) presented to ICOM at its General Conference in November 2025 entitled “**Empowering Museums in Achieving the SDGs through Youth by Means of Social Inclusion and Climate Action**”¹³

Vision of Change

The vision has been to empower young people to change the world positively and to equip them with the tools and opportunities to do so. A curriculum was therefore developed for the project to have guiding principles based on common themes that affect Small Islands viewed through the lens of the relevance of the SDGs which also worked with a constructive learning model to empower curatorial sustainability¹⁴.

¹³ ICOM General Assembly vote - November 15, 2025 (89.02%)

¹⁴ See Appendix 1

Expected Impacts and their evaluation

Expected impacts have been tied to outcomes from empowering youth action. These have thus far included work on public awareness empowering the wider community to access sustainable living practice and concrete efforts at working directly to mitigate climate action such as UNESCO Geo-heritage tagging and biochemistry experimentation to find sustainable reuse for system “pollutants” such as sargassum seaweed. Overall project goals include:

- Improved energy efficiency at all levels from the individual and specific to the country with potential adoption by other territories as good practice
- waste minimization through encouragement of cultural and lifestyle modifications at all levels of society
- development of future-oriented organizational models such as the **BMHS Community of Curatorial Practice and Climate Action Hub**
- localization of supply chains through projects like the BMHS heritage garden which can be modelled and rescaled for global application
- integration of sustainability policies such as the recently adopted resolution “Empowering Museums in Achieving the SDGs through Youth by Means of Social Inclusion and Climate Action”¹⁵

Community-Knowledge-Territory Connection

A mixture of the following tools and methods was used to encourage the development of not just skills and capacity but life practice for the young people who join the hub. They in turn have developed programmes of their own based on these same simple practices which has seen the development of work from multiple cohorts in the programme:

- Participatory workshops (see appendix 1)
- Co-created artistic practices (see figures)
- Community empowerment
- Intergenerational dialogue (see video at link)

¹⁵ See appendix 2

- Collaboration with traditional/indigenous knowledge (see figures)

Systemic Barriers and Strategies

As with most organisations carrying out this important work our most critical challenges are resource based. There is much that we can offer but we are usually in need of critical fiscal resources to support both the work and the people which carry it out mostly youth and community activists who collaborate with us to achieve these common goals. There is however much we have achieved and can offer when we are able to achieve when we are able to lose the resource gaps:

- Our organisation has currently operationalised a **Community Of Curatorial Practice** developed by Dr Natalie McGuire which was developed as a viable good practice for museums from the global south especially Small Island Developing States (SIDS) and least developed countries (LDCs). We will continue to share the model as a viable way for Museums to connect with our communities and provide them with a voice for cultural and developmental analysis and change necessary for developing a practice of sustainable living, achieving meaningful collaborative work in the attainment of Sustainable development goals which are inextricably linked through public awareness work and via capacity building training based on our own work and experiences
- **Shared Island stories** – this toolkit being developed through collaborative efforts of our young people as part of the Shared island stories project previously mentioned is intended for use across communities and museums and is expected to provide concrete ways to do managed community and youth led interventions originating from museums and communities where it is implemented.

Quintal da Vó

Fabiana Ribeiro



Figure 24. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 25. Figure 2. Photograph of the exhibition *Quintal da Vó* at Estação Cultura Photo by Cassia Bellini

Project details	
Website	https://quintaldavomelia.wixsite.com/quintaldavo
Period	2023 - 2025
SDG's	

Organization Biography / Description

(The project is conceived and coordinated by photo-documentarian Fabiana Ribeiro and carried out by an all-women team, 50% of whom are Black women from peripheral communities. This already indicates the path that our “quintal” will follow. The curatorship is by Andrea Mendes, communication

by Fernanda de Freitas, videos and editing by Débora Castro, artistic production by Ori Okan, and executive production under the care of Wannyze Zivko. The team was assembled for the execution of this envisioned project. Short description of the experience .

Short description of the experience

The project discusses our right to memory, questioning which memories should be preserved and inviting reflections on heritage, territory, ways of knowing and doing, cultural practices, and the struggle of women against extractive and Eurocentric forces that erase ancestral histories. The project originates from the lived bond between Fabiana and her maternal grandmother, Amélia, and from the yard of her home, called “the forest” by her grandfather because of its abundant and diverse vegetation. Fruits, medicinal and aromatic herbs, ornamental plants, colorful insects, birdsong, and flowers with mingling scents all coexisted there, creating a space of family gathering and learning.

From this personal memory, the project expanded to document the oral histories and images of thirteen women. The photographs, later printed on fabric, inspired an exhibition composed of sensory and visual elements: living vegetation formed by ornamental, aromatic, and medicinal plants. A documentary and a digital publication were also produced and gathered on the website. The exhibition “Quintal de Vó” sought to convey the idea of living culture, affection, inclusivity, and a deep connection to collective memories. Audio recordings carried the voices and songs of the women, while the plants, with their varied shapes and scents, awakened emotional memories. The entire exhibition could be smelled, touched, and heard.

The quintal is not merely a piece of land behind the house: it is also the street, the garden, the shared space, the cities, the countries, and the planet. These elder women’s yards exist within us, offering profound encounters with our history, identity, and paths. Plural memories of territories become contested fields in urban spaces. The exclusion of place and land produces erasures that often naturalize absences and distortions of the past, denying future generations access to their stories.

Yards play a central role in resistance. In them, samba emerges, jongo remembers, terreiros express faith rooted in African matrices, and remedies soothe pain and feed those who rely on what the earth gives.

Vision of Change

Erasures deny future generations the right to know their past. Reflecting on territories also means reflecting on what limits collective integration. Trees are cut down, green areas disappear, and the climate is affected. Oppression unfolds into climate racism. Yards are places of resistance and healing.

When territory is taken away, the process of weakening and dismantling knowledge and cultural identity begins. Likewise, the erosion of memory and traditions affects the people's relationship with the land, making it easier for external agents to invade or appropriate the territory, resulting in profound erasures.

As yards are strengthened along with ancestral knowledge, the community understands its connection to the land, to its place, and to its identity. In this way, it freely expresses cultural practices and passes its knowledge on to future generations, who in turn transmit it forward, in a continuous cycle. Yards are spaces of coexistence and confluence among diverse beings that live together in harmony. When we imagine a street where many houses preserve their yards, we see how this coexistence expands into public spaces, into the neighborhood, and into the city. A city that reconnects with the land and its identity begins to perceive itself as a collective

Expected Impacts and their evaluation

Quintal da Vó acts as an educational process of cultural heritage, contributing to recognition, appreciation, and preservation. When society understands the value of collective memory for *Bem Viver*, the defense of knowledge passed between generations is strengthened. These elder women's yards live within us.

Heritage education here functions as a transformative practice, not as "banking education" (Freire, 1970). The provocations raised by Ailton Krenak in *Ideas to Postpone the End of the World* resonate deeply, because *Quintal da Vó* is, for me, one of these ideas sustained on the axis of cultural heritage and living culture as a central force. *Quintal da Vó* is one of the possible answers. It is necessary to cross the walls of the city and within the city. *Quintal da Vó* proposes exactly this: to cross, to break through, and to return meaning to the paths that economic power tries to limit with visible and invisible walls. The yards connect to one another, even when separated by concrete. They recognize each other. They cross through. They survive.

Community-Knowledge-Territory Connection

The project was carried out collectively and communally, as each testimony gathered through the oral histories of the women contributed essential elements to its realization. The exhibition—from its expography to the selection of plants, leaves, and other components—was shaped by the oral narratives of each matriarch and by the ancestral traditional knowledge they shared. It also highlights the participation of team members Andrea Mendes and Ori Okan, Black women from peripheral communities, who actively contributed ideas and directions.

The involvement of the women and men farmers from the Marielle Vive Encampment – MST was fundamental in assembling the exhibition. Members of the social movement tended the planting of pots and garden beds and recreated the encampment's mandala. During the installation, they worked actively, shared their agroecological knowledge, and provided 80% of the plants included in the exhibition.

Knowledge passes through generations. Doné Suramaya appears beside her four-year-old daughter, Lolo, who independently prepares an herbal bath: "Herbs are important. I like them. I learned from my mother."

Systemic Barriers and Strategies

The economic model based on exploitative and predatory capitalism is the greatest of all challenges, as it attacks on many fronts: when it expels the guardians or prevents them from living in their territories and carrying out their practices; when it turns everything into a commodity through the "gourmetization" of natural spaces; when it erases traditional ancestral memories to weaken the collective and impose its own form of domination; when it manipulates heritage-defense instruments, uses the State apparatus for its purposes, generates climate crises and environmental racism, and promotes the dismantling of mechanisms that protect memory and heritage.

The project requires resources to be more effective and, consequently, to reach and engage a larger number of people, allowing for meaningful pedagogical work in heritage education. Without the necessary resources, it can only record memories, and these records need to engage in dialogue so that society can reflect, understand, and consequently respond.

Parque Botânico do Ecomuseu Ilha Grande: preserving nature is cultivating memory and the future.

Gelsom Rozentino



Figure 26. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 27. A) Ruins of the prison laundry. B) Present-day seedling production facility. C) Area once degraded. D) Visit of environmental agents to the Parque Botânico do Ecomuseu Ilha Grande. E & F) Presentation stand for the Parque Botânico do Ecomuseu Ilha Grande projects at UERJ SEM MUROS 2024. G) View of the Parque Botânico do Ecomuseu Ilha Grande's newest greenhouse.

Project details	
Website	https://www.ecomuseuilhagrande.uerj.br/ https://tour.panoec.net/parque-botanico-da-ilha-grande/63f9243690efa093727c8057
Social Links:	https://www.youtube.com/@EcoMuseuIlhaGrande https://www.instagram.com/ecomuseuilhagrande/ https://www.facebook.com/ecomuseuilhagrande
Period	2015 - ongoing
SDG's	Good Health and Well-beingQuality EducationDecent Work and Economic GrowthReduced InequalitiesClimate ActionLife on LandPartnerships for the Goals

Organization Biography / Description

The Parque Botânico (PaB) is one of the centres of the Ecomuseu Ilha Grande (ECOMIG), engaging the local community as an active participant in the sustainable development of Ilha Grande. Through conservation, research, and dissemination of its history, culture, and natural heritage, the Ecomuseum fosters reflection and conscious action (Almeida & Valença, 2019).

Located in Vila Dois Rios, Ilha Grande, in Angra dos Reis, Rio de Janeiro State, Brazil, the PaB forms part of the only Brazilian territory recognised by UNESCO as a World Heritage Site for both Culture and Biodiversity. Opened to the public in 2015, it integrates science, culture, and nature, addressing climate change and biodiversity loss. Operating as an open-air laboratory, it promotes the conservation and restoration of the Atlantic Forest through research, heritage management, and community participation (Callado et al., 2020).

Occupying 22,000 m², the Park includes an arboretum, nursery, and propagation facilities, organising its living collection to narrate the island's botanical history across the Sambaquian, Colonial, Imperial, Penal, and Anthropocene periods. Developed since 2002, this collection is supported by floristic and anatomical research that reflects Ilha Grande's ecological and cultural richness.

Its activities encompass floristic surveys, in situ and ex situ conservation of native and endangered species, seedling production, interpretative trails, and thematic gardens. Educational and cultural initiatives - workshops, guided tours, and exhibitions - engage schools, communities, and visitors.

Recognised for its environmental education and human development work, the PaB contributes to climate justice and the restoration of the Atlantic Forest. Its experience shows that conserving biodiversity also preserves memory and strengthens community ties. Aligned with the goals of COP30, the Ilha Grande Botanical Park stands as a living, regenerative museum—one that not only preserves but actively supports climate change mitigation and adaptation, reaffirming that conservation is also a cultural act.

Almeida GR, Valença VR. 2019. Ecomuseu: reflexões sobre tempo, território e comunidade. ANPUH. p. 1–13.

Callado CH, Moreira NS, Castilho MF, Reis RCC, Manão, CYG. 2020. Parque Botânico do Ecomuseu Ilha Grande no patrimônio cultural e de biodiversidade da Unesco. Paubrasília, 3: 46–55.

Short description of the experience

The PaB is the only living plant collection located within a UNESCO mixed site in Brazil and operates under the broad concept of an Ecomuseum, in which the entire Ilha Grande is understood as an open-air museum. Over its ten years of existence, the PaB has consolidated expertise in documenting the island's plant diversity, establishing a collection that tells its history, carrying out in situ and ex situ conservation of native Atlantic Forest species, training human resources, promoting the dissemination and popularisation of science, and conducting educational activities that empower children as environmental stewards and develop human resources aligned with its mission. In addition, it fosters scientific, technical, and cultural exchanges with national and international institutions. These actions have enabled the listing of over 1,200 native species, the ex-situ conservation of approximately 10% of threatened flora and reinforced the PaB's role as a guardian of local biodiversity, contributing to the building of a greener and more resilient future.

The PaB has consolidated experience in systematic and sustainable practices, including: the recording, cataloguing, and display of plants; investigation of their biological, ecological, and pharmacological characteristics; maintenance of rare, endemic, or threatened species in their habitats; preservation of the wild genetic bank; propagation of seedlings to restore local ecosystems; monitoring plant health and early detection of environmental imbalances; and the application of local provenancing to prevent genetic erosion and hybridisation of species.

Beyond its scientific work, the PaB integrates traditional knowledge, fosters community engagement, and raises awareness of conservation and sustainability. Interpretive trails, thematic gardens, and contemplation spaces allow visitors and residents to interact directly with the native flora, encouraging leisure, learning, well-being, and connection with the environment.

Thus, the PaB functions as a living laboratory and ecomuseum that unites science, culture, and education, preserves environmental memory, strengthens community bonds, and actively contributes to ecological restoration and climate change mitigation.

Vision of Change

The PaB proposes a vision of change grounded in the integration of science, culture, and nature as a transformative axis for reshaping human relationships

with the territory. The experience is based on the understanding that to conserve is also to regenerate, bringing together scientific knowledge, local wisdom, and educational practices aimed at the restoration of the Atlantic Forest and the valorisation of Ilha Grande's cultural memory.

The transformation sought is both systemic and community-driven: to convert a former prison site into a living centre for environmental education, research, and climate action. This shift symbolises the transition from a territory of exclusion to one of belonging, learning, and socio-environmental justice.

The PaB seeks to inspire new forms of environmental museology that place communities at the heart of climate solutions, strengthening their connection with natural and cultural heritage. By interlinking education, conservation, and citizenship, the Park promotes a vision of the future in which knowledge becomes a tool for climate adaptation and the museum a space for concrete action.

Thus, the PaB acts as a catalyst for a transition towards regenerative ways of living, connecting memory, biodiversity, and hope.

Expected Impacts and their evaluation

The expected impacts of the PaB are concentrated in three main dimensions: environmental, social, and educational.

In the environmental sphere, the Park seeks to expand in situ and ex situ conservation of native and endangered species, develop restoration protocols, and support the broader conservation of the Atlantic Forest. Socially, it aims to strengthen climate awareness and community participation in sustainable practices, promoting environmental justice and a renewed sense of territorial belonging. Within the educational dimension, the PaB seeks to broaden the reach of its training and outreach initiatives, engaging schools, universities, residents, and visitors in processes of learning and co-creation of local solutions to global challenges.

Impact evaluation will be carried out using both qualitative and quantitative indicators, such as the number of species conserved, new human resources trained, production protocols developed, partnerships established, and levels of community engagement. Participatory monitoring methodologies will also be implemented, valuing local perceptions and cultural indicators.

Through these actions, the PaB reinforces its role as a laboratory for climate transformation, demonstrating that museums, when acting integratively and

sustainably within ecosystems, become genuine agents of mitigation, adaptation, and environmental regeneration.

Community-Knowledge-Territory Connection

The experience of the PaB is grounded in a living relationship between community, knowledge, and territory. Located in a space historically marked by exclusion, the PaB promotes the symbolic and sustainable reoccupation of the territory, transforming the former prison into a space for dialogue and belonging.

Park's actions value the historical use of plants over time, recognising the role of the island communities as guardians of biodiversity and environmental memory. This approach to territorial museology connects the academic knowledge produced by the Universidade do Estado do Rio de Janeiro (UERJ) with the everyday practices of those who have lived — and continue to live — on the Island, strengthening a network of shared cooperation and learning.

Workshops, guided visits, exhibitions, and interpretative trails stimulate participatory climate education, bridging science and culture. The production and planting of seedlings engage residents and students alike, consolidating a sense of shared environmental responsibility.

Thus, the PaB acts as a mediator between different dimensions of knowledge — scientific, empirical, and sensory — building bridges between memory and future. The connection between community, knowledge, and territory transforms the museum into a living organism, capable of inspiring lasting cultural and ecological change.

Systemic Barriers and Strategies

Among the main barriers faced by the PaB are the scarcity of continuous financial resources, the difficult access to Ilha Grande, the impacts of unregulated tourism, and the fragility of public policies aimed at environmental museology and climate adaptation. In addition, socio-economic inequality and the gap between scientific production and community realities remain persistent challenges.

To overcome these obstacles, the PaB adopts collaborative and resilient strategies, based on inter-institutional partnerships and cooperative networks that connect museums, universities, and cultural initiatives engaged in climate action. Participatory management and the direct involvement of the local

community are essential to ensuring the continuity and legitimacy of its initiatives.

The Park also invests in the training of local multipliers, the capacity-building of environmental educators, and accessible scientific communication, encouraging knowledge appropriation and the strengthening of sustainable public policies.

These strategies enable the PaB to remain a reference in social and environmental innovation, transforming structural limitations into opportunities for collective creation. Addressing systemic barriers reaffirms its role as a museum committed to the cultural transformation necessary for climate adaptation and the conservation of life.

Development of New Technologies for Museums

Gelsom Rozentino

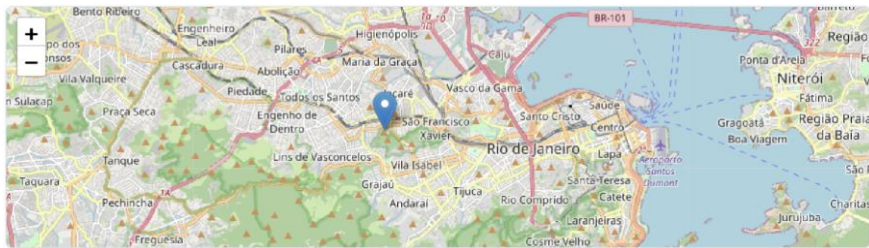


Figure 28. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 29. A) Augmented reality exhibition – National Museum Week, Ilha Grande Ecomuseum Headquarters, Vila Dois Rios, Ilha Grande. B) Residents participating in the augmented reality exhibition held in Vila do Aventureiro, Ilha Grande. C) Augmented Reality exhibition during Science and Technology Week – Brasil dos Reis Municipal School, Vila de Matariz, Ilha Grande, Angra dos Reis. D) A member of the Guarani Mbya people from Sapukai Village observes the augmented reality exhibition during the Costa Verde Ecological Cultures Festival – Vila do Abraão, Angra dos Reis.

Project details

Website	https://www.ecomuseuilhagrande.uerj.br/
Social Links:	https://www.youtube.com/@EcoMuseuIlhaGrande https://www.instagram.com/ecomuseuilhagrande/ https://www.facebook.com/ecomuseuilhagrande
Period	2015 - ongoing
SDG's	Quality Education, Industry, Innovation and Infrastructure, Reduced Inequalities, Sustainable Cities and Communities, Life on Land, Partnerships for the Goals

Organization Biography / Description

The Ilha Grande Ecomuseum, created in 1999, is in Brazil, in Angra dos Reis, Rio de Janeiro, and carries out activities that promote knowledge across broad sectors of the population through exhibitions, free courses, art education, and programs for schools and visitor groups. These activities are aimed not only at visitors – Brazilian and foreign tourists –, researchers, and students, but essentially at the local community. The Ilha Grande Ecomuseum (ECOMIG) is a unit of the Office of Extension and Culture (PR3) at the Rio de Janeiro State University (UERJ), which undertakes activities for the preservation,

research, and dissemination of the island's environment, history, and sociocultural life. It comprises four centers: the Prison Museum, the Environment Museum, the Botanical Park, and the Multimedia Center. Its headquarters are in Vila Dois Rios, on Ilha Grande, in the municipality of Angra dos Reis, in the state of Rio de Janeiro. Its territory is the island itself; the local population includes the residents of Vila Dois Rios, the communities along the island's beaches, and the academic community that carries out research, teaching, and outreach activities there.

The mission of the Ilha Grande Ecomuseum is to incorporate the community as an active participant in the process of sustainable development of the Ilha Grande territory, through the preservation, research, appreciation, and dissemination of its history, memory, culture, and identity, and of its natural, tangible, and intangible heritage, promoting reflection and informed action. We have developed projects to preserve and restore architectural, historical, natural, and cultural heritage, aiming to improve the quality of life of Ilha Grande's residents by valuing collective memory, without separating the environmental, social, educational, cultural, political, and economic dimensions. It has sought to foster encounters, intersections, and links among different fields of knowledge, to contribute effectively to scientific, technological, economic, environmental, and social development.

With the aim of creating strategies that would support this connection among diverse forms of knowledge, the Multimedia Center – the Ecomuseum unit responsible for organizing its media collection – proposed combining heritage preservation with the use of new technologies, bringing to the residents of Ilha Grande's communities the possibility of interacting with these tools to facilitate their access to museographic knowledge and to our history, streamlining processes and eliminating existing geographical barriers.

Short description of the experience

“Development of New Technologies for Museums” is an innovative, technology-based tool to enhance heritage education, helping transform and educate children and adolescents as they build knowledge and engage with culture and the values of social life. As the unit responsible for organizing the Ecomuseum's entire media collection, the Multimedia Center now faces one of its greatest challenges: ensuring these tools reach their target audience. Aiming to contribute to the museum's historiography – its record and memory – in terms of heritage, history, and culture through digital media; it is the Multimedia Center's role to guarantee citizens broad and unrestricted access to information.

With this audience in mind, the proposal emerged to unite heritage preservation with these new technologies, offering our visitors the possibility of interacting with these tools to facilitate access to museological knowledge and to our history – delivering speed while maintaining reliable content, as today's times demand. Enabling quick and easy access to the museum for visitors by employing high-tech approaches, including augmented reality elements – whether for diverse external audiences or for island communities with limited access to cultural resources – is one way to help reduce social inequalities; it is to provide equitable access to knowledge for all the museum's publics.

The use of augmented reality tools in museums innovates the way the public engages with collections, as in the experience implemented at the Louvre in Paris. Making the illusion of holographic three-dimensionality commonplace within the museum space gives the public the opportunity to experience real situations that once existed only in the imagination.

Vision of Change

The Multimedia Center (CeMu) – the unit responsible for recording and preserving the memory of the territory, heritage, history, and island culture through digital media – has created initiatives to ensure citizens' access to the museum collection, thereby expanding information, communication, and knowledge (Alevato, 2010, p. 16). This inclusion is pursued by expanding virtual visits, especially to overcome digital exclusion. Accordingly, we seek to valorize traditional groups through dialogue between art education and the territory via technology, strengthening the connection between the museum and the community in favor of a sense of territorial belonging, since we understand that the teaching-learning process must be interwoven with cultural aspects and the knowledge and practices that surround the communities (Barbosa, 2006, p. 56). The use of augmented reality tools innovates the way the public engages with the collection, offering the opportunity to experience technology and bringing the Ecomuseum to the communities.

Expected Impacts and their evaluation

The use of technologies as the guiding thread of learning processes and digital inclusion is one of the challenges on Ilha Grande. Despite inadequate infrastructure, the Augmented Reality exhibition – given its high educational potential – overcame obstacles, particularly regarding possible resistance from island communities. In this context, diverse content can be developed as

instruments for the production of knowledge, fostering processes of subjectivation, representation, mediation, and locally constituted symbolic production. The incorporation of technologies into these practices enables collective interaction and the exploration of new educational spaces, consolidating the valuing and safeguarding of community memory which, ultimately, will reflect life experiences and customs for future generations. The virtualization of the Ecomuseum's collection, by facilitating public access, broadens acceptance and curiosity, allowing the museum to fulfill its role of preserving and disseminating, with the island communities, the value of cultural heritage – a path that helps reduce social inequalities and ensure equal access to knowledge for all its audiences.

Community-Knowledge-Territory Connection

The use of these technologies resulted in the exhibition “The Great Civilizations of Ancient America,” which was widely presented in several schools on Ilha Grande. Augmented Reality headsets allowed residents to interact with the images in three dimensions, making it easier to access text and audio explanations. The sensory stimulus provided by the experience generated a series of questions and connections between local knowledge and the exhibition objects, such as the Sun Stone, the Aztec calendar, which was compared to Pico do Papagaio, the highest point on Ilha Grande, used by some locals as a weather reference since, they say, depending on the position of the clouds in relation to the rock formation, it may or may not rain during that period. The setup consisted simply of a piece of twine tied between two trees, from which images were hung with clothespins, and mobile phones inserted into the AR headsets. In this way, most village residents – from the youngest to the oldest – felt comfortable engaging in the exhibition.

Systemic Barriers and Strategies

One of the main problems faced by both the Ecomuseum team and the residents of Ilha Grande is the geographic barrier. Although one village is relatively close to another, the only access is by boat or along challenging trails. The Augmented Reality exhibitions have shown us how technologies can be used in these communities as tools for knowledge production that foster processes of subject formation, representation, mediation, and locally constituted symbolic production. The inclusion of technology in these

practices enables collective interaction and the exploration of new educational spaces, consolidating the valuing and safeguarding of community memory which, ultimately, will reflect their life experiences and customs to future generations.

We hope that digital inclusion will continuously strengthen the relationship between the community, the museum, and the territory, in a way that is more deeply rooted in and sensitive to everyday experiences, embracing the sociocultural realities that constitute this territory and generating new bonds of belonging, customs, and affective memories of the Ilha Grande.

Caiçara Cultura Project in Ilha Grande

Gelsom Rozentino

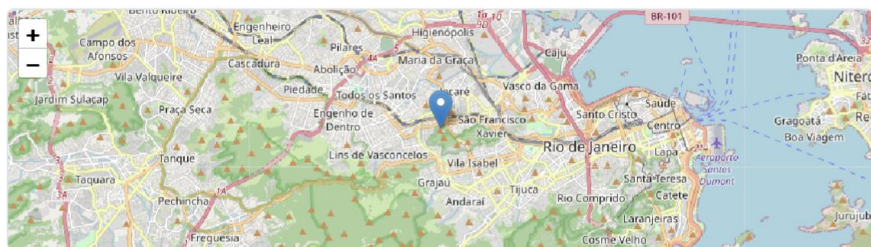


Figure 30. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 31. A) Views of the exhibition "Certain Ways of Being Caiçara" at the Museum of the Environment. B) Peter's Festival, in the caiçara community of Praia da Longa. C) Canoário Caiçara Vera Lúcia Braga, Praia da Longa, Ilha Grande (Angra dos Reis, RJ). D) Meeting of teachers from E.M. Brigadeiro Nóbrega and the development of pedagogical planning: union Ecomuseum + School + Caiçara Community.

Project details

Website	https://www.ecomuseuilhagrande.uerj.br/index.html https://www.ecomuseuilhagrande.uerj.br/Expo_CertosModosCaicara.html
Social Links:	https://www.instagram.com/ecomuseuilhagrande/ https://www.youtube.com/@EcoMuseuIlhaGrande https://www.facebook.com/ecomuseuilhagrande https://www.youtube.com/watch?v=qYaufHqxol8&t=3s https://www.youtube.com/watch?v=alo0bB2Q9Jk&t=11s https://www.youtube.com/watch?v=w3nj46NktYA&t=47s https://www.youtube.com/watch?v=IHSKRMPyxJ4 https://www.youtube.com/watch?v=z5IXU3hzyI8&t=16s https://www.youtube.com/watch?v=n8ew5V-OdE0&t=5s
Period	2015 - ongoing
SDG's	No Poverty, Quality, Education, Gender, Equality, Decent Work and Economic Growth, Reduced Inequalities, Sustainable Cities and Communities, Responsible Consumption and Production, Climate Action, Life on Land, Partnerships for the Goals

Organization Biography / Description

The Ecomuseum Ilha Grande - created in 1999, formally recognized by the State University of Rio de Janeiro – UERJ on December 20, 2007, inaugurating its first nucleus on June 5, 2009 - is located in Brazil, in Angra dos Reis, Rio de Janeiro. It plays a significant role in presenting to the public views on prison policies implemented throughout the Republican period, especially in Rio de Janeiro, and their reflections in everyday society. In this sense, it develops activities that promote knowledge among broad sectors of the population, thru exhibitions, free courses, art education, services to schools, and groups of visitors. Such activities, essentially, are directed not only to visitors - national and foreign tourists - researchers and students, but also to the local community. The Ecomuseum Ilha Grande is both an ecomuseum and a university museum, affiliated with the State University of Rio de Janeiro. The Ecomuseum Ilha Grande is a unit of the Pro-Rectorate of Extension and Culture (PR3) of the State University of Rio de Janeiro (UERJ), which carries out activities of preservation, research, and

dissemination of the environment, history, and sociocultural life of the Island. It is composed of four centers: Prison Museum, Environment Museum, Botanical Park, and Multimedia Center. Headquartered in Vila Dois Rios, on Ilha Grande, municipality of Angra dos Reis, in the State of Rio de Janeiro. Its territory is the island itself; the local population consists of the residents of Vila Dois Rios, the communities of the island's beaches, and the academic community that conducts research, teaching, and extension activities there.

Nuclei of the Ecomuseum Ilha Grande – UERJ:

- Prison Museum – It is housed in the buildings of the bakery and the guardhouse of the former Agricultural Colony of the Federal District (CADF) and the Cândido Mendes Penal Institute (IPCM). Its proposal is to serve as an important source of reflection on prison policies and their impact on Brazilian society, based on the history of the successive penitentiary units of Ilha Grande.
- Museum of the Environment – Thru exhibitions and other socio-educational activities, it aims to disseminate issues related to biodiversity and the sustainable use of the environment based on scientific research developed both integratively and individually about Ilha Grande and its surrounding Bay. It is located in the building of the old Dois Rios farm (early 19th century), later the Dois Rios Correctional Colony (1894).
- Multimedia Center – Its objective is to contribute to the research, recording, dissemination, and memory of Ilha Grande in terms of heritage, history, and culture, thru digital media and virtual access.
- Botanical Park – Located in the courtyard of the former IPCM, it is the first collection of Brazilian plants organized as an ecomuseum collection and has as its primary mission: the inventory, sampling, cultivation, cataloging, conservation, and exhibition of native plants related to the history of man in the Atlantic Forest. The mission of the Ecomuseum Ilha Grande is to incorporate the community as a subject in the process of sustainable development of the Ilha Grande territory, thru the preservation, research, appreciation, and dissemination of its history, memory, culture, identity, and its natural, material, and immaterial heritage, promoting reflection and conscious action. The Ecomuseum Ilha Grande has been developing projects for the preservation and recovery of architectural, historical, natural, and cultural heritage, aiming to improve the quality of life of the individuals of Ilha Grande, thru the appreciation of collective memory, without disconnecting the environmental, social, educational, cultural, political, and economic dimensions. It has sought to provide the meeting, intersection, and articulation between different fields of knowledge, in order to effectively contribute to scientific, technological, economic, environmental, and social development.

Short description of the experience

Given the rapid transformations that Ilha Grande is undergoing, the Ilha Grande Ecomuseum/UERJ expresses its concern with documenting the Caiçara way of life, including family memories, value systems, work methods and tools, and the communities' relationship with nature and their knowledge of it. Therefore, the museum proposes research on the Caiçara culture of Ilha Grande, aiming to understand aspects of the reality of the traditional communities living there, alongside the rapid transformations the region is undergoing. Broadly speaking, the research aims to collect memories, stories, descriptions, and objects that refer to the Caiçara way of life and the hallmarks of Caiçara culture.

From the mission of the Ecomuseum Ilha Grande, the dialogical interaction with the traditional caiçara communities is established as a pillar fundamental for the conservation and sustainable development of territory. This interaction is based on active listening, respect for local knowledge and the collective construction of knowledge, promoting the protagonism of the communities in the process of valuing history, memory, culture, and local identity. The continuous dialog strengthens the bonds between the museum and the residents, allowing actions for the preservation and dissemination of natural and cultural heritage — both material and immaterial — are carried out in a way collaborative, reflecting the real needs and aspirations of the traditional population. Thus, the Ecomuseum acts as an agent of mediation, encouraging critical reflection and conscious action, in favor of a more just, sustainable territory rooted in its own cultural references.

Interdisciplinarity and Interprofessionalism:

The project focused on caiçara culture highlights interdisciplinarity as an essential strategy to integrate knowledge and practices in favor of valorization of traditional communities. The project articulates knowledge in the fields of anthropology, history, ecology, education, social museology and arts, promoting a broad and sensitive to the multiple dimensions of Caiçara culture. This perspective interdisciplinary allows us to understand and record the ways of living, work, celebrate, and relate to nature, typical of this community, recognizing its importance for the conservation of territory and for the construction of a sustainable future. By uniting science, popular knowledge, and educational practices, the Ecomuseum strengthens the local protagonism and creates a space for reflection and collective action, respecting and disseminating the natural and cultural heritage of Ilha Grande

Great.

Vision of Change

The caiçara communities have a particular way of life that combines fishing, small-scale agriculture, handicrafts, and plant extraction, having developed heritage technologies and an in-depth knowledge of the environments in which they live.

- Strengthening identity and collective memory
- Community empowerment and participation

Expected Impacts and their evaluation

Internal impacts for the organization:

- integration of sustainability policies
- Other

External impacts:

- Groups
- Individuals
- Communities and neighborhoods
- Transforms Human systems

Community-Knowledge-Territory Connection

Concrete examples: Visits and the development of various activities in each of the 18 communities of Ilha Grande, mainly joint actions with the 10 schools of Ilha Grande, in addition to exchanges and partnerships with the traditional communities of Baía da Ilha Grande. Collection of artifacts with the caiçara communities. Creation of the exhibition "Certain Ways of Being Caiçara" at the Museum of the Environment. Organization and musealization of the collection of the Caiçara Canoe Vera Lúcia Braga, in the Caiçara community of Praia da Longa, Ilha Grande (Angra dos Reis, RJ).

Approaches used:

- Participatory workshops
- Community mapping
- Co-created artistic practices
- Community empowerment
- Intergenerational dialogue
- Collaboration with traditional/indigenous knowledge

Systemic Barriers and Strategies

How were they overcome? With persistence in dialog, the organization of activities, and the public presentation of results. With great dedication from the team, efforts to reduce costs, seek funding for research from funding agencies (FAPERJ, CNPQ), and the own resources of the Ecomuseum Ilha Grande, in addition to part of the team personally covering some of the costs.

Obstacles encountered:

- Individualism and social fragmentation
- Lack of resources including funding

External Media Link

https://www.ecomuseuilhagrande.uerj.br/Expo_CertosModosCaicara.html

ECOMUSEU RECYCLA: alternatives for the sustainable development of Vila Dois Rios, based on conscious craftsmanship.

Gelsom Rozentino

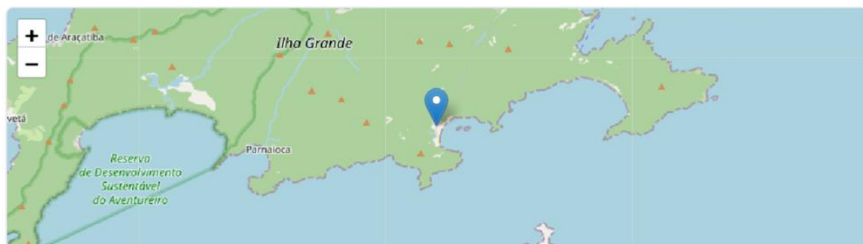


Figure 32. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 33. A) Part of the Ecomuseum Recycles exhibition. B) The artisan Marilda Caires, a resident of Vila Dois Rios. C) Part of the Ecomuseum Recycles exhibition. D) Ecomuseu Recicla: Courses, Workshops, and exhibitions in other cities.

Project details

Website	https://www.ecomuseuilhagrande.uerj.br/Expo_Reciclar.te.html
Period	2010 - ongoing
SDG's	No PovertyQuality EducationGender EqualityDecent Work and Economic GrowthReduced InequalitiesSustainable Cities and CommunitiesResponsible Consumption and ProductionClimate ActionLife on LandPartnerships for the Goals

Organization Biography / Description

The Ecomuseum Ilha Grande - created in 1999, formally recognized by the State University of Rio de Janeiro – UERJ on December 20, 2007, inaugurating its first nucleus on June 5, 2009 - is located in Brazil, in Angra dos Reis, Rio de Janeiro. It plays a significant role in presenting to the public views on prison policies implemented throughout the Republican period, especially in Rio de Janeiro, and their reflections in everyday society. In this sense, it develops activities that promote knowledge among broad sectors of the population, thru exhibitions, free courses, art education, services to schools, and groups of visitors. Such activities, essentially, are directed not only to visitors - national and foreign tourists - researchers and students, but also to the local community. The Ecomuseum Ilha Grande is both an ecomuseum and a university museum, affiliated with the State University of Rio de Janeiro. The Ecomuseum Ilha Grande is a unit of the Pro-Rector of

Extension and Culture (PR3) of the State University of Rio de Janeiro (UERJ), which carries out activities of preservation, research, and dissemination of the environment, history, and sociocultural life of the Island. It is composed of four centers: Prison Museum, Environment Museum, Botanical Park, and Multimedia Center. Headquartered in Vila Dois Rios, on Ilha Grande, municipality of Angra dos Reis, in the State of Rio de Janeiro. Its territory is the island itself; the local population consists of the residents of Vila Dois Rios, the communities of the island's beaches, and the academic community that conducts research, teaching, and extension activities there.

Nuclei of the Ecomuseum Ilha Grande – UERJ:

- Prison Museum – It is housed in the buildings of the bakery and the guardhouse of the former Agricultural Colony of the Federal District (CADF) and the Cândido Mendes Penal Institute (IPCM). Its proposal is to serve as an important source of reflection on prison policies and their impact on Brazilian society, based on the history of the successive penitentiary units of Ilha Grande.
- Museum of the Environment – Thru exhibitions and other socio-educational activities, it aims to disseminate issues related to biodiversity and the sustainable use of the environment based on scientific research developed both integratively and individually about Ilha Grande and its surrounding Bay. It is located in the building of the old Dois Rios farm (early 19th century), later the Dois Rios Correctional Colony (1894).
- Multimedia Center – Its objective is to contribute to the research, recording, dissemination, and memory of Ilha Grande in terms of heritage, history, and culture, thru digital media and virtual access.
- Botanical Park – Located in the courtyard of the former IPCM, it is the first collection of Brazilian plants organized as an ecomuseum collection and has as its primary mission: the inventory, sampling, cultivation, cataloging, conservation, and exhibition of native plants related to the history of man in the Atlantic Forest. The mission of the Ecomuseum Ilha Grande is to incorporate the community as a subject in the process of sustainable development of the Ilha Grande territory, thru the preservation, research, appreciation, and dissemination of its history, memory, culture, identity, and its natural, material, and immaterial heritage, promoting reflection and conscious action. The Ecomuseum Ilha Grande has been developing projects for the preservation and recovery of architectural, historical, natural, and cultural heritage, aiming to improve the quality of life of the individuals of Ilha Grande, thru the appreciation of collective memory, without disconnecting the environmental, social, educational, cultural, political, and economic dimensions. It has sought to provide the meeting, intersection, and articulation between different fields of knowledge, in order to effectively

contribute to scientific, technological, economic, environmental, and social development.

Short description of the experience

The Ecomuseu Recicla Project was created in 2010 by Professor Ricardo Gomes Lima as a new tool of the Ecomuseu Ilha Grande for promoting joint actions with the island's community associations for the social inclusion of the local population. During the various workshops, residents will participate in activities capable of providing learning and appreciation of aspects related to the importance of selective waste collection, not only as a means of environmental preservation but also as an alternative source of income. They will also be trained to act as artisans specialized in conscious handicrafts, and as participatory citizens in the sustainable development of the region. The main issue to be addressed in this project concerns the accelerated, disorganized, and irregular growth of Ilha Grande. The problem worsens mainly during the summer months, when the population experiences considerable swelling due to the intense flow of tourists. Problems then arise related to the lack of water, deficiencies in the sewage system, and, most importantly, the accumulation of garbage. The distance from the mainland makes waste disposal difficult, and when it is done, it happens in a disorganized manner: organic and recyclable waste mix in collection barges and are taken to open-air landfills in the municipality of Angra dos Reis. Thus, the problem is merely transferred, without being solved or even minimized. In contact with residents, the Ecomuseum team noticed isolated initiatives for selective collection, where some residents, aware of the importance of individual participation, and on their own initiative, separate waste in their homes. However, what was noted is that after some time, the accumulation of materials becomes incompatible with the storage conditions, and people are led to discard them along with common waste, wasting the investment made. Contributing to alleviating the waste problem, the Ecomuseu Recicla program aims to offer the community of Ilha Grande, especially Vila Dois Rios, techniques for producing conscious crafts, which will serve both as an alternative source of income and as a means of scientific dissemination, since the project is focused on creating pieces that playfully present representations of local culture, flora, and fauna, themes widely addressed in academic research conducted at CEADS. To this end, the project aims to add labels to the created objects containing information about zoological and botanical genera and species, with the assistance of scientists

who conduct research on the Island. They are scientists of proven excellence, mostly members of the faculty/researchers.

Vision of Change

To launch, based on scientific research, an environmental reeducation process aimed at empowering the local population, using natural waste and waste generated by human activities to create products that generate income and reflect culture and nature.

Ecological and environmental regeneration

Community empowerment and participation

Expected Impacts and their evaluation

A. Internal impacts for the organization:

- waste minimization
- reduction of carbon emissions
- development of future-oriented organizational models
- integration of sustainability policies

B. External impacts:

- Groups
- Individuals
- Communities and neighborhoods
- Transforms Human systems
- Organizations

Community-Knowledge-Territory Connection

Concrete example: Several workshops were held using recyclable solid waste to transform it into handicrafts. From these workshops, local exhibitions and various cities resulted, as well as the commercialization of the products, with resources fully returned to the artisans.

Approaches used:

- Participatory workshops
- Community mapping
- Co-created artistic practices
- Community empowerment

- Intergenerational dialogue
- Collaboration with traditional/indigenous knowledge

Systemic Barriers and Strategies

How were they overcome? With persistence in dialog, the organization of activities, and the public presentation of results.

Obstacles encountered:

- Individualism and social fragmentation
- Difficulty involving the community

External Media Link

<https://www.uerj.br/noticia/projeto-ecomuseu-recicla-transforma-lixo-em-arte-2/#:~:text=Projeto%20Ecomuseu%20Recicla%20transforma%20lixo,Estado%20do%20Rio%20de%20Janeiro>

https://www.ecomuseuilhagrande.uerj.br/Expo_Reciclarte.html

Ecomuseu dos Campos de São José

Maria Siqueira

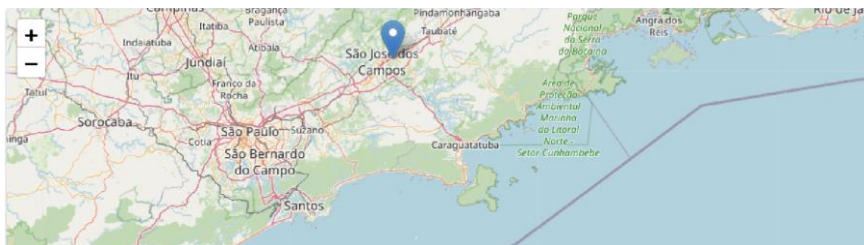


Figure 34. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 35. Ecomuseum participants gathered in a discussion group to align and plan the activities to be carried out. These meetings are important to collectively develop the concept of ecomuseum.

Project details	
Website	https://ecomuseu.org.br/ https://www.instagram.com/ecomuseucsj/ https://www.youtube.com/@Ecomuseucsj
Period	2015 - Ongoing
SDG's	2, 4, 11, 13, 15, 16 e 17

Organization Biography / Description

The Center for Popular Culture Studies (CECP, in Portuguese abbreviation) is a civil society organization (CSO) established in April 1999. The institution operates primarily in the municipality of São José dos Campos and the Paulista Paraíba Valley region.

Among its main achievements are the creation and management of the Folklore Museum, through a Term of Collaboration with the Cassiano Ricardo Cultural Foundation (FCCR, in Portuguese abbreviation), and the Ecomuseu dos Campos de São José, in partnership with Petrobras via the Petrobras Social and Environmental Program.

The organization's purpose is to study, research, disseminate and stimulate all forms of heritage – cultural and natural - and every expression of popular culture. It is active in developing and executing projects, providing technical and scientific consulting and guidance, ensuring a museological approach aimed at developing safeguarding policies for material and intangible heritage.

In 2011, it was declared a public utility by the São José dos Campos Municipal government, as per Municipal Law 8481/2011.

In 2017, it was certified by the Banco do Brasil Foundation (FBB) for the development of the Ecomuseu CSJ as a social technology. In 2024, it was certified by the Secretariat of Citizenship and Cultural Diversity of the Ministry of Culture as a Pontão de Cultura (Cultural Hub) in the thematic areas of Memory, Heritage and Popular Culture.

In addition, CECP undertakes projects in collaboration with the National Institute of Historic and Artistic Heritage (IPHAN). These projects include executing the National Inventory of Cultural References (INRC) of the Congado Paulista (2015-2017), preparing the Dossier for the Registration of Samba de Bumbo Paulista (2019-2022), and currently is producing two studies for the recognition of Cultural Assets in São Paulo, namely: Cavalaria de São Gonçalo e São Benedito de Guaratinguetá and Festa do Divino Espírito Santo de Mogi das Cruzes (2025-2026).

Since 2015, CECP has managed the Ecomuseu dos Campos de São José, a cultural project with socio-environmental impact that aims to foster community empowerment through the promotion of the cultural and natural heritage to germinate local development.

Short description of the experience

Ecomuseu CSJ is powerful in raise awareness and mobilize people to act collectively and collaboratively for the common good. Its proposals are aligned with community-based museology, which discusses the construction of the concept of heritage in dialogue with the communities that hold it and foster collective mobilization in order to structure local development based on this recognized heritage, cultural and natural. In this sense, by recognizing in the people, the forest, the river and idle public spaces the heritage to be developed, Ecomuseu CSJ provides not only heritage education but also environmental education, as it promotes the perception and positive interaction of humans with their immediate environment.

Through actions that identify and value local cultural heritage, the Ecomuseu CSJ promotes the involvement and leadership of participants who, empowered by their knowledge and skills, adopt new socio-environmental habits and become multipliers of sustainable and environmentally transformative actions, such as composting, cultivating food in a healthy way, caring for and maintaining public areas, recovering permanent preservation areas through reforestation with native trees, maintaining a seedling nursery,

and conserving local fauna. Field research, discussion groups, formal and informal environmental education activities are carried out, as well as the development and reapplication of social technologies. This proposal is transformative because it activates human sociability, creating affective bonds between participants, stimulating the exchange of knowledge, promoting social leadership, and educating for sustainability, transmitting knowledge to people and enabling experiences about ecology, resilience and care for oneself, for others, and for the planet.

Some numbers of the Ecomuseu CSJ	2015-2017	2018-2020	2021-2023	2024 – Aug/ 2025	Total
Tree seedlings planted	240	260	1.066	8.591	10.157
Seedlings produced	-	100	811	1.966	2.877
Carbon removal promoted (t/m3)	-	2,4	13,5	42	42
Number of families that compost organic waste	-	8	60	114	182
Quantity of dry and wet matter composted (t)	-	0,8	11,4	26,6	39
Emissions avoided due to composting (t/m3)	-	0,3	8	19	27

Vision of Change

Designed by Angela Savastano, *Ecomuseu CSJ* connects community, territory and heritage to establish a dialogue about the cultural practices and the natural elements historically constituted. This dialogue, which seeks to build collective solutions to local challenges, enables the creation of collaborative and shared social technologies that produce transformative social experiences from the perspective of sustainability and resilience, fundamental characteristics for navigating a planet in a climate emergency.

Therefore, the Ecomuseu CSJ raises awareness and mobilizes people to act collectively for the common good. Its proposals are aligned with community-based museology, discussing the construction of the concept of heritage in dialogue with the communities that own it, articulating knowledge and practices to develop solutions for local challenges. Thus, to act with ecological

and environmental regeneration, it focuses on community participation and empowerment, stimulating social interaction and strengthening collective actions.

Expected Impacts and their evaluation

Over the past 10 years, Ecomuseu CSJ has transformed the lives of hundreds of people and impacted thousands of them. It has done this by talking with residents of the communities involved, organizing discussion groups, promoting experiential learning, conducting sociocultural researches, co-creating social technologies, as well as developing educational activities, promoting reforestation and biodiversity conservation, and fostering social interaction and the exercise of citizenship. All of these activities were conceived, planned, carried out, and evaluated with the participation of representatives from the communities mobilized by the Ecomuseum.

Currently, around 182 families compost the organic waste produced in their homes. The total amount of wet and dry waste not disposed of in the municipal landfill since 2018 is 39 tons, representing 27 t/m³ of CO₂ equivalent not emitted into the atmosphere. Approximately 10,000 trees have been planted by the Ecomuseum, 95% of them in the last 5 years, representing a stock of 42 t/m³ of CO₂ equivalent. Reforestation, in addition to minimizing the effects of climate change, contributes to the conservation of native fauna and to improve the relationship between people and nature. These activities benefit the community of São José dos Campos as a whole, as they contribute to minimizing the effects of climate change.

Community-Knowledge-Territory Connection

Ecomuseu CSJ works since 2015 with the objective of promoting local development, identifying and valuing the integral heritage (cultural and natural), fostering social empowerment, strengthening community relationships and connecting with partners. It puts popular, technical and academic knowledge into action, promotes the exercise of citizenship and experiments collective socio-environmental solutions for local daily demands through social integration and environmental and heritage education initiatives, enabling the creation of collaborative and shared social technologies.

Two areas with a strong connection between community, knowledge and territory are: crafts and agriculture. Fostering human inventiveness and creativity, the Ecomuseum frequently promotes craft fairs, where local artisans

have the opportunity to showcase their work and sell it directly to consumers. We also connect students and artisans, in order to provide intergenerational knowledge exchange.

Agriculture is a very common skill in the territories covered by the Ecomuseum; however, there is often no space in homes for cultivating vegetable gardens. Thus, we organize community planting in public spaces, conducting practical classes, knowledge exchanges and supporting the maintenance of gardens through community workdays (“mutirões”).

Approaches used:

- Participatory workshops
- Community mapping
- Co-created artistic practices
- Community empowerment
- Intergenerational dialogue

Systemic Barriers and Strategies

Ecomuseu CSJ works with the community in a broad way, involving families and all the diversity that exists within them. We work from an intergenerational perspective. Our activities are inclusive, even if it is a meeting or activity for adults, we have people and tools capable of including the children who accompany their parents.

All participants are encouraged to give their opinions and share ideas and solutions to the common and collective problems discussed. In the discussion groups, opinions and exchanges of ideas, as well as the decisions made, are registered. We conduct evaluations frequently to monitor the participants views on the development of the Project.

Ecomuseu CSJ is carried out in partnership with Petrobras through the Petrobras Social and Environmental Program. It also counts on the partnership of São José dos Campos city government, universities, and hundreds of other partners. The strengthening of networks is fundamental to its sustainability.

In any case, we are constantly working on raising funds to continue the Project. We hire people from the community in order to root the ecomuseum proposal, as well as promoting training with multipliers, such as teachers and interested community members.

Songs for Nature

Glenn Sutter



Figure 36. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 37. Songs for Nature is a Royal Saskatchewan Museum program that brings up to 20 songwriters together to create and share original, nature-inspired songs.

Project details

Website	https://royalsaskmuseum.ca/research/sustainability/songs-4-nature
Period	2016 – Ongoing
SDG's	Good Health and Well-being; Quality Education

Organization Biography / Description

The Royal Saskatchewan Museum is a medium-sized provincial museum of natural history and Indigenous cultures in the heart of the Canadian prairies. It works to further an understanding of these topics through all available media, especially exhibits and publications, in a culturally and scientifically sensitive manner for the purposes of education and enjoyment.

Short description of the experience

Songs for Nature (S4N) is a Royal Saskatchewan Museum (RSM) program that gives established or aspiring musicians a chance to connect with nature and hone their songwriting skills. The program is also the basis for ongoing research about creativity, nature connection, and wellbeing. Facilitated by Glenn Sutter, RSM Curator of Human Ecology, S4N camps have been run at least once per year since 2016 with support from Environment and Climate Change Canada, Parks Canada, the Sask Arts Board, and other funders. To date, camps have been held at locations around Last Mountain Lake, in Moose Mountain Provincial Park, Prince Albert National Park, and Grasslands National Park. S4N camps are multi-day affairs that include free lodging and meals, talks by Indigenous elders, hikes, yoga, guided writing sessions (True Nature Writing), group songwriting, and showcase concerts. S4N camps have shown how creative pursuits like songwriting can have positive impacts on our connections to nature and other aspects of wellbeing.

Vision of Change

The Songs for Nature program aims to create communities of empowered artists who write and share original songs inspired by nature and camp experiences. These songs encourage reflection and action aimed at all aspects of sustainability, including nature conservation, social justice, and localized, regenerative economies. As these songs are created and shared, they lead to strengthened identity and collective memories that foster education and critical awareness.

Expected Impacts and their evaluation

While Songs for Nature is part of a long-standing human ecology program that has encouraged the RSM to be future-oriented, most of the evaluation work has focused on external impacts of the program on individual participants. As part of a formal research project associated with Campion College at the University of Regina, each camp starts and ends by having

participants complete surveys based on different psychological measures. To date, the survey results have been reported in two peer-reviewed papers:

Arbuthnott et al. (2022). There's nothing like the real thing: Nature connection and emotion in outdoor and online Songs for Nature workshops. Environmental Education Research. <https://doi.org/10.1080/13504622.2022.2074377>

Arbuthnott and Sutter. 2019. Songwriting for nature: Increasing nature connection and well-being through musical creativity. Environmental Education Research <https://doi.org/10.1080/13504622.2019.1608425>

Community-Knowledge-Territory Connection

Songs for Nature participants are invited to showcase their songs at public shows that happen on the last night of each camp and several weeks afterward. All of the group songs that are written during the camps are professionally recorded, publicly released via Bandcamp, and posted on YouTube as lyric videos. Some of the videos are also featured in the RSM's "Home" gallery, which sees over 100,000 visitors each year. The program thus uses a combination of participatory workshops, co-created artistic practices, and community empowerment to foster a range of personal and community connections.

Systemic Barriers and Strategies

The main obstacle we have encountered is a lack of resources, both human and financial. We responded on the personnel front by bringing on graduate students and building strong collaborative partnerships with community groups associated with different camp locations. In response to limited financing, we often use small amounts of seed money as matching funds to secure larger grants.

Weavers of Sustainability in La Guajira: Bio-Geo and Culturally Diverse

González-Tejada, C., Villazón-Lobo, K. C., Marín-Cerón, M. I., Romero Epiayu, J., Ospina-Garcés, S., Delgado-Sánchez, M. & Gutiérrez Romero, G. G.



Figure 38. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 39. Moment of presentations by waving knowledge. Photo: Genesis, 2025

Project details	
Funding	The Orchids Women in Science postdoctoral fellowship program under call No. 948 – 2024 of the Colombian Ministry of Science, Technology and Innovation with the EAFIT University
Period	January – December 2025
SDG's	Gender Equality; Peace, Justice and Strong Institutions; Climate Action; Life on Land; Sustainable Cities and Communities; Reduced Inequalities; Quality Education

Organization Biography / Description

The Colombian Ministry of Science, Technology and Innovation (MinCiencias) launched the Call No. 948 -2024 of the Orchids postdoctoral fellowship program with the aim of promoting gender equity in science, technology, and innovation across Colombia. The program is designed for alliances between a Colombian entity belonging to the National System of Science, Technology and Innovation, a female researcher with a doctoral degree, and a young female researcher or innovator (either an undergraduate student or recent graduate). In this case the entity for the alliance is the EAFIT University.

EAFIT is an institution that plays a role in its society, strengthen its interaction with the environment and its needs and promoting constant action under the principles of integrity, excellence, pluralism, and inclusion. It defends a meaning of education weaving conversations and sowing hope¹⁶. Specifically, the project integrates the EAFIT's Research Group of Nature and Cities defined by a multidisciplinary work, applied research and the use of non-conventional methodologies that meets with conventional research approaches, with the aim of develop innovative solutions.

The project development and acceptance in the territory is thanks to the teamwork done with the social organization named: "Wayuu Feminist Movement of Girls and Women"¹⁷, that plays an important role in the respect of the Wayuu indigenous peoples and their territories.

Short description of the experience

"Weavers of Sustainability in La Guajira: Bio-Geo and Culturally Diverse" is a scientific-community dialogue initiative centered on the Rancheria River Basin. The project seeks to co-construct narratives of sustainability by integrating geoscientific knowledge with Wayuu ancestral wisdom, addressing socio-environmental challenges such as water scarcity, food security, and climate change. Through participatory methodologies, it strengthens resilience, promotes cultural and territorial identity, and fosters inclusive strategies for sustainable development in one of Colombia's most vulnerable regions.

The methodology used, integrates scientific diplomacy and participatory action research within a continuous, iterative process. Drawing on

¹⁶ <https://www.eafit.edu.co/english-version>

¹⁷ <https://movimientofeministawayuu.org/>

ecomuseology and territorial heritage-making, it promotes local development through the co-construction of territorial narratives rooted the bio-geo-cultural approach. It offers a comprehensive framework that integrates biological, geological, and cultural dimensions to understand the interactions between nature, territories, and the communities that inhabit them. Community participation is central throughout all stages, ensuring that knowledge production and territorial transformation reflect local perspectives and foster sustainable, inclusive governance.

One of the most important contributions with the participatory mapping methods applied, was to reactivate ancestral knowledge for adaptation and resilience to climate change thanks to the idea of a Wayuu Calendar co-construction coming from the Wayuu leader working with us to recreate themselves. “The Wayuu Calendas is a living representation of the natural cycles, constellations, and cosmogony that guide their planting, fishing, and livestock practices”¹⁸.

Vision of Change

The project co-construct narratives, linking the bio-geo-cultural diversity of the Ranchería River Basin. By weaving scientific knowledge with ancestral wisdom and knowledge of the Wayuu indigenous peoples, it reinforces their role as key agents in territorial resilience. Strengthening identity and collective memory and community empowerment and participation.

Expected Impacts and their evaluation

Reactivation of ancestral knowledge in dialogue with the learning of new knowledge about the environment that changes paradigms and opens to other ways of resilience, towards food and territorial autonomy.

The project recognizes the value of indigenous knowledge in local adaptation to climate change and in strengthening territorial identity.

The project give voice to non-conventional actors and uses a holistic approach of the territory by its “diversity bio-geo-culturel”

Community-Knowledge-Territory Connection

Key stakeholders were identified in collaboration with the Wayuu Feminist Movement of Girls and Women. An initial field visit in Lower Guajira

¹⁸<https://www.eafit.edu.co/sistema-ciencia-tecnologia-innovacion/descubre-y-crea/edicion-180/por-que-ya-no-se-puede-leer-el-tiempo-en-el-sol>

(Fonseca–Barrancas, Ranchería River basin) used Transect Walks with women leaders and local authorities to locate sites of geological, biological, and cultural interest. Based on this, two communities — Zahino and Provincial — were selected.

After a consultation and cooperation agreement with local authorities, participants were chosen following project criteria and budget limits. Although focused on women, men also took part as leaders and educators. Activities were organized through four participatory workshops.

Throughout the project, ethical and co-responsibility principles guided all actions to ensure respect and inclusion of participating communities. Informed consent was obtained from all participants, with special protection for children. Wayuu protocols were observed through consultation with traditional authorities, use of Wayuunaiki (local language), and respect for cultural protocols.

The process promoted gender equity and intergenerational participation, with regular community feedback and validation of outputs such as maps and calendars. Activities were adapted to local conditions and schedules, and efforts were made to support the local economy through community-based services and local purchases, strengthening local productive networks.

Systemic Barriers and Strategies

The communities live alongside one of the world's largest open-pit coal mines. Our project introduces new paradigms of geology that recognize geodiversity and ecosystems as key elements of territorial identity. Through a workshop, we engaged the coal company and local government to strengthen collaboration.

We go beyond the epistemological inequities faced by indigenous communities, creating spaces of dialogue between women, elders, leaders, and other generations. We integrate members of the indigenous communities in the conception of the workshops, and we coproduce knowledge and share ownership in each result and communication of the project.

Caminos de Agua

Carolina Quintero Agámez



Figure 40. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 41. Image of the project.

Project details	
Website	-
Period	2023 - Ongoing
SDG's	Clean Water and Sanitation, Sustainable Cities and Communities, Responsible Consumption and Production, Climate Action, Life Below Water, Life on Land, Peace, Justice and Strong Institutions.

Organization Biography / Description

The National Museum of Colombia, founded in 1823 and located in Bogotá, is the oldest museum institution in the country and one of the most significant in Latin America. It houses a diverse collection that encompasses the nation's archaeological, ethnographic, historical, and artistic heritage, and serves as a

civic meeting space where multiple memories, identities, and narratives converge. Beyond the conservation and exhibition of its collections, the museum plays a fundamental social role by promoting intercultural dialogue, the inclusion of voices traditionally excluded from the national narrative, and critical reflection on the contemporary challenges facing Colombian society.

Short description of the experience

The exhibition project *Caminos de Agua* (Water Pathways), developed by the Darién Cultural Committee, the Archaeological Park of Santa María de la Antigua del Darién (ICANH), and the National Museum of Colombia, presents water as a vital axis for understanding the formation of societies—their memories, forms of resistance, and possible futures. The Colombian Darién, located in the country's northwesternmost region on the border with Panama and within the Caribbean area, is a territory of remarkable biodiversity and great cultural richness. It is home to Emberá Eyabida, Emberá Dobida, and Gunadule Indigenous communities, as well as Afro-descendant and settler populations, whose ways of life are deeply intertwined with the rivers, streams, and wetlands that shape the landscape.

Built through a participatory process with these communities, the project serves as the pilot for the Museum Production Cycle, a methodology that integrates research, territorial engagement, and collaborative practices, strengthening the museum's narratives and expanding its social impact. In the context of an environmental emergency, *Caminos de Agua* seeks to reframe water beyond its understanding as a natural resource, recognizing it instead as the foundation of life in all its forms. By bringing the knowledge generated in the territory into a national museum space, the project fosters empathy and awareness regarding the relationship between communities, water, and the sustainability of life on the planet.

The initiative brings visitors closer to the communities of the Darién and their vital connection to water—an element that sustains identities, ways of life, and dynamics of resistance, while simultaneously becoming a site of contention. It also promotes dialogue about collective action and the diverse community and territorial forms of organization around water, highlighting its symbolic, cultural, and political value.

The entire exhibition process—from narrative development to design and production—was carried out in collaboration with the Darién Cultural Committee, made up of representatives from the Emberá Eyabida, Emberá Dobida, and Gunadule communities, the Consejo Mayor del Bajo Atrato,

and settler communities from the region. Their participation ensured a plurality of voices and the legitimacy of local knowledge in shaping the museological project.

Vision of Change

The project strengthens identity and collective memory around water, highlighting the knowledge and practices of the Darién. Through a collaborative process, it acknowledges community participation in the construction of inclusive museological narratives.

- Strengthening identity and collective memory
- Community empowerment and participation

Expected Impacts and their evaluation

Internal impacts for the organization: development of future-oriented organizational models and integration of sustainability policies.

External impacts: individuals, groups, communities and neighborhoods and transformation of human systems

Community-Knowledge-Territory Connection

Concrete example: The exhibition was developed through meetings and workshops with Emberá, Gunadule, and rural communities, integrating traditional knowledge, intergenerational stories, and co-created artistic practices that connect water memory with the territory of the Darién.

Approaches used: participatory workshops, community mapping, co-created artistic practices, community empowerment, intergenerational dialogue, collaboration with traditional/indigenous knowledge.

Systemic Barriers and Strategies

How were they overcome? Institutional partnerships were strengthened, fostering collaborative work with the Darién Cultural Committee. In addition, inter-institutional support and cooperation networks were developed to sustain the process and ensure its continuity.

Obstacles encountered: Lack of resources including funding.

Chapter 6

Asia

Museum For Local Economic Development and Social Changes

Nofa Farida



Figure 42. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 43. Still from the MLEAD movie of the Museum For Local Economic Development and Social Changes.

Project details	
Website	https://www.instagram.com/indonesiahiddenheritage/
Period	2023 - Ongoing
SDG's	4,8,10,11,13,16,17

Organization Biography / Description

Indonesia Hidden Heritage Creative Hub (IHHCH), under its visionary leadership, has emerged as a pioneering force in revitalizing Indonesia's cultural legacy through creative media and strategic collaboration. By blending rigorous historical research with emotionally resonant storytelling, IHHCH crafts museum programs, documentary films, and youth-centered initiatives that make heritage not only accessible but deeply relevant. Its signature approach—rooted in poetic narrative design and cinematic aesthetics—has positioned IHHCH as a cultural innovator, particularly in engaging urban youth and fostering pride in local history. Recent initiatives like the Museum Forward Forum and the MLEADS program (Museum for Local Economic Development and Social Changes) exemplify IHHCH's commitment to cultural diplomacy and social transformation. Collaborating with institutions such as the DKI Jakarta Cultural Office, EUNIC Cluster Indonesia, and ICOM Committees, IHHCH has facilitated international dialogues with museums like the Louvre Abu Dhabi and M+ Hong Kong, while also empowering local communities through heritage-based entrepreneurship. Literary engagements, such as the “Book Talk & Meet the Author” series, further demonstrate IHHCH's dedication to cultural literacy and intergenerational storytelling. These efforts align powerfully with the United Nations Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 11 (Sustainable Cities and Communities), and SDG 17 (Partnerships for the Goals). By activating urban heritage, fostering inclusive narratives, and building cross-sectoral alliances, IHHCH transforms museums and media into platforms for dialogue, development, and dignity. It is not merely preserving the past—it is designing futures where history becomes a catalyst for creativity, equity, and collective pride.

Short description of the experience

The Indonesia Hidden Heritage Creative Hub (IHHCH), led by Nofa Farida Lestari, is redefining the role of museums and cultural spaces in Indonesia through creative media, strategic partnerships, and community empowerment. With a focus on emotionally resonant storytelling and youth engagement, IHHCH transforms historical research into compelling narratives that foster pride, reflection, and social critique. Its flagship initiative, Museum for Local Economic Development and Social Changes (MLEADS), exemplifies this mission by positioning museums as engines of inclusive growth and civic transformation. MLEADS operates through a series

of place-based projects that connect museums with local communities. In Jakarta, it collaborates with coastal area residents to activate maritime heritage through youth-led storytelling and museum-based entrepreneurship workshops. In Palembang, the program partners with various institutions to deliver training for youth in the Lembaga Pembinaan Khusus Anak (Youth Detention Center), using museum collections, local history, and cultural heritage as tools for reintegration. These workshops not only build creative and social skills but also reconnect participants with their city's identity—turning heritage into a pathway for healing, dignity, and future opportunity. Across its programs, IHHCH aligns strongly with the UN Sustainable Development Goals, particularly SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced Inequalities), SDG 11 (Sustainable Cities and Communities), and SDG 16 (Peace, Justice, and Strong Institutions). Through initiatives like Museum Forward Forum, literary engagements, and MLEADS, IHHCH is crafting a new paradigm: museums as living platforms for dialogue, resilience, and creative agency—where history becomes a resource not just for remembrance, but for reinvention.

Vision of Change

MLEADS envisions museums as dynamic agents of social transformation—no longer passive repositories of the past, but active platforms for inclusive growth, civic dialogue, and youth empowerment. By embedding museums within the social and economic fabric of their communities, IHHCH seeks to reframe heritage as a living resource for dignity, creativity, and opportunity. The vision is to cultivate future-ready cultural ecosystems where local history inspires entrepreneurship, intergenerational healing, and sustainable development. Through poetic storytelling, participatory design, and strategic partnerships, MLEADS aims to democratize access to heritage and reposition museums as catalysts for equity and resilience.

Expected Impacts and their evaluation

Internal Impacts:

- Development of adaptive, future-oriented organizational models that integrate IDEA (Inclusivity, Diversity, Equality, Access) principles.
- Embedding sustainability policies across environmental, social, and economic dimensions, guided by ICOM and OECD frameworks.

External Impacts:

- Empowerment of youth groups in coastal Jakarta and Palembang's detention centers through heritage-based entrepreneurship and reintegration.
- Strengthening community identity and pride via museum-led storytelling and workshops.
- Transformation of museums into civic hubs, influencing local governance and cultural policy.
- Activation of urban and regional heritage as a driver for inclusive economic development.

Evaluation: MLEADS is currently undergoing formative evaluation through participant feedback surveys, capturing qualitative insights on empowerment, relevance, and community impact. These data inform iterative design and future scaling strategies.

Community-Knowledge-Territory Connection

In North Jakarta, MLEADS collaborated with the Museum Bahari (Maritime Culture Museum) and Karang Taruna (Local Youth Organization) to engage youth and community with micro-enterprises based on marine and coastal resources through participatory workshops and community mapping. These sessions explored forgotten coastal narratives, connecting traditional knowledge with business development and contemporary urban challenges.

In Palembang, intergenerational dialogue and museum-based training empower youth in detention to reconnect with their city's cultural identity. Approaches include:

- Participatory workshops on storytelling and entrepreneurship
- Community mapping of heritage sites and local histories
- Business development, Financial Literacy and Access to Funding
- Empowerment through creative media and museum collections
- Dialogue between elders, youth, and cultural practitioners
- Integration of indigenous maritime knowledge into museum programming
- These efforts foster a deep-rooted sense of place, turning heritage into a tool for healing, pride, and sustainable futures.

Systemic Barriers and Strategies

Barriers:

- Limited funding for heritage-based social innovation
- Lack of institutional recognition for museums as agents of development

Strategies:

- Leveraging cross-sectoral partnerships with government, cultural offices, businesses and international bodies to build legitimacy and resource pipelines
- Designing programs aligned with SDGs to attract policy and donor support
- Embedding IDEA principles to ensure inclusive, future-oriented program design
- Using poetic narrative and cinematic storytelling to elevate visibility and emotional resonance
- By positioning museums as civic actors and aligning with global frameworks, IHHCH has begun to overcome structural limitations—transforming systemic inertia into collaborative momentum

Chapter 7

Europe

GNH, Gross National Happiness

Fanny Walter

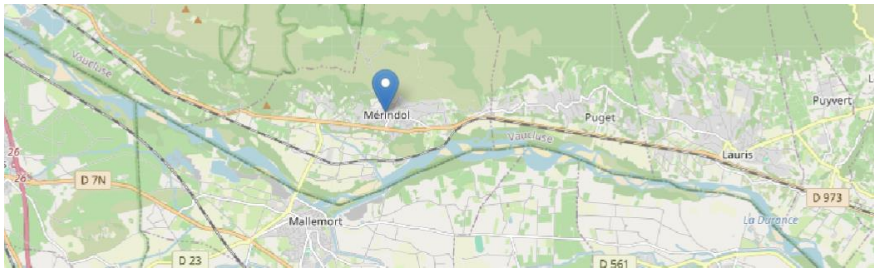


Figure 44. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 45. Logo and image of the project.

Project details	
Website	Centre BNB France https://centrebnnbfrance.assoconnect.com Cap Bien Vivre https://capbienvivre.org/wp-content/uploads/2025/06/merindol-BNB.pdf
Period	Started in 2023
SDG's	3 WellBeing, 4 Education, 8 Decent work, 11 Sustainable cities, 16 Peace & Strong institutions ...

Organization Biography / Context Description.

Fanny Walter is ambassador of GNH in France, and part of the association «Centre BNB France». Previously she got bored in the consumption model of capitalized countries, then she got the opportunity to move 5 years in India where she discovered another way of life, subtil communication, yoga and meditation. Back to France, she received the message to help the country to transform for more happiness and consciousness. She moved to Mérindol, a village of 2300 inhabitants in the South-East of France, and wanted to launch a local GNH¹⁹ project.

Mérindol is an engaged village, with history of «Vaudois» people, who had a strong faith, convictions, with practices in the nature. There were persecuted in 16th century. And Mérindol is still even today a village with a mixed of «following people» and «engaged people», open minded, motivated to promote respect of the nature, organic agriculture, local energy project, who are ready to oppose to national or regional directives which were not aligned with their values.

GNH is a 3 levels connexion: to oneself (spiritual), to others (social) and to the nature (ecological). It has 9 domains: Wellbeing, health, good governance, vitality of the community, culture, education, relation to time, respect of the nature, sustainable consumption and economy. GNH promotes 4 competences: joy, compassion, inclusion and kindness. It comes from Bhutan country in Himalaya. The king in 1975 had the intuition for this goal, then he took the intention to get international advises to put into a model with tools and launched it for his country. It can also be implemented locally for a village, city, or in a company, association, or in a family. This is completely

¹⁹ GNH, Gross National Happiness, in French is BNB for « Bonheur National Brut »

adaptable to suit the local context. The intention is the happiness of citizens, and not the growth of GDP, Gross Domestic Product. Bhutan kings presented this GNH at United Nations, it participated to inspire for the 17 SDGs.

Short description of the experience

Here are the different steps of Project «GNH Mérimindol»:

- Lobbying: During 2 years, she talked to the mayor, associations' members, teachers, to identify a possible window to give conference or start a GNH project.
- Launch of the project: The municipality launched call for citizens' project with a budget given by the municipality. Fanny caught this opportunity. Some adjustments were needed in order to respect the administration rules. She motivated a 15 citizens to be part of the team. Then the project was accepted.
- Workshops: 14 workshops were given, to discover and discuss on the 9 GNH domains, and create a GNH local Questionnaire.
- Get answers for the GNH questionnaire: interviews, communication on Instagram, Facebook, the newsletter of the village to give the link of the questionnaire. This step is still going on.
- Promotion of the project: several citizens participated to different events to give visibility to this project. There were also some interventions at school.

Slowly inner changes are coming, more projects are launched by citizens, and local governance is moving for more participation of citizens, more multiple-associations actions.

Vision of Change

Inner change and local awareness on the intention of happiness

- The workshops allowed to get to know each others, to make links, to create a local GNH questionnaire for intimate answers, to become aware of inner change for better relationships with his family and neighbors. Some events were outside to admire the beauty of the village, the landscape with the Luberon's cliff, the Durance's river. It helps also to move the municipality governance for more shared

responsibility and participation of inhabitants. The mayor during his speech for happy New Year said 4 times that the intention is happiness of all.

Awareness of the beauty of our landscape, launch of a solar energy project

- During some workshops, each one shared good practice to take care of the nature. Some examples: make presents packed in tissue reusable for Christmas and birthdays, take a bag when walking in the countryside to pick up the waste, give organic food at school.
- This state of mind boost the local motivations: A company with shared governance with citizens and the municipality was launched for solar energy projects. It started with a public technical building and it was an opportunity to remove asbestos.

Development of local culture and expose poetry sentences in the village

- GNH Mérindol project motivated some citizen to launch other projects: one to make arch out of Provence canes, one for workshops of poetry on the culture of the village and display some sentences in the village, one for a mix of children and elders cooking together and create a book receipt with its history.

Expected Impacts and their evaluation

Cultural Shifts

- A GNH project is a long-term impact, as this is an inner change, but slowly we see more smiles on faces, more help between villagers
- If you visit our village, you will hear «Good morning» from each one.

Ecological experimentations

- A collective field decided to create medicine plants area, to create a pond to improve biodiversity. GNH project participated to one «Green day» to improve ecological awareness.

Social Benefits

- Some invisible actions were done, as vibratory cleaning of an historic house, which help to make it recognized as national historical

monument, and better relationships in family and with elected officials.

- Regarding education, the intention is to give them socio-emotional competences to become later responsible citizens. Some workshops on yoga, meditation, emotions were given at school, and a specialist went one week to help children to discover how to build interviews and make a film on happiness subject.

New dreams for Future Impact

- Two members of GNH project participated with searchers to a collective book of new stories in villages to inspire citizens for future impact and new dreams.

Community-Knowledge-Territory Connection

Workshop to promote inner confidence to make people creative and dare to launch their projects

- GNH use U theory to promote creativity. Some tools of this approach, called SPT for Social Presenting Theatre, use the body to rise awareness and find new solutions. A citizen project financed by the municipality is a 2 days training on SPT, with people from the different associations of the village, elected officials, artists, therapists, artisans, merchants.

Co-design Processes

- The local GNH questionnaire were co-created by the GNH project members, then several ones participated to different events to give it to citizens.

GNH promoted shared Governance

- One pillar of GNH is a «good Governance», for more sharing, transparency and collective decision-making. We use especially the decision by consent process. After a workshop on this subject, it was so nice to hear an elected official ask during a town council to the opposition member : «what is your objection ? How can you help us to find a solution for that ?»

Intergenerational Participation

- It is so wonderful to see a 74 years old lady to get up after the death of her husband and become the treasurer of the association, locally and nationally.
- A workshop on GNH was given to a group of people of more than 90 years old. The director of nursery was part of the GNH animators, so it gave the idea to bring the little children to meet these elders for another afternoon.

Awareness to respect the Nature

- «Respect the nature» is another pillar of GNH. As the nature is all around the village with Luberon and its cliffs, Durance's river and the scrubland, the villagers want to preserve this nature. Many workshops and conferences are on this subject to help to improve awareness.

Systemic Barriers and Strategies

Project Feasibility

- Thanks for the support of the members, and the elected officials, who are open-minded, and make this project possible, even if we need more sponsors and money to go further.

Resistance Strategies

- Some officials thought this project was an utopia, and slowly they see it can become reality. Lots of resistance exist regarding this paradigm shift. It requires to be patient, increase our consciousness, and to work on oneself, use subtil techniques on an energy level to change the visible part. This is like an iceberg, you see only a little visible part.

Sustainability Plan

- The miracle of GNH approach is that when you decide to be constructive for happiness, when you are aware and make the choice to be mindful to yourself, to the others and to the nature; this is done and you can not come back.

Future Actions and Expansion - to inspire others

- The idea of GNH Mérindol project is to show that this paradigm shift is possible, and to inspire others villages, then bigger city, then one day on a national level.

Connectivity Conservation Initiative for Fresh Drinking Water

Georgia Kanellopoulou

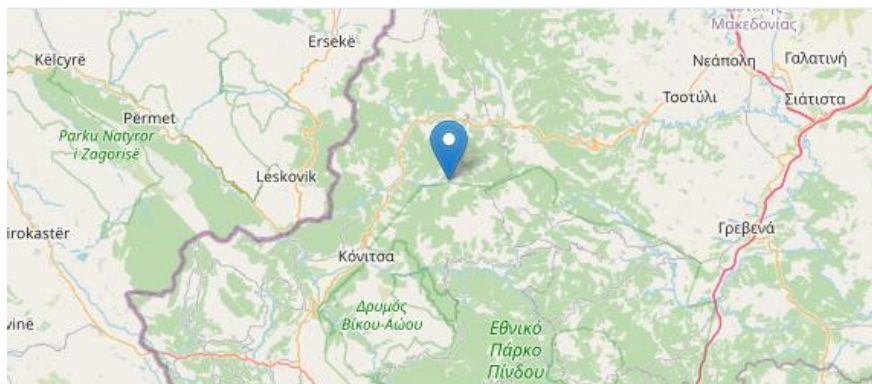


Figure 46. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 47. Restoration of traditional fresh water supply infrastructure in order to support biodiversity and humans.

Project details

Website	https://boulouki.org/project/connect-conserve/
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Period	2023-2028
SDG's	5, 13, 15

Organization Biography / Description

Boulouki – Itinerant Workshop on Traditional Building Techniques seeks to identify, study, document, preserve and disseminate the knowledge of local communities, groups and individuals on traditional building techniques, materials, landscape practices and natural resources; to (re)construct the framework for the application of this knowledge in the modern world, within the political, institutional, legal, economic, natural and technological environment by implementing exemplary projects/interventions of an educational nature, with the participation of local communities. Boulouki as a grassroots collective, innovates through bottom-up approaches, participatory care for common resources, and a holistic commitment to sustainability and rehabilitation of natural and cultural heritage. The team has centered projects on water infrastructure heritage, recognizing its importance in climate adaptation and climate action.

In this project, Boulouki is in close collaboration with Callisto, an environmental organization dedicated to wildlife and nature conservation. Founded in Thessaloniki in 2004 by individuals with extensive experience and expertise in environmental issues, Callisto works to preserve wildlife and the environment as a whole. The primary focus is on large mammals, such as the bear and the wolf, and their coexistence with humans. Together with the local communities, Callisto strives to protect forests, wildlife, and promote the beauty of nature, the value of biodiversity, and the right to life.

Short description of the experience

The project area brings together the Natura 2000 area entitled “Peaks of Smolikas Mountain/Koryfes Orous Smolikas” (GR2130002, SCI-SPA), with the northern part of Vikos – Aoos UNESCO Global Geopark, the wildlife sanctuary entitled “Vourkopotamos stream-Ganadio-Pyrgos-Pyrsogiannis” and roadless core areas. The physical geography of the project area is that of the northern Pindus Mountains, and the region is bordered by the dense mountain formations of Grammos (north), Smolikas (east), Tymfi or Gamila (south), Nemertsika or Meropi and Kamenik (west). The area lags behind in terms of economic growth and is sparsely populated. Tourism, crop and livestock production, forestry and public administration represent the most

important economic activities in terms of employment. The primary and secondary sectors have shrunk considerably over the last 30 years.

Mastorochochia area has a significant value for endangered large carnivores, with a focus on brown bear and wolf as it connects the Prespa-Pindus Connectivity Conservation Area in North Western Greece, the Polis-Sopot-Valamare-Gramoz Connectivity Conservation Area in Southeast Albania, and the Tomorri-Vjosa Connectivity Conservation Area (Figure 1).

The primary threats of climate change identified in the area for wildlife and humans are:

- Rising temperatures and shifting precipitation patterns (habitat shifts, water scarcity, food supply disruptions)
- Altered ecosystem dynamics (loss of biodiversity)
- Forest fires (increased frequency and intensity, loss of forest cover)
- Reduced snow – changes of seasonal cycles (hibernation, hunting patterns, migration barriers)
- Disruption of wildlife corridors (habitat fragmentation and degradation, corridor quality decline).

The predominantly mountainous area enhances human and wildlife coexistence. Connected landscapes not only support biodiversity but also maintain essential ecosystem services on which humans depend, such as pollination, water regulation and soil health. In this framework, water supply to this remote area is essential both for human and wildlife. Since Boulouki and Callisto have been working for years in Epirus they have come close to the needs of local communities. With this project they aim at enhancing their livelihood and well-being by mapping ecosystems and the services they offer delivering important information and skills for the management and sustainable development of the area.

Vision of Change

The project is taking into account the adverse changes that the climate crisis is bringing about to the mountain ecosystems of the Mastorochochia area and delivers participatory restoration workshops of traditional water infrastructures, promoting heritage and nature conservation and restoration. It fosters ecological and environmental regeneration and community empowerment and participation. By the establishment of a place-based Initiative between local communities, researchers, environmental and cultural

associations, local and regional authorities, it secures synergies for conservation, restoration and resilience (national and transboundary) that will foster advanced research, awareness and solutions on conservation efforts and climate action. Specifically, the Initiative is considering the challenges regarding water scarcity, ecological integrity, secure provision of ecosystem services and social-ecological resilience.

Expected Impacts and their evaluation

The project intends to improve the integration of sustainability aspects by working on the interface of nature-heritage restoration. It demonstrates the potential to deliver integrated interventions for the beneficiaries that, while contributing to climate change adaptation, will strengthen the interdependencies and symbiosis between wild fauna and humans. For doing so, it enhances active involvement and engagement of the local community and the documentation of traditional knowledge in order to be a catalyst for its successful implementation but also for the sustainability of its impact.

Gaining the support of local communities and key stakeholders for conservation actions is a key impact factor in actually changing behavior patterns, and it is evaluated through focus group discussions. Knowledge sharing between generations fostered intergenerational dialogue and the provision of new forms of communication, mutual understanding, and learning practices. In addition, the restoration of the three water constructions improved vital ecosystem services, leading to structural and functional ecological networks, and the provision of citizen science capacity building workshops regarding water management contributed to social benefits. All in all, continuation of the multi-faceted research (fieldworks, surveys, workshops) to regenerate the traditional knowledge and use it in the contemporary climate adaptation context is a fundamental impact aspect.

Community-Knowledge-Territory Connection

What is interesting in these new climate conditions of adaptation is the emerging need to capture traditional ecological knowledge and apply nature-based solutions. But how do we learn from local traditional ecological knowledge? When referring to local knowledge, we refer to the perceptions, skills, and narratives developed by societies with a long history of interaction with their natural environment. The traditional knowledge is maintained and passed on from generation to generation in a community, and the ecological knowledge is the understanding of the functions of ecosystems. Putting all the above together, we get a system of knowledge, traditions, and practices that

are heavily dependent on place! This knowledge is at the interface between environmental and cultural diversity and can provide information, methods, theory, and practice for sustainable planning and management of natural and cultural heritage. The partners harvest this knowledge by exploiting participatory knowledge sharing procedures using cultural and community mapping and walking interviews, and by organizing focus group discussion sessions based on intergenerational participation. The result of these activities is the provision of knowledge on biodiversity-related knowledge, agricultural, traditional livestock grazing practices, landscape and cultural values, traditional water infrastructures, and related knowledge on sustainable use of natural resources.

Systemic Barriers and Strategies

Boulouki and Callisto have extensive experience in “bottom-up” governance structures and how to empower local actors to play a leading role in the initiative’s functioning and make decisions through thematic working groups. Partners have established a strong synergy with the Municipality of Konitsa and the UNESCO Global Geopark Vikos-Aoos under an MoU to work further on the governance of the Connectivity Conservation Initiative for Fresh Drinking Water. However, there are obstacles encountered as the lack of institutional recognition of ecological corridors and changes in priorities and frameworks of supporters can threaten long-term commitments. Mitigation activities are based on regular meetings and accountability. Ecological corridors as green infrastructure play a pivotal role in protecting biodiversity and providing services across a wide spectrum of ecological and environmental processes. The need to create and protect them has been explicitly acknowledged in the National Biodiversity Strategy and Action Plan.

Living Landscapes of Zagori: Reviving Heritage and Ecology in the Transhumance Paths

Dimitra Papaioannidou

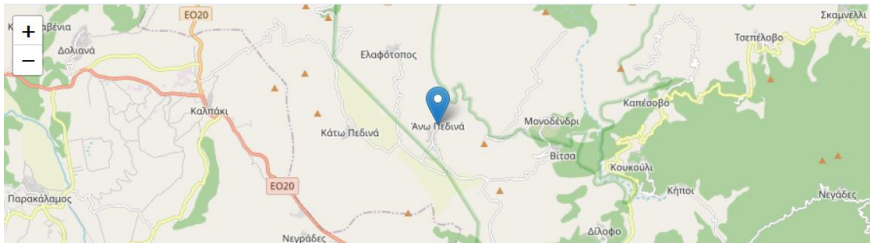


Figure 48. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 49. Image of the project.

Project details

Website <https://ecomuseumzagori.gr/>

Period 2024 - 2025

SDG's 

Organization Biography / Description

EcoMuseum Zagori was founded to manage the protection and valorization of the natural and cultural heritage of the area to the benefit of local sustainable development. The central principle it is based on is that an area's monuments should remain in situ as a living testament to a specific era. Here visitors learn about various aspects of social life, production processes and the socio-economic and natural history of the region. At the same time, they are given the opportunity to interpret the spiritual, social and economic evolution of the local population which is directly connected to the natural environment

and its effect on the definition of its identity. EcoMuseum Zagori has the role of an educational and local development hub, serving as a reference point between visitors, the local community and local governance actors.

Short description of the experience

Ecomuseum Zagori implements a community-based heritage and environmental program that reactivates local cultural practices as tools for ecological stewardship. The project strengthens the relationship between people and landscape in the mountainous region of Zagori, Epirus, Greece, a biocultural territory shaped by centuries of traditional practices and land-based knowledge. Through BioBlitz events, biodiversity recording, and community workshops, residents, scientists, and young people document local flora and fauna while learning about ecosystem interconnections. Participatory mapping and trail documentation reveal the historical and ecological layers of transhumance routes. Video portraits, photographic archives, and exhibitions share the voices and experiences of the community, while educational programs for children nurture awareness and pride in local nature and culture. The project highlights the importance of traditional livestock farming and the crucial role of women in preserving biodiversity, cultural memory and the natural landscape. This initiative is a journey through the mountains of Pindos, where heritage remains a living tradition and a way of life. It demonstrates how local knowledge, collective creativity, and intergenerational learning can regenerate both landscapes and communities, offering a model for climate resilience rooted in the wisdom of place. The project fosters intergenerational dialogue, enhances local ecological awareness, and offers a replicable model for bioregional regeneration. Its outcomes include public exhibitions, the addition of trails on the Echoloci Application, educational programs, and video-portraits, showcasing how culture and ecology can weave resilient futures together.

Vision of Change

Our vision is to regenerate to reconnecting people with the heritage, knowledge, and ecosystems that have shaped Zagori for centuries. Through participatory biodiversity actions, traditional livestock practices, and the vital role of women as custodians of memory and biodiversity, we aim to weave stronger relations between communities and their environment.

By promoting the traditional practice of transhumance, documenting ecological knowledge, and activating transhumance routes as living cultural and ecological corridors, we promote a model of ecological and environmental

regeneration rooted in local practices. At the same time, inclusive participation, especially of women, youth, and intergenerational groups, fosters community empowerment, strengthening collective identity and cultivating a shared sense of responsibility toward the land.

By celebrating local knowledge and amplifying community voices through creative practices, education, and collaborative action, Ecomuseum Zagori contributes to a regenerative future where people and landscapes thrive together.

Expected Impacts and their evaluation

Generate strong cultural, social and ecological impacts across Zagori by deepening the relationship between communities, heritage, and the natural landscape. By involving women, shepherds, youth, and local schools, it strengthens community cohesion, nurtures intergenerational exchange, and reinforces collective memory linked to traditional livestock practices and biodiversity. Participatory BioBlitz activities, mapping, and creative workshops stimulate environmental awareness. Ecologically, the project improves understanding of local flora and fauna, revitalizes traditional ecological knowledge, and supports environmental regeneration through the documentation of species, landscapes, and transhumance routes. Impact is evaluated through the number and diversity of participants, the biodiversity data collected, recorded oral histories and video portraits, the quality of community engagement during workshops and exhibitions, and the creation of collaborative outputs such as maps and audiovisual stories. Together, these indicators demonstrate how cultural practices, local knowledge, and creative participation contribute to lasting biocultural resilience in the Pindos Mountains.

Community-Knowledge-Territory Connection

The project builds a strong connection between community, knowledge, and territory by placing local people at the center of exploring, documenting, and interpreting their own landscapes. Through participatory workshops, BioBlitz biodiversity recording, trail mapping, and intergenerational storytelling, residents actively contribute their memories, skills, and observations of the natural environment. Women, shepherds, elders, youth, and children share complementary forms of knowledge, from traditional livestock practices and plant uses to oral histories and sensory experiences of the mountains. Creative tools such as video portraits and photographic documentation, deepen this relationship, transforming individual experiences into collective expressions

of place. By walking, recording and narrating together, the community strengthens its sense of belonging while recognizing the ecological value of the Pindos landscape. In this way, the project transforms the territory into an active cultural and educational space where knowledge is co-created, shared, and embodied, reinforcing both community identity and environmental stewardship.

Approaches used:

- Participatory workshops
- Community mapping
- Community empowerment
- Intergenerational dialogue
- Collaboration with traditional/indigenous knowledge

Systemic Barriers and Strategies

How were they overcome? We built trust through long-term relationships and participatory workshops. Collaborations with local cultural associations, and schools helped secure active engagement, ensuring community ownership and continuity of the project.

Obstacles encountered:

- Lack of resources including funding
- Difficulty involving the community

The Meeting of the Waters

Anjuli Grantham

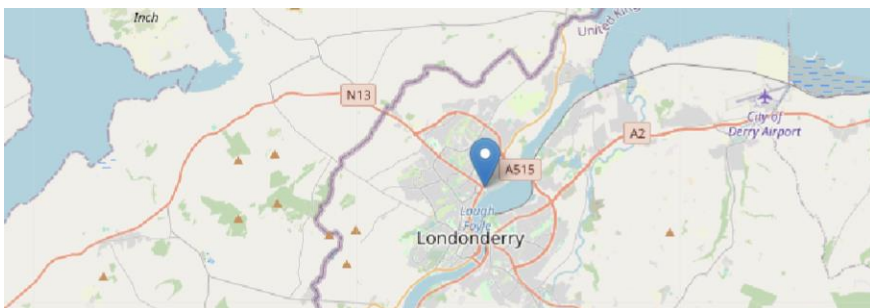


Figure 50. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>

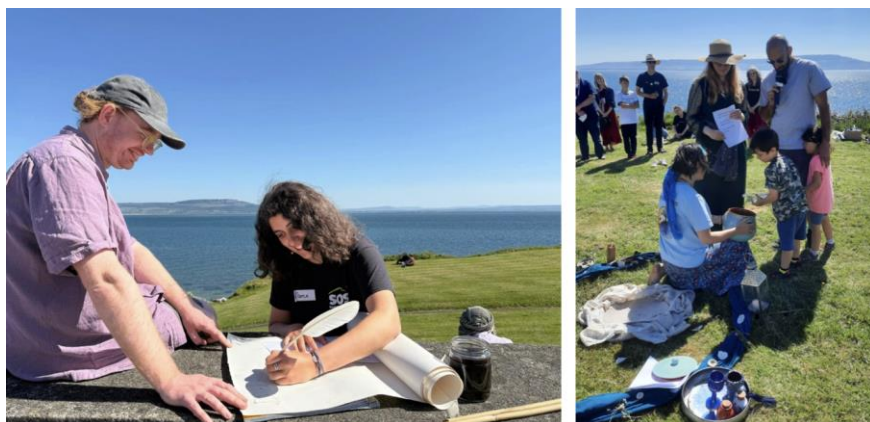


Figure 51. Oak gall ink made from waters brought from across Ireland and beyond are used to write the Rights of the Foyle. Lough Foyle is in the background. Photo courtesy Colum Sands.

Project details

Website	www.zerowastenw.org/projects/the-gathering/
Period	2025
SDG's	Clear Water and Sanitation; Life Below Water; Life on Land; Partnership for the Goals

Organization Biography

The Gathering is a coalition of grassroots environmental campaigners from the North of Ireland, including activists in Northern Ireland and the Republic of Ireland. Organised under the Derry-based circular economy group, Zero Waste North West, the Gathering is a platform for autonomous organising to counter ecological destruction. Among other things, the Gathering advances the rights of nature, advocating for eco-jurisprudence within institutions while also testing how individuals might shift from an anthropocentric to an ecocentric worldview and ways of living. In 2021, activists from the Gathering successfully lobbied for the passage of municipal motions on the rights of nature in three council areas, becoming the first councils in the United Kingdom and the Republic of Ireland to do so. Since then, members have drafted the Rights of the Foyle, which is a cross-border river and lough system.

Short description of the experience

Members acknowledge there are many ways of knowing and integrate an extended epistemology into their efforts (Heron and Reason, 2007). This includes making space for experiential knowing—immersing self in the more-than-human world—representational knowing—translating experiential encounters into creative expression—propositional knowing—the creation of texts to influence discourse—and practical knowing—developing and using skills for both daily living and social change.

All aspects of an extended epistemology were integrated within the day-long convening hosted in Moville, County Donegal, in 2025. The event, “From Colonisation to Community through the Rights of Nature”, made space to build the relationships necessary to halt extractivism. These relationships include those among human beings and those with other-than-humans. Members of the Gathering view culture as integral to the transformation of these relations.

Organisers devised an opening ceremony called the Meeting of the Waters (Grantham, 2026). All attendees were invited to serve as ambassadors for their local waterbodies. They were invited to bring water from a local source—from holy wells, lakes, streams, the sea, or even their tap—as well as oak galls. The ceremony took place at a local commons, a green on the bank of Lough Foyle. The Meeting of the Waters opened with the group singing for Lough Foyle, facing the lough and relishing in her dazzle, as attendees turned attention to the water and bolstered their experiential knowing of the Foyle. The ceremony included the sharing of specific myths from the Foyle and historic poetry describing ancestral relationships with Ireland’s web of life. In so doing, the ceremony featured intangible cultural heritage as a form of representational knowing (Grantham, 2026). Next, attendees were invited to step forward with their water, pouring the water into a ceramic vessel as they recited:

I carry the [name of water source]

I protect the [name of water source]

I am the [name of water source]

The last offered waters came from the host, the Foyle. At the ceremony’s end, the Declaration of the Rights of the River Foyle was read aloud in English and in Irish. Attendees were invited to be anointed with the water from dozens of waterbodies as water protectors.

As the convening proceeded, the water and oak galls were used to create oak gall ink. The ink was used to write the Declaration of the Rights of the Foyle on a scroll, and attendees signed their name to the declaration with the ink. Using the strength of oak trees and dozens of waterbodies, attendees confirmed the inherent rights of nature and their service as nature's protectors. Here, representational knowing and propositional knowing came together.

The convening ended with a World Café conversation that strategized about pathways for acknowledging legal personhood and other rights for the Foyle, serving to enhance the practical knowing required for political action. These conversations forged new relationships dedicated to ecological and community care.

The Gathering and the Meeting of the Waters serves as a replicable model demonstrating how many ways of knowing can be integrated into grassroots bioregional care efforts. Through prioritizing experiential and creative interactions with the more-than-human world, these events leverage heritage as a vehicle for altering extractivist worldviews and building social power.

Vision of Change

This ceremony was directed at building our confidence as advocates for our local waterbodies and watersheds.

- Ecological and environmental regeneration
- Community empowerment and participation

Expected Impacts and their evaluation

Internal impacts for the organization: development of future-oriented organizational models and integration of sustainability policies.

External impacts: transforms Human systems and cities and regions.

Community-Knowledge-Territory Connection

The ceremony and the subsequent Gathering (including World Café) incorporated all aspects of an extended epistemology. That is, an experiential epistemology, representational epistemology, propositional epistemology, and practical epistemology.

Approaches used:

- Participatory workshops
- Co-created artistic practices
- Collaboration with traditional/indigenous knowledge

Systemic Barriers and Strategies

The point of these gatherings is to elevate an ecocentric worldview. A key part of this is locating that ecocentric worldview within aspects of Irish cultural heritage. This is the "vernacularisation" process of the rights of nature. I have many other examples of this.

Obstacles encountered:

- Predatory capitalism / extractive logics

Essere parte del fiume: l'Olona attraverso di noi

Raul Dal Santo and María Soledad González-Reforma

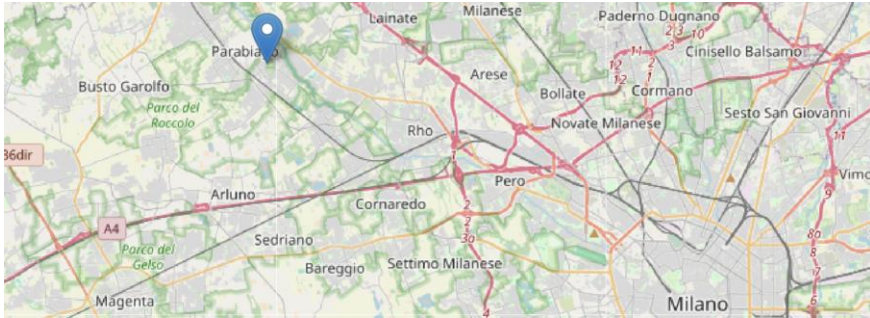


Figure 52. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 53. Image of the project.

Project details	
Website	https://ecomuseo.comune.parabiago.mi.it/radio/essere.html
Period	2024 - 2025
SDG's	Clean Water and Sanitation, Sustainable Cities and Communities, Climate Action, Partnerships for the Goals.

Organization Biography / Description

The Ecomuseo del Paesaggio di Parabiago was created in the early 2000s within the Local Agenda 21 process as a community-based response to the growing disconnection between residents and their landscape in the Olona Valley (north of Milan). Historically shaped by agriculture, mills, and later textile industry, the area experienced strong environmental degradation, fragmentation of social ties, and loss of shared knowledge. In 2007, the Ecomuseum received official recognition by the Region of Lombardy. In 2008, the Parco dei Mulini, an inter-municipal protected area, was established to safeguard the river corridor and coordinate environmental governance.

Departing from a traditional museum model, the Ecomuseum works through the principle of “territory as museum”, where places, memories, and relationships are recognized as heritage. It operates as a living laboratory, integrating participatory research, environmental care, and cultural action.

One of its core methodologies is the creation of Community Maps, collaborative cartographies used to identify meaningful places and orient initiatives that respond to local needs. The Parco dei Mulini complements this with ecological restoration, education, and trans-municipal coordination.

Within this framework, *Essere parte del fiume* was developed in partnership with artist Marisol González-Reforma, adopting a participatory action-research approach. The project built on existing community infrastructures and governance systems to design intergenerational activities—surveys, workshops, community walks, artistic mediation, and micro-ecological actions—aimed at reconnecting inhabitants with the Olona River.

The Ecomuseum’s structure enables *Essere parte del fiume* to:

- Reframe the river as a common good, linking environmental care and cultural memory.
- Use participatory and creative processes to foster collective responsibility and intergenerational dialogue.
- Collaborate with local actors (schools, Legambiente, LIPU) to merge ecological knowledge, situated art practices, and community narratives.

- Connect cultural participation with climate awareness and biodiversity protection through long-term governance rather than isolated interventions.

Short description of the experience

Essere parte del fiume (2024–2025) is a project of artistic mediation and community participation carried out in the Olona River valley. The initiative addresses the affective disconnection from the river—rooted in decades of pollution and territorial transformation—through creative and collaborative processes aimed at regenerating relationships between people, place, and ecosystems.

The project adopted a participatory action-research methodology, combining territorial exploration, the gathering of local memory, and intergenerational creative activities. It unfolded through four main phases.

The first phase, participatory diagnosis, included documentary research, walks through the territory, and questionnaires conducted with three generations. These inputs made it possible to identify perceptions and memories associated with the river, revealing a weak emotional bond among adults and the presence of more open and hopeful imaginaries among children and youth.

The second phase focused on network building with schools, environmental associations, and local groups, expanding community engagement and incorporating diverse forms of knowledge related to the river landscape.

The third phase focused on artistic mediation, carried out through four intergenerational workshops. Activities ranged from bird-listening and drawing to the creation of an embroidered emotional map, cyanotype printing combined with a planting day in a wetland, and the development of collective narratives later shared in a community walk. In parallel, *Piccola Custode*—a small floating phytoremediation island shaped like an oak leaf—was installed as both an ecological gesture and a symbol of shared care. These processes are explored in greater depth in Chapter X – *Essere parte del fiume*.

The final phase consisted of a public exhibition at the Castle of Legnano, presenting embroideries, cyanotypes, drawings, stories, maps, and sound pieces. This event facilitated encounters between participants and the broader community, keeping open the collective process initiated in the workshops.

Overall, *Essere parte del fiume* created new opportunities to engage with the territory, fostered intergenerational relationships, and opened spaces to imagine shared futures around the Olona River.

Vision of Change

The vision of *Essere parte del fiume* is to foster a renewed relationship between the community and the Olona River by activating emotional, cultural, and ecological forms of reconnection. The project proposes that meaningful territorial change begins with shifts in perception and affect, enabling inhabitants to recognize the river as a shared ecological and cultural commons rather than a degraded peripheral space.

Artistic mediation is employed as a strategic device to facilitate this transition: it enables collective sense-making, reactivation of memory, and the emergence of new imaginaries linked to the river's future. By engaging multiple generations, the initiative seeks to strengthen community identity and promote intergenerational transmission of knowledge.

This vision also emphasizes the development of environmental awareness and critical literacy, encouraging residents to understand the ecological dynamics of the river and their own role in its care. The expected long-term outcome is the consolidation of a socially embedded stewardship ethic, where cultural participation, ecological responsibility, and shared governance reinforce each other.

Expected Impacts and their evaluation

Essere parte del fiume anticipates impacts at four levels: individual, community, institutional, and ecological.

At the individual level, the project seeks to strengthen emotional connections with the river and foster greater ecological awareness through situated and creative experiences.

At the community level, it aims to reactivate local memories, generate shared narratives, and support intergenerational ties that encourage more sustained forms of engagement.

At the institutional level, the project promotes collaboration among cultural, environmental, and educational actors, facilitating the development of transferable methodologies and their integration into territorial governance processes.

At the ecological level, it encourages community attention to river ecosystems and highlights symbolic—operative interventions—such as *Piccola Custode*—that help activate practices of care.

The evaluation drew on an adaptation of the Critical Assessment Framework (CAF), originally developed by Douglas Worts, to assess impacts across

individual, community, institutional, and ecological dimensions, drawing on perception-based and qualitative evidence to assess changes in sensitivities, relationships, and practices.

Community-Knowledge-Territory Connection

Essere parte del fiume weaves together community, knowledge, and territory through situated processes that reactivate the relationship with the Olona River. It is grounded in the premise that learning from place requires recognising it as a fabric of memories, affects, and ecological dynamics.

Walks, intergenerational questionnaires, and exploratory exercises—together with the collaboration of local environmental associations— facilitated the gathering of perceptions and memories linked to the river, while the workshops (bird observation, embroidery, cyanotype and storytelling) activated this knowledge through creative practices that integrated environmental understanding, cultural techniques, and personal experience. Taken together, these actions encouraged collective interpretations of the fluvial landscape and shared ways of relating to the territory.

The installation *Piccola Custode* and the activities developed around it served as a point of encounter between community and ecosystem, offering a tangible presence that invites observation, imagination, and care for the river.

Overall, the project fostered relational forms of knowledge that strengthen the understanding of the river as a common good and as a place where territory, culture, and ecology intersect.

Systemic Barriers and Strategies

During the project, two main difficulties were identified. The first concerned communication and coordination challenges among the various actors involved, which required ongoing mediation to align schedules and roles; however, this was largely mitigated thanks to the strong commitment of those same actors.

The second difficulty was the limited participation of certain community groups. Looking ahead, it is proposed to strengthen partnerships with associations working with foreign residents and under-represented groups, as well as to expand communication efforts through cultural institutions and media, in order to increase the project's visibility and encourage more diverse participation.

INNESTI

Lavinia Lo Faro and Andrea Pujades

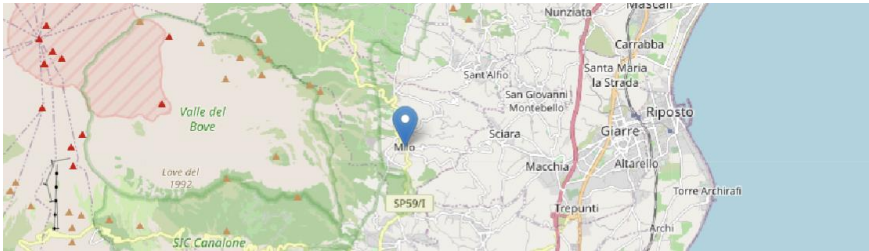


Figure 54. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 55. A) The photo shows a signage project for the recognition of the monumental trees of Mount Etna. We organize five community walks each year to visit these trees and raise public awareness about them. B) The photo shows one of the activities we organize each year with children during the Eco Camp at the Ecomuseum of the Chestnut of Etna. C) The photo shows one of the monumental chestnut trees of Mount Etna.

Project details	
Website	-
Period	2021 - 2031
SDG's	Responsible Consumption and Production, Climate Action, Life on Lan.

Organization Biography / Description

The Ecomuseum of Chustnu of Etna is a community-driven cultural and environmental initiative based on the slopes of Mount Etna. Rooted in local traditions and ecosystems, our ecomuseum is dedicated to promoting sustainable development, preserving biocultural heritage, and fostering a deep connection between people and place.

Short description of the experience

INNESTI is an initiative that aims to transform island reforestation into a tangible and vital response to climate change, while promoting sustainable

development in mountain and inland areas. Focused on strengthening Sicily's ecological and economic resilience, the project combines environmental restoration with active community engagement. It is a long-term participatory effort dedicated to reforesting Mount Etna and the island's three major parks—Etna Park, Nebrodi Park, and Madonie Park—through the cultivation of chestnut trees, a species deeply rooted in Sicily's natural and cultural heritage.

The cultivation of chestnuts in Sicily dates back centuries, forming a cornerstone of the island's agricultural identity. Generations of Sicilians have relied on chestnut trees for timber, fruit, and economic livelihood. This enduring relationship is beautifully embodied by the Chestnut of the Hundred Horses in Sant'Alfio, near Mount Etna—a millenarian tree recognized as the oldest and largest in Europe. This living monument stands as a symbol of resilience and continuity, inspiring INNESTI's mission to reconnect modern Sicily with its ecological roots.

Building upon this heritage, this project seeks to revitalize traditional chestnut cultivation as a means of uniting environmental stewardship with local prosperity. The restoration of chestnut forests supports soil stability, enhances biodiversity, and helps mitigate the effects of climate change by capturing carbon and rejuvenating degraded ecosystems.

Since its launch in 2021, the project has organized two annual conferences designed to foster dialogue among regional authorities, universities, and local communities. These gatherings serve as platforms for collaboration, knowledge exchange, and the development of sustainable land management strategies. By connecting experts, policymakers, and citizens, INNESTI strengthens a collective commitment to ecological regeneration and climate resilience across Sicily.

Vision of Change

This project aims to make island reforestation a real and necessary solution to combat climate change while boosting the economy of mountain and inland areas, fostering sustainable development, and promoting the resilience of local ecosystems.

- Ecological and environmental regeneration
- Strengthening identity and collective memory

Expected Impacts and their evaluation

Central to *INNESTI*'s mission is the active participation of local communities. Through tree-planting initiatives, educational programs, artistic events, and scientific research, the project empowers residents to become stewards of their landscapes. This participatory approach nurtures a sense of ownership and responsibility for Sicily's natural heritage, particularly in the areas surrounding Mount Etna and the island's protected parks.

Beyond its environmental goals, this project also aims to invigorate rural economies. By restoring chestnut cultivation and promoting sustainable forestry, the initiative creates opportunities in eco-tourism, agroforestry, and local craftsmanship, while preserving centuries-old traditions.

INNESTI is more than a reforestation project—it is a movement toward a sustainable, climate-resilient future. By merging ecological restoration, cultural preservation, and economic revitalization. This project envisions a thriving landscape where nature and communities grow together, ensuring a greener legacy for generations to come.

Community-Knowledge-Territory Connection

At the heart of this project lies a vibrant and inclusive community. Woodcutters, children, parents, university professors, and local associations all play a vital role in bringing this vision to life. Their collaboration embodies the spirit of shared responsibility and collective growth. The involvement of academics from the Universities of Catania and Palermo provides valuable scientific insight, ensuring that reforestation and sustainability efforts are grounded in research and best practices. At the same time, the participation of families and local workers strengthens social bonds and deepens awareness of the importance of protecting Sicily's natural heritage. Numerous associations actively contribute to spreading knowledge and fostering environmental consciousness across the island. *INNESTI* also benefits from the close support of the Slow Food Chestnut Agriculture Network, which helps identify institutional tools and partnerships essential for advancing the project and securing its long-term impact.

Systemic Barriers and Strategies

Despite its positive impact and community-driven approach, the *INNESTI* project faces several systemic barriers. One of the main challenges lies within a political system often characterized by clientelism, where access to

institutional support can depend on personal connections rather than shared environmental goals. As an independent association devoted to the environment and community well-being, INNESTI entered this context without prior experience in local political dynamics or bureaucratic procedures. This has made it difficult to identify and engage politicians who are genuinely sensitive to the project's objectives. Another critical obstacle is the lack of financial resources, as funding opportunities for grassroots ecological initiatives remain limited and hard to access. Nevertheless, INNESTI continues to build alliances with academic institutions, civil society organizations, and ethical networks like Slow Food, developing transparent, participatory strategies to overcome these barriers and pursue its mission of ecological and social regeneration.

Ci conza e sconza nu' perde mai tiempu

Ernesto Mola

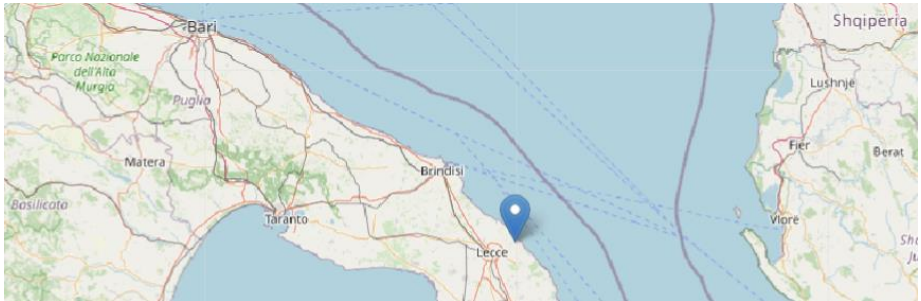


Figure 56. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 57. The poster announcing the start of the project and images from the workshops.

Project details	
Website:	https://www.ecomuseofrigole.it/news-ed-eventi/ci-conza-e-sconza-nun-perde-mai-tiempu.html
Period	From October 2025 till June 2026 and more
SDG's	Recovering the use of natural fibers by rediscovering knowledge and manual skills

Organization Biography / Description

The Ecomuseo delle Bonifiche di Frigole (Frigole Land Reclamation Ecomuseum) was founded in 2013 by CUFRILL (Comitato Unitario per lo Sviluppo di Frigole e del Litorale Leccese) and received official recognition from the Puglia Region in 2020.

The reclamation area is located north of Lecce, a city of art, and extends to the Adriatic coast. It underwent significant agricultural development in the 20th century, during four land-reclamation campaigns between 1870 and 1952.

Our founding goal is to foster the rebirth of the area, which experienced a decline in community services, economic and cultural contraction, land abandonment, and emigration at the end of the last century. The Ecomuseum aims to regenerate the present and promote development by

drawing on the history of land reclamation and the experiences of its community. We plan and seek to promote sustainable and equitable development that enhances the landscape, agriculture, the local economy, the monuments of industrial archaeology, and the historic farmhouses scattered across the area.

Over the years, we have promoted countless community initiatives: cultural walks through the landscape of fields and Mediterranean scrub to highlight the area's most evocative corners and monuments (1); a scholarly conference on the work of the "Opera Nazionale Combattenti" in Frigole in the last Century (2); the Frigole Landscape Exhibition at the Civic Museum of Lecce (3); cultural initiatives such as reading groups and film clubs; cultural productions such as *Le Fiabe di Frigole* (The Frigole Tales), written and illustrated by primary school children with the help of our facilitators (4); a training course for ecomuseum's animators (5); culinary events showcasing local products, such as the Sweet Potato Exhibition (6) and community dinners; educational projects in collaboration with schools (7); and interviews with elders and community members. These are just some of the activities promoted by our foundation.

We believe our activities are significantly boosting the community's self-recognition and empowerment.

Short description of the experience

"Ci conza e sconza nu' perde mai tiempu" (Who makes and remakes never wastes time) is a traditional way-of-saying in the Lecce dialect and the title of an Ecomuseo delle Bonifiche di Frigole project aimed at recovering knowledge and manual skills that are unfortunately being lost: crochet, sewing, knitting. A key aspect of the project is reintroducing the use of natural fibers: wool, cotton, and linen, and rediscovering the use of hemp. Participants will make as much as possible with their own hands, focusing on the use and reuse of ecologically sustainable organic materials. They will create small and large objects, some very beautiful, others simple and useful, for themselves and their loved ones.

We have invited people from the communities of Frigole and Borgo Piave to take part in the workshop. Some women have already responded to the invitation and begun working, and even some interested teenagers have signed up.

They meet every Thursday for an hour and a half to work together, as families once did, but with a renewed spirit that seeks to rediscover and update the

manual skills of an ancient culture. Motivations vary: some come to compare skills, others to learn, others to teach and exchange techniques, and all to make textiles entirely by hand. The Ecomuseum aims to revive abilities often learned in the past from mothers and grandmothers, but practiced less and less today. We want to encourage the use of biodegradable fibers, allowing expert hands to touch and experience the quality of natural products, which are preferable over synthetic fabrics.

The project also has another primary goal: to encourage encounters, share experiences, and revitalize culture in a convivial setting, one in which a small, remote rural village offers few opportunities.

Socializing and sharing life experiences enrich individuals and empower the community.

Vision of Change

The founding principle of ecomuseums is not to look solely at the past, but to improve the present and plan for the future development of a territory and its community. Our vision is that of Henry Riviere, who described the ecomuseum as "...the museum of time and space in a given territory; it is an institution that studies, preserves, enhances, and presents the collective memory of a community and its host territory, outlining coherent guidelines for future development..."

The actions we carry out, such as the project described here, draw on the past to recover, enhance, and update the experiences that characterize a territory and its community. We want to revive and bring to wider attention good practices that deserve to be lived and renewed, to improve the balance between humanity and nature, between past and present, and countering the excessive dematerialization of contemporary life.

Development is not merely about increasing economic growth, optimizing working time, or exploiting the planet's resources solely for one's own benefit. The development we desire must restore solidarity in action, the sharing of material and immaterial goods, and the spirit of community life.

Expected Impacts and their evaluation

We hope that our modest contribution of ideas and actions will spark attention and interest in the small community of Frigole and Borgo Piave. These communities, though now minorities, stem from an ancient and resilient culture that must be preserved by integrating it into modern life. Modernity does not mean abandoning what is old, but rediscovering and

updating the experiences of our communities. We believe that moments of gathering and socializing will strengthen reflection on our experiences, on how we would like to regenerate the present and create the future we want for our children.

Indicators of success will include not only the number of participants, their ages, the variety of products, the quality of the fabrics produced, but, above all, the positive perception of the time spent together rediscovering and sharing long-standing values and practices for our collective well-being.

Community-Knowledge-Territory Connection

The hamlet of Frigole include two villages, Frigole and Borgo Piave, and many farmhouses spread across the land north of Lecce. The community is the results of significant immigration from the early 1900s to 1960s and now has about 1500 inhabitants. The title of the notable book written by Antonio Passerini, which recounts the birth of the Frigole community, is “Una Comunità dalle molte radici “ (A Community with Many Roots). Indeed, only after many years did a truly cohesive community take shape in Frigole. Only a few families run productive farms, but many of them cultivate the few acres of land inherited through family partition for their own needs. For this reason, many traditions, customs, and habits continue to permeate their peasant culture, which still lives on.

Systemic Barriers and Strategies

The town of Lecce lies 7 to 16 km from the villages and farms, but even this short distance can limit contact with the city, especially for older people. This partly creates a cultural disadvantage, due to fewer opportunities for broader socialization, exchange, and recreation. On the other hand, it nurtures the preservation of the local culture. We intend to safeguard it, not to freeze it as a museum relic of the past, but to integrate it into the future of the community and make it a cultural reference for the entire city of Lecce. For this reason, many of our initiatives are aimed at city residents. We invite them to discover places, landscapes, habits, products, customs, and opportunities of a region rich in history and deserving of a future.

The Frigole Land Reclamation Ecomuseum is sustained by a few volunteers and the wider community. Limited collaborations with local institutions have supported our activities, but ongoing partnerships are necessary to overcome ideal and financial barriers and fully implement the goals of our ecomuseum movement.

Hope lies in the future.

Ash and Roots

Raquel Lucas and María Soledad González-Reforma



Figure 58. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>

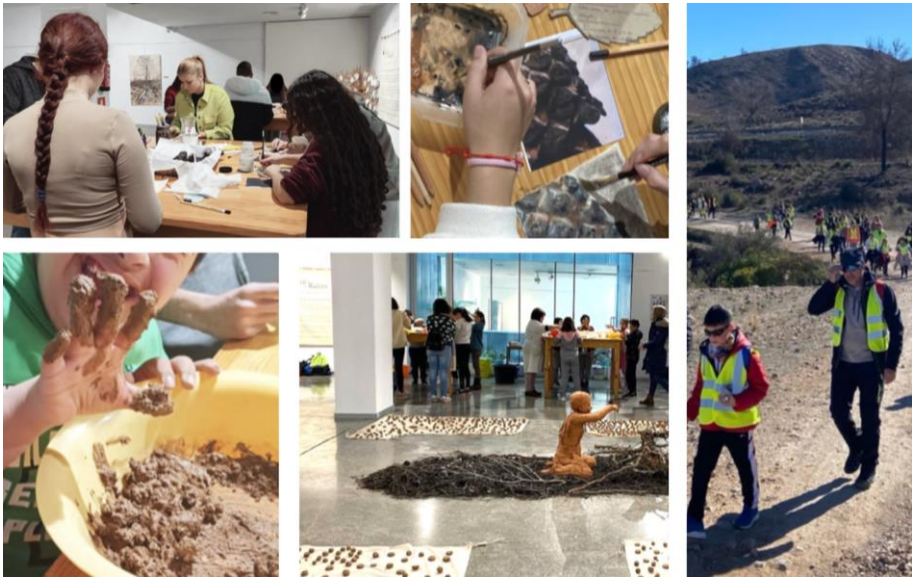


Figure 59. Images of the project

Project details

Website <https://medioambientehellin.blogspot.com>

Period	2022 - 2023
SDG's	Good Health and Well-being, Quality EducationSustainable, Cities and Communities, Responsible Consumption and Production, Climate Action, Life on Land, Partnerships for the Goals.

Organization Biography / Description

The Ceniza y Raíces (Ashes and Roots) project was developed in Hellín (Albacete, Spain), an area where Mediterranean forests are the essence of the landscape and local identity. In July 2021, a forest fire ravaged more than 2,600 hectares, affecting several districts and generating strong social concern by highlighting the vulnerability of the environment to climate change. The need to understand and accompany this process of loss led to the launch of a socio-educational experience that addressed the link between community, territory and regeneration.

The Municipal Environmental Education Programme (PMEA), created twenty-five years ago and coordinated by the Environment Department of Hellín Town Council, is the main framework for environmental education in the municipality. Its work focuses mainly on the sixteen educational centres in the town, offering activities adapted to all educational levels. The PMEA is based on three lines of action: awareness-raising, contextualised environmental education and local action, under the premise that major eco-social challenges must be addressed in the places where people live and interact with their environment. Its approach seeks to strengthen citizen co-responsibility through active experiences that integrate scientific knowledge, territorial memory and participation.

In collaboration with the PMEA, artist and researcher María Soledad González-Reforma Martínez was invited to develop Ceniza y Raíces (Ashes and Roots), based on a transdisciplinary perspective. The artist worked alongside environmental educator, forest rangers, municipal technical staff and professionals from the Hellín Holy Week Museum (MUSS), the city's main cultural institution. This network made it possible to integrate scientific, pedagogical, cultural and territorial dimensions, promoting a broad understanding of the fire and its ecological, social and emotional effects.

The experience took place between January and February 2023 in two symbolically connected spaces: the MUSS and the affected forest. A process-based exhibition was proposed, accompanied by participatory workshops using materials from the burned area. Nine educational centres participated, with students of different ages and the general public.

These actions responded to the principles of the call for proposals by integrating living cultural practices, artistic mediation and local knowledge to strengthen the link between community and territory. The proposal articulated collective creation, reflection on the fire and symbolic actions of regeneration, promoting intergenerational transmission, active participation and cooperation between diverse agents.

Short description of the experience

Ashes and Roots were a transdisciplinary project developed during the first weeks of 2023 in two related spaces: Museo de Semana Santa de Hellín (MUSS) and the forest affected by a recent fire. Guided by Raquel Lucas, environmental educator at PMEa, and artist María Soledad González-Reforma, the experience was conceived as an exhibition in progress, whose configuration was transformed as the works created in the workshops with students were incorporated. This strategy turned the local museum into a space permeable to community practice and open to forms of collective creation.

The exhibition was mainly structured around two educational activities.

The first consisted of drawing workshops focused on observing the burnt landscape. The students reinterpreted fragments of the territory using mixed techniques that employed materials from the burnt environment, such as ashes, plant debris, and mud. The resulting pieces were then assembled to form collective compositions that were integrated into the room.

The second activity focused on the creation of seed bombs from clay and plant species from Mediterranean forests that are adapted to our climatic conditions. These pieces also became part of the exhibition during the work period.

The proposal culminated in an intervention in the territory, open to the general public, in which the seed bombs were transferred to the affected forest. This action established a link between the artistic production developed in the museum and the physical place that gave rise to the experience.

Throughout the project, the exhibition hall underwent continuous transformation, offering a dynamic interpretation of the process and the contributions of the different groups. In this way, Ceniza y Raíces took shape as a device that linked artistic practice, educational action and presence in the territory.

Vision of Change

The vision of Ceniza y Raíces is to promote a more conscious and co-responsible relationship between community and territory. The artistic and educational experience is conceived as a means to broaden understanding of ecological processes, promoting forms of attention, daily care and emotional connection with the environment.

Through shared creative practices, the aim is to strengthen local identity and collective memory, encouraging people to get directly involved and recognising their ability to take action in their immediate surroundings.

The project also promoted a vision of institutional change by initiating a stable collaboration between the Municipal Environmental Education Programme and artistic practices. This alliance opened up new avenues of work and positioned culture as an active resource within public programmes linked to the territory.

Expected Impacts and their evaluation

The evaluation is carried out using quantitative and qualitative indicators that allow both participation and the effects of the process to be assessed.

Firstly, the number of participants in workshops, open activities and visits to the exhibition was recorded, revealing a high level of participation. In quantitative terms, the exhibition received 1,187 visitors, a figure that tripled the museum's monthly average for the same months of the previous year, confirming the project's ability to mobilise the community.

The qualitative evaluation included gathering students' impressions before and after the workshops, with the aim of analysing changes in their perception of forest fires and environmental recovery. These assessments showed greater awareness of environmental loss and a growing interest in getting involved in caring for the land.

On the other hand, the involvement of environmental agents allowed for subsequent monitoring of the treated forest, confirming the germination of a significant portion of the seeds.

Finally, the results of this experience have promoted the integration of artistic practices within the PME and the continuation of collaboration with the artist, creating new lines of work where art helps us to address environmental problems from a different perspective.

Community-Knowledge-Territory Connection

The work at the museum made it possible to build a shared space where participants interpreted the territory through drawing, manipulating materials, and creating collective pieces. This approach facilitated the horizontal transmission of knowledge, integrating personal stories, family memories, and observations of the immediate context.

The trip to the affected landscape made it possible to relocate the experience to its original setting, promoting an understanding of the territory as a living space. This action created opportunities to listen to environmental agents and observe the transformations of the forest, reinforcing the perception of the territory as a source of learning.

By linking creation, educational practice, and presence in the territory, the project promoted a closer relationship between community and landscape, strengthening processes of identification and belonging that are essential for the continuity of environmental care.

Systemic Barriers and Strategies

The development of *Ceniza y Raíces* required the coordination of multiple agents. The collaboration between the PMEA, the artist, the MUSS, the Provincial Delegation for Sustainable Development, the Environmental Agents and the INFOCAM involved integrating educational, artistic and technical perspectives. This challenge was addressed through working meetings and joint field trips, which helped to build shared languages and define common objectives.

At the museographic level, it was necessary to adapt the project to a process-based format: the exhibition opened almost empty and grew with the works generated in the workshops. This methodological change was sustained thanks to the support of the MUSS team, which made uses and spaces more flexible in order to accommodate collective creation dynamics, and the continuous supervision of the environmental educator and the artist.

The intervention in the forest required technical supervision to ensure its viability and safety. Collaboration with environmental agents made it possible to delimit the area of action and subsequently monitor the germination of the seed bombs, ensuring the ecological relevance of the action.

People’s Plan for taking care of the living heritage, in the face of climate change

Giusy Pappalardo and Samuele Andreoni

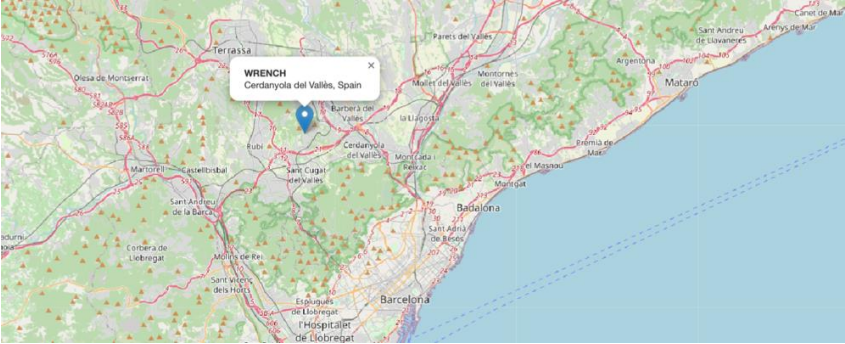


Figure 60. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>

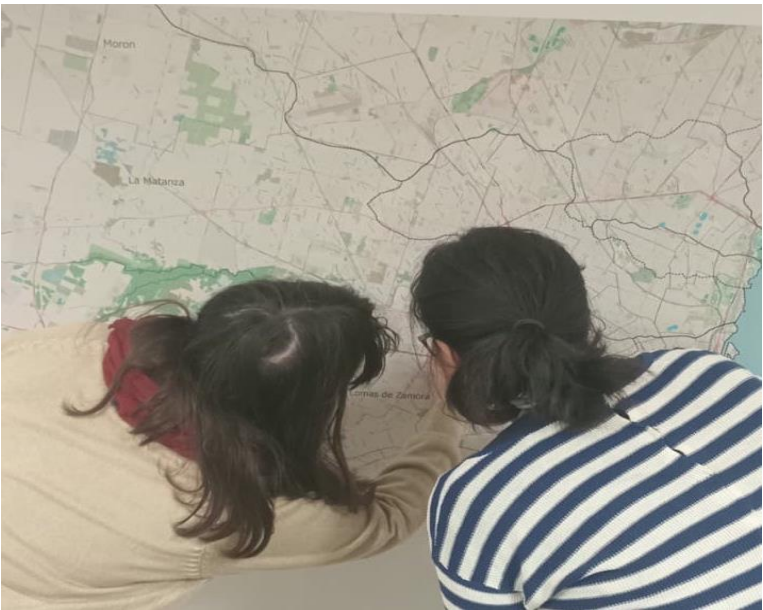


Figure 61. Image of the process.

Project details	
Website	https://webs.uab.cat/wrench/
Period	2024 - Ongoing

Organization Biography / Description

WRENCH is an inter-university, transnational project supported by the Belmont Forum. It involves a network of academic and non-academic partners who work jointly with local communities. Having begun in 2024, the project is currently developing in Italy, Spain, the UK, and Argentina. It seeks to address the impact of climate change on heritage, broadening the mainstream understanding of heritage to encompass storytelling, narratives and ephemeral legacies. We view heritage as a living, evolving system of socio-ecological relations that is vital to achieving a more just future. Heritage is not only lost through ruination, abandonment or major disruption, but also when it becomes silent and unable to tell a story. WRENCH considers heritage to be at risk, but also as a means of telling stories about the risks we all face.

Short description of the experience

If heritage embodies the collective memory of a community, it is crucial that the community in question has a say in how those memories are mobilised in response to climate change. The WRENCH project is working with associations, individuals, and local institutions to participate in a collective planning process aimed at creating a series of guides on how to deal with climate change in relation to living heritage. Each plan is the result of participatory and democratic discussions held during public workshops. So, what is a people's plan? Among the many approaches to urban planning, one stands out for its emphasis on engaging people directly in the planning process from the grassroots. This approach can be applied to spaces of all sizes, ranging from individual buildings and city blocks to entire neighbourhoods, cities and larger regions. At WRENCH, we embrace this approach, recognising the critical importance of three key pillars in creating a people's plan. First, a community is needed: a group of people who either live in or are connected to a space and care for it, each bringing their own perspective. This group may include residents, workers, public officials, and others with a stake in the area. Secondly, people must agree to engage in a process where the primary outcome is not just a document. More importantly, the process itself should foster change in the community and create a reciprocal learning opportunity for all involved. Thirdly, the process must remain democratic, open and inclusive, prioritising the involvement of those directly affected by the decisions at the heart of the plan. We believe that there are no one-size-fits-

all solutions. The principles and actions for preserving living heritage, as well as the concept of living heritage itself, must be grounded in the specific context. For this reason, we have started trialling this approach in different contexts: Naples, Ragusa, Buenos Aires and Montes de Galicia.

Vision of Change

The community workshops aim to enable people to construct their own narratives with which to advocate for their right to the city. This involves incorporating heritage as part of such a right, and engaging with climate justice as a key part of the discourse and a foundation for urban transformation.

- Social justice and inclusion
- Community empowerment and participation

Expected Impacts and their evaluation

A. Internal impacts for the organization:

- development of future-oriented organizational models
- localization of supply chains
- integration of sustainability policies

B. External impacts:

- Groups
- Individuals
- Communities and neighborhoods
- Transforms Human systems
- Organizations
- Cities and regions

Community-Knowledge-Territory Connection

In Buenos Aires, we recently organised meetings and a workshop at the Museo de la Inmigración, adopting a community mapping approach and listening to indigenous voices. As the ongoing WRENCH project progresses, we are preparing other initiatives to engage schools, museums and local organisations.

Approaches used:

- Participatory workshops

- Community mapping
- Co-created artistic practices
- Community empowerment
- Intergenerational dialogue
- Collaboration with traditional/indigenous knowledge

Systemic Barriers and Strategies

The people we are working with have highlighted extractivist dynamics as the most urgent problem they deal with. People want to work and stand up against these dynamics and propose alternatives, but a lot of organisational work on the ground is needed to generate structural changes.

Obstacles encountered:

- Individualism and social fragmentation
- Predatory capitalism / extractive logics

Green Power

Tamsin Greaves

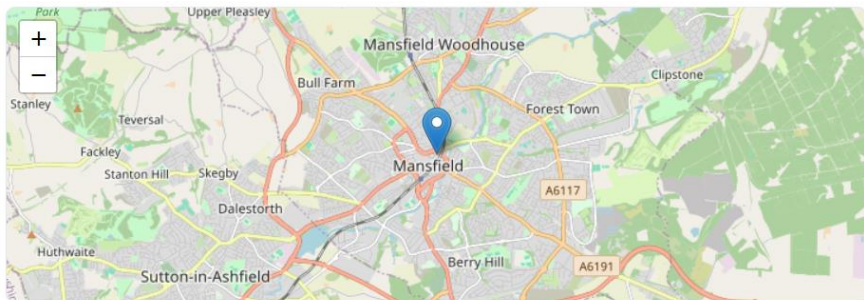


Figure 62. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 63. Green Power logo.

Project details	
Website	https://www.mansfield.gov.uk/museum/homepage/21/art-power
Period	2022 - ongoing
SDG's	Good Health and Well-being, Reduced Inequalities, Climate Action

Organization Biography / Description

Mansfield Museum is a community centre with a collection and is a hive of community activities and people centred projects. A previously mining town with considerable deprivation Mansfield's museum supports and uplifts its varied communities with events from iftar to carnival to LGBTQ+ open mic sessions.

Short Description of the experience

Art Power is a social justice initiative which began at Mansfield Museum in 2022 following increased calls to domestic and sexual abuse support services during and post-pandemic. The project works with freelance artists and partners with Women's Aid, Nottinghamshire Domestic Abuse Service and social prescribers to harness the power of creativity and togetherness thereby promoting sense of place, developing self- esteem and facilitating healing after trauma. Art Power morphed into Green Power in 2024 as the community took over a Victorian greenhouse in a nearby park and began growing, cooking and eating together. The group then expanded into its own Green Power Women's Art Hub in the park's pavilion where we hold regular art

activities as well as green wellbeing sessions including forest bathing and trauma-informed yoga. Green Power has held exhibitions at Mansfield Museum, Newstead Abbey and has been invited to exhibit at Lincoln University art gallery in Spring 2026. The project has been shortlisted for the Museums Association, Museums Change Lives Award and the Museums Development Midlands Building Bridges award. The project is the case study for a chapter in the recently published, Well-Being Past and Present edited collection and is the subject of a PhD thesis (Tamsin Greaves NTU). Green Power has created a powerful community of artist participants who provide peer support and advocate for an end to gender-based abuse through speaking out via collaborative artworks and poetry. Since March 2025 when the Women's Art Hub opened we have held 51 sessions and hosted 320 attendances of 45 women.

'Future Now' is an innovative exhibition centering on three landscape dioramas that showcase the benefits of living sustainably and supporting nature. The exhibition was designed in-house at the Australian Museum's Climate Solutions Centre by the curator, climate change, to connect to the 'climate cautious' and 'climate disengaged' portions of the Australian population. 'Future Now' travels to civic spaces such as shopping centres, libraries and council buildings. Models of a green city; a sustainable house and garden; and a rural landscape (with regenerative farm, First Nations practices of caring for Country, and a seaweed farm) all highlight in a captivating way the cost savings, clean, attractive and safe environments that come from living sustainably.

Vision of Change

Women's recovery from gender-based trauma deserves supporting in a sustainable manner. The group's commonality of experience promotes connection and resilience. Reaching out to communities other than White British increases access to support:

- Social justice and inclusion
- Community empowerment and participation

Expected Impacts and their evaluation

A. Internal impacts for the organization:

- waste minimization
- development of future-oriented organizational models

B. External impacts:

- Groups
- Individuals
- Communities and neighbourhood

Community-Knowledge-Territory Connection

Concrete example: A large-scale puppet was made from reused materials for Mansfield carnival in collaboration with Michelle Reader, freelance artist. The group made costumes and headdresses and choreographed a dance to parade through the town centre

Approaches used

- Participatory workshops
- Co-created artistic practices
- Community empowerment

Systemic Barriers and Strategies

How were they overcome?

Support services for domestic and sexual abuse are time limited, our aim is to provide sustainable funded support to enable recovery and engender positive futures. We developed a partnership with Greenwood Community Forest which provided forest bathing and some funding for artists.

Obstacles encountered

Lack of resources including funding

Shout Out

Jacqui Jones

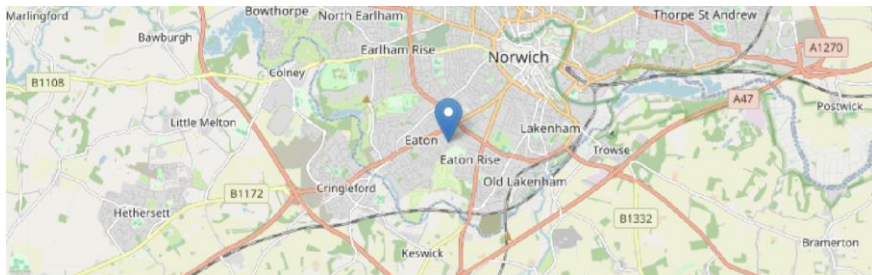


Figure 64. Image of the website map used to locate the project. –© OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 65. The 'Shout Out' Loudhailer Installation

Project details

Website	https://www.instagram.com/jacquiionesart/
Social Links	https://www.instagram.com/jacquiionesart/
Period	2025 - Ongoing

Organization Biography / Description

Norfolk County Council Arts Project Fund is a local government initiative that funds arts projects in the East of England. They have contributed to the funding of my socially engaged art practice since 2023.

Short description of the experience

The Shout Out project is an informative, intergenerational workshop in which the public create a stylized 'loudhailer' formed from world maps. The participants are encouraged to write on their 'megaphone' text concerning an environmental issue they would like to amplify, either positive or negative. A range of creative materials such as stencils, stamps and stickers are provided

so that the text is produced in creative and innovative ways. Informative prompts are provided during the session. The resulting 'megaphones' have been exhibited as a large-scale installation in several locations. Each loudhailer gracefully rotates to reveal the messages written on either side. The effect is large scale, poetic and mesmerizing, the culmination of individuals speaking up for the planet with a collective voice.

Vision of Change

The participants in the 'Shout Out' workshops and resulting art installations are speaking up for local, national & international environmental concerns. The loudhailers they create give a broad range of people a voice and the opportunity to view the words of others. The project makes people aware of local and international impacts and solutions. Overall, the work provides an opportunity to learn from each other and the awareness that we are part of a greater whole.

Expected Impacts and their evaluation

Internal impacts

- reduction of carbon emissions
- development of future-oriented organizational models
- localization of supply chains
- integration of sustainability policies

External impacts:

- Groups
- Individuals
- Communities and neighborhoods
- Transforms Human systems
- Cities and regions

Community-Knowledge-Territory Connection

Concrete example: Shout Out loudhailer workshops have taken place in care homes, wellbeing groups, libraries, festivals, community gardens and a climate change conference. Each session begins with a discussion about environmental initiatives happening locally. One participant said 'I often feel like speaking out but don't do so. This project has given me a voice'.

Approaches used:

- Participatory workshops
- Co-created artistic practices

- Community empowerment
- Intergenerational dialogue

Systemic Barriers and Strategies

The success of this socially engaged project is dependent on funding which can be a barrier to the longevity of such ventures.

To mitigate some participants reluctance to visit an art gallery the resulting installations of 90+ loudhailers has been shown in a range of settings, including cafés, festivals, and conferences.

Chapter 8

Oceania

Coffee & Climate - guided conversation program

Jane Newell

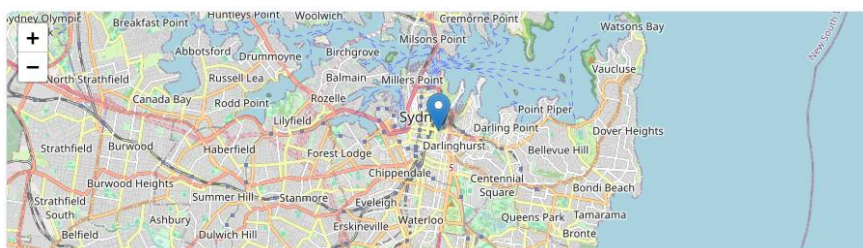


Figure 66. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 67. Coffee & Climate program, Australian Museum's Members' Lounge

Project details

Website	https://australian.museum/event/climate-coffee-conversation/
Period	February 2023 - Ongoing
SDG's	13 Climate Action

Organization Biography / Description

The Australian Museum, a natural history museum, was established nearly 200 years ago on the lands of the Gadigal in Sydney. The Australian Museum (AM) is a trusted source of knowledge, a celebrated cultural landmark and the custodian of the largest natural history collection in the Southern Hemisphere. Established nearly 200 years ago, the AM's vision is to ignite wonder, inspire debate, and drive change. The AM commits to transform the conversation around climate change, the environment and wildlife conservation, to prioritise First Nations cultures, and to continue to develop world leading science, collections, exhibitions, and education programs. Working with 21.9 million cultural objects and specimens, AM researchers document the past to help navigate the future. The AM commands respect locally and internationally for its biodiversity research and engagement with First Nations and Pacific cultures.

Short description of the experience

Coffee & Climate is a supportive, safe space for members of the public to ask questions, share information and ideas, learn about the solutions to climate change that they can help to advance. The Australian Museum's Climate Solutions Centre (CSC) developed the program after a survey revealed the AM's members having higher-than-average levels of concern and alarm about climate change. Running monthly in the museum's Members' lounge and, when requested, out in communities, the program has met its aims of supporting members of the public to feel empowered to talk about and engage with climate solutions. The sessions run for a maximum of twenty people for 1.5 hours.

Coffee & Climate is an ideal museum program as it opens up real dialogue on difficult subjects, requires relatively little time to carry out the groundwork research for each session, and is minimal in cost - requiring only hot drinks and cake. There is a different theme each month and there are always new attendees at each session in addition to regulars, who relish the camaraderie and inspiration they get from the group. The AM's Climate Solutions Centre facilitates the conversation, ensuring a respectful space is established, everyone has a chance to introduce themselves and to be heard during the conversation,

and that there are plenty of learning opportunities, whether the participant is a climate action veteran or a newcomer to thinking about the subject. A simple Q&A activity is run in pairs, with each pair selecting from a range of questions on cards scattered across the table. They discuss the question and if needed, look on the back to see the answer the CSC has researched.

Participants feedback that as a result of Coffee & Climate they feel more confident to talk about climate change and climate solutions with others and that they have been inspired to adopt measures to protect and regenerate nature and reduce carbon pollution (such as buying an EV and telling their friends about the benefits). Many tell us how positive the session makes them feel, learning about the systemic transitions underway and meeting other people who care and are taking significant action. Many have reflected that the conversations give them hope and alleviate their anxiety. As we say, 'climate change is challenging, but you don't have to tackle it alone.'

Vision of Change

Gaining insights & information about climate solutions through discussion appears to be the most effective way the museum is currently engaging hearts and minds and empowering climate action. The opportunity to discuss issues, rather than being expected to just absorb information the museum provides, is key.

Expected Impacts and their evaluation

The program offers 'bespoke' climate support for individuals, one of the most effective ways the CSC has been able to demonstrably reach hearts, minds and hands for supporting action on climate change. The program allows the CSC to track learning and behaviour change in a direct way, hearing from the participants who attend over time, rather than requiring a specialist research company to be hired to conduct longitudinal audience tracking. The CSC has been able to track the type of learning and mental health benefits of the program through direct conversations and anonymous surveys.

Community-Knowledge-Territory Connection

Coffee & Climate begins with an acknowledgement of the First Nations land that the program is held on, and includes discussions of First Nations knowledge and the responsibility we all share to care for Country (in essence caring for land, air, water, rocks, plants, animals and other living people, ancestors, heritage, culture, and more).

Intergenerational dialogue is a natural part of each session as there are always participants across generations around the table.

Systemic Barriers and Strategies

As a simple program, designed to meet the needs of a specific audience, there have been few barriers to implementation or delivery. Ensuring a workable number of participants for the conversation to be lively (ideally over seven) requires attention to advertising; in this case, in the AM Members' monthly electronic newsletter. From time to time a climate sceptic will join the conversation. To ensure this does not derail constructive conversation and become a barrier to the majority of the group engaging in the subject matter, the leader of the conversation (Jenny Newell, Curator, Climate Change) manages the discussion to ensure no one voice dominates, and gives the sceptic a chance to speak – with her – during the Q&A exercise in pairs.

Future Now - touring exhibition

Jane Newell

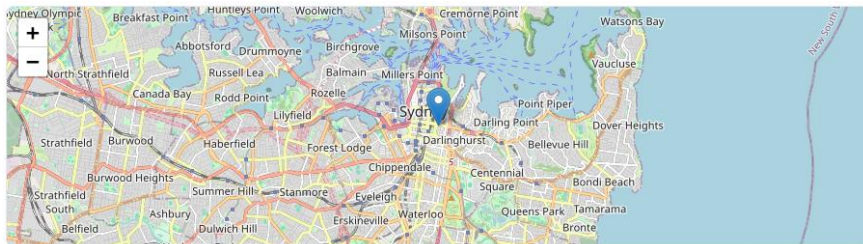


Figure 68. Image of the website map used to locate the project. © OpenStreetMap contributors. Open Database License (ODbL). <https://www.openstreetmap.org/copyright>



Figure 69. 'Clever towns' diorama, *Future Now* touring exhibition, Australian Museum.

Project details

Website	https://australian.museum/exhibition/future-now/
Period	July 2022 - Ongoing
SDG's	13 Climate Action

Organization Biography / Description

The Australian Museum, a natural history museum, was established nearly 200 years ago on the lands of the Gadigal in Sydney. The Australian Museum (AM) is a trusted source of knowledge, a celebrated cultural landmark and the custodian of the largest natural history collection in the Southern Hemisphere. Established nearly 200 years ago, the AM's vision is to ignite wonder, inspire debate, and drive change. The AM commits to transform the conversation around climate change, the environment and wildlife conservation, to prioritise First Nations cultures, and to continue to develop world leading science, collections, exhibitions, and education programs. Working with 21.9 million cultural objects and specimens, AM researchers document the past to help navigate the future. The AM commands respect locally and internationally for its biodiversity research and engagement with First Nations and Pacific cultures.

Short description of the experience

Future Now is an innovative touring exhibition featuring three landscape dioramas that showcase the benefits of living sustainably and supporting nature. The exhibition was designed in-house at the Australian Museum's Climate Solutions Centre by the Curator, Climate Change, to connect to the 'climate cautious' and 'climate disengaged' portions of the Australian population. *Future Now* travels to civic spaces such as shopping centres, libraries and council buildings. The dioramas built by architectural model-makers depict a green city; a sustainable house and garden; and a rural landscape (with regenerative farm, First Nations practices of caring for Country, and a seaweed farm) all highlight in a captivating way the cost savings, clean, attractive and safe environments that come from living sustainably.

Vision of Change

The Climate Solutions Centre has an approach that begins with listening to the concerns, questions and values of communities and designing messaging of relevance that will resonate. Listening again allows the CSC to gauge how audiences have experienced the outreach the CSC created. Highlighting solutions to climate change, this exhibition empowers visitors to make choices about energy, transport, food production, support for nature and community cooperation that will help to create a future that is safer, healthier and offers people greater wellbeing and resilience.

Expected Impacts and their evaluation

Extensive evaluation has been carried out by a social research company during the first phase of the exhibition's tour in the shopping malls. During the exhibition's visit to the Australian Museum in 2025, the research company again conducted a survey, capturing exit data and determining that the exhibition is performing well, with a very high Net Promoter Score of 89+. Many visitors were encouraged to think about the ways the decisions we make now are creating our future. 4 out of 5 people reported they had learnt something new. Evaluation and adjustment of the messaging can be carried out as the exhibition continues its trajectory. External funding has enabled an education kit for Primary and Secondary schools to be developed to extend learning on the key messages of the exhibition. Evaluation is a key part of this education project.

Community-Knowledge-Territory Connection

First Nations knowledge is built into the models, designed in consultation with members of the AM's First Nations team. A family tending a cool burn ('cultural burning', to burn leaf litter and keep a forest safe), a traditional fish trap in a stream, and bush foods in gardens: all feature in the models. A video set into the label rail with a First Nations knowledge-holder explains the concept of caring for Country. The exhibition engages people of all ages and sparks conversations across generations as they point out discoveries in the dioramas: a koala hidden in a tree, a farmers' market or pink solar-collecting films on the windows of a high rise.

Systemic Barriers and Strategies

Creating new exhibitions typically requires external funding – the AM's Partnership team was able to secure funding from a commercial shopping mall company. The exhibition travelled to four of the shopping malls in the first year, reaching large audiences, including people who would often not want to visit a museum.

Part 3: Diving into the experiences

Chapter 9

Quintal da Vó - Grandma's Backyard

Fabiana Ribeiro

Abstract:

Welcome to our backyard.

The backyard is a world of possibilities, of future and of healing. Today we need healing in this world. A world that is sick and out of balance. I believe that great transformations happen in a backyard. (Mameto Tatiana, personal communication, 2023).²⁰

Backyards (Quintals) have always been spaces of strong feminine resistance.²¹ Territories of life, leisure, community relations, and the cultivation of herbs. The project *Quintal da Vó* values the protagonism of the knowledge and practices of women from popular culture, rekindling memories and reaffirming the backyard as a territory of resistance.

In the central urban area we cannot be. Our presence is uncomfortable. Society keeps pushing us toward the margins. We keep searching for spaces where we feel safe and where, at the same time, we can pass on tradition and teachings so that they remain. (Doné Suramaya D'Aziri, personal communication, 2023).

²⁰ All quotations from the women belong to the matriarchs who guard the leaves and ancestral knowledge, interviewed by the project. They were taken from the oral narratives shared by them. The interviews can be found in the documentary available on the Quintal da Vó website, at the link provided.

²¹ Quintal is a neologism used to discuss territory. A *quintal* may be the outdoor space of a home or a public facility (such as Houses of Culture, Cultural Centers, or material heritage sites). It may also refer to streets, squares, community or collective spaces.

Quintal da Vó is a space of resistance and the renewal of memories. The project was conceived and coordinated by me, **Fabiana Ribeiro**, a photo-documentarian focused on popular culture, together with a team formed mostly by women, most of them Black. Supported by the Paulo Gustavo Law (2023), in Campinas, São Paulo, Brazil, the project reflects on our right to memory, questioning which stories must be preserved and encouraging reflections about heritage, territory, cultural practices, and the struggle of women against Eurocentric and exploitative economic forces that erase ancestral memories.

Context of the experience

The work was born from my relationship with my late maternal grandmother, Amélia, and her backyard, which my grandfather called a “forest” because of its abundant and diverse vegetation. Fruits, medicinal and aromatic herbs, ornamental plants, insects, birdsong, and flowers whose scents mingled in the air all existed there together. It was a space of coexistence and learning, where the wood-burning stove produced homemade soap and transformed pasta dough, drying on clotheslines, into our Sunday meal. Those same lines also held bright white sheets dancing in the wind. My grandmother Amélia inspires this project through a dream in which we talked again on the old backyard step.

From this memory, the project expanded into documenting the oral histories and images of 13 women. The photographs, later printed on fabric, created an exhibition composed of sensory elements: living vegetation, ornamental, aromatic, and medicinal plants; became part of the installation, which also featured a documentary.²²

The memories of territories and territorialities are fields of dispute in urban spaces. Exclusion from place/land/territory results in continuous erasures that often lead to a “naturalization” which must never occur, of absences and distortions, denying future generations access to their own histories.

Reflecting on knowledge rooted in ancestral cosmovision means understanding that it is intertwined with territory and connected to all forms of life. Such knowledge resists imposed systems that limit and enclose spaces,

²² *Quintal da Vó* has a website where the photographic exhibition, the documentary, the digital publication, as well as texts, images, and additional information are gathered in one place.

force waters into cemented canals, cut down trees, destroy lives, and fuel prejudices that manifest as climate racism.

The matriarchs of popular culture are pillars of resistance and of sustaining life. Ancestral women—working women, especially Black and Indigenous—play a central role in shaping cultural identity; they are matriarchal forces.²³ Like them, nature, the oldest ancestor, nourishes us with stories and memories.

Description of the experience

The backyard is not only a patch of land behind a home: it is also the street, the garden, the shared space, the cities, the countries, the planet. These backyards of the elders live within us. They hold our history and identity and guide who we are and who we choose to become. The Backyards of Our Memory Belong to Us

Those who have knowledge know that it is from them that we live, from them that we heal. Whoever has even a little knowledge knows the value of having an herb inside a religion or inside life (Mãe Maria de Ibeji, 2023).²⁴

²³ I refer to women who exercise powerful leadership within their community through ancestral popular and traditional ways of knowing and doing. They are female leaders who hold and protect essential knowledge for cultural safeguarding and identity. They are our living heritage.

²⁴ Maria de Ibeji, who passed away or, as we prefer to say in popular culture, “became enchanted” months after the completion of the project and after having been honored by it. (An *encantado* is a supernatural entity from Brazilian folklore, with origins mainly Indigenous and African, that inhabits a spiritual realm linked to nature, such as forests and rivers. These figures may be ancestors who become part of the natural world, guardians of the forest, or beings capable of transformation, like the river dolphin.)



Figure 70. Photograph of the exhibition *Quintal da Vó* at Estação Cultura Photo by Cassia Bellini.



Figure 71. Photograph of the exhibition *Quintal da Vó* at Estação Cultura Photo by Cassia Bellini.



Figure 72. Image from the opening of the exhibition *Quintal de Vó*, featuring a storytelling session with art educator Ori Okan and a Libras interpreter. Photo by Cassia Bellini.

The confluence present in the plurality of Afro-Amerindian or Afro-Pindoramic foundations, roots that nourish popular and traditional knowledges, forms the sustaining base that keeps the world from collapsing.²⁵

²⁶ Through this intricate weaving of traditions, practices, cosmovisions, and everyday experiences of peoples deeply connected to the land, a cultural force

²⁵ The concept of confluence, formulated by the quilombola thinker Nego Bispo, describes the coexistence and interdependence among different beings and elements of nature, which meet without mixing and strengthen one another. Confluence stands in opposition to colonialism and to the capitalist logic, promoting alliances among excluded communities seeking more integrated and authentic ways of living. In this worldview, elements preserve their essences: a river does not cease to be a river when it meets another; it simply becomes stronger and becomes “itself and other rivers.”

²⁶ Afropindorâmicos is a neologism created by quilombola leader and writer Antonio Bispo dos Santos to describe the relationships between African and Indigenous peoples in Brazil, replacing the term “Indigenous.” The word combines “afro” with “pindorâmico,” a term of Tupi origin. The expression seeks to affirm and value cosmovisions that resist colonial influences.

emerges. It is a strength able to uphold communities despite persistent attempts at erasure. These shared foundations create a web of resilience that preserves memories of origin and traces of ancestral presence, offering orientation and meaning in times of profound instability.

The process of enslavement in Brazil attempted to strip Afro-Amerindian peoples of their central socio-cultural values, attacking both individual and collective identities. One of its first strategies was the attempt to replace polytheism, in which natural elements and animals are sacred beings, with monotheistic Christianity, a system that asserted its dominion and demanded obedience from those it deemed inferior. Exploitative capitalism operates with the same logic, insisting that the exhaustion of land and bodies is synonymous with progress. In reality, these forces enact destruction; they are systems that transform tools into ends. Enslavement, colonization, and capitalism move along the same axis: domination, extraction, and the suppression of cosmological relations that guide traditional communities.

Rivers and streams were channeled, buried beneath avenues and buildings, killed by capital. What remains becomes smaller each day, disappearing along with the backyards that once sustained life. Cement, fences, walls, and gated condominiums restrict collective integration and exchange. Backyards and open spaces are repackaged and sold under the label of “gourmet,” accessible only to a selected group of equally “gourmet” people. Nature itself is turned into merchandise. Trees fall, green areas shrink, fires spread, and smoke takes over. Skyscrapers rise and obstruct winds and rains, directly impacting the environment. The more vulnerable the territory, the more inhospitable and arid it becomes, an index of the violence inherent to a system that privileges profit over life.



Figure 73. Eborá Castro and Fabiana Ribeiro in Mãe Maria de Ibeji's yard preparing the recording. Photo by Andrea Mendes.

In urban centers, real estate speculation dictates the rhythm of destruction. The exploitative system rooted in profit continues to oppress ancestral women, the working class, and especially Black and Indigenous women, who remain central to cultural identity. They are matriarchal pillars. Like them, nature, the greatest ancestor, nourishes us with its leaves and plants, carrying stories and memories into the present.²⁷ Yet knowledge linked to the leaves and their guardians, the women, is increasingly excluded from central areas of the city. Legal mechanisms are used by the State to prohibit, distance, and culturally separate these knowledges, pushing them into the margins. And it is precisely from these margins, rich with counter-narratives, that insurgent ways of existing and producing culture continue to arise, reaffirming the continuity of ancestral lineages.

Backyards are at the center of this resistance. It is in the backyards that samba, in its many variations, is born and celebrated; jongo reverberates the memories of its people; terreiros profess their faith deeply rooted in African matrices. In backyards lies the remedy that soothes body and spirit, the food that deceives hunger or sustains life with nature's gifts. They are spaces of gathering, ritual, joy, and protection—places where gestures store knowledge that cannot be fully translated into writing but is transmitted through practice, song, and coexistence.

²⁷ **Folhas** ("leaves") is a neologism used by many of the women to refer to the diversity of the flora as an environmental and ancestral force. "The leaves are our first ancestors."

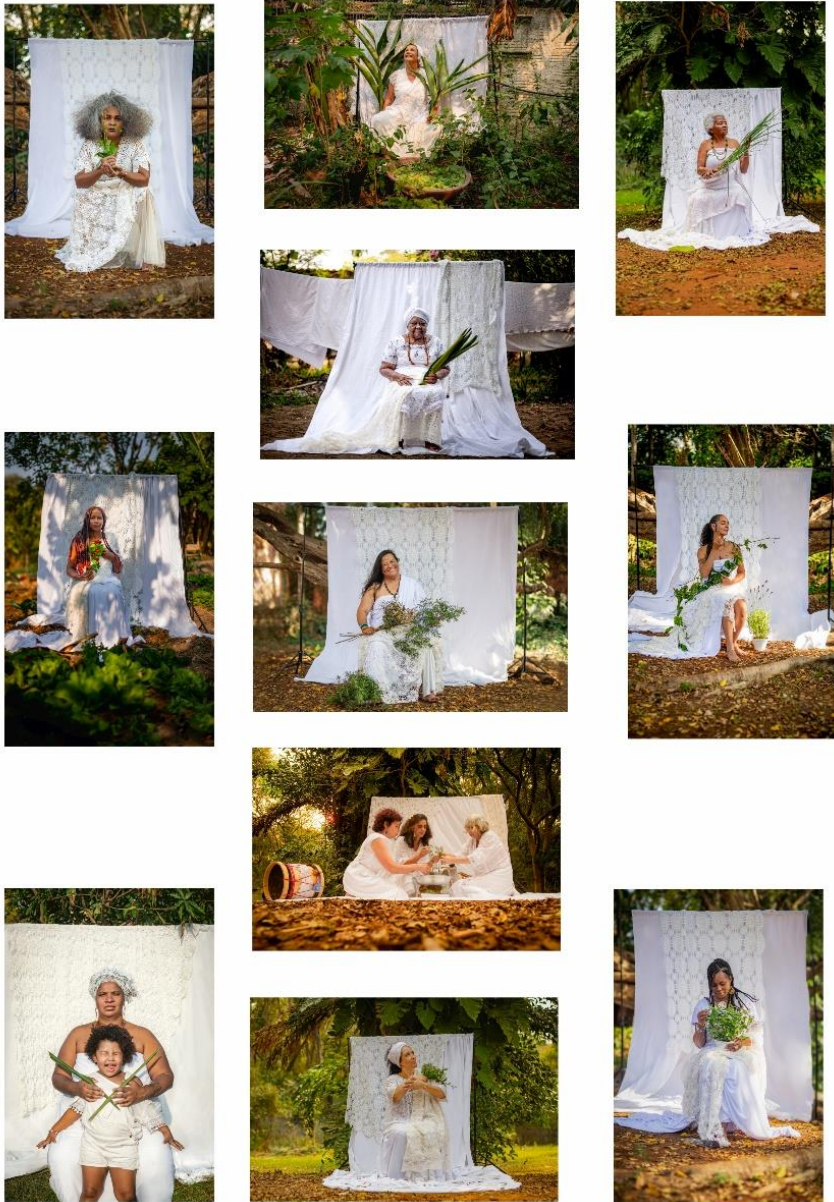


Figure 74. Photo By Fabiana Ribeiro

These backyards of our elders live somewhere within us. They are intimate encounters with our story, our identity, our paths. Connecting to the backyards of our elder women, to their memories and their legacy of knowing and doing, allows us to amplify their voices and honor their roles. Producing

documentation about this living cultural heritage becomes an act of safeguarding—ensuring that future generations can access the narratives that formed us and continue to shape our resistance and creativity.

For the inventory process of these ways of knowing and doing, we chose photographic and audiovisual records, accompanied by written transcription of the information. The collected material was transformed into a photographic exhibition, a documentary, and a digital publication. Each format allowed the gestures, stories, images, and voices of the women to reach different audiences, opening paths for wider recognition of their cultural significance.

Alignment with the call

The *Grandma's Backyard* project aligns with the Weavers of the Future call by activating living culture, ancestral knowledge, and community memory as tools for regeneration, climate justice, and social empowerment. The central axis of this alignment is the understanding that backyards have always been spaces of strong feminine resistance, spaces that hold cultural memory and ecological knowledge capable of sustaining regenerative futures.

The project highlights the interdependence between territory and memory: when land and cultural practices are protected and strengthened, communities can regenerate both identity and environment. This regeneration is further amplified when the diverse ancestral knowledge present in backyards is incorporated, recognizing its depth and multiplicity as a fundamental part of cultural and ecological resilience.

Creativity and Participatory Approach

Women reconnecting with ancestry and creating pathways beyond exploitative capitalist labor structures, such as **Fernanda de Freitas**.

Because these knowledges are broad and interwoven, all the women walk paths that intersect. The photographic and audiovisual records were produced in different backyards, some in the homes of the matriarchs and others at Casa de Cultura Casarão, a public cultural space where Neusinha Aguiar works as a cultural agent. The place hosts many activities nurtured by the collective. Many of these are connected to backyards, nature, and memory. The floor of Casarão has welcomed the knowledge of the Kariri-Xocó people and other Indigenous nations, as well as popular culture and Afro-religious practices—forming a living mosaic of traditions.

Each documented matriarch brought her affectionate relationship with a leaf chosen for her record. All received a fee and the same photographic print included in the exhibition. These actions reinforced reciprocity, respect, and the ethical commitment that documentation must also be a form of return.

Community Engagement

The project proposed a specific number of women to be documented, and we followed criteria. Participating matriarchs include iabás in Afro-religious traditions from various African matrices, manifestations of Candomblé from distinct nations, and Umbanda: Mãe Maria de Ibeji, Doné Suramaya D’Aziri, Mameto Tatiana, and Ya Inguile.

From popular culture: Caixeiras das Nascentes (Cristina Bueno, Inês Vianna, and Nilza Souza), Tati Farias, Nil Sena, and Neusinha Aguiar.

Women from social movements: Márcia Regina (MST — Movimento dos Trabalhadores Sem Terra and Gracinha Gomes (PLP — Promotoras Legais Populares).²⁸

We have also captivated our youth, because after we are gone, from above we don’t want to see all this dead. We want to see this youth rooted, continuing, moving forward.” – Mãe Maria de Ibeji For a month, we welcomed public schools, adult education groups, Ceprocamp students, and participants from the Cândido Ferreira Mental Health Service. We explained that PNPIC/SUS recognizes ancestral knowledge and the medicinal use of plants. Conversation circles and guided visits expanded educational processes. Teachers said the exhibition inspired discussions on heritage and collective gardens. In the periphery, with support from councilwoman Guida Calixto, two public squares received medicinal and aromatic gardens. The documentary is being prepared for TV Educa, a public channel belonging to the Campinas

²⁸ **The Landless Workers’ Movement (MST)** is a **mass-based** and autonomous social movement that mobilizes rural workers and society to achieve Agrarian Reform and build a Popular Project for Brazil. It is present in 24 states and brings together around 450,000 families who have gained land through struggle and organization.

EJA stands for Youth and Adult Education, a modality designed for those who did not complete basic education at the regular age. It allows people to obtain certification to broaden professional opportunities, participate in public examinations, and access higher education. It serves individuals over 15 years old (Elementary Education) and over 18 (High School), in both in-person and distance-learning formats.

Department of Education, and the printed publication is already being used in classrooms.

Vision of Desired Change

The selection of the women was made by me and curator Andrea Mendes. The choice stemmed from the desire to highlight matriarchs, guardians of everyday and natural ways of knowing and doing, women who lived in territories/backyards of resistance or in spaces threatened by predatory capital—often vulnerable—and the project sought to catalyze attention, collaboration, and strengthening of these women and their environments.

We also aimed to acknowledge African and Indigenous matrices. Within African matrices exists plurality—many “Africas” within one continent—a legacy carried through enslavement. Similarly, among Indigenous peoples there are many nations, each with its own languages, rituals, and cosmologies. Recognizing this diversity was fundamental to understanding the multiplicity present among the women who participated in the project.

The chosen location for the exhibition was Estação Cultura, a large public cultural space in the central region. The area faces intense conflict due to economic interests tied to its location. The building is under concrete threat of losing its public character and being transformed into a private development. There was even a process of “de-protection,” articulated by economic forces together with the municipal body that should have defended the heritage but instead facilitated its potential dismantling.

Reflecting on territory as tangible heritage and understanding collective memory — knowledge, traditions, and ways of life — as intangible heritage is essential to grasp their interdependence. When territory is removed, cultural knowledge and identity weaken. Likewise, when memory and tradition fade, the relationship with the land erodes, enabling external agents to appropriate it and produce deep erasures.

As backyards are strengthened through ancestral knowledge, communities recognize their bond with the land and with their identities. Cultural expressions then flourish, and knowledge is passed on in a continuous cycle. Backyards are spaces of coexistence among diverse beings in harmony. When several homes on a street preserve their backyards, this sense of coexistence expands to public spaces, shaping neighborhoods and cities. A city reconnected with land begins to perceive itself collectively.

When this awareness grows, communities reclaim memory and resist exploitative capitalist models, socio-environmental vulnerabilities, and

inequalities. They reflect on climate change, environmental disasters, degradation, and their consequences — extinction of species, loss of natural resources, and the rise of environmental refugees.

Cultural/Ecological Impact

The exhibition *Quintal da Vó* sought to convey a sense of living culture and affection—an inclusive space deeply connected to collective memory. Audio from the videos carried the voices and songs of the women; aromatic, medicinal, and ornamental leaves—with their textures and scents—evoked emotional memory. The entire exhibition could be touched, heard, and smelled, offering an immersive environment that echoed the sensorial richness of traditional backyards.



Figure 75. Ceprocamp students on a guided visit, Photo by Fabiana Ribeiro

We also restored the plant pots at Estação Cultura and carried out educational actions, guided visits, and conversation circles. Throughout the exhibition, we distributed seedlings of medicinal and aromatic plants to visitors.

At the opening event, we held an artistic-educational activity with storytelling (“The Marias”), aligned with the exhibition’s context, and a small fair

featuring handmade products created by women from the MST (Acampamento Marielle Vive).

To organize all content—texts, photographs, and other materials—we created a website.

We also restored the plant pots at Estação Cultura and carried out educational actions, guided visits, and conversation circles. Throughout the exhibition, we distributed seedlings of medicinal and aromatic plants to visitors.

At the opening event, we held an artistic-educational activity with storytelling *The Marias*, aligned with the exhibition's context, and a small fair featuring handmade products created by women from the MST (Acampamento Marielle Vive).

Feasibility

The feasibility of the *Quintal da Vó* project is supported by the structure and partnerships already activated during its development.

The project was supported by Funding Notice nº 01/2023 — Paulo Gustavo Law. I carry the ancestry of my grandparents, Amélia and Mário, who taught me the value of backyards. My mother, Wolmar, embroidered and baked to nourish women during the recordings; my father, Miro, cared for the plants during the exhibition. A team of women made possible the delicacy of this living backyard.

The matriarchs who opened their doors and shared their knowledge — often invisible women who sustain entire territories — are the heart of this work.

In November 2025, we continue experiencing the unfolding of the exhibition. Next steps include applying for new cultural grants and mapping other women for a second edition, such as the three generations of the Dito Ribeiro Community (Maria Alice Ribeiro, Alessandra Ribeiro, Bianca Lúcia) and leaf guardians like Gianne Carneiro, Mãe Dango, and Mãe Corajacy.

This project, like a living backyard, is a weaving of stories, lives, and affection.



Figure 76. Embroidery process of the printed photographs, in the photo Wolmar, Amelia's daughter.
Photo by Fabiana Ribeiro.Community

Sustainability Plan

The project's sustainability is rooted in its intergenerational and community-based nature, where "knowledge crosses generations" and is carried forward through practice, storytelling, and collective memory. The materials produced continue to circulate: the printed publication is already used in classrooms, and the documentary is in preparation for public educational broadcasting.

Its continuity is additionally supported by ongoing community engagement, as the team "continues experiencing the unfolding of the exhibition" and plans to document more women for a second edition, ensuring that the project remains alive through the same networks that created it.

Conclusions

In conclusion we can say that this project is about allowing leaves, forests, and waters to be born and to exist within us, inside our homes and bodies — a reversal in how we think and feel. When we allow this shift, cities stop being mere machines of concrete and begin to create zones of confluence with forests. It is, in a way, to produce like rivers: to let affections flow and let other modes of being in the world spill forward, modes not subordinated to extractive progress.

I want to experience — and invite others to experience — possible worlds, worlds still to be born but already alive in our ancestral memories. From them we draw new affective alliances, because ancestry is not only past; it is also a project for the future. When we recognize it as a source of wisdom, we understand that it seeks to restore balance among lives and sustain the foundations of existence on Earth.

To save our living culture, our cultural heritage, is also to save the planet we inhabit. It is recognizing that the planet is one great backyard made of many backyards, each pulsing with its own stories, leaves, and memories. And when these backyards connect, they form an expanding forest — a forest that insists, resists, and breathes even through the cracks of concrete.

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Chapter 10

Ecomuseu dos Campos de São José

Maria Siqueira Santos

Abstract:

The Ecomuseu dos Campos de São José is a model of community museology that, over 10 years, has transformed the lives of hundreds of people in São José dos Campos, Brazil. The project utilizes integral heritage (cultural and natural) as the humus for resilience and local development.

Through conversation circles (*rodas de conversa*) and the valuation of local knowledge, the Ecomuseu CSJ transforms environmental challenges into collective and replicable solutions. The results are tangible: more than 10,000 trees planted and 39 tons of waste removed from the sanitary landfill. The project ensures its sustainability by rooting part of its team in the community and promoting social empowerment, reinforcing that local culture and local action are vital for facing the climate emergency.

Context of the experience

The Center for Popular Culture Studies (CECP, abbreviation in Portuguese) is a civil society organization (CSO) established in April 1999 in the municipality of São José dos Campos, São Paulo - Brazil. The organization's purpose is to study, research, disseminate and stimulate all forms of heritage – cultural and natural. It is active in developing and executing projects, providing technical and scientific consulting and guidance, ensuring a museological approach aimed at developing safeguarding policies for material and intangible heritage.

It has managed the Folklore Museum of São José dos Campos since its institutionalization, about 30 years ago. Since 2015, CECP has been working in the east and southeast zones of São José dos Campos, carrying out the Ecomuseum of Campos de São José (Ecomuseu CSJ), for which it was certified by the Brazil's Bank Foundation (FBB, in Portuguese) as a Social Technology developer (2017). In partnership with Petrobras (2015-2017,

2018-2020, 2021-2023 and 2024-2028) as well as other important partners such as the city government, universities, and schools, Ecomuseu CSJ has been fostering environmentally efficient attitudes in the community and stimulating protagonism and the exercise of citizenship through dialogue and the appreciation of the cultural and natural heritage present in the territory. Among the many activities in the Ecomuseum's program is the agroforestry restoration of degraded Permanent Preservation Areas (APPs, in Portuguese) along the banks of streams and rivers, as well as the promotion of urban gardens and community composting.

Initially operating in just one neighborhood, today the Ecomuseu CSJ encompasses 28 neighborhoods in São José dos Campos and the municipality of Jambeiro. In the past, this region was inhabited by indigenous groups, as evidenced by the presence of dozens of archaeological sites in this territory. In the 19th century, the Afro-Brazilian, African and European population in this region grew significantly, coinciding with an increase in Brazilian coffee production for exportation. Later, São José dos Campos became a sought-after city for tuberculosis treatment, as it was believed that the region's air was beneficial for patients. In the mid-20th century, São José dos Campos's region became marked by industrial activity.

In 50 years (1970-2020), based on data from the Brazilian Institute of Geography and Statistics (IBGE), the population of São José dos Campos quintupled. Currently, 99% of the municipality's nearly 700,000 inhabitants reside in urban areas. Of these, about 25% live in the eastern region, which is still experiencing real estate expansion and population growth. The less densely populated south-eastern region represents 7.45% of the municipality's inhabitants. Together, the two regions represent 33% of the inhabitants of São José dos Campos, or about 206,000 people. The municipality of Jambeiro, in turn, has about 6,500 inhabitants, which represents a population of 212,500 people encompassed by the Ecomuseum.

Description of the experience

Ecomuseu CSJ works to raise awareness and mobilize people to act collectively and collaboratively for the common good. Its proposals are aligned with community-based museology, which discusses the construction of the concept of heritage in dialogue with the communities that hold it and foster collective mobilization in order to structure local development based on this recognized heritage, cultural and natural. Therefore, its function is to identify and register local heritage in a participatory manner. This research, as conceived by the

Brazilian folklorist Angela Savastano, traverses the territories in search of people and their knowledge and know-how (*saberes e fazeres*), their life stories, their ways of living, their architectural works, their plantations, as well as the landscapes and their natural elements: the forests, the hills, the animals, and the rivers. Identifying and registering are ways of valuing this heritage and placing it in the flow of life. This shared inventory, according to Hugues de Varine, is: “[...] a pedagogy that aims to give birth in the territory to the complex and living image of a common heritage, with multiple components and facets, which will become the humus of future development [...]” (Varine, 2013, p. 59).

Therefore, this data collection reveals the cultural richness of the territories: carpenters, painters, electricians, mechanics, Brazilian folk guitar players (*violeiros*), singers, people who do handicrafts, others who know how to sew, cultivate food, plant trees, or cook. This constitutes a vast collection of knowledge within the territory. However, as the meetings progress, in addition to the knowledge base, territorial challenges are also recorded: dumping of debris and trash in public areas, degraded riparian forests, polluted and silted rivers, threatened fauna, among many other problems common to neighborhoods in modern cities.

To bring the identified knowledge and challenges into the collective sphere and to seek practical and effective solutions, the Ecomuseu CSJ promotes conversation circles (*rodas de conversa*). This is an important moment for the conceptual foundation of the project, as well as for the construction of collective solutions to common problems. They are essential for tracing the path to realizing the dreams and demands raised in the territories. The conversation circles happen weekly and are held in an itinerant manner. They can take place in residences, partner institutions, squares, parks, within community gardens, or even at the Ecomuseum's Center. The topics discussed are diverse, sometimes brought up by the residents, sometimes by the technical team. As a place for community gathering, the conversation circle recalls an ancestral meaning deeply linked to the history of humanity, where the circularity and horizontal nature of relationships are experienced. It is a place of meaning, connection, and partnership building. A place that enables dialogues, stimulates thoughts, and expressions. It is also a place that enables the sharing of experiences, affective exchanges, and strengthens the bond of trust and friendship.

Once identified, recognized, registered, shared, and valued, the heritage assets are reconfigured as the “humus of development.” The dialogue about the

knowledge and the territorial challenges generated, among the participants of the Ecomuseu CSJ, the will to make a difference in the territory where they live, the will to build solutions for local environmental challenges, and the will to join forces to promote common benefits, which activates human sociability, creates emotional bonds among the participants, stimulates the exchange of knowledge, promotes social empowerment, and educates for sustainability, enabling experiences concerning ecology, resilience, and self-care, care for others, and care for the planet.

Collectively, based on individual skills, simple, relatively inexpensive, and easily replicable solutions are developed for local problems, such as the cultivation of urban gardens in idle public spaces, community composting, rainwater harvesting, and the reuse of materials. People, strengthened in their cultural expressions and aware of their role in caring for the territory, adhere to new socio-environmental habits and become multipliers of sustainable and environmentally transformative actions, such as the habit of composting, cultivating food in a healthy manner, recycling and reusing materials, caring for and keeping public areas clean, reforestation, and helping conserve the fauna and flora.

It was through dialogue that the Ecomuseu CSJ began, in 2015, during its first year of operation, a series of environmental impact actions. The desire to plant food in a public area emerged from farmers in the Campos de São José neighborhood during one of the conversation circles.

Since it was a degraded Permanent Preservation Area (APP), the municipal administration allowed intercropping food with native trees from the Atlantic Forest biome, thus forming an urban agroforestry system. Supported by the Ecomuseu CSJ, these farmers began this work, opening tree pits, planting, and caring for the trees and food crops. In 2018, expanding the scope of the area, the fostering of the revitalization of degraded public areas started, which are spaces where debris and trash were habitually dumped. Following a proposal from a group of residents, cleaning efforts were carried out in these areas, including both popular clean-up campaigns (*mutirões*) and waste removal by the city hall based on requests made by citizens. After the spaces were cleaned, residents interested in cultivating a piece of land began to organize themselves, maintaining dialogue in conversation circles and also during visits from Ecomuseu CSJ technicians. In 2019, in addition to cultivating the gardens, the practice of community composting started in the spaces fostered by the Ecomuseu CSJ.

All these activities were conceived, planned, produced, carried out, and evaluated in conjunction with people from the communities who volunteered as agents of local development. In 2025, approximately 180 families compost all the organic waste produced in their homes. The total amount of wet and dry organic waste that has not been dumped in the sanitary landfill of São José dos Campos since 2019 is 39 tons, which represents 27 t/m³ of CO₂ equivalent not emitted into the atmosphere, benefiting the community of São José dos Campos as a whole, since these actions contribute to minimizing the effects of climate change.

Giving continuity to the reforestation started with the community of the Campos de São José neighborhood in 2015, about 10,000 trees were planted in the municipality over the last 10 years, with 95% of them planted in the last 5 years, which represents a stock of 42 t/m³ of CO₂ equivalent. Reforestation is a fundamental action for minimizing the effects of climate change. Urgent for the moment we live in, trees are our air filters: they absorb greenhouse gases, store them in the soil through photosynthesis, and release oxygen into our atmosphere, allowing us to breathe. In addition to air quality, many are the ecosystem services promoted by reforestation, such as: mitigation of heat islands, water regulation, soil erosion control, biodiversity conservation, in addition to the beautification of places and the impact on people's well-being.

The Ecomuseu dos Campos de São José has transformed the lives of hundreds of people and impacted thousands over the last 10 years, fostering (through the valuation of cultural heritage assets) that people redefine their environmental habits. This change in environmental behavior through the valuation of local heritage is, in the view of the CECF, the key to the community construction of sustainability and the maintenance of the planetary status quo.

Some numbers of the Ecomuseu CSJ	2015-2017	2018-2020	2021-2023	2024 – Aug/ 2025	Total
Tree seedlings planted	240	260	1.066	8.591	10.157
Seedlings produced	-	100	811	1.966	2.877
Carbon removal promoted (t/m3)	-	2,4	13,5	42	42
Number of families that compost organic waste	-	8	60	114	182

Quantity of dry and wet matter composted (t)	-	0,8	11,4	26,6	39
Emissions avoided due to composting (t/m3)	-	0,3	8	19	27

Table 1: Data obtained from the work carried out at the ecomuseum over the years.



Figure 77. Photograph of participants in a conversation circle (*roda de conversa*) held in December 2024 at a family's residence in the Campos de São José neighborhood.



Figure 78. Permanent Preservation Area (APP) of the Alambari River, in the Campos de São José neighborhood. This reforestation was initiated in 2015 by community members with the support of the Ecomuseu CSJ. This photograph was taken in September 2025 during an environmental education activity focused on the conservation of *Callithrix aurita*, an endemic Atlantic Forest primate that is at risk of extinction and that inhabits the woods of São José dos Campos.

Alignment with the call

“[...] If I could, I would spend 24 hours with the Ecomuseum. Because it brings us knowledge, we learn a lot of things, we learn to live in society, in a team. It encompasses all people, all living beings, as animals, plants, and everything else. And with that, I have been growing more and more in knowledge: that one seed is used for this or for that; that the community garden also helps us live and know how to live in community. [...] I also participate in the papier-mâché workshop. Sometimes I leave home so sad that I say, ‘Oh, I won’t take anything, just the basics.’ I get here, and the whole structure changes, the people [...], I return home with a different mindset, because the environment is good, pleasant, and makes us do something better for this world we are living in.” (Guiomar Regina in: ESPECIAL 10 YEARS OF ECOMUSEU CSJ, Podcast. 2025)

This testimony by Guiomar Regina Stanzani, a resident of the Vista Verde neighborhood, was captured during the recording of a podcast. Guiomar started participating in the Ecomuseu CSJ in 2022, by invitation of a team member. The analysis of her testimony indicates the potential for promoting Community Resilience that the ecomuseological practice engenders. “We learn to live in society” is a phrase that demonstrates the importance of the

Ecomuseu CSJ in stimulating community coexistence, allowing participants the experience of dealing with real situations that involve different people, from other social, economic, and cultural backgrounds, but who unite for a common good: cleaning a public area, producing healthy food, separating household waste, and producing organic compost to fertilize plants and reduce GHG emissions. Feeling a sense of belonging to a group with a common goal and the will in building a better world for all produce a purpose that transcends individual interests, connecting neighbors and citizens who often did not know each other, even though they lived very close, and who did not visualize ways to contribute, with their knowledge and know-how, to local development.

The excerpt shows the capacity of the ecomuseological community to adapt and thrive amidst social and environmental challenges, as it demonstrates the union and companionship developed by the project. The loneliness that the urban way of life often brings us is overcome by the opportunity to meet people at a papier-mâché or mosaic workshop, or even to feel useful and active by participating in a public area clean-up campaign for the construction of a community garden or a planting of native trees. The Ecomuseu CSJ fosters the possibility of feeling capable of collectively building a possible future.

Creativity and Participatory Approach

The work of the Ecomuseu CSJ requires, for the involvement and participation of people in the planning and execution of its activities, the use of a participatory method in all of its phases. The testimony of Rovilson Marzola, a resident of the Vista Verde neighborhood, describes how the co-creation of actions is carried out within this perspective.

“The attention, empathy, support, and backing with which the staff embraces every person who joins the Ecomuseu CSJ family is something fantastic. And it was like that with me, too. An outstanding team. Only good people. They gave form and strength to a purpose of mine: that of protecting native bees. And now, it has become their mission too! It’s very good to belong to this group.” (Rovilson Marzola in: JORNAL Campos em Papel, 2025, p. 7.)

In the first conversation circle of 2024, Rovilson presented his understanding of the ecomuseum concept, suggesting the cataloging of native bee hives in the neighborhood. On that occasion, he brought a PVC prototype plaque as

a model for the signs to be affixed to the houses where the hives were located, registering the resident's name, bee species, address, and inventory number. The proposal was accepted and co-created in conversation circles, in his comings and goings to the Ecomuseum's Center for the preparation of exhibition materials, the design of the plaque, field trips with researchers, and the presentation of an exhibition about native bees in schools and other partner institutions, moments in which Mr. Marzola performs his role as an educator.



Figure 79. Guimar Regina (center), organizing the community harvest of vegetables for distribution among the activity's participants. In the image, besides Guimar, other community members contribute to the demands of the community garden and composting.



Figure 80. Mr. Rovilson Marzola (right), accompanied by Mr. Rafael de la Vega and Mr. Getúlio Soares, produces boxes for bees of the species *Tetragonisca angustula*. The boxes were finalized in a workshop open to the public and held at the Ecomuseum's Center in July 2025.

Community Engagement

Next, the testimony of Eliana Sena, a participant in the Ecomuseu CSJ since 2015, shows the involvement with the territory that the project brought into her life. Eliana was, for many years, the editor of the minutes of the conversation circles and treasurer of a community fund for the management of the vegetable garden. She is a protagonist in many activities fostered by the project, such as the handicraft circle and community composting in Campos de São José, the neighborhood where she lives. She is one of the guardians of the Permanent Preservation Area of the Alambari River, which is the first community reforestation area in São José dos Campos:

“For me, the Ecomuseum has been a great school of life. We share knowledge, exchange insights, and dream together. We learn to value the place where we live, transforming degraded areas into forest, garden, or orchard. We learn to value people and their knowledge. And we take care of one another.” (Eliana Sena in: JORNAL Campos em Papel, 2025, p. 6.)

Eliana and her husband, Sérgio Sena, are important focal points (*focalizadores*) of the Ecomuseu CSJ in the neighborhood where they live, which was the first territory covered by the project. Sena is an inventor of social technologies; Eliana plays a fundamental role in the cohesion of local actions, as she has the ability to mediate conflicts and seek peaceful solutions. During periods when the project ran out of financial resources and, consequently, had no contracted team, they kept the heart of the Ecomuseu CSJ beating. On several occasions, they represented the project in meetings and decision-making, in addition to maintaining the management of the agroforestry, carrying out brush cutting and fencing, as well as ensuring respectful coexistence among neighbors. Eliana's testimony highlights the relationship of care for the place, of communion between her, her family, and her neighbors concerning a space that was once abandoned, full of debris and dead animals, but is now transformed into a place of life, environmental recovery, food production, and social conviviality.

Ecomuseu CSJ fosters the engagement of multiple generations, working broadly with the community, involving families and all the diversity that exists within them, as well as promoting the exchange of knowledge and the strengthening of community bonds. The proposed activities are for all ages. Since changes need to be incorporated by everyone, everyone is included. Certainly, there are activities that are more appealing to one type of audience than another, but there are no restrictions on who wishes to participate. The activities are inclusive; even when they are meetings or activities intended for adults, for example, we have people and tools capable of including the children who accompany their parents. Ecomuseu CSJ also carries out educational activities with students of various age groups.

Vision of Desired Change

Ecomuseu CSJ connects community, territory and heritage to establish a dialogue about the cultural practices and the natural elements historically constituted. This dialogue, which seeks to build collective solutions to local challenges, enables the creation of collaborative and shared social technologies that produce transformative social experiences from the perspective of sustainability and resilience, fundamental characteristics for navigating a planet in a climate emergency.

Some examples of change already recorded in the last 10 years:

- 180 families compost their organic waste;
- 40 tons of organic waste removed from the landfill;

- Non-emission of 27 t/m³ of GHG into the Earth's atmosphere;
- 10,000 urban trees planted (15,000 trees to be planted by 2028);
- 3,000 tree seedlings produced;
- Stock of 42 t/m³ of CO₂ equivalent;
- Conservation of native Atlantic Forest animals at risk of extinction:

Callithrix aurita

Cultural/Ecological Impact

In the Ecomuseu CSJ, three cultural traits that connect community, heritage, and territory are: cuisine, handicrafts, and agriculture.

Agriculture is a very common skill among the older members of a community. Community gardens and productive backyards have been mapped in all territories traversed by the development agents. This demonstrates the strength of agriculture in the human way of being, even if one inhabits large (or small) paved cities. However, for many urban residents who have migrated from rural areas and the interior regions of Brazil, there is no space in their homes for cultivating gardens or raising animals. The desire to cultivate the land often extends beyond the confines of the house, and people find their places outdoors to plant. These are usually idle public spaces, where public maintenance cannot keep them clean for very long, either because people soon dump their debris there or because the weeds quickly grow. The Ecomuseu CSJ has mapped hundreds of these gardens, which appear in various ways: some more organized, others simpler; some fenced with wire, others with bamboo, pallets, or planks. Gardens sprout across the territories. Lettuce, collard greens, *mandioca*, banana, okra, pumpkin, eggplant, and spinach are some of the foods cultivated in urban soil.

The Ecomuseu CSJ, in addition to mapping and dialogue with urban farmers, promotes practical activities, thematic workshops, and community workdays (*mutirões*), with the aim of enabling cultivation spaces and designing a friendlier relationship between people and the territories where they live.

Getúlio Soares, a master luthier, knowledgeable in farm work, retired and resident of the Vista Verde neighborhood, has been a volunteer for the Ecomuseu CSJ since 2024, where he led the construction of a seedling nursery and carried out the recovery of a water source located by him and Mr. Rafael de la Vega in the neighborhood's Permanent Preservation Area (APP). This small excerpt allows us to verify the relationship between the valuation of popular knowledge and the feeling of belonging and social empowerment.

"The Ecomuseum was a transformation in my life, providing the opportunity to share my skills and culture, as well as joining the community in preserving our fauna and flora. At a time when the planet most needs conscious action, our neighborhood has become an example of a community united in a common goal: environmental preservation."
(Getúlio Soares in: JORNAL Campos em Papel, 2025, p. 6.)

Artisanal knowledge, as well as agricultural and culinary knowledge, promotes connections between people and territories. By fostering human inventiveness and creativity, the Ecomuseu CSJ has promoted handicraft fairs (feiras de saberes e fazeres) since 2016, where local artisans have the opportunity to display their work and sell it directly to consumers. This is also an opportunity for promoting artisanal work on the Internet, as the Ecomuseu CSJ's social media channels have shown considerable reach in virtual metrics; by being associated with the Ecomuseum, the artisans improve their performance on these platforms.

The testimony of Therezinha Mariano, a resident of the Chácaras Pousada do Vale neighborhood, provides an image of this partner network to which the Ecomuseu CSJ belongs:

"Through the Ecomuseu CSJ, I received several invitations to participate in other projects. Professor Kellen and one of her students, from the Federal Institute of São Paulo, produced a book with my story, with my old recipes. I am so happy. I am the first person interviewed in the book; the recipes I shared appear, [and] photos of some of my embroidery. I was also invited to go to the [Jardim] Mariana's school to talk about my work at an event, tell the story, and read some texts I wrote about Water Day, about Environmental Day. I thank the Ecomuseu, because nobody knew me, nobody knew about my work, it was through the exhibitions I participated in, feiras de saberes e fazeres. So, I am very happy. I thank all the staff at the Ecomuseu. Many thanks to everyone who helps drive me here and there." (Therezinha Mariano in: Ecomuseu INSTAGRAM, 2025).

Feasibility

The Ecomuseu dos Campos de São José is a project of the Center for Popular Culture Studies (CECP), carried out in partnership with Petrobras through the Petrobras Social and Environmental Program. It also counts on the support of the São José dos Campos city government, universities, and hundreds of other partners and volunteers. This strengthening of networks is fundamental to the project's sustainability, as it supports activities involving

multiple stakeholders and generates longevity for the actions in the territories. Fundraising is a constant, as the Ecomuseu CSJ is not a public museum, although it is accessible to any citizen interested in participating.

As a rooting strategy, people from the communities are also hired to work on the Ecomuseu CSJ team. Biologists, historians, permaculturists, and researchers who live in the covered neighborhoods act as technicians (38% of the team); however, they are also members of the communities, which provides cohesion and creates identity among the participating individuals. Conceptual training sessions are also promoted with multipliers, such as interested teachers and professionals, in order to disseminate the principles and methods of community museology.

Conclusions

Ecomuseu CSJ stands as a good demonstration of how community-based museology can be leveraged to drive profound social and environmental change. Over its 10 years of operation, by focusing on the participatory identification, registration, and valuation of integral heritage (cultural and natural), the Ecomuseu CSJ has established a robust framework for fostering local development, sustainability, and community resilience. The project's strength lies in its participatory methodology, which uses conversation circles and shared inventory methods (as articulated by Hugues de Varine) to transform residents into active agents of change. Testimonies from participants like Guiomar Regina and Eliana Sena powerfully illustrate this shift, describing the Ecomuseum as a “great school of life” that overcomes urban isolation, stimulates coexistence, and imbues individuals with a sense of purpose and belonging. By connecting historical cultural traits, such as cuisine, handicrafts, and agriculture, with contemporary challenges, the project enables communities to use their own ancestral knowledge as the “humus of future development”.

The impact of the Ecomuseu CSJ is tangible and measurable. The project directly contributes to minimizing climate change effects, as evidenced by the 39 tons of organic waste diverted from the landfill and the corresponding 27 t/m³ CO₂ equivalent non-emitted since 2019. Furthermore, the commitment to reforestation, with over 10,000 trees planted and the fostering of urban agroforestry in degraded Permanent Preservation Areas (APPs), not only stocks carbon (42 t/m³ CO₂ equivalent stock) but also contributes to biodiversity conservation, notably for endangered species like the *Callithrix aurita*.

The Ecomuseu CSJ's sustained viability is guaranteed by a robust strategy that integrates institutional support and community empowerment. The continuous partnership with Petrobras, combined with support from the São José dos Campos city government and universities, provides a crucial financial and institutional base. Crucially, the "rooting strategy", hiring community members as technical staff and promoting conceptual training with local multipliers, ensures that the project's principles and methods of community museology are ingrained within the territory, guaranteeing longevity even when external resources fluctuate.

Future steps should focus on: Establishing formal mentorship programs between community elders and local school students, using the Ecomuseum's resources and archives to preserve and disseminate intangible cultural heritage (recipes, stories, traditional farming methods). Enhancing Resilience Metrics, by developing more sophisticated metrics to assess the qualitative impact of collective actions on social cohesion, mental health, and adaptive capacity, complementing the existing ecological data.

By continuing to prioritize dialogue, shared governance, and the valuation of heritage, the Ecomuseu CSJ offers a potent model for community resilience. It affirms that the simplest local actions, when rooted in a collective vision and guided by shared knowledge, are the most powerful forces for achieving sustainability and maintaining the planetary status quo in the face of a climate emergency.

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Chapter 11

Weavers of Sustainability in La Guajira: Bio-Geo and Culturally Diverse

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Abstract:

This experience interweaves scientific and ancestral knowledge to address environmental and social challenges in the Ranchería River Basin, La Guajira, Colombia. Through participatory geoscientific approaches and intercultural dialogue with the Wayuu people, it fosters climate adaptation, cultural identity, and territorial resilience. The initiative highlights how science diplomacy and women's leadership can build bridges between academic knowledge and indigenous wisdom for a just and sustainable future.

Context of the experience

La Guajira, located in northern Colombia, is a desert-coastal region shaped by intense climatic variability, extractive pressures, and deep cultural richness. The Wayuu, Colombia's largest Indigenous group, have developed an intricate relationship with their environment, expressed through oral traditions, myths, and seasonal calendars that govern daily life and survival in an arid landscape.

Despite this wealth of traditional knowledge, the region faces critical challenges: recurrent droughts, food insecurity, and the socio-ecological disruption caused by decades of coal mining along the Ranchería River Basin. This river—lifeline for both ecosystems and communities—has been diverted, polluted, and contested, turning sustainability into a question of justice and sovereignty.

Within this context, “*Weavers of Sustainability in La Guajira: Bio-Geo and Culturally Diverse*” emerged as a collaboration between EAFIT University, the Ministry of Science (MinCiencias), and Wayuu community organizations, under the framework of the *Orquídeas: Women in Science 2024 Program*. The project aligns with the program’s mission to promote gender equity in science, while strengthening women’s leadership in sustainable territorial management.

The initiative redefines the role of geosciences as a bridge between technical knowledge and community wisdom. It does so through the co-construction of intercultural pedagogical tools—particularly the *Wayuu Climate Calendar*—that connect scientific climate data with ancestral ecological indicators.

Through workshops, storytelling, participatory mapping, and artistic co-creation, the project has built a living laboratory of dialogue in which Wayuu women, youth, and scientists collectively interpret their territory. This approach demonstrates how knowledge diversity can lead to climate adaptation strategies rooted in local identity, justice, and ecological integrity.

Description of the experience

The *Weavers of Sustainability* project was implemented as an intercultural, transdisciplinary living-lab model structured around four core components: (1) participatory diagnosis, (2) community mapping, (3) intercultural co-creation, and (4) dissemination and appropriation of knowledge.

Participatory Diagnosis

The project began with a participatory diagnosis in three Wayuu communities located near the middle and lower Ranchería Basin. Using qualitative tools—storytelling, seasonal calendars, and semi-structured interviews—the team identified key issues: water scarcity, loss of traditional food systems, and youth disconnection from ancestral practices. Women elders emphasized the erosion of oral traditions related to climate and territory, which historically guided decisions about grazing, fishing, and agriculture.

Community Mapping

Community mapping sessions combined geoscientific data (hydrology, geology, geomorphology) with local narratives. Participants identified sacred springs (*ainrra*), salt flats, dunes, and dry riverbeds, reinterpreting them as

“geosites of cultural meaning.” These maps became both scientific and pedagogical tools, demonstrating how landscapes are intertwined with identity and memory.

Intercultural Co-Creation: The Wayuu Climate Calendar

The co-creation of the *Wayuu Climate Calendar* was the project’s central milestone. This calendar integrates traditional ecological knowledge with meteorological records and satellite data. Each lunar cycle is associated with cultural events, plant indicators, and animal behavior, forming a framework for local climate governance.



Figure 81. Community mapping workshop with Wayuu elders and youth — identifying geosites and ancestral water routes



Figure 82. The Co-construction of a Wayuu Climate Calendar: linking lunar cycles, star constellations, and ecological indicators for climate adaptation.

Workshops were conducted in both Wayuunaiki and Spanish, ensuring linguistic and epistemic inclusion. Women played a leading role in transmitting oral histories, songs, and rituals related to seasonal change, which were later transformed into visual and digital materials for community schools and the ColombiaGeoDiverHub portal.

Dissemination and Appropriation of Knowledge

To strengthen science communication, the project produced podcasts, illustrated educational materials, and short documentaries co-authored with Wayuu youth. These outputs are used in community radio and local schools, contributing to climate literacy and cultural pride.

A key outcome was the empowerment of young female community members who, after training in bioacoustics and participatory mapping, became ambassadors of “geoscience for life.”

Key Lessons

- Intercultural methodologies enhance both scientific quality and social legitimacy.
- Women’s leadership ensures continuity and sensitivity in intercultural dialogue.

- Combining local ecological knowledge with digital mapping platforms enhances visibility and ownership.
- Co-creation processes demand flexibility and ethical commitment beyond conventional research metrics.

Alignment with the call

Climate Action Relevance

The project directly contributes to **climate adaptation** by transforming traditional knowledge into actionable tools for decision-making. The *Wayuu Climate Calendar* supports early warning systems for drought and enhances water governance in a region severely affected by desertification.

Cultural Sustainability

The initiative safeguards intangible heritage by documenting and revitalizing oral traditions, myths, and songs linked to the land. The collaboration between scientists and artists produced visual representations of the Wayuu cosmology, emphasizing the *cosmovisión del territorio*.

Community Resilience

Community resilience was achieved by reinforcing collective identity and the capacity for self-organization. Participatory mapping and inclusive workshops strengthened women's networks, promoting intergenerational learning and collective problem-solving.



Figure 83. Intergenerational dialogue among Wayuu elders and students during a resilience workshop.

Creativity and Participatory Approach

The Weavers of Sustainability initiative placed creativity at the heart of its methodology, recognizing art and sensory experience as essential pathways for intercultural understanding and community participation. Through the combination of storytelling, visual arts, and experiential learning, creativity became a bridge between scientific interpretation and local worldviews. This participatory framework transformed workshops into living classrooms (*aulas vivas*), where imagination and observation guided collective exploration of the Ranchería River Basin. The result was a vibrant set of cultural expressions — murals, drawings, sounds, and narratives — that captured the intertwined meanings of land, water, and identity. Figure 4 illustrates one of these artistic co-creations: a community mural that represents the Ranchería River as a thread connecting ecosystems, memories, and hopes for the future. The main items are:

- **Creative Community Strategies:** Art was used as a language of connection through murals and storytelling.

- **Participatory Methods:** *Aula viva* (living classroom) methodologies combined sensory observation, storytelling, and field exploration.
- **Visual Illustrations:** Digital drawings, photographic essays, and soundscapes of biodiversity complemented scientific data.

Community Engagement

At the core of the *Weavers of Sustainability* initiative lies a deep commitment to community engagement as both a methodology and a guiding ethic. The project was not designed *for* the Wayuu communities but *with* them, ensuring that every stage—from diagnosis to dissemination—was co-created through dialogue, trust, and reciprocity. Engagement was conceived as a long-term relationship rather than a single intervention, enabling shared learning and collective governance. This participatory approach strengthened local leadership, revitalized traditional institutions, and encouraged intergenerational exchange as a means to preserve ancestral knowledge and adapt it to contemporary challenges. The following components illustrate how collaboration shaped the project's structure and impact across all dimensions of its implementation:

- **Co-Design Processes:** Community members co-designed all stages of the project.
- **Shared Governance:** Decisions were collective, involving local assemblies and traditional authorities.
- **Intergenerational Participation:** Elders, adults, and youth worked together, ensuring continuity of ancestral knowledge.
- **Long-Term Impact:** The project continues as a platform for intercultural climate governance and education.

Vision of Desired Change

The *Weavers of Sustainability* initiative is grounded in a transformative vision that seeks not only to generate knowledge but to reshape relationships — between people, science, and territory. This vision of change emerges from the belief that genuine sustainability requires shifts in values, identities, and ways of knowing. By fostering dialogue between academic research and ancestral wisdom, the project challenges extractive paradigms and promotes an ethics of care rooted in reciprocity and respect for the land. The transformation is both personal and collective, empowering women, youth,

and communities to redefine their role in climate governance and the co-creation of knowledge. The following elements synthesize this process of change:

- **Who Changes:** Wayuu women and youth become recognized agents of climate governance.
- **What Changes:** Geoscience evolves from extractive knowledge to an ethics of care and belonging.
- **How Change Happens:** Dialogue between academic and ancestral knowledge catalyzes systemic transformation.

Cultural/Ecological Impact

The cultural and ecological impacts of the Weavers of Sustainability initiative reveal how science and ancestral knowledge can converge to restore balance between people and their environment. Beyond technical results, the project generated profound transformations in how communities perceive, value, and interact with their territory. By reactivating oral traditions, strengthening local governance, and promoting environmental stewardship, the initiative contributed to both cultural continuity and ecological regeneration. These changes are expressed through renewed community practices, improved management of natural resources, and the emergence of new spaces for intercultural learning and territorial pride. The following outcomes summarize the key dimensions of this impact:

- **Cultural Shifts:** Renewal of oral traditions and ceremonial practices connected to climate cycles.
- **Ecological Improvements:** Improved water management using traditional ecological indicators.
- **Social Benefits:** Strengthened female leadership and intercultural education.
- **Future Impact:** Creation of the *Geoeducational Route of the Ranchería River* integrating science, art, and tourism.

Feasibility

Project funded through the Orquídeas: Women in Science Call No. 948-2024, with resources from the National Fund for Financing Science, Technology, and Innovation "Fondo Francisco José de Caldas" and EAFIT

University, with the support of local authorities and the association: Movimiento Feminista de Niñas y Mujeres Wayuu.

Sustainability: Community training ensures local ownership, while open-access materials hosted on ColombiaGeoDiverHub guarantee continuity.

Conclusions

Weavers of Sustainability in La Guajira demonstrates that meaningful transformation arises when science is reimagined as a collective, dialogical, and care-centered practice. This initiative, led by women scientists in alliance with Wayuu communities, reveals that geosciences can transcend extractivist paradigms and become a pathway for social innovation and cultural resilience. By weaving together ancestral wisdom, academic research, and participatory art, the project created new languages of sustainability—ones that are poetic and practical, grounded in both data and lived experience.

At its core, the project embodies a profound shift in how knowledge is produced and shared. Rather than treating communities as beneficiaries, it positions them as co-creators and custodians of knowledge systems that sustain life in fragile environments. This epistemic inclusion not only democratizes science but also strengthens local governance capacities, ensuring that adaptation and climate resilience strategies are rooted in cultural identity and self-determination. The Wayuu Climate Calendar, community mapping, and intercultural workshops stand as tangible outcomes of this process—living tools that empower people to read and manage their environment through both ancestral and scientific lenses.

Equally transformative has been the role of women as mediators of change. The project shows that gender equity in science extends far beyond representation: it is about reconfiguring relationships of power, knowledge, and care. Wayuu women, scientists, and educators together have demonstrated that female leadership can guide sustainability processes that are inclusive, ethical, and intergenerational. This approach directly contributes to the goals of the Orquídeas: Women in Science Program by MinCiencias, offering an exemplary model of how women-led initiatives can anchor national strategies for climate adaptation and territorial peace.

Culturally, the project revitalized oral traditions and cosmologies that reaffirm belonging and reciprocity between humans and the Earth. Ecologically, it supported more informed water management practices through the integration of traditional indicators. Socially, it strengthened education and intercultural dialogue as pillars of resilience. The creation of the

Geoeducational Route of the Ranchería River stands as a symbolic and practical achievement—an itinerant classroom where science, art, and spirituality coexist as instruments of transformation.

Recommendations and Policy Linkages (see Policy Brief)

- Building on the Policy Brief derived from the project, the experience generates clear policy recommendations that can guide decision-makers and future initiatives:
- Institutionalize intercultural science approaches within national climate adaptation frameworks, recognizing indigenous ecological indicators as legitimate tools for governance.
- Scale the living-lab methodology to other basins in Colombia—particularly those facing similar socio-environmental vulnerabilities—through alliances among universities, communities, and local governments.
- Develop digital monitoring and open-data platforms that merge local ecological knowledge with geoscientific indicators to support inclusive environmental management.
- Establish the Intercultural School of Geosciences for Life, a permanent platform for training, exchange, and dissemination of practices that connect science, culture, and sustainability.
- Ensure long-term funding mechanisms to sustain women-led and community-driven climate innovation, aligning them with the Sustainable Development Goals (SDGs 4, 5, 10, 11, 13, and 15).
- Ultimately, Weavers of Sustainability invites policymakers, scientists, and communities to rethink sustainability as an act of reciprocity and collective care. Its legacy lies not only in the tools it produced but in the relationships it wove—threads of trust, creativity, and knowledge that can guide Colombia’s transition toward a more just, inclusive, and resilient future.

Policy Brief

Bridging Science and Ancestral Knowledge for Climate Resilience in La Guajira, Colombia

Context and Problem: The Wayuu territory faces water scarcity, extractive pressures, and climate change. Top-down climate policies rarely integrate indigenous ecological knowledge. Inclusive, gender-sensitive approaches are needed for resilience and sustainability.

Policy Objective: Promote intercultural, women-led models that merge scientific and ancestral knowledge to strengthen adaptation, biodiversity conservation, and local governance.

Key Insights

- 1. Integration of local indicators into formal climate tools.
- 2. Women-led research fosters trust and social inclusion.
- 3. Educational transformation through intercultural curricula.
- 4. Governance innovation via participatory mapping and assemblies.

Policy Recommendations

Domain	Recommendation	Responsible Actors
Climate Governance	Integrate indigenous climate calendars into national adaptation plans.	MinAmbiente, IDEAM, Local Governments
Education	Institutionalize intercultural curricula and territorial laboratories.	MinEducación, EAFIT, Indigenous Authorities
Science & Technology	Fund women-led research linking geoscience and community innovation.	MinCiencias, STI System
Economic Development	Support geotourism, renewable energy, and cultural economies.	MinComercio, SENA, Territorial Councils

Table 2: Resume of the main recommendations from the project

Expected Outcomes

- Strengthened local adaptation and resilience.
- Recognition of women and indigenous leadership.
- Integration of intercultural science in national policy.
- Territorial peace through knowledge co-production.

Call to Action: Scale the Weavers of Sustainability model to other Colombian regions — transforming geoscience for extraction into geoscience for life.

Chapter 12

Caminos de Agua

Carolina Quintero Agámez

Abstract:

Caminos de Agua (Paths of water) is an exhibition that highlights the vital relationship between the Darién communities and water as a source of life, territory, and resistance. Developed collaboratively with the Darién Cultural Committee, the Colombian Institute of Anthropology and History (ICANH), and the National Museum of Colombia, the exhibition shows how water bodies sustain identities, ancestral technologies, and memories in the face of extractivism, contamination, and the climate crisis. In a context of environmental emergency, the project reaffirms water as a subject of rights and invites us to imagine sustainable futures based on territorial knowledge, positioning the museum as an active space for listening, care, and collective action.

Context of the experience

Paths of Water originated in the Darién territory, a place where the relationship between the communities and water is intrinsically linked to history, memory, and resistance. Its origin dates back to the Santa María de la Antigua del Darién Archaeological and Historical Park²⁹, administered by the Colombian Institute of Anthropology and History (ICANH)³⁰. This

²⁹ In 1510, Spanish conquistadors founded this city on an indigenous Cueva-speaking settlement known as Darién. It became the first European settlement on the Tierra Firme (Mainland) and the capital of the territory of Castilla del Oro until the foundation of Panama City in 1519. It was gradually abandoned after the capital's relocation and was ultimately raided and burned by enslaved and allied indigenous groups in 1524 (Sarcina & Quintero, 2019).

³⁰ Due to its historical importance, the site was declared a National Cultural Interest Asset (BIC) in 2015, and in 2016, the ICANH declared the area as the Santa María de la Antigua del Darién Archaeological and Historical Park.

location was the site of the first city founded by Spanish conquistadors on the mainland in 1510, built upon an indigenous settlement of Cueva-speakers³¹.

Since 2013, this archaeological project adopted a central principle: working hand-in-hand with local communities, not only to jointly construct knowledge but also to share decision-making and exercise a shared cultural governance over the park, the territory, and its memories. In a region historically marked by the Colombian Internal Armed Conflict³², this

³¹ When the Spanish arrived in 1510, the site where Santa María de la Antigua was later founded was home to an indigenous settlement named Darién, the same name as the river that bordered it. We only know about the people who inhabited this town through the writings of chroniclers contemporary to the city. Their language was called Cueva, and they inhabited the territory stretching from the Chagres River, in present-day Panama, all the way to the Gulf of Urabá. According to documentary sources and archaeological records, it was a densely populated region (Romoli, 1987, in: Sarcina y Quintero, 2019).

³² The municipality of Unguía in the department of Chocó, where the archaeological park is located, has historically been a border area marked by isolation, state absence, and illegal trade (contraband). Since the colonial era, it has been characterized by extractivist logics, driven by the hidden wealth of the region and the freedom with which various actors have been able to exploit it.

In the municipality, agro-industrial cultivation of plantain and banana, alongside cattle ranching, are the main sources of subsistence. The latter has served as a tool for land concentration and speculation.

The actors present in the region have configured themselves over the years through the mobilization and organization of its inhabitants, supported by specific legislation:

"The figures of *resguardo* (Indigenous reserves) and *cabildo* (Indigenous councils), as a product of Indigenous struggles, have allowed for the reconstruction of geographical boundaries, the consideration of a socio-spatial ancestral heritage, the restoration of authority, and the institutionalization of an Indigenous way of life" (Galindo, 2013).

The territories of the Afro-descendant communities were consolidated thanks to the Community Councils of Black Communities (*Consejos Comunitarios*), which, in the 1990s, were established through Law 70 of 1993 and "evolved into organizations and communities whose struggles centered on ethno-territorial issues: territorial autonomy, customary law (*derecho propio*), and the conservation and care of the environment associated with traditional economic practices, among others" (Galindo, 2013).

In the 1960s, driven by the appropriation of large tracts of land by landowners, groups of farmers from Córdoba and Bolívar arrived in the territory to found a town "which

participatory approach strengthens the defense of the territory and the continuity of the cultural practices that sustain it.

The Emberá and Gunadule Indigenous peoples, Afro-descendant communities, and settler farmers all converge in this territory. Community participation has not been a supplement, but the very foundation of the project. The communities not only requested that the archaeological artifacts remain in the Darién but also asserted their right to be involved in every stage: excavation, conservation, interpretation, and transmission of the heritage. As a result, more than 300 people—mostly women—have been trained in community archaeology, generating employment, strengthening local knowledge, and reinforcing the collective history of the territory (Sarcina, 2021).

they would name, thanks to colonization leader Pedro Coronado Arrieta, Santa María The New in memory of the first Spanish settlement, located just 6 kilometers from the new foundation" (Galindo, 2013). As these populations settled and organized themselves within the territory, cycles of violence—largely associated with the presence of paramilitary groups—emerged, directly impacting the civilian population. This situation, coupled with state abandonment, has resulted in the current high rates of poverty and unemployment, as well as the absence or precariousness of fundamental services such as healthcare, education, water supply, sewerage, electricity, and housing.



Figure 84. The archaeological region of Santa María de La Antigua del Darién. The map indicates the archaeological sites identified to date and the current settlements. Illustration: Daniela Orrego, digital rendering. (ICANH), 2017

This approach led to the creation of the Darién Cultural Committee in 2017, an autonomous body for cultural co-management composed of representatives from 21 different communities and organizations³³. The

³³ The Darién Cultural Committee, created in 2017, is composed of representatives from diverse local communities: the Gunadule community of Arquía; the Emberá communities of Citará, Cuti, Ziparadó, Tumburrulá, Loma Estrella, Bidokera, and Eyaquera; the Afro-descendant communities of Marriaga, El Roto, Ticolé, Tumaradó, El Puerto, and Tarena, all of which belong to the Senior Council of Bajo Atrato (COCOMAUNGUÍA); and the settler communities of Santuario, Tanela, Santa María la Nueva, Gilgal, Unguía, San Francisco, and Triganá. Its mission is to propose and develop gathering spaces and cultural activities that promote: the exchange of knowledge, the strengthening of collective memory, the care of the natural environment, and the preservation of local traditions, both within the Santa María de la Antigua del Darién Archaeological Park and in the communities themselves and the wider region. Over time, the Committee's meetings have consolidated as a vital setting for intercultural dialogue. Through mutual recognition, historical tensions are mitigated, diverse territorial visions are shared, and

Committee has spearheaded cultural events, publications, and community exhibitions, dismantling external and hegemonic views of the territory. Its gathering spaces have built trust among communities previously distanced, sustaining an intercultural effort that is sometimes challenging but profoundly transformative.



Figure 85. Meeting of the Darién Cultural Committee. Santa María de la Antigua del Darién Archaeological and Historical Park (ICANH). Municipality of Unguía.

In 2022, within this context of continuous work with the communities, the first phase of *Paths of Water* was developed at the Archaeological Park. This exhibition was conceived as a mechanism for collective listening and creation, in which the rivers, wetlands (*ciénagas*), and the sea were narrated from the experience of those who inhabit the territory: as pathways, histories, and beings intertwined with daily life, socio-environmental conflicts, and spirituality.

collaborative ties are woven that strengthen coexistence, respect, and collective work among the peoples who comprise it.

The second phase, currently under development, is taking place at the National Museum of Colombia. In this new setting, the project not only expands its scope nationally but also opens a dialogue between different Aqueous Territories, diverse identities, and plural ways of understanding our relationship with water.

Through this articulation between territory and museum, *Paths of Water* is consolidated as an experience that transforms traditional exhibition practices. It does not seek to represent the communities, but rather to bring together their knowledge, demands, and ways of inhabiting water within an institutional space that is transformed by welcoming them.

Description of the experience

The first phase of *Paths of Water*, developed in 2022, was built upon a co-creation process within the territory involving nearly one hundred people from Indigenous, Afro-descendant, and farmer communities in the Darién. The exhibition's contents emerged from shared experiences—walks, navigations, intergenerational dialogues, and community workshops—which allowed for the exploration of the multiple ways of inhabiting and understanding water and the territory.

In parallel, during the meetings of the Darién Cultural Committee, held at the Heritage House of the Archaeological Park, discussions focused on daily practices, environmental impacts, and the need to strengthen community actions for the care, defense, and protection of water bodies.



Figure 86. Meeting of the Darién Cultural Committee. Santa María de la Antigua del Darién Archaeological and Historical Park (ICANH). Municipality of Unguía.

These gatherings allowed for the identification of the key themes that shaped the exhibition's structure and core narrative, which were then further explored through co-creation workshops in each community. These included conversations with environmental leaders, artisans, and authorities, as well as individual interviews that provided specific content and audiovisual material. It was in these spaces that the concept of “water fatigue” (*fatiga del agua*) was strongly manifested: the exhaustion stemming from the accumulated damage to rivers, seas, and wetlands caused by various human activities.

“There were many water bodies before, where fish reproduced, but now they are gone due to sedimentation. That is caused by illegal mining and extensive cattle ranching. When the river has trees on its banks, it has strength; there are roots, so they keep the banks from collapsing. With no trees, there is no strength. That sediment causes immense damage because it flows into the lagoon. This lagoon used to be five meters deep; now the deepest part does not reach two meters.”—Marriaga Community

“Twenty years ago, the fishing methods of the fishing boats called 'The Vikings,' which came from Cartagena, were frequently encountered. We had to witness that fishing method, which was very destructive, for many years. Those nets caught all kinds of living animals in the sea, and few were used for food. In one cast, they would capture about fifty species, use ten, and return the other forty to the sea, but already dead. It has been twenty years, and the area has not been able to recover.”—San Francisco Community

“Most of the plastic seen in the sea is produced by human beings. Since there is no one here to recycle or collect it, people pile it up and then throw it into a corner of the beach; the tide rises, or a river swells, and carries it away. That is how the seas, rivers, and many channels are kept; all that ends up in the sea.”—Tarena Community

Simultaneously, archaeological and historical studies were developed and integrated, related to the Cueva-speaking populations, their fishing practices, and river navigation, as well as documentary accounts of Spanish fleets and

provisions during the conquest. The rivers, lagoons, and seas of the Darién are not just water bodies: they are arteries of life that connect territories, sustain cultural and economic ties, and shape the identity of the communities that inhabit them, reflecting a tapestry of histories, memories, and experiences that the exhibition seeks to transmit and accompany.

Another central aspect of this phase was the collective construction of the exhibition design. The exhibition was designed and produced with the active participation of the communities. In the *Casa Común* (Common House)—the space created to house it within the archaeological park—residents of Santuario and Gilgal collaborated in the design and construction, while members of other communities, including the Emberá and Guna peoples and the Senior Council of Bajo Atrato (Afro-descendant Community Council), contributed to the creation of pieces and installations for the exhibition tour.

The result of this process took shape around three curatorial axes: Lives in the Water, The Forms of Water, and The Justice of Water. The first axis focuses on the ways of inhabiting water bodies: fishing, navigation, the trades associated with rivers and lagoons, and the knowledge transmitted through daily practices. The axis The Forms of Water brings together the ways in which the territory is represented and imagined, but also the way it is named and understood by the communities that inhabit it. Maps, narratives, and symbols trace a collective portrait of the Darién.

In the axis The Justice of Water, the processes of social and environmental transformation affecting the territory are addressed: deforestation, river sedimentation, contamination, illegal mining, forced displacement, and the resulting impacts on community ways of life. This axis also highlights forms of resistance: local pedagogies, care actions, community-based environmental defense strategies, and the leadership that has emerged in the face of the socio-environmental crisis. Here, water is not just a resource or a landscape, but a territory in dispute.



Figure 87. A moment of collective work

The inauguration of the exhibition at the park was a key moment: 300 people from the different communities participated in a day that included mediation, process engagement sessions, and cultural presentations—dances, songs, oral narration, and theater. More than a formal act, it was a collective celebration in which the exhibition was embodied in the living practices of the territory.

In 2023, *Paths of Water* began its development as an exhibition project at the National Museum of Colombia, becoming the pilot project for the *Museological Production Cycle*, a methodology that articulates research, participation, and interdisciplinarity in the construction of exhibitions³⁴. This step allowed the territorial work from the Darién to be transferred to a broader

³⁴ One of the pillars of the National Museum of Colombia is territorialization, understood as the creation of projects that engage with the knowledge and ways of life of each territory, extending the museum's voice beyond the center (the capital) and constructing knowledge collectively and locally alongside the communities. Within this framework, the *Museological Production Cycle* emerges as a methodological tool that articulates the museum's areas through collaborative processes based on participatory research, where the questions originate from those involved in the process and diverse knowledge systems are recognized. *Paths of Water* has been the pilot project for this cycle. From its beginnings in the Darién, the team worked with local communities using participatory methodologies, strengthened by the creation of the Darién Cultural Committee in 2018. Thanks to this joint effort, the project became a benchmark for consolidating this territorial and collaborative model.

institutional setting, consolidating the museum as a space for encounter between diverse territories, memories, and knowledge.

During this second phase, work focused on the so-called "expanded exhibition narratives": broadened versions of the curatorial and museographic scripts built during the first phase in the Darién. For this purpose, an interdisciplinary team was formed, including professionals from the National Museum, ICANH, the National University of Colombia, the Afro Museum Project, and, centrally, representatives from the Darién Cultural Committee and the communities. This process not only sought to adapt the exhibition to a different scale but also to sustain and broaden the listening and collaboration that made it possible, allowing territorial reflections on water—its care, tensions, and memories—to enter into dialogue with wider audiences.

In this framework, the team expanded research on the three curatorial axes, developed new curatorial and educational content, and advanced the museography based on the meetings with the communities. A central idea emerged from these processes that guided the curatorial, museographic, educational, and other related actions: "For the Darién communities, water is life, a medium in constant dispute that underpins their identities, their ways of life, and their dynamics of resistance. It is a legacy that transforms, interweaves, communicates, and connects."

For the development of the exhibition's second phase, numerous meetings were held, with the participation of more than 300 people. Various community-created pieces were constructed and subsequently integrated into the National Museum's collection, contributing to the strengthening of the museum's heritage from a territorial perspective and one of epistemological justice.



Figure 88. Collective construction of the exhibition

The expanded content of the exhibition includes the topic of the Atrato River, recognized by the Constitutional Court as a subject of rights through Ruling T-622 of 2016, which declares it a living entity and grants it rights to protection, conservation, and restoration.

This content articulates the vital relationship between the peasant, Afro-descendant, and Indigenous communities and the river they inhabit, as well as the environmental and social impacts that affect it, such as illegal mining, deforestation, and forced displacement. The exhibition highlights the care and resistance actions led by the communities, particularly through the Collegial Body of Guardians of the Atrato, which is responsible for ensuring compliance with the ruling. Eight years later, the implementation of T-622 has allowed for progress in environmental restoration and community protection, although challenges persist, such as illegal mining and insufficient institutional intervention.

Alignment with the call

Paths of Water highlights the environmental and social impacts affecting the water bodies of the Darién—such as deforestation, sedimentation, contamination, illegal mining, and biodiversity loss—and how these

transform the ecosystems and the lives of local communities. The exhibition generates spaces for collective meeting and reflection that articulate ancestral knowledge, local knowledge, and scientific perspectives, allowing for an understanding of how the territories resist, care for, and adapt to these changes.

Creativity and Participatory Approach

Both phases of the exhibition were developed through participatory processes, original research, co-creation, and co-design. For example, the axis dedicated to the Forms of Water presents representations of the territory that reveal decolonial stances and diverse ways of approaching and understanding the space. A central example is the Di Igala Burba River Memory Map, developed with the women weavers of the Gunadule community of Arquía. This map constitutes a community (counter)cartography built from a unique aesthetic, inspired by the mola textile art, and based on a collective dialogue around the stories of origin and the meanings linked to the water bodies of the ancestral territory.

Community Engagement

Building on this participatory foundation, the molas—traditional textiles of the Gunadule community—serve as a medium to represent the twelve main water bodies, sacred sites, and significant places for the Arquía community, articulating their inherent knowledge, symbols, and languages. Each mola reflects not only a geographic location but also its spiritual and social value within the community, establishing a visual form of communication that expresses the interconnection between people, rivers, and the different species and beings that inhabit them.



Figure 89. Process of Paths of Water - phase 2. Arquía Community. Municipality of Unguía (Chocó - Colombia). 2022.

In the exhibition's installation, this map is placed in dialogue with historical colonial maps from the 16th, 17th, and 18th centuries, evidencing the relationship between the imposition of colonial power and cartographic knowledge as an instrument of territorial appropriation. By confronting these visions, the community (counter) cartography highlights a material and symbolic geography that expresses an inherent perspective on the jungle, the water, and the territory. It thus incorporates decolonial perspectives and reaffirms the centrality of local knowledge systems in the understanding and management of the ancestral space.

Vision of Desired Change

The exhibition also highlights community practices for the care and restoration of aquatic ecosystems, including respect for species' reproductive cycles, the conservation of protected areas such as the Marriaga Lagoon (*Ciénaga de Marriaga*)—a manatee habitat—and the voluntary work of the Guardians of the Planet (*Guardianes del Planeta*), who conduct cleaning campaigns in the Lower Atrato River. By placing these actions in a space for dialogue and recognition, the exhibition enhances their visibility and contributes to awareness-raising and the proposal of actions regarding the climate crisis.

“Currently, Arquía preserves an area we call a ‘genetic reservoir,’ where giant cativales (a native tree species of the Darién) are conserved, because

throughout the entire Darién region, the timber was depleted and the cativales were razed. Arquía has that genetic reservoir, which is moisture. We Indigenous peoples are not here for resources; we are here to care—not only for the water, but for Mother Earth and other elements: the air, the trees, the plants, and the other species.”—Arquí Community

“We need enough territory to safeguard the forests, to make a canoe (chalupa), to build, to reserve water, to have fish that reproduce, to have all kinds of animals, food, and we would also contribute to the world’s oxygen. If we cut everything down, we leave nothing for our future. Because who is going to commit to reforesting the riverbanks? Here, all the banks of the river—the Cuti River, Tisló, Capitán, and the Tanela River from its mouth to its source—must be reforested.” —Bidokera, Citará, Cuti, Loma Estrella, Tumburrulá and Ziparadó Communities

It also integrates the legal and symbolic perspective of the Atrato River as a subject of rights, according to Ruling T-622 of 2016, recognizing water as a living territory, essential for the memory, identity, and survival of peasant, Afro-descendant, and Indigenous communities. The exhibition connects this rights framework with local practices of water care and defense, showing how the communities exercise their autonomy and environmental justice from their own territories.

Cultural/Ecological Impact

In terms of cultural sustainability, Paths of Water recognizes and supports the work that the Cultural Committee and the communities have been developing in the Darién. More than limiting itself to exhibiting content, the exhibition integrates itself into processes already underway, providing tools, visibility, and spaces for articulation that reinforce existing collective action. Among its strategies is the production of pedagogical materials that will remain in the territory, aimed at supporting education, reflection, and the continuity of local organizational processes. Here, cultural sustainability is understood as the capacity of communities to keep their knowledge, practices, and forms of organization alive, giving them continuity according to their own timelines, decisions, and horizons.

The exhibition also contributes to peace-building in a context historically characterized by the armed conflict and the absence of the State, generating spaces for collective reflection and learning that strengthen the communities' capacity to confront environmental, social, and cultural challenges.

The co-creation and co-design processes ensure the active participation of communities in defining the curatorial, museographic, and educational content. The inclusion of different generations allows for the transmission of knowledge and reinforces local leadership, while the participation of environmental leaders, fishers, weavers, and authorities guarantees that decisions are collective and culturally grounded. From the first phase to the implementation at the National Museum, intergenerational participation has been key to ensuring the continuity of the processes and the transmission of knowledge, although achieving the full integration of Younger Generations still represents a challenge.

The piloting of the Museological Production Cycle reaffirmed the importance of working from a decentralized and situated logic, prioritizing territorial presence, active listening, and collective construction. The experience evidenced that institutional timelines do not always coincide with community rhythms and that the processes require commitment, continuity, and sustained relationships to generate significant results. These learnings have guided the future projection of the project, ensuring that the cultural, educational, and environmental benefits are maintained long-term and can be replicated in other territorial contexts.

Paths of Water integrates research, creativity, community participation, and sustainability, demonstrating how cultural heritage, ancestral knowledge, and local practices can be articulated with environmental action. The exhibition offers a model of a cultural project that contributes to reflection on climate change, the strengthening of local capacities, and the preservation of cultural and natural heritage in the territories.

Feasibility

The feasibility of the project is supported by a set of human, institutional, and methodological resources developed over several years of work in the territory. The National Museum of Colombia, ICANH, and the National University contribute technical capacities, research experience, and institutional backing. Added to this is the active participation of the Darién Cultural Committee and the communities, who have co-designed the contents and ensure the cultural and territorial relevance of the actions.

The project has materials, validated methodologies, risk-management tools, and a network of actors that facilitates logistical implementation in a context marked by environmental and security challenges. Together, these elements

make it possible to foresee a successful implementation and results aligned with the project's objectives.

Sustainability Plan

The sustainability plan is grounded in capacity building, the production of educational materials, and the continuity of the community and institutional networks created throughout the process. The communities will receive tools and content that they can autonomously use in educational, organizational, and environmental initiatives. The project includes ongoing support through interinstitutional alliances and the possibility of developing itinerant, virtual, or expanded versions, allowing it to circulate in other museums and territories. Likewise, the intergenerational approach and the participation of local leaders strengthen community autonomy and the preservation of knowledge and practices related to water care, ensuring that the project's benefits are maintained over time.

Conclusions

Paths of Water reveals that cultural heritage and environmental action are not separate spheres, but rather intertwined dimensions of community life. The exhibition demonstrates that local knowledge, collective memories, and water care practices constitute strategies of resilience against the socio-environmental and climatic impacts that permeate the Darién. The project's strength lies in its capacity to translate these territorial experiences into forms of shared knowledge, visible and recognizable beyond the territory, without losing their symbolic and cultural depth.

The work with the communities was not limited to documentation but generated processes of mutual learning and institutional transformation. Co-creation, co-design, and participation allowed local voices, their priorities, and their worldviews to become the structuring axes of the exhibition. Thus, *Paths of Water* evidences that the construction of museological knowledge can be an act of epistemic and cultural justice: it recognizes the capacity of the peoples to interpret their territory and exercise autonomy over their resources and memories.

The project also evidences the power of a situated and decentralized approach. The exhibition was built from the territory, in constant dialogue with the rhythms, knowledge, and needs of the communities, which allowed the museum to be transformed into a receptive and active space, capable of articulating research, education, and social action. Through cartographies,

objects, and narratives, the communities transform memory and creativity into acts of resistance and territorial protection.

Finally, Paths of Water invites a rethinking of the museum's role: not only as an exhibition space, but also as a mediator of knowledge, a facilitator of intercultural dialogues, and a catalyst for cultural and environmental sustainability processes. The exhibition demonstrates that protecting water bodies and strengthening territories is not an isolated act, but a tapestry of relationships, histories, and collective practices that sustain identities and generate a future. By highlighting these experiences, Paths of Water offers a model of a cultural project capable of transforming perceptions, inspiring actions, and articulating heritage preservation with the active defense of territory and life.

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Chapter 13

Connectivity Conservation Initiative for Fresh Drinking Water (CONSERVE CONNECT)

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Abstract

The project CONSERVE CONNECT constitutes a participatory initiative enhancing ecological connectivity and water security in the mountainous Mastorochoria region. Through interdisciplinary research, restoration of traditional freshwater infrastructures, and documentation of local ecological knowledge, the project supports climate adaptation, biodiversity conservation and community resilience. By integrating cultural heritage, citizen science and shared governance, it strengthens human–wildlife coexistence and demonstrates a low-carbon, place-based model for sustainable landscape management.

Context of the experience

Boulouki – Itinerant Workshop on Traditional Building Techniques seeks to identify, study, document, preserve and disseminate the knowledge of local communities, groups and individuals on traditional building techniques, materials, landscape practices and natural resources; to (re)construct the framework for the application of this knowledge in the modern world, within the political, institutional, legal, economic, natural and technological environment by implementing exemplary projects/interventions of an educational nature, with the participation of local communities. Boulouki as a grassroots collective, innovates through bottom-up approaches, participatory care for common resources, and a holistic commitment to sustainability and rehabilitation of natural and cultural heritage. The team has centered projects on water infrastructure heritage, recognizing its importance in climate adaptation and climate action.

In this project, Boulouki is in close collaboration with Callisto, an environmental organization dedicated to wildlife and nature conservation. Founded in Thessaloniki in 2004 by individuals with extensive experience and expertise in environmental issues, Callisto works to preserve wildlife and the environment as a whole. The primary focus is on large mammals, such as the bear and the wolf, and their coexistence with humans. Together with the local communities, Callisto strives to protect forests, wildlife, and promote the beauty of nature, the value of biodiversity, and the right to life.

The project area brings together the Natura 2000 area entitled “Peaks of Smolikas Mountain/Koryfes Orous Smolikas” (Standard Data Form. 2025), with the northern part of Vikos – Aoos UNESCO Global Geopark, the wildlife sanctuary entitled “Vourkopotamos stream-Ganadio-Pyrgos-Pyrsogiannis” and roadless core areas. The physical geography of the project area is that of the northern Pindus Mountains, and the region is bordered by the dense mountain formations of Grammos (north), Smolikas (east), Tymfi or Gamila (south), Nemertsika or Meropi and Kamenik (west). More specifically, the Mastorochoria area lags behind in terms of economic growth and is sparsely populated. Tourism, crop and livestock production and forestry represent the most important economic activities in terms of employment and the primary and secondary sectors have shrunk considerably over the last 30 years.

The primary threats of climate change identified in the area for wildlife and humans are:

- Rising temperatures and shifting precipitation patterns (habitat shifts, water scarcity, food supply disruptions)
- Altered ecosystem dynamics (loss of biodiversity)
- Forest fires (increased frequency and intensity, loss of forest cover)
- Reduced snow – changes of seasonal cycles (hibernation, hunting patterns, migration barriers)
- Disruption of wildlife corridors (habitat fragmentation and degradation, corridor quality decline).

However, the predominantly mountainous area enhances human and wildlife coexistence. Connected landscapes not only support biodiversity but also maintain essential ecosystem services on which humans depend, such as pollination, water regulation and soil health. In this framework, water supply to this remote area is essential both for humans and wildlife. Since Boulouki

and Callisto have been working for years in Epirus they have come close to the needs of local communities. With this project they aim at enhancing their livelihood and well-being by mapping ecosystems and the services they offer delivering important information and skills for the management and sustainable development of the villages Molista, Ganadio, Monastiri, Kerasovo (Agia Paraskevi), Pournia, Pyrgos, Pyrsogianni and Vourbiani.

Description of the experience

The CONNECT CONSERV is an on-going project which has completed two years of implementation and has secured 75% funding for the next three years. The core actions of the project involve the restoration of traditional fresh water supply infrastructures in order to support biodiversity, contributing in protecting, restoring and promoting the sustainable use of terrestrial ecosystems and taking urgent action to combat climate change and its impacts for both wildlife and humans. In addition, as the restoration is taking place within a participatory approach the project ensures equal access to education and leadership roles.

During the first year of implementation a strong relationship between partners was established while working together both in fieldworks and remotely. Callisto offered a detailed view of the ecological corridors for the brown bear and the grey wolf that could serve as the groundwork for the design of site and species-specific conservation strategies. Temperature, soil components and hydrogeological characteristics were recorded in the ecological corridors which correspond to significant abiotic factors. Abiotic conditions make up part of the basic prerequisites for biodiversity as a direct link between the occurrence of different plants and animals and the form of the land surface, the composition of the bedrock, the distribution of soils, soil water conditions and the soil's chemical properties. These factors determine habitat quality and are most affected by climate change. Therefore, they were part of the applied research conducted in the project in order to design practical solutions to enhance the conservation of the ecosystem services in the connectivity area. Temperature trends of the researched ecological corridors differ significantly from the modeled projections of the RCP scenarios for current and future temperature trends. The measured temperature data point out that the predictions of the models are not coherent with the current situation. Actual values of indices suggest that temperature is elevated above even the worst case scenario for global warming. It is important that this research continues to better monitor temperature trends of the mountain areas, a powerful indicator for global warming.

A significant part of the project is the enhancement of the livelihood and well-being of Mastorochoria local communities by mapping ecosystems and the services they offer to the sustainable conservation of natural resources. Local traditional ecological knowledge for the management and sustainable development of the area focusing on biodiversity-related knowledge, agricultural, traditional livestock grazing practices, landscape and cultural values, traditional water infrastructures and related knowledge on sustainable use of natural resources, were recorded. When referring to local knowledge, we refer to the perceptions, skills, and narratives developed by societies with a long history of interaction with their natural environment. The traditional knowledge is maintained and passed on from generation to generation in a community, and the ecological knowledge is the understanding of the functions of ecosystems. Putting all the above together, we get a system of knowledge, traditions, and practices that are heavily dependent on place! This knowledge is at the interface between environmental and cultural diversity and can provide information, methods, theory, and practice for sustainable planning and management of natural and cultural heritage.

In order to deliver a wide range of engagement, the interdisciplinary team of Boulouki and Callisto investigated five tools that provide different procedures of participatory knowledge sharing so as to gain information on sustainable use of natural resources. The complementary nature of these tools highlights the diverse sources of traditional ecological knowledge when working with local communities. The tools to provide different types of participatory knowledge sharing procedures were: Participatory mapping, Key informant interviews, Discussion in Focus group, Plan Drawings, Walking interviews. Local communities are aware of the impacts on water scarcity as they already experience low snow accumulation and milder winters. In this framework, they were engaged with interest in the meetings and the activities of the project sharing valuable information on traditional ecological knowledge that can be deployed nowadays providing sustainable solutions for habitat suitability.

There are a variety of types of maps that extend the definition of a map beyond its geophysical history of practice and use. Participatory mapping provides a way to collate a wide range of landscape values (Ernoula et al, 2018) providing a visual representation to inform conservation planning. Species, landscapes and ecosystems are valued differently by individuals and across human populations. The participatory mapping of landscape values has drawn on approaches developed by Brown extensive work, in which 14 landscape values were identified and tested: aesthetic, biodiversity, cultural, learning,

therapeutic, spiritual, future, economic, historic, recreation, life sustaining, subsistence, intrinsic and wilderness values. In this framework, we conducted a mapping landscape values workshop to develop more effective conservation planning within the context of the complex social-ecological systems of the place and local people. In addition, to foster knowledge transfer within the group and increase confidence in their experiential knowledge for co-producing knowledge.

The tool "key informant interviews" provided valuable information regarding the traditional know-how of traditional architecture that is vanishing, by reaching to people who had a direct relationship with it, either as users or even builders. The semi-structured interview is considered the appropriate type for extracting information of this kind, as it sets the general subject headings of the discussion while allowing the interviewee to develop thoughts, ideas and memories that may emerge during the interview and constitute important material for recording. The above structure is considered to have the most advantages as a primary research tool, but at the same time requires great effort in evaluating and organising the information collected. Walking interviews gave access to richer understandings of place because interviewees were prompted by meanings and connections to the surrounding environment. Research questions were framed by the 'place' so as to produce insights into attitudes and knowledge about the surrounding environment.

Focus group discussion is widely used in conservation research, as topics ranging from community participation in natural resource management and governance, human-wildlife conflict mitigation, to indigenous ecological knowledge systems can be investigated using focus group discussion. Since one part of the research concerns the study of traditional water supply infrastructures, drawings were used in order to thoroughly document their architecture and various elements. Thus, sketches of the infrastructures prepared in scale, detailed with all necessary measurements and later designed digitally with appropriate software.

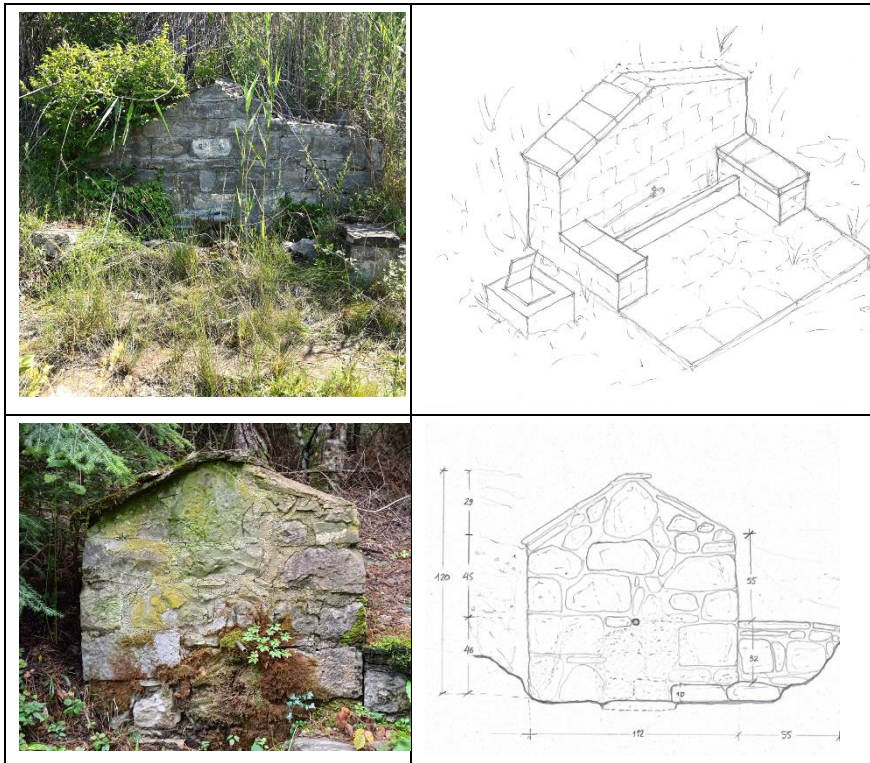


Figure 90. Plan Drawings (Grigoris Koutropoulos, Athina Sifaka Boulouki team)

In addition, the project fosters a participatory conservation governance model and management through the establishment of the “Connectivity Conservation Initiative for Fresh Drinking Water” and the participatory monitoring by a Local Action Group. In this regard, after several meetings with local communities and with key stakeholders on a bilateral condition, a Local Action Group (LAG) that supports the activities of the Initiative has been raised. Its creation was based not on voluntary work but on the active participation of its members with the aim of the best exploitation of the project's deliverables and the co-creation of future activities that are based on the needs of local communities.

Core actions of the project were the two participatory restoration workshops of small-scale water infrastructure and the one-day maintenance interventions to a third infrastructure, ensuring a sufficient water supply for large animals. The most important challenge of the works was the restoration of the water supply and the re-operation of the fountains both for wildlife and humans.

Special care was given to ensure a sufficient water supply for large animals while at the same time prevent the risk of drowning of small forest animals.



Figure 91. Restoration of traditional fresh water supply infrastructure in order to support biodiversity and humans (photo credits: Aris Giannoukos)

Alignment with the call: Climate action, community engagement and shared governance

The CONSERVE CONNECT project demonstrates clear relevance to climate action by integrating ecological restoration, traditional knowledge and participatory governance into a coherent response to the accelerating environmental changes affecting mountainous regions. In the northern Pindus, where shifts in precipitation, rising temperatures and declining snowpack increasingly undermine both ecological stability and human livelihoods, the project operates at the interface of climate mitigation and adaptation. Its work shows that climate resilience in such landscapes cannot rely solely on technical solutions; instead, it must emerge from a combination of low-carbon interventions, community-based monitoring and culturally grounded approaches to managing natural resources (Folke et al., 2003).

The restoration of traditional freshwater infrastructures provides one of the clearest examples of this climate relevance. Springs, stone channels, troughs and fountains have historically functioned as decentralized water systems adapted to the local hydrological rhythms—systems that embody principles found in traditional ecological knowledge (Berkes, 2018). As climate change disrupts those rhythms, increasing drought frequency and extending dry seasons, these structures play a crucial role in stabilizing water availability. Their rehabilitation ensures that water remains accessible to both residents and wildlife during periods of scarcity. Importantly, the materials and techniques used in the restorations—local stone, lime mortars and gravity-based distribution systems—keep the carbon footprint extremely low compared with modern infrastructure. Rather than introducing energy-demanding pumps or concrete-heavy solutions, the project strengthens existing systems that have proven resilient, require minimal maintenance and remain functional under variable climatic conditions. In this way, adaptation measures are achieved without additional emissions, while simultaneously maintaining the cultural fabric of the landscape.

Ecological connectivity is another dimension through which the project contributes to climate resilience. As habitats shift due to warming temperatures and altered snowfall patterns, species such as brown bears and wolves rely on continuous movement across altitudinal gradients to access food, refuge and water. The identification and maintenance of ecological corridors, carried out in collaboration with Callisto, support this climate-driven mobility. Restored water points located along movement routes reduce heat stress during seasonal migrations and ensure survival during extended dry spells. Coupled with the revitalization of traditional footpaths, these actions maintain a permeable landscape essential for species adapting to changing conditions. Connectivity, in this sense, becomes not just a conservation aim but a climate adaptation necessity (Beier & Gregory, 2012; Opdam & Wascher, 2004).

Monitoring has also emerged as a vital climate-related function of the project. The unexpectedly high temperatures recorded in the study areas, surpassing model predictions, underline the urgency of understanding how climate change manifests at local scales. By engaging residents in citizen science activities and providing them with tools to monitor water temperature, water flow rate and basic quality indicators, the project builds a community-based observation network that complements scientific research, highlighting the value of participatory monitoring. This shared monitoring capacity equips local people to recognize early warning signs of environmental stress,

including declining spring flow or warming water bodies, and to participate actively in shaping adaptation responses. In regions where official climate monitoring networks are sparse or distant, this approach ensures that adaptation strategies remain grounded in continuously updated local knowledge (Averill & Dietze, 2011).

Traditional ecological knowledge plays a central role in this climate relevance. Communities in Mastorochochia hold extensive experience in managing water, forests and grazing areas under challenging climatic conditions. These practices offer valuable insights into decentralized governance, risk distribution and resource sharing—principles that resonate strongly with climate adaptation frameworks (Berkes et al., 2000). By documenting traditional ecological knowledge through interviews, community mapping and participatory field visits, CONSERVE CONNECT revitalizes knowledge systems that strengthen social-ecological resilience. Integrating this knowledge with scientific findings creates a more comprehensive understanding of the region's vulnerabilities and adaptive capacities. When communities see their knowledge validated and incorporated, they engage more fully in climate-related decision-making, ensuring that strategies are culturally appropriate and more likely to be sustained over time.

Climate adaptation in mountainous regions is also closely linked to wildfire risk. Rising temperatures and prolonged droughts increase the likelihood of fires, while land abandonment leads to vegetation overgrowth and fuel accumulation. Although the project does not conduct fire management interventions directly, the restoration and maintenance of water infrastructures and footpaths indirectly mitigate fire risk. Clearing vegetation around springs, reopening access routes and promoting light human presence reduce flammable biomass and contribute to a more managed landscape. These actions help preserve forest carbon stocks, prevent severe ecosystem degradation and support the long-term ecological functions that underpin climate resilience.

The project's contributions to ecosystem services further reinforce its relevance to climate action. By ensuring reliable water flow, maintaining soil stability, supporting habitat connectivity and facilitating wildlife movement, the project strengthens the ecological processes that buffer communities against climate extremes. For instance, healthy forests regulate microclimates, store carbon and maintain hydrological balance; wildlife movement supports forest regeneration and diversity; and functioning springs ensure water

availability for both ecological and human needs. The interplay between these services enhances the adaptive capacity of the entire system.

Equally important is the governance dimension of the project, as climate adaptation is fundamentally a governance challenge (Reed, 2008). The establishment of the Local Action Group and the emergence of the Connectivity Conservation Initiative create participatory structures through which communities, scientists, forest authorities and cultural groups can collaborate on climate-relevant issues. These platforms encourage dialogue, collective learning and joint decision-making, embodying the flexible and inclusive governance required to navigate climate uncertainty. The Local Action Group's early activities—such as organizing spring monitoring, coordinating landscape stewardship tasks and engaging residents in ecological discussions—demonstrate how local institutions can translate climate concerns into concrete actions. By anchoring climate adaptation in community agency and shared responsibility, the project strengthens institutional resilience alongside ecological resilience.

A distinctive aspect of CONSERVE CONNECT is its integration of cultural heritage into climate action. The restoration of traditional water infrastructures is simultaneously a technical, ecological and cultural act. It reconnects communities with historical practices that embody sustainable resource management, while cultural events, lectures and guided walks situate environmental change within narratives of identity and collective memory. This cultural grounding enhances the legitimacy and emotional resonance of climate initiatives, fostering solidarity and reinforcing the social networks needed to withstand future climatic stresses. In this sense, climate adaptation becomes not merely a set of environmental interventions but part of a broader continuity of cultural practice and community cohesion.

Finally, the project offers a model that can be adapted to other mountainous regions confronting similar climate challenges. Many rural areas across Europe face shrinking populations, declining traditional knowledge, increasing water insecurity and growing wildfire risk. The approach developed here—restoring low-carbon traditional infrastructures, combining scientific research with community knowledge, strengthening ecological connectivity and building participatory governance—provides a practical, scalable template for addressing these challenges. The project demonstrates that climate action is most effective when rooted in local realities, when it strengthens rather than replaces existing practices and when it fosters long-term stewardship instead of short-term interventions.

By weaving together ecological restoration, cultural heritage, community engagement and scientific inquiry, CONSERVE CONNECT embodies a holistic approach to climate action that responds to immediate environmental pressures while building the foundations for enduring resilience.



Figure 92. Focus Group discussion, Walking interview, Open Lectures (photo credits: Boulouki team, Aris Giannoukos)



Figure 93. Live music and dancing event (photo credits: Boulouki team)



Figure 94. Presentations of the Citizen Science guidebook (photo credits: Boulouki team)

Vision of Desired Change

The project is taking into account the adverse changes that the climate crisis is bringing about to the mountain ecosystems of the Mastorochochia area and delivers participatory restoration workshops of traditional water infrastructures, promoting heritage and nature conservation and restoration. It fosters ecological and environmental regeneration and community empowerment and participation. By the establishment of a place-based

Initiative between local communities, researchers, environmental and cultural associations, local and regional authorities, it secures synergies for conservation, restoration and resilience (national and transboundary) that will foster advanced research, awareness and solutions on conservation efforts and climate action. Specifically, the Initiative is considering the challenges regarding water scarcity, ecological integrity, secure provision of ecosystem services and social-ecological resilience.

Cultural/Ecological Impact

The project intends to improve the integration of sustainability aspects by working on the interface of nature-heritage restoration. It demonstrates the potential to deliver integrated interventions for the beneficiaries that, while contributing to climate change adaptation, will strengthen the interdependencies and symbiosis between wild fauna and humans. For doing so, it enhances active involvement and engagement of the local community and the documentation of traditional knowledge in order to be a catalyst for its successful implementation but also for the sustainability of its impact.

Gaining the support of local communities and key stakeholders for conservation actions is a key impact factor in actually changing behavior patterns, and it is evaluated through focus group discussions. Knowledge sharing between generations fostered intergenerational dialogue and the provision of new forms of communication, mutual understanding, and learning practices. In addition, the restoration of the three water constructions improved vital ecosystem services, leading to structural and functional ecological networks, and the provision of citizen science capacity building workshops regarding water management contributed to social benefits. Overall, continuation of the multi-faceted research (fieldworks, surveys, workshops) to regenerate the traditional knowledge and use it in the contemporary climate adaptation context is a fundamental impact aspect.

The ecological improvements are related to enhancing effective ecological connectivity for conservation, sustainable development and climate change adaptation in a system of core habitats (protected areas, non-protected areas and other intact natural areas) and their associated social actors and institutions. When successful, connectivity conservation enables wildlife to move across landscapes, ensuring access to all resources necessary for survival, genetic diversity and adaptation to environmental disturbances, such as climate change. In this regard, securing fresh water supply for large carnivores and ensuring well-connected habitat patches is essential in a changing climate condition.

Feasibility

Boulouki and Callisto have extensive experience in “bottom-up” governance structures and how to empower local actors to play a leading role in the initiative’s functioning and make decisions through thematic working groups. Partners have established a strong synergy with the Municipality of Konitsa and the UNESCO Global Geopark Vikos-Aoos under an MoU to work further on the governance of the Connectivity Conservation Initiative for Fresh Drinking Water. However, there are obstacles encountered as the lack of institutional recognition of ecological corridors and changes in priorities and frameworks of supporters can threaten long-term commitments. Mitigation activities are based on regular meetings and accountability. Ecological corridors as green infrastructure play a pivotal role in protecting biodiversity and providing services across a wide spectrum of ecological and environmental processes. The need to create and protect them has been explicitly acknowledged in the National Biodiversity Strategy and Action Plan (Ministry of Environment, Energy & Climate Change. 2014).

The most relevant priority actions for the next three years are: the enhancement of both structural and functional connectivity, the monitoring of the environmental disturbances focusing on climate change, the management of human-wildlife coexistence with emphasis on co-creation of solutions with the most affected communities and the design of holistic approaches that tackle both immediate and root cause elements of the challenge, connectivity interventions of isolated habitat patches to support wider interconnected ecological processes, the provision of incentives to local communities to preserve the environment for optimal functionality of corridors (support local producers, improvement of nature-based tourism and geotourism facilities and raise awareness on green jobs).

Conclusions

A high priority is to improve the formal and informal processes and structures through which decisions are made under the impacts of the climate crisis. As conservation connectivity proposed activities are expected to deliver benefits not only to biodiversity protection but also to communities living near or within the Mastorochoria area, it is crucial to comprehend how local people experience the costs and benefits of conservation. The methodology to gain the improvement of participatory and equitable governance and management will deploy equity recognition by respect for resource rights, human rights of community members, all relevant actors and their knowledge and values. This

approach may contribute to the development of an interdisciplinary and cross-cultural conservation and climate adaptation initiative with a more sophisticated understanding of social-ecological interactions dealing with the human-bear-wolf coexistence conflict.

All in all, the project demonstrates the potential to deliver integrated interventions for the beneficiaries that, while contributing to climate change adaptation, enables, by strengthening the interdependencies, the symbiosis among wild fauna and humans and the transition to a natural-cultural restoration framework. For doing so, the project foresees the active involvement and engagement of the local community and the documentation/interpretation of traditional ecological knowledge as a catalyst for its successful implementation but also for the sustainability of its impact.

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Chapter 14

Living Landscapes of Zagori: Reviving Heritage and Ecology in the Transhumance Paths

Dimitra Papaioannidou

Abstract:

Ecomuseum Zagori implements a community-based heritage and environmental program that reactivates local cultural practices as tools for ecological stewardship. Through BioBlitz events, biodiversity recording, participatory mapping and workshops, residents, scientists and young people document local flora and fauna, learn ecosystem interconnections and reveal the cultural and ecological layers of historic transhumance routes. Video portraits and exhibitions share the voices and experiences of the community, while educational programs for children nurture awareness and pride in local nature and culture. The initiative highlights the importance of traditional livestock farming and the crucial role of women in preserving biodiversity, cultural memory and the natural landscape.

Context of the experience

Transhumance is a traditional, multifunctional livestock system that has shaped the cultural, environmental and social character of many Mediterranean regions for centuries. (Olea and Mateo-Tomás, 2009, Pardini and Nori 2011). Based on the seasonal movement of herds between high-altitude summer pastures and lowland winter grazing areas, it is a practice finely attuned to climatic cycles and ecological rhythms. In Greece, shepherding families historically migrated to the cool, lush mountain zones during spring and summer, and to milder lowland regions in autumn and winter, ensuring year-round access to forage. This system allowed herds to

thrive while preventing overgrazing, promoting biodiversity, and sustaining a resilient rural economy.

Beyond its economic role, transhumance has profoundly influenced land use, settlement patterns, social relations, and cultural identity. Recognizing its significance, transhumance was inscribed in 2019 on the UNESCO Intangible Cultural Heritage List.

Despite its deep roots, the practice has undergone severe decline in recent decades (Dong et al. 2011). The decline places at risk not only biodiversity (Sklavou et al. 2017), but also the cultural continuity associated with transhumance, the memory, craftsmanship, and knowledge systems that supported mountain communities for generations.

The wider region of Zagori, Konitsa, and Pogoni in Epirus offers a striking example of this transition. Nestled within the Pindos Mountains, the area is among Greece's most remarkable biocultural territories, where pastoralism long formed the backbone of community life. Its deep gorges, alpine meadows, forests, and stone-built villages form a landscape shaped by centuries of interaction between people and nature.

Today, however, these landscapes face multiple pressures. Demographic decline, land abandonment, and climate pressures have put traditional knowledge and ecological systems at risk.

In this context, Ecomuseum Zagori emerged as a community-driven initiative seeking to reconnect people, heritage, and landscape. The ecomuseum model recognizes the territory itself as a living museum, activated through the participation and knowledge of its inhabitants. The initiative responds to the contemporary challenges facing transhumant heritage by combining cultural documentation, scientific research, and community engagement. Through biodiversity recording, participatory mapping of pastoral routes, video portraits, exhibitions, and educational activities, Ecomuseum Zagori works to reconnect residents, especially youth and women, with the cultural and ecological legacy of their landscape.

Ecomuseum Zagori's work aims to honor this heritage as a living practice, capable of guiding regenerative futures in the Pindos Mountains and beyond. Through these actions, it seeks to contribute substantially to sustainable landscape management and to promote a practice with a profound cultural and environmental impact.

Description of the experience

The initiative is rooted in the traditional practice of transhumance, an adaptive pastoral system based on the seasonal movement of herds between high-altitude summer pastures and milder lowland wintering grounds. This practice, present across the Mediterranean, has long been intertwined with ecological management, cultural identity, and community resilience. In the mountains of Epirus, transhumance created a dynamic relationship between people, animals, and terrain, producing a living cultural landscape where paths, settlements, grazing patterns, and social structures evolved together. As this practice declines, both the biodiversity it sustained and the cultural knowledge that supported it face significant risk.

The initiative, developed by the Hellenic Ornithological Society in collaboration with Ecomuseum Zagori and supported by the Prespa Ohrid Nature Trust (PONT), emerged as a response to this ecological and cultural weakening, aiming to regenerate community-land relationships through a program that integrates biodiversity recording documentation, participatory workshops and audiovisual storytelling.

The central concept of the initiative is to preserve and promote transhumance and its role in biodiversity and cultural conservation. Within this framework, the project developed a multi-layered program encompassing a wide range of activities designed to reconnect residents with transhumant heritage while building ecological awareness and fostering collective responsibility for the future.

A first major component involved the participatory documentation of transhumance routes. Many of these paths had become fragmented due to land abandonment, changes in livestock practices, and the decline of seasonal mobility. Working closely with shepherds and local associations, the team engaged in field expeditions that combined walking, listening, mapping, and storytelling. GPS devices, notebooks, cameras, and drones helped to create a systematic record of these routes, while the embodied experience of walking allowed the group to physically reconnect with forgotten landmarks. This embodied method aligns with cultural anthropology approaches emphasizing the role of “walking as a mode of knowledge production” in landscape-based heritage studies (Ingold 2011; Vergunst & Ingold 2008).

Alongside route documentation and trail mapping, Ecomuseum Zagori organized a series of BioBlitz events designed to build ecological awareness while generating valuable biodiversity data. These events brought together scientists, naturalists, residents, and young people to document plants, insects, fungi, and birds. Participants used mobile applications and field guides,

learning to identify species while understanding how their presence is connected to grazing practices, microclimates, and habitat structures maintained by pastoral activities. Elders frequently contributed knowledge about plant uses, weather indicators, and seasonal cycles, blending traditional ecological knowledge with scientific observation. The BioBlitzes revealed the extraordinary diversity present in areas shaped by transhumance and highlighted the ecological consequences of its decline. For many participants, these events provided a new perspective on familiar surroundings, transforming the mountains from a backdrop into a living ecosystem whose complexity depended on human interaction.

Soundwalks and soundscape recordings formed another key dimension of the project, enriching both the scientific and cultural layers of documentation. Residents, schoolchildren, visitors and shepherds, participated in guided walks designed to attune them to the acoustic ecology of the landscape like the bells of grazing animals, bird calls linked to habitat types, wind patterns etc. The soundwalks not only generated an audio archive of transhumant landscapes but also offered a sensory, experiential method of learning, allowing participants to understand ecosystems not only visually but through deep listening.

These recordings, along with photographs, species observations, and mapped routes, were uploaded to the Echoloci Application for iOS and Android, where each trail segment becomes a layered cultural–ecological corridor. The platform ensures long-term accessibility for locals, visitors, researchers, and educators, transforming the collected material into an evolving digital commons.

Audiovisual documentation formed another major strand of the experience. The team produced a series of video portraits featuring women shepherds, showcasing the role of women in a male dominated sector. These portraits capture personal stories, reflections on the changing landscape, and insights into the ecological logic of transhumance. Women played a central role in these sessions, sharing memories related to weaving, cheese-making, food preservation, childcare, and the maintenance of home and village life during transhumant journeys.

Several exhibitions were organized in local villages, combining photography and audio-visual installations. These exhibitions travelled across different communities, prompting dialogue on landscape change, biodiversity, gender roles, and the future of local livelihoods. They allowed residents to see their

own stories represented in a public forum, fostering pride, recognition, and a renewed sense of collective identity.

A crucial pillar of the initiative was the development of educational programs for schools in the area. Collaborating closely with teachers, Ecomuseum Zagori created a curriculum that integrates biodiversity observation, cultural heritage, and place-based learning. Children participated in outdoor explorations, soundwalks met a local shepherd and his animals, helped in everyday tasks, cultivating a deeper understanding of how human practices shape ecological systems. These programs not only enriched local education but also addressed a broader challenge facing mountain communities: the outmigration of youth and weakening connections to the land. By offering meaningful engagement with local heritage and ecology, the project encouraged young people to value their homeland and consider their potential role in its future.

The success of the initiative is inseparable from its community-centered methodology. Partnerships were established with shepherd families, women farmers, cultural associations, universities, schools, environmental organizations, and municipal bodies. This collaborative network enabled the project to expand its reach while remaining grounded in community realities. The participatory approach also ensured that the work generated tangible benefits for those involved: strengthened social ties, revitalized cultural pride, enhanced ecological knowledge, and increased visibility for local perspectives.

Over time, the project demonstrated that the revitalization of transhumance is not an attempt to resurrect a past way of life but an opportunity to support environmentally sustainable futures. The adaptive logic of transhumance, like its attention to seasonal cycles, climatic variation, and landscape capacity, offers valuable lessons for contemporary environmental challenges. By documenting routes, sharing stories, and observing biodiversity, participants recognized that the cultural memory of transhumance contains practical insights relevant to climate change adaptation, fire prevention, and habitat conservation.

In conclusion, the initiative developed an integrated, participatory, and deeply place-based experience that reconnects communities with the cultural and ecological legacy of transhumance. Through trail mapping, biodiversity events, audiovisual storytelling, community workshops, and educational activities, the project revitalizes traditional knowledge, cultivates environmental awareness, and strengthens social cohesion. It demonstrates that cultural landscapes are living systems sustained through everyday

interactions between people and nature. In the mountains of Pindos, heritage remains a dynamic force.



Figure 95. Images of the activities



Figure 96. Images from the exhibition.

Alignment with the call

Climate Action Relevance

The initiative demonstrates a direct and practical contribution to climate action by linking traditional pastoral practices, ecological stewardship and community-based heritage initiatives in the Pindos Mountains of Epirus, Greece. At the core of the project is the recognition that transhumance, as a seasonal livestock farming system, embodies ecological knowledge that inherently supports climate adaptation and mitigation. Through the controlled movement of herds between high-altitude summer pastures and lowland winter grounds, the system maintains open meadows, prevents shrub encroachment, and reduces fire risk, thereby sustaining biodiversity, promoting carbon sequestration, and contributing to the resilience of local ecosystems (Minotti et al., 2018, Ispikoudis et al., 2004). By revitalizing and documenting these routes through participatory mapping, field expeditions, and community workshops, the project translates traditional ecological knowledge into actionable climate solutions, showing how culturally rooted practices can serve as effective strategies in the face of climate variability (Olea & Mateo-Tomás, 2009, Ruiz & Ruiz, 1986).

Cultural Sustainability

Cultural sustainability is equally central to the initiative. Transhumance is not simply a means of animal husbandry, it is a cultural system that has historically shaped the social, spatial, and ecological fabric of the Pindos region. Seasonal migration routes, resting areas, stone-built infrastructure, and associated rituals, like music, collectively form a living cultural landscape that encodes knowledge about sustainable land use, ecological observation, and community governance (Herzog et al., 2005; UNESCO, 2019). Ecomuseum Zagori ensures that this heritage remains visible, accessible and actively transmitted across generations. Oral histories capture interwoven narratives of landscape, livestock management, and daily life, emphasizing the role of women in sustaining households, preserving biodiversity, and managing seasonal transitions. By highlighting these often overlooked dimensions of pastoral life, the project demonstrates that cultural heritage is inseparable from environmental stewardship and serves as a living framework for ecological sustainability (Berkes, 2012; Heather et al 2023).

Community Resilience

The project strengthens community resilience by fostering social cohesion, intergenerational exchange, and adaptive capacity. Through participatory mapping of transhumance routes, community members identify, walk, and

digitally record historic paths that were abandoned. This process combines embodied knowledge and GPS-based mapping to reconstruct ecological and cultural knowledge collaboratively. Workshops, field trips and educational programs bridge the knowledge gap between elders, women, and youth, enabling the transmission of practical skills, ecological observation, and cultural values. Such intergenerational engagement promotes adaptive governance within the community, reinforcing trust networks and providing mechanisms for collective response to socio-ecological challenges including climate change, depopulation, and the decline of traditional livelihoods (Fernández et al 2008, 2006; Oteros-Rozas et al., 2013).

Creativity and Participatory Approach

Creativity and participatory approaches are embedded in all aspects of the project. The initiative employs artistic tools such as video portraits, exhibitions, sound recordings, to represent the lived experience of pastoralists and the ecological richness of the mountains. These creative strategies not only engage participants emotionally but also catalyze knowledge-sharing and collaborative interpretation. Video interviews capture shepherds' insights on herd management, women's knowledge of craft and food preservation, and youth perspectives on environmental change, while photographs, maps, and soundscapes provide multisensory representations of heritage. BioBlitz events further exemplify this creativity: residents, scientists, and students jointly record local flora and fauna, integrating citizen science with cultural learning. Participants observe, document, and analyze biodiversity, while simultaneously reflecting on the interconnectedness of ecological processes and traditional practices (Lundmark et al., 2014; Berkes, 2012). Such integrative methods demonstrate how creativity can serve as a medium for community empowerment, ecological awareness, and intergenerational learning.

Community Engagement

Community engagement in the initiative is extensive, structured, and inclusive. The project uses co-design processes in which residents contribute to the planning, execution, and interpretation of fieldwork, workshops, and exhibitions, ensuring that local voices drive decision-making. These engagements span from short-term educational activities to sustained relationships that foster climate awareness, equity, and collective agency. The model emphasizes long-term relational engagement rather than transactional interactions, ensuring that outcomes extend beyond immediate project

outputs to support systemic adaptation and community cohesion (Smith, 2006, Waterton & Watson, 2013).

Vision of Desired Change

The vision of desired change in the project articulates both ecological and social transformation. The targeted beneficiaries include local communities, especially youth, women, and pastoral families, as well as regional ecosystems and cultural landscapes. The expected changes encompass shifts in values, knowledge, and practices. The project catalyzes change by combining embodied knowledge, scientific observation, and creative representation, demonstrating that systemic transformation can be achieved by leveraging cultural heritage as a tool for ecological adaptation, climate resilience, and social cohesion (Ingold, 2011).

Cultural/Ecological Impact

Cultural and ecological impacts are evident in both qualitative and quantitative dimensions. Culturally, the project has strengthened community identity, pride, and cohesion, particularly by elevating women's knowledge and facilitating intergenerational dialogue. Ecologically, documented transhumance routes and biodiversity surveys have identified habitats requiring conservation and highlighted areas with species richness. Socially, educational programs and community workshops have improved environmental literacy, increased civic engagement, and fostered intergenerational knowledge transmission. Anticipated future impacts include the continued strengthening of local ecological stewardship, replication of participatory methods in other biocultural landscapes, and reinforcement of sustainable livelihoods linked to cultural tourism and pastoral practices.

Feasibility

The feasibility of the project is underpinned by strong partnerships, institutional support, and available resources. Collaboration with local schools, municipal authorities, environmental NGOs, local cultural associations, and universities ensures a multi-stakeholder foundation that supports practical implementation. Specifically, the collaboration with the Hellenic Ornithological Society and the funding support of the Prespa Ohrid Nature Trust-PONT was a catalyst for the implementation and success of the initiative. The integration of digital tools, such as GPS mapping and the Echoloci Application, facilitates scalable data collection, visualization, and dissemination. Sustainability is further reinforced through capacity-building

initiatives that train community members in documentation, monitoring, and interpretation, ensuring the continuity of knowledge and practices beyond the initial project cycle.

In summary, this initiative aligns closely with the objectives of the Weavers of the Future call by integrating climate action, cultural sustainability, and community resilience into a single, participatory, and creative framework. By revitalizing transhumance, documenting biodiversity, engaging youth and elders in co-created knowledge processes, and foregrounding the cultural contributions of women, the project exemplifies how local heritage can function as a mechanism for ecological and social regeneration. Through participatory mapping and citizen science, it demonstrates innovative methods for fostering community-led climate adaptation. The initiative strengthens social cohesion, amplifies local knowledge, preserves cultural landscapes, and improves ecosystem functionality. It offers a replicable model for bioregional regeneration that bridges local action with global climate goals, emphasizing that the intersection of culture, ecology, and creativity is essential to building resilient futures rooted in knowledge, care, and collective agency (Herzog et al., 2005, Oteros-Rozas et al., 2013).

Conclusions

The initiative exemplifies the transformative potential of linking cultural heritage, ecological knowledge, and community participation to address contemporary environmental and social challenges. By revitalizing transhumance, recording local biodiversity, and highlighting the pivotal role of women shepherds in maintaining ecological and cultural knowledge, the initiative demonstrates that heritage is a living, actionable system capable of supporting climate adaptation, biodiversity conservation, and community resilience. The project illustrates how local knowledge, when combined with creative educational, artistic, and scientific methods, can foster ecological stewardship, strengthen cultural identity and nurture social cohesion.

Community engagement and participatory approaches have been central to the project's success. Through workshops, field expeditions, participatory workshops, and multimedia storytelling, local residents and associations collaborate to document, interpret, and transmit knowledge about heritage and the natural environment. Creative tools have amplified learning, inspired reflection, and made complex ecological and cultural connections accessible, reinforcing the role of heritage as both a pedagogical and ecological resource.

Looking to the future, the initiative offers multiple avenues for growth to enhance its ecological, social, and cultural impact. Integrating the knowledge generated through participatory mapping and BioBlitz activities into climate adaptation strategies would link local practices with broader policy frameworks, ensuring sustained ecological benefits. Expanding educational programming would broaden engagement, inspiring new audiences while reinforcing local identity. Collaboration with other cultural institutions across the Mediterranean could foster knowledge sharing, comparative learning, and advocacy for the protection of cultural landscapes and traditional pastoral practices. The development of heritage-based ecotourism initiatives and citizen science networks could further generate socio-economic opportunities while sustaining ecological and cultural stewardship.

In conclusion, the initiative demonstrates how cultural heritage, ecological knowledge and participatory creativity can converge to address climate change, preserve traditions and strengthen community resilience. Its holistic approach fosters tangible ecological, cultural, and social outcomes while providing a replicable model for bioregional regeneration. By weaving together people, knowledge, and landscape, the project ensures that heritage remains a living, actionable force for inclusive, sustainable, and resilient futures. Through continued development, Ecomuseum Zagori promises to expand its ecological, social, and cultural impact, reinforcing the vital role of local knowledge and collective action in shaping sustainable pathways for communities facing global environmental and cultural challenges.

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Chapter 15

Essere parte del fiume: l'Olona attraverso di noi - Being Part of the River: The Olona Flowing Through Us

María Soledad González-Reforma and Raul Dal Santo

Abstract:

This is an ecosocial art and community participation initiative (2024–2025) developed with Parco dei Mulini and the Ecomuseo del Paesaggio di Parabiago. The project seeks to rebuild the community's connection with the Olona River, recovering its historical and emotional memory after decades of neglect. It combines research, collaborative art creation, and public engagement, culminating in an exhibition that blends artworks, narratives, and interactive spaces. The initiative highlights how artistic practices can foster dialogue, collective responsibility, and environmental awareness in local communities.

Context of the experience

The Olona Valley is a historic river landscape located north of Milan. It is structured around the Olona River and a dense hydraulic network that, since Roman times, has shaped agricultural, artisanal, and industrial activities. The river—whose name is etymologically linked to its significance rather than its flow—powered hundreds of mills for centuries and, from the nineteenth century onward, sustained the development of the textile industry. This process gave rise to factory complexes, workers' districts, and infrastructures that continue to shape the material memory of the valley today (Pravettoni, 1984, pp. 41–43). Industrial expansion brought with it the straightening of the riverbed, canalization, and severe pollution discharges which, by the mid-twentieth century, placed the Olona among the most polluted rivers in Italy (Pravettoni, 1984, p. 44). Since the late twentieth century, and particularly

following the signing of the *Contratto di Fiume Olona, Bozzente e Lura* in 2004, a “river renaissance” has emerged, promoting environmental sanitation, ecological monitoring, and shared governance (Fanzini, Riva & Dal Santo, 2019, p. 69).

Within this environmental and sociohistorical context, the Ecomuseo del Paesaggio di Parabiago was established in 2002 as a community-driven response to the growing social and ecological disconnection between local residents and their landscape, with the explicit aim of reclaiming the landscape as a common good (Dal Santo & Rossoni, 2010). Officially recognized by the Lombardy Region in 2007, the Ecomuseum operates as a *living laboratory* that integrates heritage, landscape, and civic engagement through participatory methodologies (Dal Santo, 2008). One of its core tools is the Community Map, a collaborative cartographic process used to identify places of environmental, historical, and cultural significance while guiding preservation strategies and sustainable development planning (Dal Santo & Vignati, 2017). Building on these processes, the Parco dei Mulini was established in 2008 as an intermunicipal park to protect the territorial system formed by the Olona River, its canal networks, and surrounding agricultural areas. This initiative has become a reference point for intermunicipal governance aimed at ecological restoration and cultural regeneration (Dal Santo & Vignati, 2017, pp. 6–9).

It is from this institutional framework—linking the ecomuseum, landscape, and local communities—that the present project was developed in collaboration with artist Marisol González-Reforma. The initiative is conceived as an ecosocial art and community participation project aimed at reconnecting local residents with the river and its layered memories. It adopts a territorial approach that combines local knowledge, historical memory, and creative practices. Through a series of workshops, forums, and participatory activities, community members reinterpret their relationship with the river, reflect on its textile and environmental legacy, and actively contribute to the creation of artistic and narrative works that are integrated into public spaces and ongoing ecological restoration efforts.

This experience puts into practice several of the core dimensions emphasized in the call for contributions. First, it activates the interconnection between culture, climate, and biodiversity by positioning the river as both a common good and a central narrative axis. In doing so, it re-signifies the industrial and textile legacy through a just transition perspective, linking memory and ecological regeneration. Simultaneously, it fosters local empowerment and

participation through non-hierarchical methodologies—such as Community Maps, questionnaires, and participatory workshops—that enhance civic agency and support the co-creation of knowledge and practices. Furthermore, the initiative is embedded within an existing governance infrastructure—anchored in the Ecomuseum, the Parco dei Mulini, and local associations—that ensures continuity, institutional collaboration, and the potential for replication in other river corridors.

In this way, the project integrates the memory of the Olona, its industrial heritage, participatory art practices, and territorial governance to regenerate the relationship between communities and ecosystems, while contributing to broader strategies for cultural and ecological resilience (Dal Santo & Vignati, 2017).

Description of the experience

The methodology of *Essere parte del fiume* is grounded in a participatory action-research approach, in which artistic mediation serves as a central tool for strengthening connections between community, territory, and ecosystem. For its development, the project drew on both the artistic methods of the lead artist and the participatory strategies of the Ecomuseo del Paesaggio di Parabiago, directed by Raul Dal Santo, as well as on an adaptation of the Inside–Outside Model and the Critical Assessment Framework developed by Douglas Worts.

This model, discussed in depth in chapter 2, was originally conceived to guide museum planning and management, but here it was translated into the artistic and community domain. It retained its capacity to evaluate cultural and social impacts at different scales—individual, community, institutional, and global—while also incorporating an ecological dimension. In this way, the project responded not only to community perceptions but also to the needs and opportunities of local ecosystems, actively integrating cultural, social, and environmental dimensions.

Phase 1. Context Study and Participatory Diagnosis

The first stage focused on a comprehensive analysis of the context of intervention. This included documentary research, the study of previous projects, consultation of existing community maps, and field observations and walks led by the artist. Additionally, statistical and qualitative data from past experiences were examined to situate the Olona River in its full historical, cultural, and ecological complexity.

As part of this process, intergenerational questionnaires were designed and administered to collect perceptions, memories, and emotional connections associated with the river. Inspired by the *luoghi del cuore* project of the Ecomuseum, the tool combined closed questions—yielding quantifiable data—with open questions aimed at collecting personal narratives and creative suggestions. Its structure captured the voices of three generations (children, adults, and older people), allowing for comparative and intergenerational analysis.

The results revealed a deep disconnection between the local population and the Olona River: while “nature” was among the most highly valued elements, only 3.2 % of respondents mentioned the river as a meaningful place, and 4 % even identified it as something dispensable in the landscape. These patterns mirrored those observed in 2012, confirming that the disconnect is not circumstantial but structural and persistent (González-Reforma, 2025). The large share of responses with no clear emotional attachment also showed that the river has historically been perceived as a marginal space, associated with contamination and neglect.

However, signs of opportunity were also evident: younger generations associated the river with positive emotions such as joy, relaxation, and hope, whereas older participants expressed nostalgia and sadness (González-Reforma, 2025). This contrast revealed fertile ground for reconstructing narratives and affective bonds, reactivating memory, and re-signifying the river through new cultural and ecological practices.

Phase 2. Building the Collaborative Network and Designing Activities

The second phase focused on defining the network of collaborators and participants. Strategic alliances were established with key organizations such as Legambiente—with extensive experience in community environmental awareness—and LIPU, whose work monitoring bird species provides valuable ecological data for park management. Both organizations participated in the design and implementation of the workshops, contributing technical expertise and volunteer support.

The search for participants aimed to bridge different generations. Partnerships were formed with local schools and the community’s senior residence, resulting in diverse working groups. Three schools (in Legnano, Villastanza, and Parabiago) and a group of twelve older women from the residence and local embroidery associations joined the project. This intergenerational structure made it possible to work from different memories

and perspectives, connecting the experiences of those who lived through the period of river pollution with the fresh outlook of younger participants.

Phase 3. Implementation and Artistic Mediation

The third phase consisted of the implementation of artistic mediation through a series of differentiated workshops:

The first workshop, with children aged 6–10, used sensory and play-based strategies to introduce basic concepts of biodiversity through bird identification and drawing.

The second workshop, with elderly women aged 85–100, created an embroidered emotional map of the river, weaving memories and visions. Inspired by Francesco Careri, it revealed both visible and invisible layers of the landscape while reinterpreting the Olona Valley's textile legacy, historically linked to industrial pollution.

The third workshop, with children aged 10–12, used cyanotype printing to connect ecological knowledge and creative expression, followed by a planting day in a nearby wetland.

The fourth workshop, with pre-teens, explored collective narratives through oral storytelling, drawing, and symbol creation, culminating in a community walk where the children shared their stories with local residents, strengthening intergenerational dialogue.

After both workshops, participants wrote their reflections, adding a narrative layer later integrated into the final artworks.

Phase 4. Public Presentation and Final Exhibition

The final phase was a public exhibition bringing together embroidery, cyanotypes, drawings, maps, and sound pieces. More than a closing event, it became an open space that extended the experience and seeded future community processes around the Olona River.

Once the exhibition was completed, the Critical Assessment Framework by Douglas Worts was adapted to carry out a self-evaluation of the project.

Alignment with the call

The *Essere parte del fiume* project is positioned at the intersection of climate action, cultural sustainability, and community resilience. Its starting point is the recognition that the climate crisis involves not only environmental

transformations but also the loss or weakening of cultural and social bonds with the territory. The recent history of the Olona River illustrates this issue clearly: decades of industrial pollution and riverbed alteration pushed it into collective oblivion, creating a deep disconnection between the local population and an ecosystem that for centuries had been both a source of life and an economic driver for the region.

By focusing its intervention on the Olona River and its ecological surroundings, the project seeks to rebuild that symbolic and emotional relationship with the river landscape. It does so through participatory and creative processes that integrate the voices, memories, and perceptions of the community, strengthening environmental awareness and connecting the local scale (the river and its immediate surroundings) with the global scale (the climatic and ecological dynamics affecting the planet).

In this sense, artistic practices are not conceived as technical solutions to environmental problems, but as symbolic actions that empower the community and inspire it to strengthen its ties to the territory. The aim is to activate collective imaginaries, spark reflection, and foster a shared environmental culture — a fundamental basis for adaptation and resilience in the face of climate change.

One of the elements that explains the strength of *Essere parte del fiume* is that it did not emerge from scratch, but was embedded within an already well-established institutional framework. The Ecomuseo del Paesaggio di Parabiago has spent more than two decades building its work from the territory itself, in constant dialogue with the local community and with sustained attention to the social, cultural, and environmental needs of the Olona Valley.

In this sense, the project did not represent a radical shift in the way the ecomuseum operates, but rather a natural evolution of its practice: the introduction of artistic tools opened up new ways of engaging with the community, especially with people and groups who do not usually take part in more conventional heritage or environmental processes.

Art functioned as a bridge: it maintained the ecomuseum's characteristic territorial and participatory approach while offering other, more sensitive, symbolic, and accessible forms of engagement. This combination of consolidated practices and methodological innovation strengthens the institution's cultural sustainability by demonstrating its ability to adapt to social and environmental change without losing coherence with its territory.

Creativity and Participatory Approach

The *Essere parte del fiume* project placed creativity and community participation at the core of its ecosocial action strategy. Through diverse creative languages and participatory methodologies, it fostered intergenerational experiences that connected memories, perceptions, and local knowledge, encouraging a symbolic and emotional reappropriation of the Olona River and its surrounding environment.

The implementation phase, as previously outlined, combined four workshops along with an intervention in a nearby wetland area, weaving together concrete action and the construction of collective imaginaries.

Workshop 1. The first workshop involved 200 children aged six to ten from the Istituto Paritario Barbara Melzi and was developed in collaboration with LIPU. It was based on the conviction that environmental education should begin with sensitive, accessible experiences that enable young children to recognize, listen to, and actively connect with their natural surroundings. Since the activity had to take place within the school, it was adapted to preserve its participatory character without requiring outdoor displacement.

In the first part of the session, the children were invited to freely draw an animal. When the drawings were observed collectively, domestic species such as dogs and cats predominated, but unexpectedly, birds and animals native to the Olona River valley also appeared. This created a spontaneous space for reflection on local biodiversity. In the second part, recordings of birdsongs were played so the children could identify and match them with corresponding images.



Figure 97. Image of some drawings from the first workshop.

Workshop 2. Twelve women aged between 85 and 100 took part in a workshop that transformed the findings from initial surveys, historical research, and the ecological analysis of the Olona River into a collective artwork. The activity focused on creating an embroidered emotional map of



Figure 99. Women embroidering during the workshop.

Inspired by Francesco Careri, the map adopted an inverted cartography: empty spaces represented the city and filled spaces symbolized nature and the hidden groundwater system sustaining the valley. This allowed the map to reveal both the visible and invisible dimensions of the landscape. More over, the map was conceived as three modular panels measuring one and a half by one meter, inspired by the banners of the Greenham Common Women's Peace Camp. This modular structure allowed the pieces to be joined or separated, serving as a metaphor for collective construction and the open, evolving nature of the project (González-Reforma, 2025).

Textiles were chosen both for their symbolic and territorial relevance. They connect to the artist's personal family history of sewing and embroidery as spaces of care and shared knowledge, and to the textile legacy of the Olona Valley, historically tied to Milan's fashion industry and its environmental impacts.

Piccola Custode: A Floating Island of Care

Before developing the cyanotype and storytelling workshops, the project introduced “Piccola Custode”, a floating treatment island made of macrophytes and shaped like an oak leaf, a tree species symbolic of the region. The installation was designed in collaboration with Valter Porzio, a specialist in naturalistic engineering and founder of *EULAND – Piante contro cemento*. Floating treatment wetlands function as biological filters: the submerged roots of the plants absorb nitrogen and phosphorus, facilitate the sedimentation of suspended particles, and create surfaces where microbial communities thrive and help purify the water. These systems improve water quality while creating habitats for birds, insects, and other organisms, thereby enhancing biodiversity.



Figure 100. Images of the evolution of *Piccola Custode* in Golena 4 over one year.

Although modest in scale, *Piccola Custode* embodied the idea that small, tangible actions can drive broader ecological change when embedded in collective efforts. The piece became both an ecological intervention and a symbol of shared responsibility, anchoring the artistic workshops in a real environmental transformation.

Workshop 3 (Children, 10–12 years) – Students from Scuola Manzoni participated in a cyanotype workshop, using sunlight to imprint collected leaves and plants onto paper. This technique encouraged them to combine ecological knowledge with creative expression, making direct connections between the natural environment and their artistic production. The group also took part in a planting day at the Golena 4 wetland, linking art and ecological restoration in practice.



Figure 101. Images of the activities from the third workshop: cyanotype and planting.

Workshop 4. The fourth workshop, with Students from Scuola Ranzillio, reversed the order. It began with a sensory experience in the landscape and culminated in the creation of stories that built new narratives about the river. The walk acted as a catalyst for a more reflective and metaphor-rich form of expression.

The activity culminated in an open community walk along the Olona, during which the children performed and shared their stories with local residents. This final moment transformed the workshop into a public act of storytelling, reinforcing intergenerational dialogue and collective engagement with the river.



Figure 102. Images from the fourth workshop: *Nuovi miti e poemi del fiume Olona*.

After both the cyanotype and storytelling workshops, the children were invited to write down their perceptions of the experience. These reflections offered valuable insight into what they had felt and learned throughout the process, and many of their words were later incorporated into the final artworks, adding an additional layer of meaning and authorship to the collective piece.



Figure 103. Children's reflections on the activity and the artwork

The responses from Workshops 3 and 4 revealed two complementary layers: in the cyanotype workshop, immediate emotions and perceptions linked to action predominated; in the storytelling workshop, more complex symbolic elaborations and a deeper awareness of the ecosystem emerged. Comparing both processes highlighted the value of combining embodied experience, artistic expression, and narrative construction to strengthen the community's connection with the territory.

Phase 4. Public Presentation and Final Exhibition

The final phase focused on publicly sharing the outcomes. An exhibition brought together and integrated the materials created during the workshops: embroidery pieces, cyanotypes, drawings, maps, and sound recordings. The exhibition served a dual purpose: on the one hand, to recognize and make visible the collective work of participants; on the other, to broaden the impact of the experience by fostering dialogue with a wider audience.

Importantly, the exhibition was not conceived as a closure, but as an open device, prolonging the process and enabling the emergence of new participatory dynamics. In this way, the project was designed not as a one-off intervention limited to its original participants, but as a seed for future community processes around the Olona River and its shared memory.



Figure 104. Images from the exhibition held at the Castle of Legnano.

Community Engagement

From its inception, *Essere parte del fiume* was built on a co-creation approach in which the community was not a passive audience but an active agent in defining the project's content, methodologies, and outcomes. The diagnostic and planning phase was carried out through questionnaires, interviews, and intergenerational meetings that not only identified perceptions, memories, and needs but also shaped the artistic intervention itself. The embroidered phrases, the narratives created, and the visual elements of the works emerged from this collaborative process, ensuring that community voices were genuinely represented.

For those reasons, a key aspect of the initiative was the involvement of multiple generations: young children, preteens, adults, and older adults. Each group contributed unique perspectives on the Olona River—from memories tied to the textile industry to fresh outlooks focused on biodiversity and the future.

Project governance was structured horizontally, drawing on the participatory framework already established by the ecomuseum, although most of the organizational responsibilities were shared between the artist and the ecomuseum. Responsibilities were distributed among the artist, the ecomuseum's technical team, environmental associations such

as LIPU and Legambiente, local schools, and community groups. This structure fostered transparency, co-responsibility, and collective decision-making regarding activities, timelines, and project goals.

The participatory strategy was conceived not as a one-time engagement but as a layered process. In the short term, the workshops generated meaningful experiences, ecological learning, the creation of collective artworks, and direct interaction with the territory. In the medium and long term, by embedding itself in established community structures (ecomuseum, park system, associations), the project strengthened existing relationships and cultivated new ones, linking care for the river to a broader vision of climate action and territorial justice.

In this sense, participation operated as a tool for cultural transformation: it was not only about involving people in activities but about activating bonds, shared responsibilities, and a collective ecological awareness capable of extending beyond the project's duration.

Vision of Desired Change

Essere parte del fiume is grounded in a transformative vision situated at the intersection of culture, ecology, and community. Its objective is not merely to intervene temporarily in a territory but to activate social and symbolic processes capable of generating lasting change over time.

Who changes

The project, whose framework is inspired by Inside-Outside Model by Douglas Worts, is designed to operate at multiple levels of transformation. First, it targets the local community of Parabiago and the Olona Valley, with a special focus on children, young people, and older adults as carriers of memories, knowledge, and future visions. Second, it involves existing community institutions—particularly the Ecomuseo del Paesaggio di Parabiago and the Parco dei Mulini—which play a key role in mediating between civil society and the territory. Finally, it engages associations already working on environmental stewardship, reinforcing the connection between culture, ecology, and civic participation.

What changes

The vision of change focuses on transforming values, relationships, and ecological and cultural practices.

- **Individual level:** Strengthening emotional bonds with the river landscape, fostering a sense of belonging, ecological awareness, and individual agency.
- **Community level:** Reinforcing intergenerational relationships, collaboration among local actors, and the construction of shared narratives and imaginaries around the river.
- **Institutional and territorial level:** Integrating participatory cultural practices into environmental management and ecological planning strategies, contributing to more inclusive governance.

How change is catalyzed

The transformation strategy is not based on isolated actions but on an accumulative and relational process. Artistic practices function as catalysts: they activate emotions, memories, and narratives that reshape how the community perceives and relates to its environment. By embedding itself within already consolidated community structures, the project ensures continuity and the potential for replication.

Change is catalyzed through:

- **Participatory creative processes** that inspire new ways of imagining the territory.
- **Symbolic ecological interventions** that connect art and climate action in tangible ways.
- **Long-term community structures** that sustain and expand the project's initial impact.

In this way, the transformation extends beyond the local level: by strengthening eco-social awareness and fostering new forms of participatory governance, the project aligns with global challenges such as climate change adaptation, environmental justice, and cultural sustainability.

Cultural/Ecological Impact

The evaluation of *Essere parte del fiume* was conceived from the outset as a self-assessment tool to identify achievements, areas for improvement, and guide future actions. It applied an adaptation of the Critical Assessment

Framework developed by Douglas Worts, integrating the ecological dimension across personal, community, institutional, and global levels.

At the personal and community levels, high scores (4–5) reflected perceptual and emotional shifts, strengthening the connection with the Olona River and recognizing art as a catalyst for memory and a sense of belonging.

At the institutional level, methodological coherence and local partnerships were positively valued, though logistical and communication challenges were noted.

At the global level, the project was recognized for its replicability and its ability to link local action to broader eco-social challenges such as environmental justice and the *Objetivos de Desarrollo Sostenible*.

Feasibility

The feasibility of *Essere parte del fiume* was built on a collaborative structure that combined the artistic initiative with established institutional partnerships. The artist led the methodological design, cultural mediation, and creative coordination, ensuring coherence between the aesthetic, ecological, and community dimensions of the Project. The Ecomuseo del Paesaggio di Parabiago provided infrastructure, territorial legitimacy, and collaboration networks, while schools and associations such as LIPU and Legambiente contributed technical expertise and community engagement. This network allowed the project to be carried out efficiently, maximizing limited resources.

The future sustainability of the project rests on three complementary pillars. First, on the consolidated local structures —such as the ecomuseum and partner associations— which ensure the continuity of activities without needing to restart processes from scratch.

Second, on the *Piccola Custode* ecological installation, which remains in the territory as a physical and symbolic point capable of activating new initiatives and sustaining the community's connection with the river.

Finally, on a transferable and adaptable methodology that enables the experience to be replicated in other contexts through collaboration between the artist and the existing institutional network.

Conclusions

One of its main strengths was its integration into already consolidated community structures, particularly the Ecomuseo del Paesaggio di Parabiago,

which made it possible to combine the artistic initiative with existing networks and knowledge.

The project demonstrated that artistic practices can be effective tools for ecological and cultural activation when grounded in the needs of the territory and the community where they are embedded. The co-creation workshops generated shared experiences that connected memory, territory, and future, strengthening both a sense of belonging and active community engagement.

The evaluation, based on the adaptation of the *Critical Assessment Framework*, revealed a strong personal and community impact as well as clear potential for replication. It also identified challenges, including the need to improve communication, broaden participation, and reinforce organizational structures.

Looking ahead, the project is supported by solid foundations for sustainability: its anchoring in local structures, the permanence of the ecological installation as a symbolic node, and a transferable methodology that allows the experience to be replicated in other contexts.

Moreover, it opens opportunities for building alliances through ecomuseum networks and art-and-climate-action platforms, expanding its reach and contributing to global goals such as climate adaptation, environmental justice, and cultural sustainability.

In short, *Essere parte del fiume* confirms that art, when integrated into community processes, is not a complement but a catalyst for bonds, learning, and lasting ecosocial transformations.

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Chapter 16

Insurgent Exhibitions and People's Plans for the Living Heritage: Reflections from the WRENCH Project

Giusy Pappalardo and Samuele Andreoni

Abstract

The People's Plan serves as a pivotal tool for empowering communities to articulate their needs to policymakers, while integrating more-than-human perspectives into their understanding of living heritage. This approach emphasises the importance of community engagement, fostering democratic processes that encompass diverse voices. Key to this initiative are three critical elements: the formation of a dedicated community, commitment to a process beyond mere documentation, and ensuring engagement of those directly impacted by decisions. By recounting one first initiative in Buenos Aires, this contribution explores how the People's Plan aims to create a sustainable practice that extends beyond the project's lifespan, promoting long-term socio-ecological resistances.

Context of the experience

In this Chapter, we present some preliminary reflections from our ongoing work on the transnational project WRENCH: *Whisper of Times – Heritage as Narratives of Climate Change*³⁵. In this context, we explore the imaginative

³⁵ WRENCH is supported by the Belmont Forum and funded in Spain by the Agencia Estatal de Investigación (PCI2024-153536), which we acknowledge in this contribution. The project is coordinated by Marco Armiero and is based at the Universitat Autònoma de Barcelona. It brings together scholars and experts from Durham University (UK), Middle East Technical University (Turkey), and

power of heritage as a living entity. We understand heritage not as a monolithic or elitist construct, but as a collectively recognised inheritance from the past (Smith, 2006): one imbued with the potential to transform and challenge contemporary socio-ecological injustices. This includes narratives on contested and toxic heritage, echoing the practice of toxic bios (Armiero et al., 2019), whose traces can reveal dynamics of exploitation, oppression, and urban segregation.

The WRENCH project spans multiple fields of knowledge and practice, including environmental history, urban planning, anthropology, museology, civil and structural engineering, and climate science. It also involves a range of non-academic partners and experiments with a transdisciplinary or, as we prefer to call it, undisciplined approach (see Armiero, Barca, and Velicu, 2019), within the broad spheres of environmental humanities and political ecology.

As a transnational and undisciplined project, WRENCH engages with a variety of local contexts and positionalities. It focuses on Durham Castle in the UK - a Norman castle and World Heritage Site - and the Dome of the San Giorgio Church in Ragusa, Italy, also a World Heritage Site. In these locations, WRENCH explores the monumental and material dimensions of heritage as they intersect with climate change. This includes laboratory testing of historic materials under varying environmental conditions, environmental and structural monitoring, and climatic and structural analyses to predict the long-term effects of climate change on historic structures. Meanwhile, in the UK, we are collaborating with the curator and representatives of Durham Castle, which houses approximately 100 students. In Ragusa, we are working with residents, local experts, representatives from the parish Church of San Giorgio, various associations, schools, and university students. These efforts go beyond assessing the effects of climate change on the structures, extending into a broader urban laboratory that experiments with a “People’s Plan for taking care of the living heritage in the face of climate change”, one of WRENCH’s practical approaches to community engagement.

Still in Italy, our work extends to Naples, where we are partnering with a social cooperative and engaging communities near a former military hospital, currently being renovated to become part of a new urban park. Here, too, the aim is to co-develop a People’s Plan. We are also collaborating with representatives from the Metropolitan City of Naples to explore the possibility

Campania University Luigi Vanvitelli (Italy), along with other organizations and non-academic partners.

of hosting a Forum of Mediterranean Cities on Heritage and Climate Change in 2026.

In Spain, we have begun working with local groups in the Montes of Galicia. Similarly, in Argentina, we are collaborating with the Migrant Museum (Museo de la Inmigración) at the Universidad Nacional de Tres de Febrero in Buenos Aires and colleagues from Universidad Nacional de Quilmes.

Among all our sites, the Argentine case - specifically the Matanza-Riachuelo River, which flows through both the City and Province of Buenos Aires toward the better-known Río de la Plata - has been our primary focus in preparing this Chapter. Recognised as both a contaminated more-than-human body and a form of living heritage, the Matanza-Riachuelo River offers a complex and multifaceted context through which to examine our ongoing engagement process and reflect on its potential as well as its challenges.

Description of the experience

The multifaceted memories embodied in the river

For over two centuries, the Matanza-Riachuelo River has functioned as Buenos Aires' "dumping ground," evolving into one of the most polluted rivers in the world. Its basin is home to approximately five million residents and hosts thousands of industrial operations, including tanneries, factories, cold storage facilities, infrastructure hubs, and petrochemical plants (Zuleta et al., 2012).

La Boca, the neighbourhood located at the river's mouth, was once a vibrant and diverse migrant port, shaped by Italian cultures during the Great Migration (1870–1930), and progressively transformed into a cultural melting pot. Yet it also bore witness to deep inequalities and exclusion (Fabaron, 2016).

From the perspective of the Wasteocene - defined by Armiero (2021) as the era of socio-ecological waste relations - the river and its surroundings locally embody the traits of the "global dump," reflecting what has been expelled from the parts of the capitalist and "neoliberal city" (Harvey, 2007), inhabited by elites.

The Matanza-Riachuelo River also stands as a stark reminder of original Indigenous cultures and their silenced cosmovisions. The name "Matanza" itself traces back to the colonial genocide that led to the extermination of the Querandí people, a legacy sustained through oral history and reflected in the river's contested heritage narratives.

In this context, residents, activists, and experts have led ongoing struggles for environmental justice (Merlinsky, 2022). One of the most critical areas at the heart of this struggle is Villa Inflamable - an informal settlement near the Dock Sud Petrochemical Hub - home to approximately 3,000 families and considered one of the most contaminated areas in Buenos Aires.³⁶ There, air, soil, and water pollution have severely impacted the health of residents (Auyero & Swistun, 2009). In 2004, Beatriz Mendoza, a social psychologist from the neighbourhood, joined by other residents and professionals, filed a collective lawsuit for damages, denouncing human rights violations (Frydman, 2022). The resulting “Mendoza Case” led to significant progress, including the creation of a new institution: ACUMAR (*Autoridad de Cuenca Matanza-Riachuelo*), the public authority responsible for coordinating and implementing integrated collaborative watershed governance, policies, plans and actions.

Despite this achievement, living conditions in Villa Inflamable and other informal settlements remain alarming³⁷. Although remediation projects have been launched, many have been criticised as insufficient or inattentive to the growing social inequalities affecting working-class, migrant, and subaltern communities. Residents living near the river report that the water remains polluted, sewage flows openly, toxins continue to circulate, and pollution levels exceed acceptable limits. Activists fear that cuts to public services, driven by the current national political milieu, could reverse progress and once again allow industries to pollute with impunity.

In this context, as part of the WRENCH project, we, the authors, have begun envisioning and implementing an initiative titled *Narratives as Living Heritage for the Matanza-Riachuelo River in Buenos Aires* (the “BA Initiative”, hereafter)³⁸. It aims to build collective narratives and exhibitions about the river’s history and its communities, while also developing concrete actions with residents to improve their quality of life. Conceived as a public environmental humanities laboratory (Armiero, 2019), it is grounded in the action-research approach (Pappalardo & Gravagno, 2018; Saija &

³⁶ <https://youtu.be/j5GSDE0PFuE?si=sgclyxKv5u2sAvwU> Last access: 04/11/2025

³⁷ <https://proyectoriachuelo.blogspot.com/> Last access: 04/11/2025

³⁸ This initiative has received additional funding from Fundació Autònoma Solidària of the Universitat Autònoma de Barcelona (CT621193), in response to the call “XLII Cooperació Universitària i Educació per a la Justícia Global,” which we also acknowledge in this contribution. The BA initiative is coordinated by Giusy Pappalardo.

Pappalardo, 2022) and carried out in collaboration with us, the National University of Quilmes, the Immigration Museum of the National University of Tres de Febrero, and various local actors.

In the following sections, we reflect on the early stages of fieldwork conducted between August and September 2025. This period marked the beginning of experimentation with community workshops, complemented by archival research and in-depth interviews. Most importantly, a local core group was established - comprising four young research fellows and a cooperative - to carry the project forward from a situated perspective within the local context (Haraway, 1995).

The process is designed to span approximately nine months and unfolds along two integrated lines of action: the co-creation of an insurgent exhibition, grounded in the principles and praxis of social museology (Duarte Cândido, 2023), and the development of a People's Plan, shaped by the approach of reciprocal community-based planning (Reardon, 2006). It aims to co-produce both a bottom-up exhibition and an open strategic planning document developed by a diverse range of local actors.

Conceived as a legacy of the WRENCH project, the Plan is intended to serve as a negotiation tool to impact public policies and contribute to the urban planning debate in Buenos Aires.

Before discussing the details of the experience, a clarification is necessary. Although Argentina ranks 47th globally with a relatively high Human Development Index of 0.865³⁹, the conditions in the targeted settlements - classified as vulnerable by the Observatory of the Ministry of Economy - are markedly different. As anticipated, these informal settlements face irregular access to water, electricity, and sewage infrastructure, and are at heightened risk of flooding due to their proximity to the Matanza-Riachuelo River and exposure to multiple sources of environmental pollution and toxicity.

While the BA Initiative may not be able to directly resolve these structural issues - many of which ought to be addressed by specific public policies - it aims to generate impact by empowering the affected communities.

Inspired by a Freirean pedagogical approach (Freire, 1968; hooks, 2003), the BA Initiative aims to offer learning opportunities that empower participants in two interconnected ways: 1) By reconstructing the legacy of Indigenous

³⁹ 2023 data, 2025 report:

<https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>

Last access: 04/11/2025

peoples, migrants, subaltern, women, and working-class groups - as embodied in the river landscape - and highlighting their recent struggles for environmental justice (insurgent exhibition); 2) By developing a document to engage with the institutions responsible for territorial governance (People's Plan).

Establishing and advancing the Insurgent Exhibition and the People's Plan in Buenos Aires

In this section, we outline the initial steps taken to launch the process aimed at producing both the Insurgent Exhibition and the People's Plan. It is important to emphasise that these two efforts - the Exhibition and the Plan - are not disconnected but are instead reciprocally interrelated. The Exhibition serves as a collective space to explore and discuss the systems of knowledge that will inform the People's Plan. In turn, the Plan is envisioned as a creative reimagining of what an exhibition catalogue can be: it will include the core materials gathered during the co-creation of the exhibition, while also incorporating a forward-looking section typical of a strategic plan, along with maps that link stories to the spatial dynamics of the territory. This integrative approach is intended as an experiment in bridging diverse fields of knowledge and practice, aligning with the undisciplined ethos of the environmental humanities.

In Buenos Aires, the initial steps of this effort focused on establishing a local core group capable of embracing and advancing the process. To achieve this, we adopted a twofold strategy.

First, we invited students and activists - whether pursuing a master's, postgraduate, or PhD degree, or working as independent researchers - to integrate their formative paths with WRENCH through four dedicated seed scholarships.

Second, we conducted a preliminary series of in-depth interviews and informal workshops to engage additional participants and invite them to form a broader collective. This wider group is intended to collaboratively drive the development of the process forward.

Specifically, the Call for Scholarship aimed to identify lines of inquiry that could enrich the project through diverse lenses of observation. One line of inquiry explores toxic heritage and the collective memory of contamination in the Matanza-Riachuelo basin, with reference to the Mendoza ruling, the history of ACUMAR, and related institutional processes. Another focuses on

critiques of institutional action, examining the vulnerabilities and precarious conditions within informal settlements. A third centres on living heritage from the perspective of workers, with particular attention to the experiences of women workers. A fourth line is dedicated to documentation and visual/multimedia production across all themes, supporting the development of both the “insurgent” exhibition and the final strategic plan.

All these research paths incorporate the perspectives of both historical European migrants and contemporary Latin American migrants, while also seeking to engage with invisibilised Indigenous cultures that have endured colonial and oppressive dynamics.

In August, during the month-long dissemination of the Call, we faced initial challenges, particularly the need to organise multiple clarification sessions to unpack the complexity and ambition of the project. Nevertheless, we engaged three women and one man, a member of a cooperative, who joined alongside four other people to form the core group. This collective now represents the initial nucleus of the local community. With them, we have established a mutual learning agreement, consistent with the principles of action-research.

The preliminary informal workshops were conducted as walking-narrative sessions along the river: one at the multiethnic Indigenous site Tres Ombúes in Partido de La Matanza, and another at “La Noria,” a site of archaeological significance for the Indigenous communities of the Querandí People Nation, located near an old natural stretch of the “Río Chuelo,” as it is referred to by them. These informal walks primarily engaged Indigenous participants and offered meaningful opportunities to begin cultivating reciprocal relationships. As a result, approximately four additional people have joined the expanding nucleus of the local community.

Following approximately 20 in-depth interviews - approached not as one-way requests for information, but as opportunities to build reciprocal relationships - the first formal workshop was held at the Museo de la Inmigración at the end of September⁴⁰. The event was co-organised by the initial group of scholarship holders, alongside representatives from Indigenous communities, a local television collective⁴¹ working within one of the symbolic informal

⁴⁰ The project website provides access to both the radio broadcast that invited public participation in the workshop and its recorded session.

<https://webs.uab.cat/wrench/2025/09/25/wrench-sigue-on-air-desde-buenos-aires/>
<https://webs.uab.cat/wrench/2025/09/30/cuentos-de-la-cuenca-el-servicio-de-urbanateve/> Last access: 04/11/2025

⁴¹ <https://urbanateve.com/> Last access: 04/11/2025

settlements along the river - Barrio Padre Mugica - and the Migrant Museum itself, which acted as a leading partner in the process.

This workshop marked the formal and public launch of the WRENCH project in Buenos Aires. It also initiated the collection of stories about the river and its surroundings, understood as living heritage shaped not only by the impacts of climate change but, more specifically in this context, by toxic and waste-related elements. Around twenty participants took part in the workshop, writing “postcards” and placing them on a map that illustrated the rivers, settlements, and the complex, contested socio-ecological relationships in the area.

With this event, WRENCH officially began its engagement process toward the development of the final People’s Plan.



Figure 105. Walking narrative along the river with the Multiethnic Indigenous Community in Tres Ombúes, Partido de La Matanza. September 6, 2025.



Figure 106. Meeting at the archaeological site *La Noria* with members of the Indigenous communities of the Querandí People Nation, preparing for the creation of a mural as a form of public art to express their ancestral cosmogony. September 14, 2025.



Figure 107. Community workshop at the Migrant Museum, 27 September 2025

Alignment with the call

At Wrench, we understand and theorise heritage as a living, evolving system of socio-ecological relations that is vital for achieving a more just future. The

greatest peril that heritage faces is becoming silent, unable to tell a story, to reinvent itself through new practices, and to lose its capacity for imagining alternative worlds. Wrench views heritage as at risk due to climate change, but also proposes it as a tool to address the struggles imposed by climate change on both humans and non-humans.

As we exposed in the first part of this writing, the People's Plan serves as an opportunity to emphasise the grassroots aspects of violence related to climate change. As the working class and non-waged individuals are the first climate subalterns (Grieco, 2025), we align with the call of Weavers of the Future to foster a grassroots approach to understanding and theorising adaptation and mitigation to climate change as a matter of climate justice.

Cultural heritage, as we highlighted in the previous paragraphs, is not a static sum of historical facts. Rather, it is a continuous negotiation of social, economic, and cultural elements that "give order" (Williams, 2017) to the more-than-human space in which humanity lives. Consequently, heritage is endangered by climate change as the socio-ecological bases from which it takes form can vanish violently.

However, living heritage's primary characteristic is its ability for *socio-ecological reproduction* and *reinvention*. Building on this idea, we can view heritage as an instrument, a tool—a *wrench*—through which we can navigate contemporary struggles.

If heritage becomes the focus of debates about climate change, communities can concentrate on what they value most (i.e., their habits, lifestyles, and cosmovisions) and collectively develop practices to safeguard and, if necessary, reinvent their social structures based on new socio-ecological foundations.

By engaging with literature offering a plural understanding of heritage, such as pluriversal heritage and more-than-human heritage (Kisic, 2016), Wrench aims to propose, through the practice of the People's Plan, a practical guide for communities to reconsider heritage in relation to nature.

Creativity and Participatory Approach

As described in the first part of this writing, the "Exhibition" acts as a collective and creative space to explore and discuss the systems of knowledge that will later inform the People's Plan. It invites communities to engage in dialogue and envision new perspectives on heritage, new "heritagescapes" (Garden, 2006, p. 407).

The Exhibition aims to collectively reflect on our shared experiences merging with socio-ecological space and how memories shape that experience. By

revitalising the violent memories surrounding the Matanza-Riachuelo River, as well as the relationships that space embodies, the river becomes an integral part of living heritage. Telling the “river’s history,” as proposed to participants in the BA Initiative, encourages them to reconsider their memories as interconnected with the river, allowing for the river to be recognised as an active participant in their heritage-making process.

The inclusion of the river in heritage-making processes is fundamental for reconsidering more-than-human scapes in our understanding of heritage. For Wrench, this aspect is pivotal as it provides a broader perspective on how climate change affects communities. Rather than being viewed as an immediate disaster or catastrophic event, climate change manifests as a form of slow violence (Nixon 2011) that is often rendered invisible.

By training communities to recognise more-than-human scapes in their daily experiences, they can generate new ecological knowledge and understandings that will be crucial in countering upcoming challenges posed by climate change.

While the Exhibition serves as a platform for these debates and ideas, the People’s Plan is envisioned as the strategic outcome of the insights and materials produced through the exhibition. It will encompass core materials gathered during the co-creation phase while also including a forward-looking section typical of a strategic plan, along with maps that connect narratives to the spatial dynamics of the territory. This integrative approach aims to bridge diverse fields of knowledge and practice, in line with the undisciplined ethos of the environmental humanities.

Community Engagement

As outlined in our People’s Plan guide⁴², we suggest several common methodological tools designed to guide each community in finding its own way forward.

At the heart of each final People’s Plan, we present the results of the workshops. Here, we describe the pilot site (e.g., the river) in relation to a broader context (e.g., the neighbourhood, city, or region) and summarise how participants perceive it throughout the process.

⁴² <https://webs.uab.cat/wrench/wp-content/uploads/sites/615/2025/07/D5.7-PEOPLESPLAN.pdf>. Last access: 04/11/2025

This section is crucial for fostering community and providing a grassroots definition of their living heritage. Furthermore, it plays a key role in building community ties and ensuring long-term engagement.

Cultural/Ecological Impact

We view the People's Plan as a tool for achieving a better understanding of the socio-ecological dimensions of heritage within communities. As the experience in BA demonstrates, community heritage has been—and continues to be—endangered by pollution. The combination of high pollutant levels in the river, rising temperatures, and abrupt shifts in climate conditions poses a severe threat to the preservation of cultural heritage, profoundly impacting the lives of these communities.

As outlined in the previous section, we believe the People's Plan is an instrument for fostering, in the long run, a holistic understanding of heritage. This approach has the potential to question and transform socio-ecological scapes, which are a fundamental element in the processes of adaptation to climate change.

Vision of Desired Change

The People's Plan aims to provide communities with an instrument that “speaks the language” of policymakers, enabling them to express their concerns effectively.

In this spirit, we foster public support for heritage-making processes that are not top-down. We advocate for bottom-up policies that receive backing and funding from institutions. While technicians, experts, and policymakers are welcome to share their ideas, advice, and insights, the final decision rests with the community.

To clarify this point, one compelling example comes from another of our pilot sites, the Montes in Galicia (Spain). Every two years, the ORGACMM (Organización Galega de Comunidades de Montes Veciñais - Galician Organisation of Collective Montes Communities) organises a congress inviting communities to propose, discuss, and approve the next steps for preserving their socio-ecological heritage in the face of contemporary struggles, including climate and judicial challenges.

The next congress will be held in May 2026 with the title “**Montes Veciñais: Pasado, Presente e Futuro vivo**” (Collective Montes: Past, Present and Living Future), which will also host a space for external communications, inviting experts and policymakers to share their insights on the topic.

Nonetheless, as in the words of Alfredo Pereira, president of the association, the vote and final decision will belong just and only to community members, as they “have clear that it’s our, and only our, the right to decide on the future of our communities” (oral interview by Samuele Andreoni on November 7, 2025).

As expressed in the last lines, the main change the People’s Plan promotes is to provide communities with a means to be heard by policymakers, while integrating more-than-human perspectives into their understanding of living heritage.

Feasibility

The People’s Plan should also include a list of actors who are currently involved and those who should participate in the next steps of the process. At Wrench, we recognise three key pillars as critical in creating a community plan. First, there must be a community: a group of individuals who either live in or are connected to a space and care for it, each bringing their unique perspectives. This group may include residents, workers, public officials, and others with a stake in the area. Second, participants must commit to engaging in a process where the primary outcome is not merely a document. Third, the process must remain democratic, open, and inclusive, prioritising the participation of those directly affected by the decisions at the core of the plan, as well as the most marginalised groups who are often excluded from institutional decision-making. From our perspective, these three elements can enable the practice to evolve beyond the initial project. Therefore, creating a core group is crucial for the practice's long-term feasibility.

As shown in tab.1, a strategic plan with roles and a timeline can grant the practice a longer life and better outputs.

Lastly, the establishment of agreements with local partners, such as the Museo de la Inmigración and the National University of Quilmes in Buenos Aires or the Museo do Povo Galego and ORGACCMM in Santiago de Compostela, will grant the later diffusion of the practice in the future.

What to do?	Who will do it?	When?	With what resources?	Notes
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<p>Action 1: Renew popular epidemiology projects in the <i>villas</i> most affected by contamination</p>	<p>Core group + a coalition of independent institutions (universities, research centres, etc.), residents, grassroots associations, health centres, negotiating with the Matanza - Riachuelo watershed authority (ACUMAR)</p>	<p>Short term (by one year after the issue of the People's Plan)</p>	<p>International grants</p>	<p>This action is key to assessing the health conditions of residents of the most contaminated settlements after almost 20 years from the first lawsuit (Mendoza Case)</p>
<p>Action 2: Improve water quality and sanitation through small-scale blue-green infrastructures in the <i>villas</i> most affected by contamination, which can also serve as an educational project with schools</p>	<p>Core group + a coalition of independent institutions (universities, research centres, etc.), residents, grassroots associations, Municipalities, schools, negotiating with the Matanza - Riachuelo watershed authority (ACUMAR)</p>	<p>Medium term (by two years after the issue of the People's Plan)</p>	<p>International grants</p>	<p>Small-scale blue-green infrastructures (like rain gardens, permeable pavements, urban wetlands, etc.) can also serve as part of an overall integrated strategy for climate change mitigation and adaptation, while enhancing the quality of public spaces and increasing biodiversity</p>

Table 3: Strategic Plan Template with some preliminary examples from the BA case (in progress)

Conclusions

Building on the previous pages, we believe the dual practice of the “Exhibition-People’s Plan” aligns perfectly with the call of Weavers of the Future. The core of the Plan resides in community involvement and strives to strengthen socio-ecological bonds.

Observing the Wrench pilot sites, one can see a clear separation among them, largely due to the differing approaches employed by various teams. The Italian and British cases are handled by engineers whose primary objective is to assess structural preservation in light of climate change. In contrast, the Argentinian and Galician cases are rooted in a socio-ecological understanding of the communities' living heritage safeguard.

The People's Plan serves as a tool developed by Wrench to bridge these disciplinary separations and to foster a better understanding of what communities fear most concerning climate change. We assert that communities must have a voice—if not the primary voice—in the preservation and safeguarding of their heritage, as they are both the creators and the users of that living heritage. Communities are central to heritage preservation because they are the ones who live it; they are the ones to deal with it, practically and symbolically, to make sense of their daily life experiences.

Wrench's approach is grounded in environmental humanities and political ecology literature. These backgrounds invite us to theorise a practice that crosses the human/non-human divide and fosters a holistic understanding of heritage scapes. Living heritage, as we described earlier, is the space where more-than-human stories and memories nourish social life and culture. To attempt to understand heritage without considering non-human elements, such as the river in Buenos Aires, misses a critical aspect of its essence.

The Exhibition plays a central role in achieving this more-than-human knowledge. Building on the concept of the Wasteocene (Armiero, 2021), the BA initiative positions the river as a participant in the injustices that communities face. The Exhibition transforms it into both a member of the community that needs protection and a political argument for environmental and social justice. The People's Plan is designed to be a tool accessible to the public, enabling other communities and planners to implement it in their projects. We aim to share practices by offering insights from our experiences while also incorporating ideas from others. As mentioned, the Exhibition/Plan is not meant to serve as a fixed template. It is a creative proposal that can act as a starting point for anyone interested in reflecting on heritage practices from a more-than-human perspective.

Lastly, to address the “imperative of participation” that sometimes overshadows research projects, we promote a People's Plan that enables communities to take not only a participatory role but also a leading role. To achieve this, we emphasise that communities should be recognised as fully capable of shaping their own future. The Plan serves as a tool to define this direction, as well as a means to express and recognise their agency within institutions and empower them to act upon it.

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Chapter 17

Green Power

Tamsin Greaves

Abstract:

Art Power is a social justice initiative which began at Mansfield Museum in 2022 following increased calls to domestic and sexual abuse support services during and post-pandemic. The project works with freelance artists and partners with Women's Aid, Nottinghamshire Domestic Abuse Service and social prescribers to harness the power of creativity and togetherness thereby promoting sense of place, developing self-esteem and facilitating healing after trauma. Art Power morphed into Green Power in 2024 as the community took over a Victorian greenhouse in a nearby park and began growing, cooking and eating together. The group then expanded into its own Green Power Women's Art Hub in the park's pavilion where we hold regular art activities as well as green wellbeing sessions including forest bathing and trauma-informed yoga.

Context of the experience

Green Power Women's Art Hub is a place for togetherness, creativity and healing. It holds space for women living with the aftermath of gender-based trauma and developed from the Art Power project at Mansfield Museum. After the pandemic Mansfield District Council noticed an increase in calls to domestic abuse support services and Sian Booth, the Cultural Services Manager secured funding from the Museums Association to take action.

Holding dual roles as Community Project Officer and post-graduate researcher at Nottingham Trent University I combine practice with theory and began by researching good practice in care-ful museology and trauma recovery literature. I discovered the Glasgow Women's Library and Judith Herman's Trauma and Recovery as starting points and partnered with support services including Women's Aid, Nottinghamshire Independent

Domestic Abuse Service, Nottinghamshire Sexual Violence Support Service, Change Grow Live and social prescribers. In April 2022 participants began attending creative workshops in the museum. They learnt new artistic skills, techniques and materials from freelance artists, explored the museum store and built a sense of belonging through making friends and connections with museum objects.

Two years later we had a register of sixty participants and took over a Victorian greenhouse in the nearby park to grow flowers and vegetables. A year on and we became a J9 safe space, began outdoor trauma-informed yoga and forest bathing sessions and then spotted an underused space in the park pavilion: the Green Power Women's Art Hub was founded. The group has exhibited at Newstead Abbey, Lincoln University Art Gallery and has a body of work accessioned by Mansfield Museum. Participants have delivered art, craft and cookery workshops to their peers and helped at museum events such as community iftar and organised a McMillan coffee morning. Green Power has now engaged with over eighty women with outcomes ranging from learning to trust again, developing self-esteem, reduced social anxiety and the ability to travel to sessions independently, to securing volunteering and paid work roles.

Three exhibitions, two short listings for the Museums Change Lives award and a published book of poetry later, the group is now preparing for its most ambitious project yet: Green Power - Red Flags. This major exhibition opening on International Women's Day 2026 at Mansfield Museum will display the participants' artworks alongside pieces by our six freelance artists who undertook residencies at the art hub. The exhibition will advocate for an end to gender-based abuse showing work around five 'red flag' perpetrator behaviours: charmer, keeper, gaslighter, taker and shamer and contrasting these with five empowerment strategies.

Description of the experience

In 2021 Mansfield District Council noticed an increase in calls to domestic and sexual abuse services as we emerged from the pandemic and a project was conceived to support these women. Our premise is that creative activities connected to museum objects have the power to improve wellbeing for a vulnerable group. The first Art Power (as the project was then called) workshops took place in April 2022. Participants were referred through a range of services including Women's Aid, NIDAS, NSVSS, CGL, DWP and social prescribing. These vital services provide crisis support and short psycho-

social courses such as the Freedom Programme however recovery from trauma is long and Green Power picks up where these services taper away, not offering therapy but being, nevertheless, therapeutic. Before recovery and healing can begin, a person must feel safe and crossing the threshold of the museum can be a challenging first step. Coming to a new place, meeting new people and doing, you're not sure yet what, can be intimidating even if you're not in recovery. Our contact usually starts with a phone call, a bit of a chat about the project and the sort of things we do, where we are, and how to get there. I met one first timer at the bus station and accompanied her across town to our site, she later said; 'Well, I was very nervous about coming because for me, going new places and being places I don't know before, I can't do it no matter what. I could have got to the bus station but I couldn't have walked out of the bus station, so you came to meet me and I just, in my head... I just couldn't get from the bus station to the group on my own. I would have like a massive panic attack, so thank fully you came to meet me, which made it so much better because then the second time I knew where I was going...' So that was a lesson, don't ever underestimate how difficult it may be for a participant to come through the door. Having got through the door, we want our participants to become comfortable in the space, to feel welcome, heard and valued. In a group with a shared commonality of experience, companionship and trust are possible, stories of trauma can be shared and integrated. For example, in one clay workshop a woman made a gravestone to her marriage. Recovery then requires reconnection to ordinary life and participants have got involved in volunteering, in delivering their own workshops to their peers and even, recently, being on a panel at the Museums Association conference. The three stages of safety, memorialising, and reconnection are not necessarily linear, they can repeat and overlap and sadly the fact that a participant has extracted herself from an abusive relationship does not always mean she will not meet another perpetrator. And participants also leave the project, sometimes because they have found paid employment or don't feel the need for the project anymore and sometimes they return.



Figure 108.Green Power logo.

Alignment with the call

Mansfield is a community museum which has a social and climate justice agenda. The participants in the Green Power project are women living with the aftermath of domestic and sexual abuse and other trauma. The project aims to develop recovery from trauma through togetherness, creativity, nature-connectedness and activism. Although, sadly, the women share a commonality of abuse, the shared experience promotes understanding and healing. The project activates the museum's collection - most of which is in store. The participants explore and discover connections and stories which lead to collaborative creative projects. For example, bird of paradise headdresses made for carnival 2024 inspired by the museum's Victorian taxidermy natural history collection, a series of ceramic Green Women faces and a carnival 2025 recycled puppet, a new mayoral chain to celebrate Mansfield's one female mayor and other heroines made from copper sheet.

Our green spaces which include a Victorian greenhouse which the project has restored and reinstated is now in its third year of organic growing followed by cooking and eating in our Green Power Women's Art Hub. Our growing is organic and this year we are experimenting with green compost and are collecting tree seeds in order to grow and plant saplings. Our participants lead workshops for their peers, sharing skills in crochet and cooking. Knowledge

and healthy, climate aware practices are shared such as pickling vegetables for food security and cooking from scratch.

The participants' age range is currently from 21 to 81 and we also provide childcare and transport so that barriers to attendance are removed. In school holidays participants' children are also welcomed into our space so that their attendance is not impacted by childcare restrictions.

Our participants are diverse and we have sessions which share and celebrate variety and difference such as a community iftar, Caribbean hot chocolate making, Turkish cooking workshop, picnics in the park and trauma-informed yoga.

Creativity and Participatory Approach



Figure 109. Working in the Green Power greenhouse.



Figure 110.Green Woman ceramic face projected inside the greenhouse.



Figure 111.The Green Power Women's Art Hub in Mansfield.



Figure 112. Participants working in the hub.



Figure 113. Islamic lino prints created by participants.



Figure 114. Trauma-informed yoga in the park.

Community Engagement

Green Power workshops are held two or three times a week and participants attend as much or as little as suits them and lots of them dip in and out as their needs and circumstances ebb and flow. Our Whatsapp group keeps everybody in touch and we have a couple of participants who never attend in person but stay connected this way. We are currently busy preparing for our largest cocreated and curated exhibition to date, named by the participants, Green Power-Red Flags, it boldly tackles the danger signs of unhealthy relationships, explores recovery journeys, advocates for an end to gender abuse, and finishes with a positive reflection space and comprehensive signposting to support services. We hold regular meetings to discuss and plan for the exhibition, the participants taking the lead and are in control of the contents and interpretation of their work. A recent discussion led to a name change to focus on the empowerment rather than the the perpetrator behaviour, hence, Green Power – Red Flags. The exhibition includes felt masks which are double sided, one side showing outward faces and, on the reverse, how participants feel on the inside. Felt is a tactile transformative

material which turns wisps of wool into a solid textile and is a very satisfying, repetitive technique. Other techniques such as clay, collage and stitch also privilege a flow state of being 'in the zone' which can dispel intrusive thoughts. The exhibition planning also includes collaboration with our referring services who are the experts in domestic and sexual abuse support. We value their input which helps to keep all of our community safe. We also have regular check-ins and artist get-togethers with our freelance artists. These meetings offer opportunities to gather feedback, offload and share ideas.

Inclusion is not just about programming; it's also about removing practical barriers that might prevent people from joining. For many women attending a workshop can be difficult without support. That's why we are dedicated to keeping all of our sessions cost-free, ensuring that money is never a reason to stay away. We provide transport, whether that means covering bus or train fares, organising shared rides, booking taxis, or sometimes simply driving participants ourselves. These small acts can make a big difference, turning what might feel like an impossible journey into an achievable one. We also offer childcare during sessions, creating a safe and playful space for children nearby. This gives mothers something they rarely have, two hours just for themselves. Time to focus on an art project, to chat with a friend, or simply to drink a cup of tea in peace. For many of our participants, this moment of calm and autonomy is as valuable as the creative activity itself.

Vision of Desired Change

Ultimately, we advocate for an end to gender abuse. The exhibition aims to raise awareness of the behaviours of abuse and encourage all of society to take notice. We also promote the dissemination of the available support services and aim for this knowledge to filter into all of Mansfield's diverse communities so that help can be provided to all. Mansfield Museum staff have regular, updated training and maintain the site as a J9 safe space. The project also aims for climate conscious behaviour in our sites and participants, promoting cooking from scratch and the use of repurposed materials for artworks.

Cultural/Ecological Impact

The project has made life changing improvements to participants' lives, actions such as helping move a woman and her children out of refuge, sourcing and supplying a secondhand mobility pushchair for a participant's child, supporting a participant through the criminal justice system and

hospital visits all create a sense of place, community and shared values of care and support.

One of the participants has become a published poet encouraged through creative writing workshops. was found in a skip next to Wilko's in October. After his rescue we repaired his paw, and Japanese kintsugi was used to patch up his scar. He has been given a new life decorated in decoupage finery. Here is her poem which describes a repurposing;

Skip Dog

We found him abandoned in a skip.
He was patiently waiting for us to pass by,
how long he had been waiting no one knew.
To some he was broken,
to us he was perfect with his imperfections.
We lovingly carried him home.
We embrace that he had a difficult beginning -
not everyone has the best start in life.
Every dog has his day,
it's now his time to shine.
Phoenix has finally risen from the ashes.



Figure 115. Skip Dog.

And another poem which speaks to a sense of recovery;

Discovery of Self

I shut myself away
For days on end
Feeling sorry for myself
Searching endlessly
For someone wonderful
To walk into my life
And put an end to all
The bad things.

For someone to walk
Through my door
And change my life –
It never crossed my mind
That person could

Be me.

Two hundred workshops and events later we have expanded to harness all five ways to wellbeing; connect, take notice, keep learning, give, and be active and Art Power became Green Power. There is a beautiful park over the road from the museum and through our contacts in the council and Jodie, our curator, always knowing the right person to speak to, we noticed and then took over a listed Victorian greenhouse. It had been unused except for storing compost for a few years and although it is a heritage building, it had been left to deteriorate. Living in refuge or temporary accommodation, many of our participants do not have gardens or access to green spaces and the greenhouse offered the opportunity to get growing. We managed to fund its restoration and repainting and we're now planning our third season of planting, tending and harvesting. The greenhouse which was an unused asset is now a thriving community garden. This year we used the Indigenous north American three sisters planting method to produce mutually beneficent corn, squash and beans.

Reconnecting with the outside or ordinary world is a crucial part of any recovery journey and Green Power also organises trips to museums, galleries and heritage sites. We have visited Nottingham Castle, Doncaster Museum, the Framework Knitters' Museum, Newstead Abbey where we were invited to exhibit work as a consequence and recently we attended a print workshop at Yorkshire Sculpture Park. These trips are an opportunity to experience art and objects authentically, and to explore local heritage sites and green spaces to enhance nature-connectedness.

Participants report less accessing of mental and physical health services due to improved wellbeing as a consequence of taking part in the project. There are also economic benefits from getting involved, for example a participant is using sewing machine to maintain herself and another is cake baking for neighbours.

Feasibility

An aim of the project is to improve wellbeing and develop resilience to empower optimistic futures for our participants. Sustaining the project longterm in order to be a reliable source of support is crucial for a population who have been let down by society. Collaboration with our referring services allows us to reach new participants and ensure we are providing the support they require. To this end the project is pushing for core funding from its local authority to sustain its benefits long term and move beyond its precarious

short term project funding model. We are also setting up a charitable giving option for the project through 'GoFundMe' which will promote distinct elements of the project for example, trauma-informed yoga sessions which can be funded in this way.

Conclusions

The Green Power project is a creative community which exists to promote recovery in a vulnerable group who are nevertheless advocating for a fairer, safer world, caring and advocating for a just society and a sustainable climate for all.

Awareness raising and dissemination of good practice are bearing fruit. Shortlisted twice for the Museums Change Lives Award, winners of the Museums Development Midlands Overall Excellence award, a published case study in Wellbeing Past and Present and 'Art Cares?' a recent PhD thesis suggest the project is reaching beyond its initial implementation.

To finish we would like to highlight the importance of relationships in every aspect of our work at Green Power. Relationships with place and between all the actors involved: participants, facilitators, museum staff, support services, community leaders, funders and the climate. We suggest that regenerative relationships are key to empower women who have been let down by society, to rebuild trust with others, with their locality, and with the wider world around them.

References

- Herman, J. L. (2022). *Trauma and recovery: the aftermath of violence - from domestic abuse to political terror* (2015 edition / with a new epilogue by the author.). Basic Books.
- Greaves, T. (2025). *Art Cares? Creative Workshops, Social Justice and Positive Psychology*. In Hyland, S. & Rothery, M. (Eds.), *Wellbeing Past and Present* (pp. 213-224). Bloomsbury.

Annexes

Annex 1: The Belem agreement (amended 03 November 2025)

On the occasion of COP30 Brasil Amazonia, Belém 2025, we, place-based, community-led participatory and collaborative cultural organisations, including, but not restricted to, ecomuseums, community museums, geoparks, and other bioregional actors including artistic collectives, mediators, creators, academics, and activists, have come together within the framework of the "Weavers of the Future" to develop this 3-year initiative that affirms a common commitment to work with culture as a force for regenerating and adapting life — in our territories and communities — amidst times of climate, ecological and social crisis.

1. Our shared vision

We recognize that the climate crisis is also a crisis of culture and meaning. In the face of this, we reaffirm that living culture, territorial knowledge, and community artistic practices are essential to imagine and build more just, resilient, and care-ful ways of inhabiting the world.

We vindicate the role of cultural organisations as active agents of conservation and transformation, capable of generating the cultural, social and environmental impact in their territories while fostering adaptive strategies aligned with dynamic, interdependent natural systems and guided by principles of equity and justice. Visioning is essential: activists, artists, scientists, educators and communities must co-create pathways for action, and cultural organisations can empower these processes.

We acknowledge that the climate crisis is fuelled by an economic and cultural system that prioritizes the accumulation of wealth and power at the expense of social and environmental justice. These systemic forces — including corporate interests, ideological narratives, and political asymmetries — actively obstruct the transition toward sustainability and regeneration.

Cultural institutions must embrace a transformative and political role, recognizing the dynamics that hinder change and acting as catalysts for inclusive, regenerative futures. Reflecting the Paris Agreement Article 12, we commit to confronting these forces through critical education, community empowerment, and creative practices that serve as cultural feedback mechanisms.

We also recognize the concept of a “sustainability debt” — the cumulative ecological and social costs of unsustainable systems — and affirm the need for a Great Transformation that reorients our cultural evolution toward justice, resilience, and care.

2. Our challenges

We are facing multiple interconnected crises: climate, ecological, social, economic, political, legal and cultural. These crises require integrated responses, based on cooperation, participation and territorial justice.

We recognize the need to build living international networks that articulate local experiences with global, horizontal and decolonizing perspectives.

We also recognize that powerful corporate and ideological interests are actively working to preserve the current unsustainable trajectory, often leveraging political influence and media control. These forces must be named and addressed if cultural institutions are to play a meaningful role in shaping regenerative futures.

3. Our call to the COP30

We urge governments meeting at COP30 of Belém (Brazil) to do everything they can to deliver on the Paris Agreement, limit global warming to 1.5 C, and meet the United Nations 2030 Sustainable Development Goals.

As an international network of living culture, we join this call with hope, conviction and responsibility – using COP30 as a starting point to galvanise action through a collaborative three-year programme from 2026 to 2029, whilst aligning with future climate summits and global frameworks.

4. Our response and commitments

We commit to:

- Sign this agreement as an act of being part of an international network of cultural cooperation.

- Promote cultural rights and other human rights, as a collective practice and as a tool for social and environmental regeneration and adaptation. Work to uplift the voices of those most marginalised and underrepresented in our societies and those most effected by climate, social and the other interconnected crises named above, including women and girls, children and youth, people with disabilities, and low-income, refugee, displaced and indigenous people.
- Strengthen the role of culture as a means of collaborative criticism, care and territorial action, together with our communities and participate in visioning processes that consciously connect local and traditional knowledges with scientific insights to design adaptive, regenerative strategies that foreground human, nonhuman and environmental wellbeing and relationship, and living within Earth's Planetary Boundaries.
- Ensure that actions are community-led and inclusive, engaging diverse and plural local voices in decision-making and implementation.
- Evaluate the impact of our actions with qualitative and quantitative methods to identify key indicators of performance and respond positively to our findings.
- Participate in a three-year collaborative network and program (2026–2029) that includes shared actions such as: sharing support, ideas, inspiration and experiences; digital collective exhibitions; annual international meetings – including around future COP and climate summits; the exchange of good practices; encouraging academic and informal publications; promoting joint training; co-create resources for climate action.
- Foster empathy, awareness, understanding, solidarity, respect, reciprocity and care within the Weavers network and within our communities and territories.
- By endorsing the Belém Agreement, signatories also express their commitment to the principles and objectives of the "We Make Tomorrow"<https://www.wemaketomorrow.global/>) initiative, which

calls on COP30 to strengthen the case for culture to be embedded in national climate and nature plans and global frameworks.

5. Modalities of accession

Institutions are invited to comment on, add to, and amend this document. It will also be discussed collectively during the international meeting - “EcoLivre” – which will take place before the COP30 of Belém in Brazil. It is proposed that any changes proposed at this session will result in the production of a final version of the “Agreement of Belém” which will be presented to participants at the final session of the “EcoLivre” conference in November 2025. If the “Agreement of Belém” is then accepted by a majority vote at the meeting, participants will be invited to make a commitment to it by signing the document. Voting will be conducted through live polls during EcoLivre sessions and an online poll open for 48 hours after the event to include all registered participants. sessions and an online poll open for 48 hours after the event to include all registered participants.

6. Coordination, Shared Learning & Supportive Accountability

Weavers of the Future aims to be an international collaborative network of community-led cultural organisations and practitioners who commit to help and support each other envision and enact community agency and action for social and environmental wellbeing, with mutual motivation and accountability through periodic sharing of actions and progress, challenges and problem solving within the network [see also Section 4]. An international coordination group will facilitate voluntary exchange of experiences and tools and may publish an annual note highlighting learnings.

Annex 2: The Weavers of the Future Call for Good Practices Evaluation Criteria

The following instruction were redacted to guide the scientific committee in the evaluation of the proposal received for the Weaver of the Future call.

The web page of the call is [here](#).

Each project should be scored from 1 (lowest) to 5 (highest) for the following criteria:

Fit with the Topics of the Call – Does the project align with the themes and objectives described in the Call for Good Practices?

1 = Not aligned

5 = Fully aligned

Reviewer note: If alignment is weak, note which aspects of the call are missing. This can guide authors to strengthen their framing in the paper and or in the EcoLivre international meeting.

Creativity and Participatory Approach - Assesses the originality and creativity of the methods used to engage communities and address project goals. This includes artistic practices where relevant, but also innovative, inclusive, and culturally grounded approaches.

1 = No evidence of creative or participatory methods

3 = Some creative elements or participatory tools

5 = Highly creative and inclusive approach, strongly aligned with project aims

Consider both artistic practices and other innovative strategies that foster meaningful community engagement.

Reviewer note: If creativity is low, suggest examples of participatory or artistic strategies that could enrich the narrative for the publication.

Vision of Desired Change – Clarity and relevance of the transformative vision.

1 = No vision or very vague.

2 = Objectives stated but no logic of change.

3 = Clear vision but mechanisms of transformation not explicit.

4 = Well-articulated vision with clear actors and change levers.

5 = Systemic vision with explicit Theory of Change aligned to global challenges (climate, equity).

WHO is expected to change (individuals, communities, systems)?

WHAT will change (values, relationships, governance, ecological practices)?

HOW will the change be catalyzed?

Is the 'Vision of Change' conceived to help alter the current forces that are contributing to increasing Climate Change? Social Inequity? Inadequate social cohesion?

Reviewer note: If unclear, recommend that authors articulate a Theory of Change in the article (why and how their approach can lead to systemic impact).

Community Engagement – Level of participation and empowerment of local communities.

1 = No real engagement.

2 = Episodic or instrumental involvement.

3 = Regular participation but not structured.

4 = Co-design and shared governance.

5 = Full empowerment, intergenerational processes, and community leadership.

Is engagement transactional (short-term) or relational (long-term)?

Does it connect to climate action and social equity?

On what level of participation does the project fit (information, consultation, joint planning, joint decision-making, co-responsibility, people empowerment)?

Reviewer note: If engagement is minimal, suggest adding details on governance, co-creation, intergenerational involvement or empowerment.

Cultural/Ecological Impact – Evidence of cultural, social, or environmental benefits.

1 = No evidence of impact.

2 = Potential impact but not demonstrated.

3 = Some qualitative or anecdotal results.

4 = Concrete evidence of cultural or environmental change.

5 = Significant and documented impact with clear indicators.

Does the project address cultural change (values, narratives, practices)?

Are there measurable ecological or social outcomes?

Evaluate the project "stage of maturity" (not as a score, but as metadata: Ideation / Pilot / Implementation / Scaling). This helps you correctly interpret Impact vs. Potential, avoiding penalizing pilot projects or overly rewarding already mature projects.

Reviewer note: If evidence is weak, ask authors to include indicators or qualitative stories in the article.

Innovation – Originality of the approach and its potential to catalyze systemic change.

1 = Conventional approach.

2 = Minor innovative elements, marginal to the core.

3 = Contextual innovation (new for the territory).

4 = Substantial innovation in method or model.

5 = System-level innovation with scalability and policy impact potential.

Does it respond to local environmental or social conditions in a unique way?

Are there innovations in the model and in the contribution to the system (new alliances, policies, supply chains, circular economies, etc.)

Reviewer note: If innovation is unclear, suggest authors explain what makes their approach distinctive.

(See the image by Douglas Worts on Innovation and the need to ensure that it is 'outside the box'. Originality and creativity of the approach.

INNOVATION - Ideas could include:

- New overarching goals and visions
- New ways to measure 'success'
- New ways to bring past into the present
- New models of co-creating knowledge
- New value propositions
- New forms of organization, cooperation, collaboration
- New ways to identify stakeholders
- New targets and standards
- New feedback mechanisms
- New information flows to new people
- New rules, policies, incentives
- New skills and capacities
- New mindsets and paradigms
- **A NEW WILLINGNESS TO TRY NEW THINGS - EXPERIMENTATION**



Method:

- Brainstorming ideas
- Analyzing possible impacts
- Prioritizing ideas
- Developing project briefs to assess viability, costs, etc.

Figure 116. Image adapted from "Leverage Points: Ways to Intervene in a System", by Donella H. Meadows. Available from www.sustainer.org

Feasibility – Realistic implementation and sustainability of the project

1 = Vague project, unidentified resources, risks not addressed.

3 = Partial resources; risks identified but generic mitigations.

5 = Clear resources/partners, realistic timeline, risks with concrete mitigations, and post-project sustainability.

What obstacles exist?

What opportunities make it viable?

Reviewer note: If feasibility is uncertain, recommend authors discuss risks and mitigation strategies in the article.

Annex 3: The coordination committee

The work that produced this book, along with the Belem agreement and the Ecolivre event was composed of academic and practitioners from all over the world.

Nunzia Borrelli – Associate Professor - University of Milan-Bicocca, Department of Sociology and Social Research, Italy. Research Area: Environmental and Territorial Sociology.

Karen Brown, Professor of Art History, Museum and Heritage Studies, University of St Andrews, Scotland.

Raul Dal Santo - Coordinator of the DROPS Platform and Director of the Ecomuseo di Parabiago and Parco dei Mulini. His work in community engagement, territorial heritage management, and collaborative cultural initiatives has strengthened local networks and fostered innovative approaches to landscape-based stewardship.

Hugues de Varine, France - Director of the International Council of Museums (ICOM) from 1965 to 1974, de Varine was key in redefining the social role of museums and promoting community-based, territorial approaches to heritage. Recognized as a co-founder of the ecomuseum concept, he emphasized the active participation of local communities in managing their living heritage. His work has strongly influenced culture, development, and community empowerment.

María Soledad González-Reforma – Universidad de Murcia (ES) - Postdoctoral Researcher at the Department of Fine Arts, University of Murcia. FPU Program funded by the Spanish Ministry of Science, Innovation and Universities. Research Area: Ecosocial art, ecofeminism, and community-based artistic practice.

Catalina González Tejada - Universidad EAFIT (CO). PhD. Postdoctoral researcher and project leader of “Weaving bio-geo-cultural sustainability in Ranchería River Basin” funded by the Orchids Program of the Ministry of Science of Colombia - Research Area: Community Museology; Ecomuseology; community practices.

Zyanya Isabel Hernandez Moreno - MLitt in Museum and Heritage Studies (University of St Andrews). Research areas: Globalisation and migration processes, ecomuseology, and community-led initiatives

Lucimara Letelier. Director and Founder of RegeneraMuseu (www.regeneramuseu.com.br; www.regenerativemuseums.com , Research Areas: Regeneration, sustainable development & museums

Henry McGhie, museum consultant, founder of Curating Tomorrow, UK

Victoria McMillan - St Andrews University (Scotland). Shared Island Stories between Scotland and the Caribbean: Past, Present, Future research project.
- Research Areas: Ecomuseology, Social Museology, Land Connectedness, Community-led socially engaged practice for environmental and social justice and regeneration.

Giulia Mura - Università degli Studi di Milano-Bicocca (IT). - PhD, Assistant Professor, Department of Sociology and Social Research. Research Area: Environmental and Territorial Sociology.

Nadia Helena Oliveira Almeida - ABREMC / "Distanti ma Uniti" - Phd. Coordinator of the Maranguape Ecomuseum. Research Area: Community Museology; Ecomuseology; Education.

Giusy Pappalardo - researcher. Universitat Autònoma de Barcelona. Environmental humanities. Urban planning. WRENCH Project

Lucia Vignati – Ecomuseo di Parabiago Accessibility and preservation of municipal assets. Research Area: Ecomuseology; Community Museology.

Douglas Worts, Canada - specialist in museums, culture, and sustainability. With over 45 years of experience, including 25 years at the Art Gallery of Ontario, he helped advance exhibit development and audience research. He co-founded the Visitor Studies Association and became a LEAD Fellow in 1997, joining an international network focused on sustainability.

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- SEDES- Secretaria de Ciência e Tecnologia para o Desenvolvimento Social. Ministério da Ciência, Tecnologia e Inovação. Governo do Brasil.
- Ministério da Cultura. Governo do Brasil.
- ABREMC - Brazilian Association of Ecomuseums and Community Museums.
- DROPS - Global Platform for ecomuseums and community museums.
- EMI - Italian ecomuseums network.

- ICOFOM - International Committee for Museology.
- ICOM SOMUS - International Committee for Social Museology.
- ICOM MINOM - International movement for a new Museology.
- ICOM SUSTAIN - International Committee on museums and sustainable development.
- Club per l'UNESCO - Genova Città Metropolitana.
- Barbados Museum and Historical Society.
- APOYOnline - Association for Heritage Preservation of the Americas.
- Regenera Museu.
- Climate Museums UK.
- NBFC - National Biodiversity Future Center.