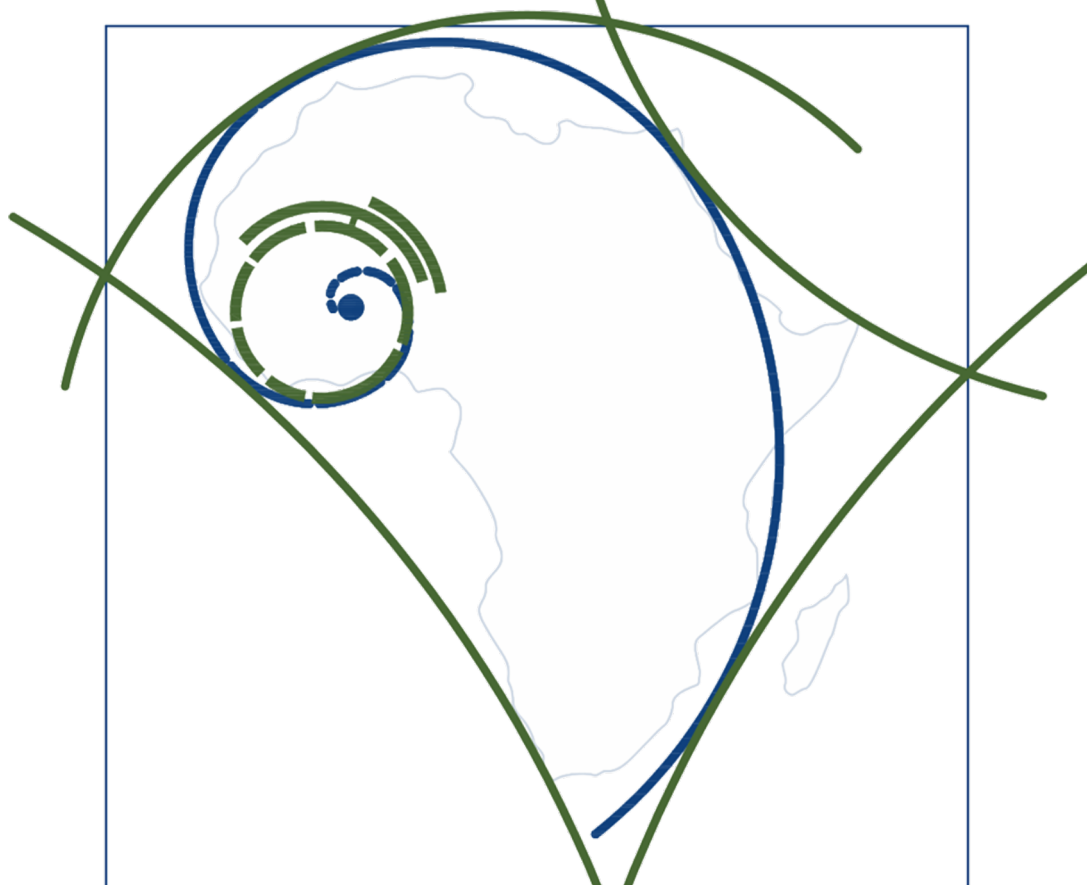


ARCHITECTURE HERITAGE and DESIGN

Carmine Gambardella

XXIV INTERNATIONAL FORUM

Le Vie dei
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**WORLD HERITAGE | AFRICA LESS IS MORE
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Scholars has been invited to submit researches on theoretical and methodological aspects related to the impact of natural ecological disasters and armed conflicts on Cultural Heritage, and show real applications and experiences carried out on this themes. Based on blind peer review, abstracts has been accepted, conditionally accepted, or rejected. Authors of accepted and conditionally accepted papers has been invited to submit full papers. These has been again peer-reviewed and selected for the oral session and publication, or only for the publication in the conference proceedings.

Conference report

300 abstracts and 400 authors from 20 countries:

Albania, Algeria, Australia, Belgium, Canada, China, France, Germany, Greece, Hungary, India, Iran, Italy, Japan, Morocco, Mexico, Portugal, Romania, Republic of Guinea, Serbia, South Africa, Spain, Turkey, Uganda, United Kingdom, United State of America.

**From the XXIII FORUM WORLD HERITAGE and FOOD TO FEED
to the XXIV FORUM:
WORLD HERITAGE and AFRICA: LESS IS MORE
WORLD HERITAGE and FUTURE AS AN ETERNAL PRESENT**

The **XXIV International Forum “Le Vie dei Mercanti”** continues the path of previous editions by presenting World Heritage as a living organism able to connect memory, identity, and future. After the reflections on “*World Heritage and Food to Feed*,” the 2026 edition broadens its focus to Africa and to the idea of the future as a dynamic continuity of the present.

The theme **World Heritage and Africa: Less is More** recognizes Africa as the cradle of humanity and a laboratory of sustainability. Its cultural landscapes and vernacular architectures demonstrate how the integration of environment, traditional techniques, and community life can generate resilient, low-impact solutions. “Less is More” becomes an ethical and design paradigm: enhancement of local resources, natural materials, essential construction processes, circular economy, and community participation. Heritage protection is thus understood as an active process of social and economic regeneration, based on light settlement models attentive to biodiversity and the memory of places.

The theme **World Heritage and Future as an Eternal Present** interprets heritage as a dynamic system, not only a legacy of the past but a living structure shaping the future. Architecture and planning act as mediators between memory and innovation, integrating digital technologies, advanced education, and knowledge dissemination. Sustainability embraces public health, quality of life, and environmental responsibility within an inclusive global vision.

The logo of the XXIV International Forum synthesizes these values: Africa as a universal reference, the golden ratio as harmony between nature and culture, and the cell as a symbol of life and continuity. Heritage thus emerges as a balance between history and design, tradition and innovation.

Prof. Carmine Gambardella
General Chair XXIV Forum ‘World Heritage and Africa: Less is More’
and ‘World Heritage and Future as an Eternal Present’
President and CEO of the Benecon University Consortium
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**Dal XXIII FORUM WORLD HERITAGE and FOOD TO FEED
al XXIV FORUM:
WORLD HERITAGE and AFRICA: LESS IS MORE
WORLD HERITAGE and FUTURE AS AN ETERNAL PRESENT**

Il **XXIV Forum Internazionale “Le Vie dei Mercanti”** prosegue il percorso delle edizioni precedenti ponendo il patrimonio mondiale come organismo vivente, capace di connettere memoria, identità e futuro. Dopo la riflessione su “*World Heritage and Food to Feed*”, l’edizione 2026 amplia lo sguardo al ruolo dell’Africa e al futuro inteso come continuità dinamica del presente.

Il tema **World Heritage and Africa: Less is More** riconosce l’Africa come culla dell’umanità e laboratorio di sostenibilità. I suoi paesaggi culturali e le architetture vernacolari mostrano come l’integrazione tra ambiente, tecniche tradizionali e vita comunitaria generi soluzioni resilienti e a basso impatto. “Less is More” diventa paradigma etico e progettuale: valorizzazione delle risorse locali, uso di materiali naturali, processi costruttivi essenziali, economia circolare e partecipazione delle comunità. La tutela del patrimonio si configura così come processo attivo di rigenerazione sociale ed economica, fondato su modelli insediativi leggeri, attenti alla biodiversità e alla memoria dei luoghi.

Il tema **World Heritage and Future as an Eternal Present** interpreta il patrimonio come sistema dinamico, non solo eredità del passato ma struttura viva che orienta il futuro. Architettura e pianificazione diventano strumenti di mediazione tra memoria e innovazione, integrando tecnologie digitali, formazione avanzata e diffusione della conoscenza. La sostenibilità comprende salute pubblica, qualità della vita e responsabilità ambientale, in una visione inclusiva e globale.

Il logo del XXIV Forum Internazionale sintetizza tali valori: l’Africa come riferimento universale, la sezione aurea quale principio di armonia tra natura e cultura, la cellula come simbolo di vita e continuità. Il patrimonio emerge così come equilibrio tra storia e progetto, tradizione e innovazione.

Prof. Carmine Gambardella
General Chair XXIV Forum ‘World Heritage and Africa: Less is More’
and ‘World Heritage and Future as an Eternal Present’
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Territorial Synergies in Conservation: A Spatial and Functional Taxonomy of OECMs

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Abstract

The rapid loss of biodiversity and the fragmentation of ecosystems call for conservation instruments that are more inclusive and spatially integrated than traditional Protected Areas alone. Within this context, Other Effective Area-based Conservation Measures (OECMs) have emerged as strategic components for implementing the Kunming–Montreal Global Biodiversity Framework and achieving the 30×30 target.

This study proposes a spatial, functional, and regulatory taxonomy of OECMs at the global scale, with the aim of analysing territorial configurations, governance models, and policy frameworks through which these measures are implemented. A comparative approach highlights recurring patterns in the relationships among OECMs, Protected Areas, and existing protection systems.

The findings indicate that OECMs enhance ecological connectivity, strengthen local stewardship, and align ecological and socio-cultural objectives. The proposed framework is replicable for the identification and design of OECMs and is particularly pertinent to Europe, where they have not yet been formally implemented, but could support more effective and resilient conservation networks.

Keywords: Other effective area-based conservation measures; taxonomy; conservation; Global biodiversity framework

1. Beyond Beyond Protected Areas. The emerging Role of OECMs in Global Biodiversity Goals

The global environmental crisis has reached unprecedented levels of severity, as highlighted by major international assessments – including the IPBES Global Assessment Report (2019)

[1] and the CBD Global Biodiversity Outlook 5 (2020) [2] – which document a rapid decline in biodiversity and widespread ecosystem degradation. This loss is further accelerated by the interaction between climate change [3] and escalating anthropogenic pressures, attributable to urbanisation, land-use change, habitat fragmentation, pollution, and the intensive exploitation of natural resources, all of which reflect structurally unsustainable development models [4, 5].

In response to this critical trajectory, the scientific community and leading international strategies have identified Protected Areas (PAs) as essential instruments for the in situ conservation of biodiversity and ecosystem services [6, 1]. However, the effectiveness of PAs systems depends not only on expanding the extent of designated sites, but also on the quality of their management and their capacity to integrate into coherent and functional ecological networks, thereby overcoming the traditional “Park-island” paradigm [7, 8].

Within this perspective, the Kunming–Montreal Global Biodiversity Framework (2022) establishes the “30×30” target, which aims to conserve 30% of terrestrial and marine areas through integrated systems of PAs and Other Effective Area-based Conservation Measures

(OECMs). This target is endorsed by the 198 Parties to the Convention, which define national objectives and mechanisms for its implementation.

OECMs, formally introduced by the CBD in 2010 under the Aichi Biodiversity Targets [9], have since assumed a strategic role in broadening and diversifying the global conservation toolbox. They recognise and valorise effective forms of biodiversity conservation that occur outside traditional PAs designations, thereby expanding the range of territorial governance models capable of delivering durable conservation outcomes.

1.1 OECM. Key definitions and Global Framework

The OECMs are defined as “a geographically delimited area other than a PA, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity, with associated ecosystem functions and services and, where applicable, cultural, spiritual, socio-economic, and other locally relevant values” [10].

According to the 2024 IUCN Guidelines, for a site to be recognised as an OECM four fundamental criteria must be fulfilled:

- it must not be designated as a PA, while nonetheless contributing substantially to biodiversity conservation;
- it must be a geographically defined area, with an active system of governance and management;
- it must provide an effective and durable contribution to the in situ conservation of biodiversity;
- it must contribute to the conservation of ecosystem services and to the safeguarding of cultural, spiritual, socio-economic and other locally relevant values [11].

The essence of OECMs lies in their capacity to deliver stable, long-term conservation outcomes, regardless of whether biodiversity conservation constitutes the primary management objective. This flexibility - allowing areas governed for cultural, productive, spiritual or territorial purposes to be recognised as contributing to conservation - has facilitated the rapid global diffusion of the instrument, expanding the diversity of contexts and governance models that can be included within international conservation systems.

Globally, OECMs have grown significantly: as of 2026, 7,462 sites have been officially recognised [12], with a prevailing distribution across North and South America, North Africa and Southeast Asia.

In the European context, the designation of OECMs is still at an early stage. In the absence of dedicated EU guidelines, the existing indications are incorporated within the 2030 EU Biodiversity Strategy, which outlines the contribution of OECMs to the 30% conservation target [13]. Despite increasing global uptake [14], the publication of an IUCN reference document specific to the European context [15], and several national reports assessing their potential application [16, 17], no site has yet been officially registered as an OECM in the global database for the European continent [12]. Only Scotland has developed its own approach to OECMs—using the term “Nature30 sites” and identifying four such sites by 2026 [18]—although these are not yet included in the global database [12].

Nevertheless, the potential for OECMs in Europe is substantial, particularly in landscapes characterised by territorial fragmentation, high land-use pressures and the coexistence of natural, cultural and productive values. Currently, PAs cover approximately 23.2% of the European Union’s territory, amounting to 5,520,726 km² of terrestrial and marine protected surface [12]. In this context, OECMs may serve as strategic complementary instruments, contributing to:

- strengthening ecological connectivity beyond the boundaries of PAs;
- integrating and valorising local sustainable management practices;
- incorporating into the conservation network marginal areas that play key ecological functions;
- building more interconnected and resilient territorial systems.

From this perspective, OECMs represent an essential component of a more inclusive and integrated conservation approach, capable of engaging a plurality of actors and territories and extending protection beyond formal PAs, thereby enhancing ecosystem resilience and

supporting the achievement of the objectives of the Kunming–Montreal Global Biodiversity Framework.

2. Taxonomy of OECMs: A Spatial and Functional Approach

This study aims to define and test a comparative taxonomy of Other Effective Area-based Conservation Measures (OECMs) established at the global scale, situating them within the framework of the Convention on Biological Diversity. The taxonomy of OECM sites is developed along three analytical dimensions—spatial, functional and normative—anchoring the classification to their territorial, ecological, managerial and legal-administrative characteristics. Through this taxonomy, it is possible to identify recurring patterns in the geographical distribution of OECMs, in governance models, and in associated conservation functions, in order to highlight the conditions that favour the effectiveness and long-term durability of in situ conservation outcomes delivered by OECMs. The ultimate objective is to contribute to the scientific and operational debate on OECMs, with particular attention to the European context, by proposing comparable and replicable criteria to support the identification, delineation and design of new OECMs. Taken together, these aims respond to the need for analytical and operational tools consistent with the Kunming–Montreal Global Biodiversity Framework and its global 30×30 target, promoting an integrated approach to the strengthening of conservation policies.

From a methodological perspective, the study adopts an analytical matrix articulated into three macro-dimensions: spatial taxonomy, functional taxonomy and normative taxonomy. The sources used include the World Database on Protected and Conserved Areas (WDPA) available on the Protected Planet portal [12], institutional sources and international scientific literature regarding OECM sites already recognised but not yet reported within the WDPA. The spatial taxonomy includes indicators relating to the spatial scale of the site (macro-regional, regional, local), to the geographical context (terrestrial, inland waters and marine), and to the relationship with existing Protected Areas (archipelago-like configurations, contiguous, buffer, or separate sites).

The functional taxonomy encompasses the typology of governance (state, private, Indigenous Peoples and local communities, shared governance) and the predominant management objectives (ecological, cultural and social).

The normative taxonomy identifies the different regulatory approaches for OECM recognition at the national scale (ministerial or departmental legal instruments, national guidelines and policy frameworks, administrative procedures, sector-based recognition, and measures in areas beyond national jurisdiction), along with the relationship between OECMs and other existing protection systems (Historic Sites, Cultural Parks, Sites of Biological Interest, Ramsar Sites, Key Biodiversity Areas) and the planning and management tools applied to OECMs (Existing Management Plan, Integrated Planning System).

	Results
<i>Spatial taxonomy</i>	
Spatial scale	OECMs are geographically defined areas characterised by clear and recognisable boundaries. Although no minimum size is prescribed, they must possess an ecologically meaningful extent capable of ensuring long-term and durable conservation outcomes. Analysis of designated sites shows that OECMs can occur across three spatial scales: the macro-regional scale (landscape scale), the regional scale (ecosystem scale), and the local scale. The variation in size is particularly substantial: Algeria hosts the five largest OECMs in the world, each exceeding several tens of millions of hectares [11]. Comparative estimates indicate that the average size of OECM sites differs considerably among countries, with approximately 250,000 ha in Colombia, 90,000 ha in the Philippines, and 570,000 ha in South Africa [19]. At the opposite end of the spectrum, the smallest OECMs may encompass only a few dozen hectares, as in the case of the Jagatpur Wetland in India (40 ha) or several sites in the Cook Islands, which cover surfaces on the order of one hundred hectares.

Geographical context	OECMs do not correspond to a predetermined ecosystem category and may therefore be recognised across a wide range of geographical contexts. These contexts can be grouped into three principal macro-domains, each encompassing a plurality of ecosystems and territorial configurations. - <u>Terrestrial system:</u> Mountain areas (Mountain Dene Land, Canada), forest areas (Takitumu Conservation Area, Cook Islands), urban areas (Hachioji Nagaïke Park, Japan), terrestrial coastal areas (Littoral Atlantique, Morocco), agricultural areas (Zabo Agricultural System, India); educational and university facilities (Queen's University Biological Station, Canada), military zones (Canadian Forces Base Shilo, Canada). - <u>Inland waters:</u> Lakes, wetlands (Kadwa Kosi floodplains, India) and river systems (Anderson River, Canada); - <u>Marine and coastal system:</u> Coastal marine areas (Scallop Buffer Zone, Canada) and the high seas (Cournier Rise Seamount, Areas Beyond National Jurisdiction).
Relationship with existing Protected Areas	OECMs do not, by definition, overlap with PAs, but operate alongside them as part of integrated conservation networks, in which each site performs distinct yet complementary roles. With regard to the spatial relationships that may occur between these designations, four main configurations can be identified: - <u>Network-integrated relationships:</u> a multi-site configuration in which a set of OECMs strategically distributed across the territory contributes, together with PAs, to forming a cohesive ecological system, even in the absence of physical contiguity (Cuenca Hidrográfica Río San Jorge, Colombia; Sea to Sky Wildland Areas, Canada); - <u>Edge-sharing relationships:</u> when OECMs physically touch the boundary of PAs, thereby forming a single, continuous ecological extension (Ikawa mountains and forest, Japan); - <u>Buffer-protection relationships:</u> when OECMs are located around PAs, forming a peripheral buffer belt (Ramsar Site Delta Estuarino del Río Magdalena, Colombia); - <u>Independent-complementary relationships:</u> OECMs located at a physical distance from existing PAs, which are important because they enhance the representativeness of biodiversity by encompassing ecosystems or species that are not present within PAs (Old Growth Management Areas, Canada).
<i>Functional taxonomy</i>	
Type of governance	In accordance with the IUCN classification applied to Protected Areas, OECMs fall into four principal governance models: governmental, shared, private, and governance by Indigenous Peoples and Local Communities (IPLC) [20]. - <u>Public governance</u> Decision-making and management responsibilities are exercised by public authorities (national, sub-national or local). This represents the most prevalent governance type globally. Such governance ensures institutional certainty and integration with sectoral policies, and is particularly widespread in Africa, the Americas and Southeast Asia [11]. - <u>Private governance</u> Sites governed by private actors (individual landowners or organisations) represent a very small proportion of OECMs worldwide [11]. Existing examples include forest research areas in Canada; environmental education and biodiversity conservation sites managed by private technical and research centres in Thailand and Japan; small private nature reserves managed by NGOs in Ecuador; and religious-spiritual sites in Korea. - <u>Governance by Indigenous Peoples and Local Communities (IPLC)</u> This model assigns Indigenous peoples and local communities a direct role in territorial governance and management, often grounded in collective rights,

	traditional practices and local knowledge systems. Although under-represented in official reporting (less than 2% of all recorded sites), this form of governance is crucial for biocultural conservation, territorial continuity and socio-ecological resilience [11]. - <u>Shared governance</u> Shared governance involves formal co-management arrangements among public authorities, local governments, intergovernmental organisations, watershed agencies, NGOs and, in some cases, IPLC. It is particularly suited to multi-sectoral objectives (ecological, social, cultural), transboundary sites and ecological network management, and supports coordination and social legitimacy of conservation measures [20, 21, 11]. Examples include hunting reserves in Morocco, Ramsar sites and watershed areas in Venezuela, and several marine OECMs in the Northwest Atlantic.
Main management objectives	Unlike PAs, OECMs are not managed exclusively with conservation as the primary objective; accordingly, conservation may constitute a primary, secondary, or ancillary management goal [11]. Beyond the general reference to biodiversity conservation as an essential requirement, OECMs may pursue a plurality of distinct management objectives, which can be grouped primarily into two broad categories: ecological objectives and socio-cultural objectives. - <u>Ecological objectives</u> Conservation of habitats and species: protection of critical habitats, breeding areas, ecological corridors, and threatened species (Community Reserve for the Conservation of Grey Parrots, Democratic Republic of the Congo); Safeguarding ecosystem functions: hydrological regulation, protection of wetlands, disaster risk reduction, maintenance of soil fertility, and carbon sequestration (OECMs in Japan supporting Eco-DDR strategies) [21]; Climate resilience: strengthening the adaptive capacity of ecosystems, with benefits for both mitigation and adaptation to climate change (tropical forests with high carbon stocks). - <u>Socio-cultural objectives</u> Cultural and spiritual values: sacred or identity-bearing sites conserved by communities and faith groups (Takitumu Conservation Area, Cook Islands); Subsistence and sustainable livelihoods: traditional resource-management practices that indirectly support biodiversity conservation (extensive pastoralism in semi-natural systems; community-regulated artisanal fisheries in the Pacific and Southeast Asia); Development of sustainable economies: initiatives based on the sustainable use of natural resources, ecotourism, and community-based conservation actions [21]; Research, education and training: areas designated for scientific or educational purposes, where conservation outcomes derive from continuous use, monitoring and knowledge production (forest university campus in Africa; research stations in Canada and Japan).
<i>Normative taxonomy</i>	
Regulatory framework	The regulatory framework for the identification and recognition of OECMs varies considerably between countries, with five main categories of instruments through which OECMs are integrated into national regulatory systems [22]. - <u>Ministerial or departmental legal instruments</u> Legally binding ministerial acts issued within the scope of competences already established under existing legislation (Ecuador, Peru, Argentina); - <u>National guidelines and policy frameworks</u> National guidelines aligned with CBD criteria, lacking binding legal effect yet used to ensure procedural consistency (Canada, Colombia, Australia); - <u>Administrative procedures</u> Administrative procedures established under existing environmental legislation, without the introduction of new regulatory instruments (Japan, Cook Islands, Guernsey, Republic of Korea, Eswatini);

	- <u>Sector-based recognition</u> Recognition based on pre-existing sectoral frameworks (fisheries, forestry, hunting, cultural heritage) that already deliver durable conservation outcomes (Algeria, Morocco, Oman, Philippines); - <u>Beyond National Jurisdiction</u> In the case of OECMs located in areas beyond national jurisdiction, recognition is entrusted to the decisions of Regional Fisheries Management Organisations, particularly in the Northeast Atlantic. At the same time, many Countries are developing regulatory frameworks for the identification of OECMs. Countries falling within the first category (ministerial legal instruments) include Costa Rica, Indonesia and South Africa; those in the second category (national guidelines and policy frameworks) include Chile, France, India, Malaysia, Scotland and Vietnam; while the third category (administrative procedures) includes Bhutan, Namibia and Nepal.
Relationship with other existing protection systems	In continuity with what is outlined in the previous section (Regulatory framework), a distinctive feature of OECMs lies in their ability to be embedded within pre-existing protection and management frameworks, without requiring the establishment of new legal categories. This characteristic makes it possible to valorise consolidated regulatory instruments, avoiding institutional overlaps and strengthening the conservation function of existing designations [14]. Global analyses indeed show that a significant share of OECMs is recognised on sites already endowed with their own legal and administrative regimes. From this perspective, OECM recognition assumes the value of an additional conservation qualification, acting as a mechanism that renders visible, formalises, and reinforces the contribution to biodiversity provided by these pre-existing protection systems. - <u>National Historic Sites:</u> In North America — particularly in the United States and Canada — several National Historic Sites have been recognised as OECMs (Fortress of Louisbourg National Historic Site, Canada); - <u>Cultural Parks:</u> One of the most extensive networks of existing OECMs is represented by Algeria's Cultural Parks, which cover over 50 million hectares. These parks, defined by national legislation as "areas characterised by the predominance and importance of cultural assets," are established under the country's legal framework for the protection of eco-cultural heritage [23] (Tassili n'Ajjer, Ahaggar, Touat-Gourara-Tidikelt, Tindouf, and the Atlas Saharien, Algeria); - <u>Hunting Reserve, Sites of Biological and Ecological Interest, Nature Reserves, River Basins, Ramsar Sites:</u> In Africa and South America, numerous OECMs are located on areas already designated as: nature reserves (Río Anzu Reserve, Ecuador); Sites of Biological and Ecological Interest (SIBEs) (Jbel Tazerkount, Bou Tferda, Morocco); hunting reserves (Béni Mellal, Morocco); river basins (Cuenca Hidrográfica Río San Jorge, Colombia); and Ramsar Sites (Estrella Fluvial Inírida, Colombia). In such cases, the OECM constitutes an additional designation that recognises and valorises already consolidated management practices. - <u>Key biodiversity areas (KBAs):</u> KBAs constitute priority sites for biodiversity, identified on the basis of internationally defined scientific criteria [24]. Recent analyses show that over one quarter of OECMs worldwide overlap with KBAs [11], revealing a strong synergy between the two instruments. In South Africa, approximately half of the unprotected KBAs meet OECM criteria [25]. In India, KBAs serve as a fundamental reference for identifying potential OECMs [26] (Namphala, Tergola, Dagachu). - <u>Marine areas:</u> Many marine OECMs rely on existing designations, such as Marine Refuges in Canada, established under the Fisheries Act [27] which aims to conserve fish stocks, protect vulnerable habitats and maintain ecological connectivity [28].

	Some countries are considering extending OECMs to national designations that are already in place: - <u>Conservation areas</u> South Africa is currently assessing the recognition of its Conservation Areas as OECMs, with the aim of strengthening already established stewardship systems [25]. - <u>Ecological Protection Redline (EPRL) system:</u> China has recently established a systematic conservation network known as EPRL, which delineates approximately 32% of the national territory as “ecological space” [29] and exhibits high potential for recognition as OECMs without the need to introduce new legal categories [21].
Planning and management tools	Within OECMs, the pursuit of in situ conservation objectives—together with the broad range of aims outlined in the Functional taxonomy—is carried out through territorial planning instruments or site-specific management tools. Depending on whether the OECM is recognised on a site already subject to other forms of protection or not, two distinct situations emerge. - <u>Existing Management Plan</u> When the OECM is designated on an area already protected, the management tool in force for that site is applied to the OECM. The site’s management plan is subsequently updated and integrated with specific content related to its new OECM status. Such updates may include the definition of the OECM boundaries which may not fully coincide with the original ones, and the explicit articulation of biodiversity conservation objectives as well as ecological and socio-cultural management measures. This is the case for National Historic Sites in Canada, where Management Plans are revised to incorporate objectives and measures aligned with OECM conservation criteria, in addition to the cultural purposes of the site. - <u>Integrated Planning System</u> In sites characterised by complex governance arrangements, the planning and management of the OECM emerges from an integrated system of pre-existing plans and management tools operating within the territory. Typically, at the overall scale, a general zoning framework is defined for the entire OECM perimeter, establishing strategic orientations and conservation objectives applicable to the whole site. Within this overarching framework, multiple planning and management instruments coexist, often equipped with their own zoning systems and regulatory regimes, which govern land use, permitted activities, and conservation measures in a more detailed manner for specific territorial units or ecosystem components (Área de Manejo Especial La Macarena, Colombia) [30].

Table 1. OECM Taxonomy.

3. Conclusion

The proposed taxonomy (Table 1), articulated across the spatial, functional and normative dimensions, can serve as a replicable tool to: systematically classify OECM sites; highlight their role within territorial systems; and assess the coherence between management objectives, governance arrangements and ecological value. In particular, it has shown that a site’s conservation role depends not only on its intrinsic ecological value, but, above all, on the position it occupies within the territorial network and on the governance instruments that regulate its use. This perspective suggests that conservation planning can no longer be interpreted solely as the delimitation of traditional PAs, but rather as the progressive construction of diffuse ecological networks.

This aspect appears particularly relevant in the European context, which is characterised by a high degree of ecosystem fragmentation; under such conditions, the expansion of PAs often encounters social, economic and planning constraints, whereas numerous territories already managed for cultural, productive or community purposes generate positive effects on biodiversity without being formally recognised within conservation systems. OECMs therefore offer the possibility of addressing this gap by recognising and strengthening territorial practices that, in effect, contribute to the protection of ecosystems.

The main challenge for the future, however, is to translate this potential into operational planning and governance tools. This requires, on the one hand, recognition and monitoring criteria that can guarantee lasting conservation results and, on the other, a more explicit integration of OECMs into territorial policies, so that they can contribute to the construction of coherent ecological networks both on a large scale and at the local level. From this perspective, OECMs should not be interpreted as a residual category compared to PAs, but as a strategic component of a more flexible conservation system, capable of operating in landscapes modified by humans and linking ecological, social and cultural dimensions.

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