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# The Cultural Value of Protected Areas as Models of Sustainable Development

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Abstract: In recognition of the urgent need to drive the transition to truly sustainable development, it is our belief that the divisions still distinguishing economic, social and environmental dimensions of human activities can impede the creation of conditions for sustainable development. Our paper investigates reference models for integrating such economic, social and environmental perspectives of sustainable development, proposing a systems approach. We take into consideration protected areas as models of sustainable development by means of a case study, discussing (1) the need to integrate the economic, social and environmental dimensions of human activity; and (2) opportunities offered by protected areas as reference models for promoting sustainable development in the wider surrounding territory. Findings highlight the cultural value of protected areas as models of sustainable development leveraging territorial governance on the basis of a systems approach.

Keywords: protected areas; sustainable development; landscape; governance; systems approach

#### 1. Introduction

Italy is among the most attractive and beautiful countries in the world. The need to safeguard such wealth has led to the institution of protected areas: territories that evidence an enduring balanced ecosystem [1]. Protection of such areas has long been considered a primary aim often contrasting with the need to enhance them. Over time, however, to resolve the traditional protection/enhancement dichotomy, a view highlighting the virtuous relationship between the two activities has emerged [2]. The key lies in the concept that such areas transmit to humans about adopting models of development that are environmentally, socially and economically sustainable [3–5]. In other words, protected areas can be viewed as reference models for promoting sustainable development in the surrounding territory [6].

Despite wide consensus, the reality of protected areas in Italy shows a potential that is far from being fully expressed especially with reference to their value as models of sustainable development. Accordingly, our research question pivots on: what value derives from protected areas as models of sustainable development, and how they can be effectively enhanced?

The discussion of our research question leads us to highlight the necessity of a systems perspective as a methodological approach capable of overcoming the divisions between the various views that characterize territorial governance for addressing sustainable development.

The need to recover a systems view of economic, social and environmental processes has been highlighted in the effort to realize sustainability [7–9]. A systems perspective supports a unitary

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view of the effects of actions in each of the three spheres of sustainability (social, economic and environmental) as represented in the well-known Triple Bottom Line framework [10]. A key challenge of the governance approach for sustainability is aligning the different goals that emerge from the various perspectives involved in development issues.

To discuss our research question, the study is organized as follows: we first provide the essentials of the conceptual and theoretical background of our proposal by illustrating the concepts of sustainable development and protected areas with particular reference to the relevance of rural landscapes. Subsequently, we illustrate our methodological approach with a focus on the key problem being addressed. Then, we present the case study highlighting elements useful to the subsequent discussion where we propose our view of protected areas as models of sustainable development and where, thanks to the adoption of a systems view, the environmental, social and economic perspectives are integrated within a unitary systems view of sustainability. Finally, we highlight the main managerial and research implications.

#### 1.1. Key Concepts and Theoretical Background

To illustrate our theoretical background, we first briefly introduce the concepts of sustainable development and protected areas in order to highlight relevant aspects of our interpretative proposal.

# 1.1.1. Sustainable Development

The definitions of sustainability and sustainable development are not univocal, even within the scientific community. Some emphasize its historical origins, others political, economic, socio-cultural aspects, while finally others use multidisciplinary approaches. The first definition of sustainable development appeared in the Bruntland Report (1987) also used by the United Nations (UN) World Commission on Environment and Development (WCED) [11]: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

A later (and more comprehensive) definition of sustainable development provided in 1991 by the World Conservation Union (WCU), United Nations Environment Programme (UNEP) and World Wildlife Fund for Nature (WWF) stated [12]: "Improving the quality of human life while living within the carrying capacity of supporting eco-systems". In 1994, the ICLEI (International Council for Local Environmental Initiatives) proposed a new definition [13]: "Development that delivers basic environmental, social and economic services to all residents of a community without threatening the viability of natural, built and social system upon which the delivery of those systems depends". Finally, in 2001 the UN Educational, Scientific and Cultural Organization (UNESCO) extended the idea of sustainability, affirming that "Cultural diversity is as necessary for humankind as biodiversity is for nature [...] Cultural diversity widens the range of options open to everyone; it is one of the roots of development, understood not simply in terms of economic growth, but also as a means to achieve a more satisfactory intellectual, emotional, moral and spiritual existence" [14].

In consonance with the UNESCO definition [14], sustainable development may be considered a process based on four pillars: ecology, economics, equity and cultural diversity. The creation of a more sustainable society has become a crucial issue across the world. Several methods, approaches and policies can be applied, and agencies, interests groups etc. have become active in this regard. The management of protected areas is a relevant challenge for obtaining sustainable rural systems.

## 1.1.2. Protected Areas and Rural Landscapes

During the past two decades, considerable growth in protected areas in the world has taken place, in particular, with remarkable development in terms of extension, quantity and diversity [15–17]. Furthermore, protected areas have been recognized as areas of particular importance, since they are suitable contexts for experimenting and developing a sustainable use of the territory [18,19]. Their mission, not limited to ecosystem and biodiversity conservation [20], includes supporting local social and economic development [21–25]. A land use consistent with the future needs of humankind

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as well as with current needs implies the ability to design development plans complying with the physical and cultural carrying capacity of places and individual local attractions and, therefore, of the supporting ecosystems on which the territory depends [26]. In a nutshell, applied to the landscape, the paradigm of sustainable development involves behaviours that avoid impoverishing the territories, compromising the quality of the environment, affecting their social and cultural balance, generating for structures and infrastructures non-recoverable costs through revenues, and involving consumption (energy, water, landscape, etc.) higher than is acceptable [27,28].

Therefore, protected areas pursue not only ecological and environmental objectives but also those of a socio-cultural and economic nature, thus becoming key factors in the socio-economic development of local systems. As for the effects on the economy, the contribution of protected areas to revitalizing rural and internal areas is evident. Increased demand for goods and services generated by them determines additional remuneration, supports the mitigation of the demographic landslide that, commonly, depletes rural areas, and contributes to the protection of local heritage [29,30].

The economic development of a territory should not, therefore, be seen as exploitation, but rather as enhancement. In other words, it implies engaging in processes of value created from specific resources of a place (natural, cultural etc.) through products and services capable of intercepting and satisfying the widest possible demand. On the one hand, the protection of the territory shifts from being an activity as an end in itself to the condition sine qua non for enhancement, thus enabling, on the other hand, the pursuit of long-term self-sustaining sustainability [31].

In the light of the above considerations, the most suitable factors for achieving sustainable economic development of protected areas and rural landscapes are tourism, agriculture and pastoralism.

As concerns tourism, natural protected areas as well as rural ones are increasingly popular tourist destinations [32], as places that offer a wide range of attractions: contact with nature, sports, knowledge, experience of local culture (traditions, crafts, eno-gastronomy, agro-food, etc.) and relaxation [33]. Respect for the environment means the preservation and enhancement of irreproducible resources involved in tourism are indispensable conditions for maintaining an area's ability to attract tourists in the long term [34–36].

The combination of tourism-protected and rural areas bases its success on the multifaceted concept of landscape, as organic material evidence of the culture of the communities that have lived in a place consecutively, conforming the territory to their needs—including tastes and values—according to their material and immaterial capacities to produce desired transformations. Therefore, the landscape, as a set of local resources and the result of the works of human transformation, is an essential element for enhancing and understanding local culture, as it is easily identified and highly differentiated from other contexts.

The great opportunity offered by tourism, also as a profitable economic activity, to sustainable land-use planning is confirmed both statistically and in legislative dispositions.

In Italy, an annual growth rate of 2% of overnight stays in parks and in rural areas is expected in 2020, compared to an annual increase of 3% in cities of art, and of 1.5% for mountain resorts and wellness tourism [37,38].

Furthermore, the [39], approved by the Italian Senate in June 2017 concerning the regulation of eco-compatible economic activities taking place in parks and protected areas fosters tourism and related initiatives in addition to the recovery of ecosystems and characteristics of landscape, the economic-social development of residential communities, the protection and enhancement of the archaeological and historical-cultural heritage, and the attraction of visitors spurred by naturalistic, cultural and educational motives. Tourism, as a multidimensional phenomenon [40], is thus acknowledged as able to reconcile the protection of biodiversity and social, cultural and economic development of a territory.

Agro-forestry and cattle breeding also play a primary role in economic activities considered compatible with the protection of environmental resources. In areas where agriculture occupies a significant portion of the territory, such as protected and rural areas, when planned and managed in compliance with sustainability criteria (environmental, social and economic), this becomes a decisive

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tool for sustainable land management. In line with the considerations relative to the concept of landscape, high levels of anthropic fostering are recorded in rural and protected areas where the territory has been shaped over many years by human activities, especially those related to agriculture, resulting as an inalienable part of local identity and of its value together with the local communities who live there.

The high potential value of agriculture in protected areas and rural landscapes for sustainable development has, thus, become a very important topic for Italians scholars, especially agricultural economists, whose aim is to foster the promotion of development paths in rural areas by providing analytical tools to assess their dynamics, and to identify appropriate policy instruments [41–47].

In order to benefit from such economic and socio-cultural opportunities at the local level [48], it would be useful to include the management of protected and rural areas in regional planning processes [49]. In other words, to implement a systems governance of the territory [50–52], based on cooperation between public and private local actors, starting with those responsible for tourism development and those responsible for nature conservation and protected area management [53,54], as well as the local community.

However, the management of protected areas suffers from a lack of political commitment to realize their full potential [26,55,56], as well as the persistence of multi-stakeholder conflicts [54], due to the complexity of governance and the competition between the different interests and views [20,57].

#### 2. Materials and Methods

#### 2.1. The Viable Systems Approach

The proposed discussion is developed in the light of the systems theory framework [58–65], with specific reference to the viable systems approach (VSA) [66–77], an accredited and a recognized constructivist research stream which favors the observation and understanding of social phenomena, as well as the role of boundaries for interacting systems, and which provides consistent support to decision-making processes for governance [69,78].

The viable systems approach research stream was developed over the last 20 years, mainly in Italy and involving numerous several scholars, and is a research and governance methodology rooted in systems thinking and an evolution of the viable system model of Stafford Beer [58].

The viable systems approach framework proposes general interpretation and representation schemes of social phenomena, as well as insights that throw light on the concept of boundaries, a key element of this article, highlighting their systemic nature, extending beyond the most common structural ones.

In particular, the approach provides in-depth discussion on the role of relations and interactions, rather than (simple) connections between actors. Such a shift clarifies the concept of sustainability, representing interaction and dynamism going beyond the exchange of physical resources through individual values and the strong beliefs of the actors involved. This appears particularly useful, as the concept of organizations as open systems is quite common today. Organizations are involved in many dynamics and related to many actors, with their patrimony of resources—available for exchanging processes if adequately encouraged—necessary to guarantee system survival in context. By this perspective, the role of systems boundaries is a fundamental concept that merits analysis to clarify governance and managerial behavior.

Viable systems approach appears particularly useful also because it allows the representation of the territory as a viable system [79]. A viable system aims at surviving conditions (consonance) in specific contexts, by favoring the integration of resources and value co-creation processes for public policy decision makers, communities, providers/owners of resources available for exchange processes, natural and social environments, future generations and non-human species, thus facilitating the essential conditions for sustainable equilibrium.

At a structural level, territorial boundaries vary in relation to specific contexts, enabling communication and filtering functions between that which is considered internal and that which is external, including the distinction between external and internal processes. However, by shifting

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observations from the static/structural to the dynamic/systems perspective, this representation seems to be flawed.

In line with this concept, our paper proposes an innovative interpretation of territorial boundaries, and argues the role and the implications of the properties of interaction processes between systems (and actors). In other words, despite the usefulness of structural information, we highlight the limits of such a restricted representation. Structural representations implicitly provide information relative to the objective characteristics of observed phenomenon, but clearly appear inadequate for understanding the dynamics that are intrinsically systemic in nature.

Another useful contribution for territorial governance from the VSA perspective defines the role of the governing subject in interpreting the context by: (1) identifying relevant actors in the system's plan; (2) analysing their goals that generally differ due to their diverging (if not conflicting) interests and views; and (3) then defining and redefining the system to act according to conditions of consonance (harmonic relationships and alignment between the actors involved to the final aim of promoting (sustainable) development of the territory).

The viable systems approach methodology is based on the distinction between the structural (objective) and the systems (subjective) view for the investigation of the observed phenomenon/system. A brief focus on the issue links territorial governance and the management of protected areas in a potentially common view of sustainable development. The following discussion of the case study of the Alta Murgia National Park in Italy, developed through an on-desk analysis adopting the systems view perspective introduced above, highlights the high potential value of protected areas as models of sustainable development.

## 2.2. The Key Problem and an Interpretation Model

Italian governance of territory and rural areas, which can be considered as an interrupt landscape of high cultural value shaped over time by the human–nature relationship, shows the reality of an underexploited patrimony. This is particularly true for the large part of the territory (11%) [80] represented by protected areas. The Italian system of parks and protected area is facing many difficulties, of different types [81,82]. The main problems are [83]: (1) lack of public funds and the inadequate capacity of fund raising; (2) often limited social consensus and the explicit aversion of local communities creates disparity between specific aims and territorial extension; and (3) the need for environmental and landscape protection.

From our perspective, these problems also appear to be related to the predominance of a management approach that seems to fail in effectively exploring and exploiting the true potential value of protected areas (as well as of the rest of the surrounding territory). A protected area often appears as a naturalistic 'island' incapable of acting effectively as a factor of territorial development [75]. In particular, the lack of social consensus appears as an expression of the incapability to make relevant actors converge towards an integrated development plan. Certainly, this problem is related to the complexity of aligning goals in a multi-actor context due to the diversity of interests and views at play. From a sustainable development perspective, territorial governance is even more complex, given the diversity of interests of the various actors involved in territorial processes that have always impacted on the environmental, social, and economic dimensions of sustainability.

Using the lens of systems thinking through the VSA framework, new light can be shed on these issues. Through the analysis and discussion of the case study, it becomes clear that:

- 1. The condition of isolation of protected areas is the result of a view focused excessively on the structural protection of the areas within the boundaries defined by the zonation process. This predominant structural view often prevents decision makers from identifying and exploiting relevant development opportunities that derive from making the protected area the 'core' of a wider territorial system to govern in the light of a sustainable development plan. The systems perspective should enable the integration of resources and the co-creation of value.
- 2. The complexity of territorial governance is also the result of an approach incapable of identifying elements of convergence between the actors involved that can generally be traced to the trade-offs between the three dimensions of sustainability. A systems approach could

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support the creation of conditions of consonance between interacting actors in terms of a unitary and coherent development plan to leverage common interests and value.

As highlighted by VSA, 'value' is never 'intrinsic' to an object; it is a subjective concept, measurable and appreciable by the beneficiary/user as in a service-interaction process [84]. The management approach of protected areas within a wider territorial system should take into account the subjective nature of value and attempt to identify a common key for enhancement involving the largest number of actors addressing development pathways.

In the light of the above and the methodological perspective of the VSA framework, our interpretative proposal aims to highlight the great potential of the cultural enhancement of protected areas as models for promoting sustainable development.

In particular, we refer to the biosphere reserves of the UNESCO program "Man and the Biosphere" (MaB) [85,86] as an interpretation scheme to identify key points of leverage for promoting sustainable development in territorial governance. The program stipulates, in fact, that protected areas should be managed as tools for promoting sustainable development. Essentially, the development model experimented with in protected areas should progressively involve external actors and communities of the territory. The development model integrates synergistically research, education, economic production, etc., activities involving necessarily all the dimensions and perspectives of sustainability as illustrated in Figure 1.

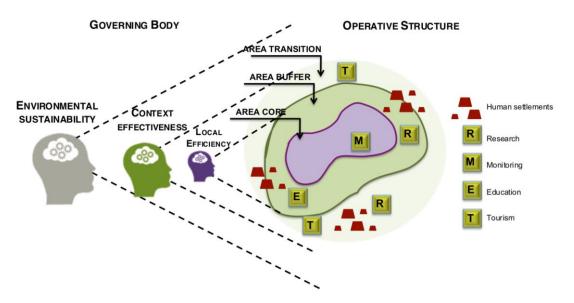


Figure 1. A systems-based governance model for protected areas [86,87].

The model of zonation, in other words, enables the governing body to progressively open the protected areas to interaction with the surrounding territory creating a unitary landscape in which effective and efficient sustainable development practices are defined, experimented with, monitored and socialized through various economic and social activities, primarily tourism, but also agriculture, culture, etc.

As will be seen, the cultural perspective represents a bridging element in the multi-actor and multi-perspective context of territorial governance. In particular, it enables the limits of an objective view of value to be overcome in order to embrace a wider sustainability perspective in which environmental, social and economic elements are integrated into a common unitary framework of reference for action involving all the relevant actors.

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### 3. Results

## 3.1. The Case of the Alta Murgia National Park in Italy

The Alta Murgia National Park was established by Presidential Decree of 10 March 2004 [88]; it extends for about 68,077 hectares and is divided into three diversely protected zones. The park covers two provinces (province of Bari and the new province of Barletta–Andria–Trani), 13 municipalities (Altamura, Andria, Bitonto, Cassano Murge, Corato, Gravina in Puglia, Grumo Appula, Minervino Murge, Poggiorsini, Ruvo di Puglia, Santeramo, Spinazzola, Toritto) with small towns all around its boundary, and two mountain communities (Murgia North-West, Murgia South-East.) There are about 450,000 inhabitants living in the area of the park [89].

The perimeter criterion applied to the park to define its boundaries derives from the desire to identify an area that is distinguished and characterized by elements that are typical of the Murgia territory, based on strong local connotations. The zonation process distinguishes the three zones characterized by differing degrees of protection: Zone 1, characterized by natural, scenic and cultural history of relevant interest, where steppe and rocky landscape prevails; Zone 2, characterized by natural, landscape and cultural history value, where agricultural landscape prevails; Zone 3, characterized by ecological connection and the promotion of economic activities that comply with constraints and aims defined by the park.

The territory of the Alta Murgia National Park has been inhabited by man, more or less intensely, since prehistoric times. Nevertheless, until the last decades of the twentieth century, the relationship between man and nature was balanced and human intelligence has made this territory more suitable for productive activities such as transhumant pastoralism and agriculture. Starting from the use of poor, resistant and easily available materials, such as limestone and 'tufo', extremely functional artefacts, valuable also from an architectural point of view have been created. Examples include dry stone walls, cisterns to collect rainwater, 'trulli' and 'casedde', stone sheepfolds (jazzi) and farms, as well as historic centres and castles.

The Alta Murgia National Park, a structured, precious set of architectural, environmental, naturalistic assets through its relaxed, silent landscape, creates a unique emotional experience. The integration between material, culture and emotional experience is the guiding image of the park and its heritage.

The park claims numerous strengths that could form the basis of an effective enhancement strategy: biodiversity and heritage in agriculture and forestry; specificity of agro-silvopastoral resources, which characterise almost the whole of the local landscape; typical and high-quality agri-food products; historical centres of artefacts functionally related to agricultural production of the territory; cultural tourist attractions; archaeological and paleontological testimonies; several local traditions etc. As will be seen, however, many strengths related to agriculture are not effectively capitalized. Moreover, numerous weaknesses prevent the such high potential to be met. Many of these weaknesses depend on the lack of a systems approach to the governance and management of the area capable of creating synergies and promoting the area beyond its borders [90]: a negative attitude to associations; difficulty of access to markets; limited processes of enhancement of naturalistic value; limited exploitation of the natural heritage; poor coordination of institutions; limited exploitation of the historical-cultural and archaeological heritage; difficulty in controlling and managing assets; abandoned rural structures; lack of intervention aimed at diversifying tourist offer packages (rural tourism, environmental, cultural, naturalistic) and their coordinated, integrated and selective coordination with respect to users and markets; low reception and service network; lack of a systematic promotion system, coordinated between local authorities; insufficient entrepreneurship and professional training in the tourism sector; poor infrastructure in the territory; and unemployment among youths and women.

In order to address such weaknesses typical of the generality of protected areas, an integrated organization and planning approach has been in place, experimented with since 2010 through development of the SAC (Sistema Ambientale Culturale—Cultural Environmental System) project.

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# 3.1.1. Organization and Planning

In 2010, the Puglia region issued by public notice the SAC, an innovative project for the allocation of Puglia community funds to integrated territorial areas.

Sistema Ambientale Culturale is based on an operational approach at territorial scale and involves the networking of actors, resources and skills for programs of intervention aimed at the enhancement of heritage, the construction of qualified relations with the territory, the mobilization of the productive system, and the promotion of advanced forms of territorial management of environmental and cultural resources.

The Apulian Environmental and Cultural System (to date 18 proposals approved throughout the regional territory), based on the idea of integration between goods and work-sharing, is characterized by an original and sustainable idea of development and territorial attractiveness, a coherent project of enhancement and integrated management of environmental and cultural resources. The proposals refer to supra-municipal areas and territorial partnerships which also include local authorities in associated form, park authorities, public law bodies, associations and bodies for social, cultural and tourist promotion, ecclesiastical bodies, foundations, business representatives, other bodies and institutions [91].

The territorial partnership of the Alta Murgia National Park SAC comprises 16 institutional partners and 68 other socio-economic partners from civic society.

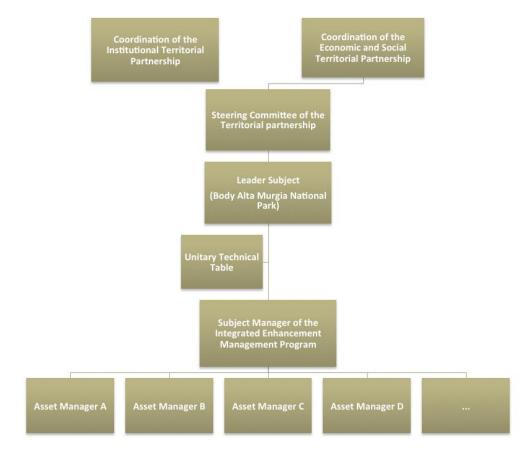
Governance of the system involves a leader, a committee, a representative of the institutional partnership who acts as a decision-maker, and an economic and social partnership institution. All the signatories of the partnership are committed to collaborate in the definition of the SAC and in the preparation and the implementation of the related actions of enhancement and integrated management. The governance of the SAC (Figure 2) is characterized by three formally regulated aspects: coordination between the public system and private operators of the SAC (memorandum of intent); methods of relationship between public actors (convention); methods of relationship between private actors (regulation).

The partnership shares the objective of defining and implementing stable and long-lasting action for the enhancement and integrated management of the environmental and cultural heritage of the territory for development purposes, within the framework of the SAC, on the basis of regional regulations and provisions.

Up to the period of the partnership, the Alta Murgia National Park territory was unable to coordinate the architectonic, cultural and environmental heritage it hosts due to extreme localism and the peripheral characteristics of the rural areas with respect to the urban centers of the municipalities of the park area. The new role of the national park, now the core center of the area (as required by the Puglia region), represents significant innovation contrasting with the traditional weakness of the system of the local governance.

The strength of the Alta Murgia National Park SAC is that the environment as a collective strategic resource represents a unique emotional experience that gives attractiveness to a territory and communicates the identity of places and an emotional message to the communities that enter the territory for work, tourism, trade, and leisure purposes. This leads to the immaterial value of products within an economic system and the so-called "experience economy" [92], a powerful driver of contemporary tourism choices.

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**Figure 2.** The Alta Murgia National Park Sistema Ambientale Culturale (SAC, Cultural Environmental System) organizational and management model [93].

The plan for the park was conceived, therefore, not only to respond to the need to geographically differentiate protection measures, but also to promote the integration and coordination of diverse actions and policies, on the basis of a coherent strategic, cross-sector and long-term framework [94].

The aim of overcoming the boundaries of the protected areas is apparent: planning involves many actors also from beyond the perimeters of the protected area. Successful strategies were based on the effective integration of natural and cultural resources [94]. Combining of cultural and natural values within an overall program of economic and social development also involves broader socio-economic contexts. The Alta Murgia National Park managed the risk of 'isolation' by integrating ecological, landscape, and environmental and cultural elements of the territorial system. Hence, protective action appears based on efficacious enhancement planning integrated within the urban, territorial, landscape and environmental planning process of the surrounding territory.

# 3.1.2. Development Activities

The environmental and landscape characteristics of the Alta Murgia area highlight complementarity between cultural and natural factors that can be further enhanced.

The strategic and systemic action implemented by the government of the Alta Murgia National Park to enhance the resources of the protected area clearly shift from a structural to a systems view of governance to a much broader cultural approach, by putting in place, for example, a physical network to connect urban and extra-urban goods to facilitate accessibility (billboards, information panels, slow mobility paths) (structural level of action); new slow mobility paths with minivans, rickshaws, bicycles (example of enjoyment systems); education services in laboratories (amplified 'cultural' enhancement).

Three main sectors characterize the growth of the park: agriculture, sheep-farming and tourism. The agro-pastoral activity harmonically integrates the human and natural element, moulding its landscape identity. Antique *masserias* (a set of rural buildings used as farms that support agro-pastoral activities) have a relevant role not only in economic terms, but also in supporting the management of the territory and the conservation of the landscape.

From a socio-economic perspective, the agro-livestock sector is a crucial factor for unemployment that higher in this area than at national level. Nevertheless, the continued reduction of usable agricultural areas, combined with the decreasing number of farms, represent the critical problems caused by a progressive abandonment of rural areas, with serious consequences in terms of economic, social and environmental risks of decline, resulting in serious socio-economic impacts. The isolation of farms operating in the dedicated areas of the park creates safety problems for human activities [95–98].

## 3.1.3. An Integrated Development Strategy

The enhancement of environmental and cultural goods, the qualification and rationalization of the services supply besides the (economic) development of the territory, have been stimulated by two fundamental actions put in place by the SAC to help the Alta Murgia territory become a new tourist destination. The first is aimed at stimulating the internal network of the goods and services supplied in the territory. The second is addressed to the promotion of the network in tourist markets.

The focus of the project pivots on sustainable and naturalistic tourism: the promotion of the "slow" fruition of the territory.

The Murgia area is, thus, crosscut by different kinds of integration between environment and culture. It is characterized by naturalistic and landscape attractions—such as Geositi, caves and chasms, that are naturalistically relevant and that have been identified as landscape goods (ex art. 136 "Buildings and areas of considerable public interest", Legislative Decree 22 January 2004, no. 42 [99]—and cultural and social attractions, such as the anthropic, cultural and historical systems like the discovery of the ancient presence of man in prehistoric times, rock habitats, villages of the Bronze Age, etc.

The strong idea of the Alta Murgia National Park SAC is based on their integration, considered the crucial element for the sustainable development of the whole territory. The park enhances the natural, historical, cultural and social resources of the Alta Murgia National Park by suggesting new itineraries to enhance the city networks and integrated routes through the promotion of strategic territorial marketing that would benefit from the national park brand and the policies of the Puglia region. Integrated marketing envisaged for the third phase of the Alta Murgia National Park SAC (i.e., the Alta Murgia National Park Card), will enable tourists to visit the sites independently. The card will also give access to discounts and advantages in accessing the sites.

The environmental and social perspective, with a view to sustainable development, is integrated with the economic perspective of the SAC of the park. The economic element in the SAC is an important part of the strategy.

The project foresees that the mobilization and activation of the resources of the territory will be assured by the manager of the SAC in agreement with the local socio-economic partner with specific activities of a territorial kind, including those addressed to local businesses and the population;

- communication activities, able to activate a significant territorial marketing function within the territory;
- awareness and information activities to facilitate access of local entrepreneurial energies to forms of financial support for innovation and creativity;
- external territorial marketing activities aimed at creating forms of cooperation between local productive forces and external productive forces, also in order to create new business partnerships.

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Moreover, the SAC strategy envisages initiatives provided thanks to public and private funding to promote actions for enhancing the environmental framework, such as research, innovation and creativity, as well as educational, business and occupational activities.

The set of these integrated and coordinated actions will then affect the entire territorial system, favouring further action and synergistic effects that are otherwise impossible, since only the systemic approach positively affects the structure of relations between public and private actors.

Weaknesses of the Alta Murgia National Park have determined the inability to put in place joint territorial activities, to integrate environmental and cultural characteristics that are only apparently distant. Sustainable development should be linked to the conservation (but also to the enhancement) and use of environmental and social heritage in the protected area. From the economic perspective, the Alta Murgia National Park SAC has taken a synergistic view of the territory and of all the public and private institutions that are essential for the development of the territory in the medium and long term.

The project, whose objective is sustainable development of the territory, has been founded on the integration of the resources of the protected area in which their potentiality has been enhanced in an integrated cultural, environmental and economic perspective in the long term.

Learning from mistakes made in the past, the project focused on territorial synergy as key to the success of the actions. This has enabled the Alta Murgia National Park to achieve several integrated and multi-stakeholder activities.

The unique idea around which all the partners have chosen to gather, a slow and experiential use of the territory, enables not only the combining of elements of the protected area but their integration to render them a unique territorial system as a potential model of sustainable development.

#### 4. Discussion

The case study provides a good example not only of a management approach of protected areas capable of overcoming the limits of a structural and objective view of the area but also of a potential reference model of governance to adopt in the wider surrounding territory. By this view, the case study offers a basis for discussing how a higher potential of enhancement can and should be leveraged in the management of protected areas.

As emerges from the description of the case study, Alta Murgia National Park's management strategy is defined in an attempt to clarify how to create a territorial system in which the resources available are effectively integrated to produce value for all the actors involved beyond the boundaries of the protected area. The Alta Murgia National Park's SAC project, in particular, is the core of a similar development strategy that, in our view, could more effectively leverage the multiple dimensions of sustainable development in order to create a shared, enhanced value-creation context.

This interpretative hypothesis is the outcome of a systems view that highlights the high potential of protected areas to become reference models of sustainable development strategy for the overall territory that surrounds the protected area. The systems view, in particular, supports the definition of a development strategy and plan that synergistically assemble the resources endowment of the area, amplifying its attraction and value co-creation potential [100,101].

More specifically, the SAC project designs enhancement pathways that, by integrating the environmental and cultural resources of the area, create a multi-dimensional platform in which each individual component is linked to the whole. A higher enhancement potential clearly emerges that appears, however, to be still underexploited as it does not capture all the opportunities of integration of resources under an overall perspective that leverages the multiple values of sustainable development.

As suggested by the VSA, in fact the simple assembling of multiple resources, although being a necessary condition for value co-creation, would be not sufficient: simply 'combining' elements of variety would not be so distant from a traditional reductionist approach focused on parts to manage and enhance; effective integration implies a focus on the ways those parts interact, i.e., on the way variety is integrated to create a synergistic outcome.

The strategic aim of local governing bodies appears to be correctly directed to involve many other actors of the territory, overcoming the 'boundaries' of law and bureaucracy, and the focus on

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conservation and protection in order to embrace the view that integrates economic, social and environmental interests. The focus of the strategy is on making the area more attractive to tourists, the key being to integrate the environmental and cultural components of the territory. Integration, however, seems to leverage specific interests that are correctly identified from the perspective of the potential users. However, the wider potential related to sustainable development as a unitary paradigm of reference does not clearly appear or is only implicitly included in the enhancement strategy.

The element rendering the issue apparent is the reduction of agricultural activities within protected areas, due to the abandonment of rural areas. Besides safety problems, clear incentive mechanisms for promoting agriculture in protected areas are lacking. Agriculture in protected areas is expected generally to suffer from the constraints that typically limit the economic exploitation potential of the area. Clearly, agriculture is not at the centre of the development strategy. However, in our perspective, this may be an underexploited opportunity.

In order to clarify our claims, we refer to the regulation of protected areas in Italy (the Law 394/91 [6], to be reformed). As in other countries, the law promotes a model of management based on the appropriate integration of protection and enhancement aims [102]. The zonation model, in fact, is essentially the same as that of the better framed biosphere reserves of the UNESCO program "Man and the Biosphere" introduced in the methodological section.

The promoted cultural value of protected areas emerges here not so much for the inclusion of cultural goods within the local offering system but for embracing an enhancement view that leverages the capability of integrating the three dimensions of sustainability under an overall view of sustainable development, i.e., the core of protected areas. Culture, in our view, is not a further dimension but a general paradigm of reference to define coherently the offering system of the territory to the variety of potential beneficiaries as well as to local communities. Placed at the centre of the development strategy of the territory as whole, protected areas become the core model to promote truly sustainable development. As suggested by Figure 3, a three-level governance perspective should inform the development strategy, including more systematic research and education activities in the management of the protected area. In this perspective, the touristic activities that currently represent the core of the development strategy would benefit from the wider attraction potential of a cultural value based on the capability of the area to live and promote sustainable development.

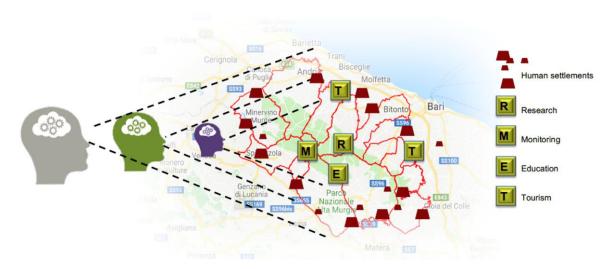


Figure 3. A systems-based representation of the Alta Murgia National Park governance structure [86,87].

In such a scenario, the role of agriculture would go far beyond that of economic activities to be implemented in the area under certain conditions: agriculture can become the bridging activity between protected and non-protected areas through which models of sustainable development can be shared and progressively socialized.

Agriculture and protected areas are often considered as "opposite ends of a spectrum"; instead "they can play important complementary roles, especially when the protected areas are managed in ways explicitly designed to support agricultural development." [103]. It has been highlighted that "at least some protected areas can make direct contributions to agriculture, while even the most strictly protected areas can make significant indirect contributions" [103].

Sustainable agriculture [104], with its intrinsic characteristic implying a harmonic humannature relationship, can be enhanced not only from an economic but also from a social and environmental perspective under a common cultural view. We are aware that agriculture does not imply sustainable activity in economic, environmental and social terms. However, intrinsically, it has such potential. Leverage i.e., strategy, requires a 'cultural' change in the approach to territorial governance and the strong commitment of all the actors involved in the research, economic, education, social and cultural activities of protected areas, also beyond its borders. Their focus should pivot on identifying shared values to exploit. Such values, in our opinion, lie in a shared commitment to promote truly sustainable development.

Therefore, we propose a cultural view as a broader systems perspective to explore and fully exploit the potential of protected areas as a development context in which environmental, social and economic perspectives are integrated within a unitary and coherent development framework.

#### 5. Conclusions

The proposed analysis throws light on the in-depth reconsideration of the cultural value of protected areas, as well as on their governance for the achievement of sustainable development.

Considering the systems perspective argued for here, with specific reference to the viable systems approach, we propose the adoption of a wider (holistic) vision in order to overcome the well-known limits of the traditional (reductionist) view.

In particular, in our opinion the VSA perspective introduces adequate general interpretation schemes for the investigation of social phenomena (and therefore, organizations), providing support for the definition of the most appropriate governance approach, either on a theoretical or practical basis [79,105,106].

Investigating the territory surrounding protected areas through the proposed systems perspective fosters the understanding of dynamics that potentially are determinant in support of the expected transformation for the promotion of palpable sustainable development [107–109].

Thus, we expect this contribution can provide relevant and useful managerial insights, which would be worth keeping under consideration when dealing with multi-dimensional phenomena. Among them, in fact, are almost all the activities performed in protected areas, and also those related to them, with the expectation of achieving the appropriate impact on sustainable development promotion [86,110].

Then, the systems perspective research stream, even specifically developed in mainstream of management and organization studies, offers significant contributions.

Enlightening the research advancement perspective, what would contribute to a real behavioural (and cultural) change would be the reconsideration and overcoming of the boundaries view, which often divides not only perspectives but whole disciplines (research ones not excluded), promoting the adoption of a multi-disciplinary and, even more, an inter-disciplinary and trans-disciplinary [111] body of knowledge to favor the transition toward sustainable development [106,112,113].

This study combines managerial and research implications, throwing light on multi-disciplinary research streams with a potential impact upon territorial development [114,115].

The limits of the work lie in the fact that it is still an ongoing process. Therefore, the proposed discussion can only be considered preliminary. Relevant suggestions about methodologies have been included in order to address and favor behavioral change for implementing sustainable development. Local level bottom-up processes, for example, would encourage cultural change. Those who think sustainable development can be achieved only reinforcing incentives and top-down governance run the risk of obtaining only partial or temporary results. On the contrary, sustainable development can be achieved only through cultural awareness and sharing.

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