

ITALIAN PROTECTED AREAS AND PLURALIST EVALUATION: THE EXPERIMENTATION OF AN INTEGRATED MODEL

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Abstract

From a careful and critical reading of the main methodologies developed so far in the evaluation of the protected areas at a national and international level, derives a research project which consists in the designing and experimentation of an integrated evaluation model for the Italian National Parks. The change in the evaluation approach enables to read in an exhaustive way the overall impacts and effects that the management of these public institutions can contribute to the territories and on the local communities involved, analyzing the collateral processes of the existing sustainable local development.

Keywords:

Environmental policies evaluation, sustainable development, international cooperation and universities, social impact, inner areas

Introduction

The essay has the main objective of proposing some ways of integrating the tools for evaluating the effectiveness of protected areas with innovative tools derived from social research, illustrating an evaluation perspective able to go beyond mainstream models of monitoring and verification of the management of protected areas, using methods of applied social research aimed at "giving value" to the activities and results with an improvement judgment relative to the complex realities of protected areas in Italy.

The evaluation procedures used in the research represent an innovative way to explain the outcomes of the programs and projects implemented in the protected areas, which is able to focus not only on the results achieved by the protected area, but also on the processes that have led to certain results

¹ This essay is the result of the joint work of the authors. Specifically, Arianna Calderamo drafted paragraphs 2, 3 and 4; Veronica Lo Presti drafted paragraph "Introduction" and paragraph 1.

in the specific context of the structural and organizational characteristics of the Park Authorities investigated in the research.

The hypothesis proposed in the essay is that the use of integrated evaluation approaches capable of overcoming the dichotomy between goal free and goal-oriented evaluation, focused on the concrete results of the projects launched in the protected areas rather than on a linear verification between objectives and results expected also allow unexpected effects of the programs to emerge, explaining the mechanisms that generated them in specific contexts. The change in the evaluation approach makes it possible to read in an even more exhaustive way the overall and real effects and impacts that the management of the Park Authorities can generate on the territories and local communities affected.

It also seems appropriate to specify that the evaluation research at the center of this reflection was born within the training activities of the PhD in "Communication, Innovation and Marketing" of the Department of Communication and Social Research of the Sapienza University of Rome in which activation of an observatory on the evaluation of biodiversity protection programs in Italian parks within the international framework of analysis and evaluation models for protected areas.

Experience learned in international cooperation projects applied to Protected Areas evaluation

The rate of biodiversity loss is considered as one of the most serious threats to human well-being in the 21st century (Rockstrom et al. 2009; Cardinale et al. 2012). This environmental problem is determined by the impacts and pressures that human activities have. There are about one million animals and plant species threatened with extinction and this number will increase in the coming decades. The scientific world defines our current geological era with the name of Anthropocene, or "age of man": an unprecedented period in which the physical changes of the Earth, including the climate, biodiversity and the chemical structure of the seas and soil, are mainly related to human activities and the impact of the global economy (Sachs 2015). This translates into one of the greatest threats to human well-being and survival. But how does biodiversity loss interfere with human well-being? The Millennium Ecosystem Assessment (Mea) (2005) defines the multidimensional links between natural ecosystems and human well-being, called ecosystem services. This term identifies the ways in which ecosystems support, maintain and constitute human well-being, guaranteeing the existence of human life on Earth (Costanza et al. 1997; Daily et al. 1997, 2000, 2008; de Groot et al 2002). Ecosystem services are generated by the ecological

processes of our planet and biodiversity is a fundamental element for their function, their regulation, and their existence. In this sense, it is correct to believe that biodiversity itself is strongly interconnected with human well-being (Cardinale et al. 2012). Rockstrom (2009) argues that, globally, the rate of biodiversity loss has already exceeded a "safe limit" for human well-being, to an even more critical extent than that related to climate change. And this is a thought-provoking aspect.

The scientific community recognizes that protected areas are the cornerstone on which the efforts of all state and non-state international organizations rest today, aimed at the conservation and maintenance of natural ecosystems in guaranteeing high levels of species diversity (Mea 2005; Coetzee et al. 2014). There is empirical evidence that long-term investments made by national governments and communities in protected area systems are showing impressively positive results on a global scale (Lopoukhine et al. 2012). At the same time, however, the lack of data often leads to serious difficulties in being able to evaluate with certainty whether the effectiveness of protected areas is really slowing down the rapid decline of biodiversity that we are witnessing. Certainly, the percentage of the planet protected to date (17% of land areas and 10% of marine areas) is not yet sufficient to counteract a phenomenon characterized by such criticality. In this regard, Wilson (2016) argues that 50% of the global surface should be covered by protected areas, while Hoffmann (2018) and da Silva (2018) affirm the substantial irreplaceability of protected areas within biodiversity conservation policies as the main solution tool. At a global level we are witnessing a slow but steady increase in protected areas by number, extent, and type. This also brings countless challenges. Given their importance in countering the loss of biodiversity, it is vital to be aware that as a dynamic and complex structure, the protected area is an institution more than ever before, needs new and more effective skills, an ever-greater quantity interdisciplinary scientific knowledge and, above all, efficient and effective management. Furthermore, there are countless and robust scientific evidence that have shown that the mere establishment of a protected area is not enough to guarantee the conservation of nature. A protected area does not fulfill its duties simply by existing: management is the central fulcrum capable of making the difference in terms of effective protection of biodiversity (Coetzee et al. 2014). Poor management of protected areas risks turning these indelible institutions into "paper parks", recognizable only because they are shown on geographical maps (Leverington et al. 2010). For this reason, assessment is recognized among the top 100 global research priorities for protected areas (Dudley et al., 2018). A type of evaluation that must be able to adapt to the changing world and to evolving needs, to grasp the multi- and transdisciplinary aspect of protected areas.

While pursuing a single and common goal, protected areas throughout the world differ in typology, context, and strategies. These are bodies for the protection of the nature set in contexts that imply a continuous search for solutions that can vary from one continent to another, from nation to nation and, often, even from region to region. Conserving biodiversity does not always mean a passive defense of natural ecosystems, but it does involve knowing how to monitor, know and explore the changes consequently intervening actively with restoration, and maintenance actions. This approach to conservation is typical of protected areas in populated areas of our planet, where human presence has been interacting with natural ecosystems for thousands of years. In these contexts, nature conservation assumes a highly significant role in knowing how to balance and manage the interactions between human activities, i.e. those activities from which all negative impacts on nature derive, and the need to conserve biodiversity. As well as the opportunity to study a type of development that takes on collateral connotations for the defense of nature, but which are nonetheless very relevant.

This degree of complexity, together with the urge to intervene on the loss of biodiversity at a global level, makes the evaluation of protected areas an even more central issue in socio-demographic contexts such as the Italian one, where we see associated with an equally vast biodiversity a large population density. This context makes nature conservation a successful experience only through an effort towards sustainable local development. A continuous search for solutions and best practices so that the well-being and the persistence of local communities living in protected areas does not only interfere with, but rather finds a foundation in improving the state of conservation of biodiversity, i.e. the founding prerogative of every National Park. For these reasons, it is mainly in the experience of the Italian protected areas that the idea of the park as a "laboratory of sustainable development" has established itself over the years, a container of ideas and good practices capable of redesigning the relationship between man and nature, seeking a harmonious coexistence long lost. Inspiration that materializes through the approval of the Framework Law 394/1991 on protected areas. In this sense, Law 394/91 also aims to improve efficiency in dealing with social and economic conflicts that historically arise in protected areas, thanks to the involvement of local communities through democratic, participatory, and transparent processes. The 394 captures the unique nature of Italian parks, which, unlike most protected areas around the world, host a strong anthropic presence within them. The conservation of nature thus becomes the main tool for sustainable local development, the bearer of well-being, culture, and participation. An even more significant aspect considering that most of the Italian parks are in delicate inland areas, victims of depopulation and economic depression (Barca et al. 2014; Pompili Pagliari 2009). The field of action in which a Park must intervene is wide and varied: from the naturalistic and biological one to

the social and economic one, from environmental monitoring to urban planning, from surveillance and control of the territory to historical-cultural promotion.

Reflecting on the intrinsic complexity of a park and its management, it is not surprising that the system of the Italian protected areas does not yet envisage any type of evaluation strategy, either locally or nationally. Protected areas are public bodies, therefore they form part of the environmental public policies adopted by the State. Resorting to evaluation as a social research methodology can and must be a fundamental tool for investigating strengths and limitations related to protected areas, in analyzing the impacts they have on the territories in which they exist. Because it is certainly possible to carry out a new and more exhaustive evaluation which could also represent a precious opportunity to broaden the horizons of research and knowledge of evaluation in a field of study that is still too little explored.

Evaluation of development programs in protected areas

To date, the International Union for Conservation of Nature (IUCN) is the organization that has most committed itself over the years to the creation of an Evaluation Framework suitable for all protected areas in the world. The evaluation approach chosen was the effectiveness evaluation. The efforts of the IUCN materialize in 1996 with the birth of the global theoretical framework for the evaluation of the effectiveness of protected areas. This framework still provides a consistent basis for designing protected area assessment systems. It is applied all over the world in response to the need to develop flexible methodologies, but at the same time can return homogeneous and standardized results that allow comparability at a global level. There are more than fifty assessment methodologies developed which based on the Iucn-Wcpa model and in Italy the Mevap (Methodology for the Evaluation of Protected Areas) appears to be the first and only attempt to evaluate the effectiveness of protected areas based on this framework. Mevap represents a scientific and rigorous step forward because it makes possible to evaluate the effectiveness of the management of Italian protected areas with the possibility of setting a standard and of making reasonable and objective comparisons, with the main objective of enhancing their management (Marino et al. 2012). The methodology has been tested on all Italian National Parks and is the result of nearly four years of planning and experimentation, carried out by a research group from the University of Molise led by Professor Davide Marino.

The Mevap was designed to evaluate the management activities of the Park Authorities, also analyzing the evolution of the territorial context. This is because the management implemented by the Park is always connected to the social, cultural and economic dynamics of the context in which it operates. The model keeps track of the evolution of the biodiversity conservation processes with reference to national and international environmental policies on the subject, at the same time evaluating the processes of reconversion of the socio-economic system in the direction of sustainability, which emerges directly or not from the activity itself of the Body. The Mevap, a quantitative and structured methodology, allows to carry out a macro-level assessment of the management of protected areas to the extent that they meet national and international objectives in the field of nature conservation, as well as a micro-level assessment of the management of protected areas locally. It undoubtedly represents a valid and useful tool for a good and farsighted national strategy of protected areas, a scientific and rigorous step forward. In fact, it allows to evaluate the effectiveness of the management of Italian protected areas with the possibility of setting a standard and making reasonable and objective comparisons. However, where it seems to be lacking is what is often missing from any evaluation of effectiveness: a more in-depth attention to the processes, mechanisms and causes that lead to certain results. The Mevap inspects the inputs and outputs of the management in detail, returning an accurate picture of the objectives that the protected area can or cannot achieve. But nothing expresses how and why these results are recorded and about the ways in which the various internal processes that allow the functioning of the Organization are articulated. What really happens inside these complicated organisms is not investigated.

In the light of the fundamental importance of the topic in question and considering the theoretical and applied advances made both nationally and internationally, the resulting research proposal consists in the desire to integrate the existing tools for assessing the effectiveness of protected areas with an evaluation which, in the context of social research, can "give value" with an ameliorative judgment to the action of the Institution. An evaluation capable of explaining the results of the programs and projects implemented in the reference context and which therefore does not place the emphasis exclusively on the results achieved or not by the protected area; but which analyzes the processes, structural characteristics, organizational forms, and internal behavioral practices of the managing body and how these lead to the failures and successes of the protected area, helping their understanding and definition. The change in the evaluation approach allows an even more comprehensive reading of the overall and real effects and impacts that the management of these public institutions can have on the territories and local communities. Aware that protected areas, in protecting and conserving species and natural habitats as the main reason for existence, also represent a profound and vivid expression Experimentation mission of sustainable local

development, through a direct intervention that can generate experiences and solutions that make the necessary coexistence between man and nature possible and fruitful. It is pivotal to decide to study and above all to evaluate this type of territorial development strategies: the cultural, social and economic impact that a well-managed protected area can potentially have on a territory must necessarily be taken into consideration.

The proposal of an integrated assessment model for protected areas

An integrated assessment model was created for the Italian protected areas to understand every existing aspect in these microcosms and capable of integrating with what has already been produced in the context of the Mevap methodology. To prove the adequacy and generalizability of the model, it was then tested, during nine months of field research, in three Italian National Parks. The protected areas are chosen based on two substantial criteria: the ability to represent the different Italian socio-cultural gradients and the intrinsic importance (historical, conservation and anthropogenic) of the territory and of the Institutions themselves.

By changing the evaluation approach, the results obtained from the evaluation research are different, integrable, and complementary to those deriving from a typical effectiveness evaluation. The need was therefore to devise an evaluation model capable of shedding light both on the "black box" of the management and decision-making processes that determine the results of the Organization in terms of nature conservation, but also the real social, economic, and cultural aspects that such management entails on the territories, on the unexpected ones as well as the expected ones. And this while navigating in a sea of profound complexity and not infrequent contradictions. The inclusion of social impacts within the evaluation model derives from the awareness that the protection of biodiversity can often pass-through sustainable development paths in which local populations are involved, also capable of aligning economic and productive activities with the institutional prerogatives of the Parks. Therefore, the model is integrated using the theoretical and applicative framework of Positive Thinking (Stame, Lo Presti 2015; Lo Presti 2020), approaches born in the context of development cooperation and united by the idea that we learn more from successes than from failures, thus producing a greater motivation to act (Sabel 2004). Furthermore, success adds information about why something desired happens, while failure merely reproduces the initial lack of knowledge, highlighting obstacles to change. Following this family of approaches, the main reference for the model concerns the cognitive style and the evaluative approach of Albert O. Hirschman (1967) and Judith Tandler (1992), who both immediately demonstrated the concrete possibility of conducting an in an alternative way. An assessment that starts from the direct observation of the phenomenon, immersed in the specific context and in a proactive position aimed

at improvement (Stame 2022). An approach that is based on the analysis of the resources and strengths available as opposed to the traditional problem-solving approach, giving relevance to what in the specific local context is defined as success even without representing a predetermined goal, but rather treating him with a curious and surprised attitude (Stame 2016). An evaluation therefore understood positively, as a tool for improving effectiveness in management of protected areas and which looks concretely at reality through direct observation of what really happens in practice (Weiss 1997). Therefore, capable of grasping and analyzing everything that is not foreseen a priori, investigating the reference context to add information on why and how a change occurs, and not just its mere occurrence. An evaluation able to support development and its ancillary effects, appreciating every facet of it during the process of discovery and comparison between the similarities and differences that emerge from time to time, even where it was not thought to dwell.

In the design of the model, we opted for an integration between the goal oriented evaluation and the goal free evaluation. Goal oriented evaluation, as the first objective of the model, consists in verifying the results achieved thanks to the effectiveness of the management of the Authority, therefore by its own work (Weiss 1997). Goal free (Scriven 1974) because following each step of the realization of events, this type of evaluation does not deal exclusively with what the public institution does, but also with how managers and local communities respond, analyzing the aspects that mediate between inputs and outputs, such as intermediate processes, psychological and organizational factors, with a view to improvement.

Among the elements taken into consideration by the evaluation process of the model, the enhancement of the strengths of the individual Bodies, of the way in which the projects are implemented, and of how ordinary and extraordinary difficulties condition every choice made at a strategic level extremely becomes a priority. Looking at the implementation process and reflecting on the creative way in which one reacts to the difficulty, in Positive Thinking means setting out in search of the constellations of circumstances that return positive results, also considering the systematic deviations from the predefined paths and towards other possible and unexpected horizons. It is also important to pay particular attention to the "structural characteristics" (Hirschman 1967) of the various projects implemented by the National Parks in relation to the type of context to which they refer, reconstructing a sort of design history useful to understand the conceptual passages that followed one another in relation to the outcomes obtained. The precise circumstance observed also points the gaze towards the unexpected effects that every project implemented in a territory experiences, which can in any case be positive, but can also be considered an alternative way of solving the same problem (Hirschman 1967; in Stame 2017).

The hypothesis underlying what has been illustrated is that an evaluation model conceived in this way can better adapt to the heterogeneous nature of Italian protected areas, where there is a very high anthropic presence. The importance of the human and social element is such that the use of the intellectual baggage of social sciences in the evaluation of Italian national parks is more than necessary, following a largely interdisciplinary and not exclusively quantitative approach. With reference to the impacts that protected areas have on territories, an important reasoning is certainly linked to the concept of local development (Biggeri et al. 2011). Today's challenge for protected areas is to trace local development patterns to strengthen the identity and competitiveness of local community activities without compromising, but rather improving, the conservation of nature operated by the Park Authorities. Since the protection of biodiversity can and must become the reason for a successful and fruitful territorial positioning, a real exit strategy from marginality and the consequent depopulation of many internal Italian areas is necessary to ensure a development that only in this way can be defined as sustainable (Agnoletti 2010; Lo Presti 2016). And it is essential that evaluation research in this area becomes a valuable tool that can be used to bring out the relevance of the various facets of development that are collateral to this action of protection of the natural environments.

The experimentation of a pluralist and democratic model of evaluation

A fundamental characteristic of the model experimented in the research is the use of participatory evaluation techniques conceived in a logic of pluralistic and democratic evaluation (Stame 2016). In fact, during the research, all the personnel in the protected area took an active part in the evaluation, like the local stakeholders, based on the hypothesis that failure to involve all the parties interested in the phenomenon studied would have resulted in a serious loss in terms of knowledge. Social inclusion has represented a democratic and participatory decision-making tool in a pluralist perspective, not only on a methodological level. Unlike the Mevap effectiveness evaluation, the evaluation with a positive approach is guided by a clear learning purpose, whereby the knowledge acquired regarding the functioning of an organization, or a project can be useful in the planning of future actions already in place, in itinerary of the evaluation (Stame 2016). With the involvement of the stakeholders in the research data collection process, new ways of thinking and acting are discovered together, increasing their ability to master a change and unleashing alternative, perhaps better ideas (Senge 1990; in Stame 2016).

It is evident that the two models explore elements, objects and subjects which are an integral part of the management of a Park, but which are substantially dissimilar. As reported by the theory, the MEVAP is mostly focused on the definition and measurement of output indicators of the

management of a Park. The proposed integrated evaluation model, on the contrary, is focused on the institution's management process and on the forms in which it is structured and materialized in more or less advantageous results. This evaluation model, placing less emphasis on the need to measure a result quantitatively, investigates the complex network of human relationships and organizational models that constitute the dynamics relating to the performance levels of the Body, so that the why and how of that result emerge. By doing so, alternative chances of real improvement and organizational learning are already discovered in the moment in which the evaluation process develops but above all at the end of the same. Also thanks to the return of the evaluation considerations and recommendations. The same indicators selected for the Mevap provide an overview of the state of the protected area, even if more than half of the indicators refer to the territorial context and are therefore independent from the management of the assessed Park. In the proposed evaluation model, on the other hand, while not referring to precise and standardized indicators, the evaluation survey breaks down and analyzes the entire management process of the Entity, paying attention to internal mechanisms, results, critical issues, and strengths. This applies to the internal dimension of the Park as well as to the external dimension referring to local communities and the territory. Therefore, the model makes it possible to evaluate the work of the Park, asking useful questions, directly and indirectly, for the reconstruction of the social impact generated by the protected area. The proposed evaluation therefore represents an investigation process which, in wanting to formulate value judgements, strongly believes in the involvement of the social actors involved in the project, both the implementers and the beneficiaries, to stimulate and understand what happens during the change process. The important work carried out in this case with the maximum participation and full involvement of the stakeholders was useful for conveying the potential of the evaluation as an opportunity rather than as a fulfillment or an obstacle. Also because the willingness of the managers of the institutions to receive the results of the evaluation and to be able to discuss them both internally, in an attempt to improve the critical points that have emerged and appreciate the strengths that characterize each National Park is reported. As well as the intention of discussing it together with the local populations to increase dialogue with the territory which is even more valued in a process of shared awareness.

The application of this integrated evaluation model for the Italian protected areas is important to produce advancements and corrections in the management of complex and indispensable situations. Considering the immense natural heritage that Italy possesses, it is essential to be able to give more decisive attention to the evaluation tool also in this field of study that goes beyond the idea of mere monitoring of performance. The ultimate hope, as a courageous attempt, is to increase political, social, and cultural attention towards the issue of biodiversity conservation, investigated and

questioned by professionals with different points of view and levels of preparation, which become both constructive and complementary (Gallino 1992). The purpose of this evaluative research is not limited to a hypothesis test but consists in undertaking a path characterized both by theory and by direct observation. Going beyond something scientifically certain and considering the active role of research, innovative solutions are imagined, and specific methods are shaped to evaluate protected areas. We strongly want to highlight the importance of the relationship between natural science research and social science research, which is to be encouraged and supported. As many points of view as possible are needed when it comes to the environment, ecology, and conservation in the full and latest holistic vision of sustainable development. Innovating in research means investing in the future, it's like preserving and strengthening what is already known by illuminating the knowledge available. Applying the evaluation dimension to the issue of biodiversity conservation finally means taking a big step forward, now indispensable, in the national and international scientific research. It is impossible to think of truly progressing by renouncing to the possibility of perfecting an evaluation model capable not only of measuring the effectiveness of something, but also capable of returning calibrated responses to the peculiarities of the territories in which a policy or project is implemented, beyond any cultural paradigm and bureaucratic slowdown. A positive approach of evaluation enables to explain the motivations and methods of the changes that take place directly for the people who live these realities. It is possible to create something concrete and tangible to increase the collective consideration of environmental issues, improving the work done by protected areas that deal with preserving our "home". The evaluation tool can give the right importance to the Italian protected areas also as a cultural process, in a planning perspective that has already been in force in other European countries for years and in the more far-sighted American tradition of National Parks. In this way it can be possible to overcome the age-old debate deriving from the environmental crisis of which we are all protagonists, which is also the consequence of a cognitive crisis regarding the ways in which environmental issues and realities are studied and managed (Saragosa 2005; Meldolesi 1994). Reiterating the importance of what Giacomini (1980) expressed on the impossibility of continuing to imagine the environment only as what surrounds us, it is urgent to understand how much every single component of this planet, including the humanity, plays a pivotal role for a healthy and overall longevous functioning. The environment is ecology as part of a whole that also includes us, and for which we are strictly responsible. Let all of this be a starting point to achieve something truly important and urgent, reinforcing the values of democracy, participation, responsibility, and social inclusion. Attempting to beyond any individualism and division of progress and knowledge, in favor of a construction of inclusive, transdisciplinary, and systemic structures of knowledge (Stame 2022).

Acronym list

Iucn	International Union for Conservation of Nature
Mea	Millennium Ecosystem Assessment
Mevap	Metodologia per la Valutazione delle Aree Protette
WCPA	World Commission on Protected Areas

Bibliography

- Agnoletti M. (2010), *Paesaggio Rurale, evoluzione, valorizzazione e gestione*, Edagricole, Milano.
- Barca F., Casavola P., Lucatelli S. (2014), “Strategia nazionale per le Aree interne: definizione, obiettivi, strumenti e governance”, *Materiali Uval*, n. 31, pp. 1-66.
- Biggeri M., Libanora R., (2011). “From valuing to evaluating: tools and procedures to operationalise the Capability Approach”, in Biggeri M., Ballet J. and Comim F. (2011), “From valuing to evaluating: tools and procedures to operationalise the Capability Approach”, in *Children and the Capability Approach* Ed. Palgrave Macmillan, London.
- Cardinale J., Emmett Duffy J., Gonzalez A., Hooper D., Perrings C., Venail P., Narwani A, Mace G., Tilman D., Wardle D., Kinzig A., Daily G., Loreau M., Grace J., Larigauderie A., Srivastava D., Naeem S. (2012), “Biodiversity loss and its impact on humanity”, *Nature*, vol. 486, pp. 59-67.
- Coetzee BWT., Gaston KJ., Chown SL. (2014), “Local Scale Comparisons of Biodiversity as a Test for Global Protected Area Ecological Performance: A MetaAnalysis”, *PLoS ONE* vol. 9, n. 8.
- Costanza R., Groot R., Farberk S., Grass M., Hannon B., Limburg K., Naeem S., V O 'neill,R., Paruelo J., G., Raskin R., Sutton P., Belt M. (1997), “The Value of the World's Ecosystem Services and Natural Capital”, *Nature*, n. 387, pp. 253-260.
- da Silva M., Paviolo A., Tambosi L., Pardini R. (2018), “Effectiveness of Protected Areas for biodiversity conservation: Mammal occupancy patterns in the Iguazu National Park,” *Brazil, Journal for Nature Conservation*, 41, pp. 51-62.

- Daily G.C, Matson P. (2008), “Ecosystem services: From theory to implementation”, PNAS, vol. 105, n. 28, pp. 9455–9456.
- Daily G.C. (1997), *Nature’s services: societal dependence on natural ecosystems*, Island Press: Washington DC.
- Daily G.C. (2000), “The Value of Nature and the Nature of Value”, *Science*, n. 289, pp. 395-39.
- Dudley N., Stolton S. (2018), “Protected areas: challenges and responses for the coming decade”, *PARKS: the international journal of protected areas and conservation*, vol. 24, issue 1, pp. 35-50.
- Gallino L. (1992), *L'incerta alleanza. Modelli di relazioni tra scienze umane e scienze della natura*, Einaudi, Torino.
- Giacomini V. (1980), *Perché l’ecologia...*, Ed. La Scuola, Brescia.
- Hirschman A.O. (1967), *Development Projects Observed*, Brookings Institutions: Washington DC.
- Hofmann S., Beierkuhnlein C., Field R., Provenzale A., Chiarucci A. (2018), “Uniqueness of Protected Areas for Conservation Strategies in the European Union”, *Scientific Reports*, n. 8, pp. 45-64.
- Leverington F., Costa K., Pavese H., Lisle A., Hockings M. (2010), “A Global Analysis of Protected Area Management Effectiveness”, *Environmental management*, 46, pp. 685-98.
- Lo Presti V. (in collaborazione con N. Stame) (2015), “Positive thinking and learning from evaluation”, in Bohni-Nielsen S., Turksema R. e van del Knaap P. (a c. di), *Success in Evaluation: focusing on the positives*, Transaction Publishers, New Brunswick, NJ, pp. 19-45.
- Lo Presti V. (2020), *L’uso dei Positive thinking nella ricerca valutativa*, Franco Angeli: Milano.
- Lo Presti V. (2016), “Positive thinking e sviluppo locale: quali approcci per la promozione dell’innovazione”, *Sociologia e Ricerca Sociale*, Milano, Franco Angeli, pp. 138-155.
- Lopoukhine N., Crawhall N., Dudley N., Figgis P., Karibuhoye C., Laffoley D., Miranda Londoño J., MacKinnon K., Sandwith T. (2012), “Protected areas: providing natural solutions to 21st Century challenges”, *S.A.P.I.EN. S*, vol. 5.2.
- Marino D. (2012) (a cura di), *La valutazione di efficacia per le aree protette - Proposta di un modello di analisi (MEVAP) e manuale di applicazione*, Franco Angeli, Milano.
- Reid W., Mooney H.C., Capistrano D., Carpenter S., Chopra K., Dasgupta P., Dietz T., Duraiappah A., Hassan R., Kasperson R., Leemans R., May R., Mcmichael A., Pingali P., Samper C., Scholes R., Watson R., Zakri A.H., Zurek M. (2005), *Millenium Ecosystem Assessment*, Island Press, Washington D.C.
- Meldolesi L. (1994), *Alla scoperta del possibile: Il mondo sorprendente di Albert O. Hirschman*, Il Mulino, Bologna.
- Pompili Pagliari M. (2009) (a cura di), *Politiche di sviluppo locale. Progetti per la sostenibilità*, Carrocci editore, Roma.
- Rockström J., Steffen W., Noone K. (2009), “A safe operating space for humanity”, *Nature*, 461, pp. 472–475.
- Sabel C. F. (2004), “Theory of a Real-Time Revolution”, presented at 19th Egos Colloquium, Copenhagen, Denmark, July 2003.



- Sachs J. D. (2015), *The Age of Sustainable Development*, Columbia University Press, New York, NY.
- Saragosa C. (2005), *Insediamiento umano, ecologia e sostenibilità*, Donzelli, Roma.
- Scriven M. (1974), *Evaluation: A study guide for educational administrators*, Nova University, Lisbon.
- Stame N. (2017) (a cura di), *Some observation on Hirschman production line*, in *Bias for Hope*, Italic Digital Editions, Roma.
- Stame N. (2016), *Valutazione Pluralista*, Franco Angeli, Milano.
- Stame N. (2022), *Tra possibilismo e valutazione Judith Tandler e Albert Hirschman*, Rubbettino, Soveria Mannelli.
- Tandler J., Stame N. (1992) (a cura di), *Progetti ed effetti*, Liguori ed., Napoli.
- Weiss C. H. (1997), “Theory-based evaluation: Past, present, and future”, *New Directions for Evaluation*, vol.1997, issue 76, pp. 41-55.
- Wilson E. O. (2016), *Half-Earth, Our Planet’s Fight for Life*, Codice Edizioni, Torino.