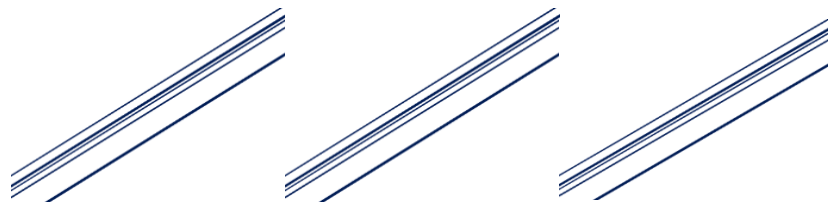




**UNIVERSITAT
JAUME·I**

EFFICIENT PROVISION OF PUBLIC GOODS IN SPAIN



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I.ABSTRACT

The work is oriented to analyze the management of common goods and resources in the Spanish context, taking the Elinor Ostrom approach. For this, a bibliographic review was carried out, establishing five steps where the topic-problem is defined and the research question is set. As part of the analysis and discussion, it was possible to determine that the Spanish context has as theoretical elements of management: collective governance, cultural identity, policies and norms, economic conception; Ostrom's suggested management principles are developed, with their particularities and scope; and there is a structure that characterizes the commons management approach with the following components: managerial, cultural, relational and economic. Hence, common management is considered a viable economic model that emerges as an alternative to the traditional market-state duality.

Keywords: Common Assets and Resources, Common Management, Common Principles, Elinor Ostrom.

RESUMEN

El trabajo está orientado a analizar la gestión de bienes y recursos comunes en el contexto español, tomando el enfoque de Elinor Ostrom. Para ello, se hizo una revisión bibliográfica narrativa, estableciendo cinco pasos donde se define el tema-problema y se plantea la pregunta de investigación. Como parte del análisis y discusión se pudo determinar que del contexto español se tienen como elementos teóricos de la gestión: gobernanza colectiva, identidad cultura, políticas y normas, concepción económica; se desarrollan los principios de gestión sugeridos por Ostrom, con sus particularidades y alcances; y se dispone de una estructura que caracteriza el enfoque de gestión de comunes con los siguientes componentes: gerencial, cultural, relacional y económico. De allí que, la gestión de comunes es considerado un modelo económico viable que surge como alternativa a la dualidad tradicional mercado-Estado.

Palabras Clave: Bienes y Recursos Comunes, Gestión de comunes, Principios de Comunes, Elinor Ostrom.

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II. INTRODUCTION

Societies throughout history have been organized through economic systems that allow them to establish strategies for the generation and exchange of goods and services, considering the particularities that these systems offer to them. In this sense, finding a single definition of economics would be difficult, given that the different currents of thought in economic schools adapt the concept to their different approaches based on the theories that support them.

When we generalize the concept and make a reconstruction of it, it can be said that the Economics is the social science that aims at studying the administration of the resources available in the environment, whose objective is focused on satisfying human needs; in addition to closely following the interrelationships given by the exchange of products, goods, services; and the effect of these on individual and collective behaviour.

Given this statement, the economic organization has taken as reference certain key questions, such as: What goods and in what quantities must be produced? How will production be carried out? And for whom is the production intended? Based on this, the economic sciences propose the classification of alternatives through which the different societies can answer such questions and organize themselves, in order to define their space or scope; which give rise to economic systems as schemes that allow different ways of organizing the economy and making the respective decisions.

In general, there are two antagonistic forces located at opposite sides: in one of them is the market, also known as the market economy, where individuals and private companies make decisions about the production and exchange of goods and services. At the other side is the State, also called the centralized or planned economy, attributing most of the economic decisions of production and distribution to the authorities that are part of its structure; however, the prevalence of a combination of both markets is known as a mixed economy, which combines elements from the previous markets.

At this point reference is made to public goods, considered free access and free use; however, a characteristic aspect is that its use reduces the possibility that others will also do so. Likewise, the unrestricted use makes countless people benefit without any payment, so the market is limited to their management and it is the State that becomes in charge of regulating them.

D'Alisa (2015) indicates that academics from various areas, moved by the interest in the commons proposed by Elinor Ostrom, have demonstrated that the state-market dichotomy

is limiting, finding other forms of self-organization of the communities. This third option seeks to develop the capacity to make resources sustainable over time, disregarding the power exercised until now by the State and the market, over the economies of people.

According to economic dynamics, the market requires negotiations either for goods or services, where it is necessary to manage prices based on production costs, study of demand, supply, among others. All this is done by the interested parts, that is, the owner of the property or who offers the service and the client or interested in the acquisition, therefore, the identification of each one of them is essential to carry out the respective transactions.

However, there are situations where the ownership or ownership of the goods is not identified, so negotiations where money becomes the symbol of the exchange are prevented. In this case, we are faced with the presence of two fundamental elements: on one side, the Commons which according to Ostrom are managed from the sustainability of the interactions given as part of self-organization in a given socio-environmental context, as reported by D'Alisa (2015); while on the other, there are resources in common use, also called collective resources, the latter indicated by Bollier (2016) as those resources over which there are no identified property rights.

This leads to undefined property rights, which creates a dynamic of non-transaction, non-exploitation; and consequently, represents a limiting factor of exchange and pricing. Given this, Ostrom (s/f) argues for a solution based on the creation of self-managed institutions.

According to Bollier (2016), the economic sciences and their social implications were quite questioned by Ostrom, particularly in establishing the inability of individuals to stable and sustainable cooperation; establishing as a central axis of its work, the elaboration of social norms for the use of common resources in a sustainable way over time.

In this context, Bollier (2016) mentions the common paradigm consisting of functional models of self-sufficiency, with political and management implications where economic, social, collective and individual elements are combined. Common property, implies the integration of collective cooperation, participation, economic production that comes together in reciprocal aid in order to generate a collective profit, in short it is a social system for resource management with a particular identity.

Based on this, the following research question was generated for this study: How is the management of common goods and resources in the Spanish context? To give an answer, the objectives are set, considering basic theoretical elements that help in understanding the topic.

1. Objectives

1.1 General Objective

Analyze the management of common assets and resources in the Spanish context

1.2 Specifics Objectives

- Determine the theoretical elements associated with the management of common assets and resources.
- Identify the principles of the management of common goods and resources in Spain.
- Contribute to the improvement of scientific knowledge regarding the management of common goods and resources in the Spanish context.

2. Motivation

Common goods and resources constitute a third alternative in the economic dynamics of a country, so its study represents an opportunity to add valid options for its development. Under Elinor Ostrom's theory, common goods can be generated by self-managed and sustainable processes, making collective action the standard.

For this, the inclination to work together for the common good under an economic and social order that establishes parameters of use, exchange, performance, distribution, among others; it makes the same individuals build their own reality from the immediate spaces to their environment. Which affects a change in the economic nature that governs them, as well as the collective dynamism towards cooperation, solidarity, ethics, as values proper to a humanistic approach.

Ostrom in her research demonstrates the importance of the commons, emphasizing community cooperation to share and use resources. This offers an option that can lead to governance with autonomy of management, use of resources, negotiation strategies, without the traditional influence of the market or the State.

An aspect of interest within the framework of this study refers to the fact of establishing common purposes, through which effective forms of management for common goods and the efficient use of resources are achieved; in addition to creating best practices to contribute to sustainability, collective habits, which over time become part of their culture.

Likewise, the identification of the principles for common goods proposed by Ostrom offers the possibility of establishing the current way of governing these goods, from the perspective of sustainability and equity. In this case, the delimitation of the group, rules of use, participation in the modification of rules, respect for the rights of members of the community, monitoring of the behaviour of other members, use of sanctions, accessible and low-cost means and responsibility to govern the common resource; they are principles that facilitate the understanding of an alternative that has broken the traditional schemes of the economy.

III.MAIN CONCEPTS

1. Common goods and resources

The term "common" according to Méndez de Andes (2015) is used by the Observatorio Metropolitano de Madrid when referring to resource management systems from communal properties and common property. Its structure is made up of three basic elements: the resource, which may or may not be material; the community, comprised of the people who maintain the production of resources; and management, how the resources are managed. D'Alisa (2015) proposes as common assets those structures that connect human beings gathered in a community and other communities with each other and with their immediate environment through integrated institutions. This conception of common goods contains elements that characterize it, among which can be mentioned: relationships, dynamism, adaptation, interaction, among others; but it requires the integration of peculiarities of its culture that adds value to the exchange and creates its own identity.

Regarding this identity, D'Alisa (2015) points out that it is not predetermined, but is created when people adhere to the existing value system, it is recognized in them, and through their actions the identity is constructed. In this case, a direct connection between identity and participation is established, so it can be said that common goods are relational goods.

One aspect that must be considered is that common goods lead to the use of resources. In this sense, Bollier (2016) affirms that common resources also called collective resources are about those over which neither the private nor the exclusive control of the State affects. This characterization makes this type of resources vulnerable to excessive use, given the difficulty in avoiding their use by people.

According to Méndez de Andes (2005), given the nature of common resources, they cannot be sold in the market, nor are they subject to speculation; because its value is for use and this escapes from the financial market processes.

Likewise, the term Common Use Resource used by Ostrom is introduced, making it clear that this is an alternative way of referring to this type of resources, which, as found by Ramis (2015), refers to a fairly large system of natural resources or also those created by the hand of man, which is almost impossible to exclude potential beneficiaries. It should be noted that the scope of the resource depends on the scenario where it is located; that is to say on a local, community scale or beyond its immediate borders.

Perhaps an aspect of interest to many is the way to find a common resource that can generate collective well-being; in addition to the way to optimize its use with a clearly sustainable vision. As mentioned by Bollier (2016), for Ostrom it is necessary to explicitly delimit common resources, in order to have clarity on who is authorized to use them; because contribution and accessibility are in correspondence.

Based on the above-mentioned, Elinor Ostrom mentions that the rules related to common resources must take into account the particularities of the place, as well as precise restrictions on the resources that can be used, procedures for use or extraction, among other aspects; being attributable to periods of use and accessibility.

2. Management of common goods. Governance

D'Alisa (2015) based on the postulates of Ostrom points out that common goods need to be managed in a sustainable way, making the self-organization of individuals a key factor to achieve their mission. Based on the ideas of Elinor Ostrom, Bollier (2016) highlights that the challenge of independent contexts focuses on finding in autonomy the way to organize and manage, in order to obtain common benefits permanently.

The common property management process must also lead to: an increase in the initial probability of self-management, an increase in the ability to maintain self-management over time, or the overcoming of self-management capacity without constant help. For the collective management of common resources, Méndez de Andes (2005) considers four fundamental aspects:

Universality: Access to common resources must be guaranteed for all members of the community.

Sustainability: The management of common resources must guarantee their use by future generations.

Democracy: The management of common resources must allow the communities that benefit and care for those resources, to make decisions to guarantee the aspects mentioned above.

Inalienability: The sale, accumulation and speculation of common resources is not allowed, given its nature.

Ramis (2015) found five ways to determine the property rights of the material common goods arranged by Schlager and Ostrom in 1992, such as: access, extraction, management, exclusion and alienation. It should be noted that the construction of social capital guided by self-organization, capacity for collective action and self-management remain the characteristic of management.

The management of the commons has its roots in practices carried out in the historical course of the context, according to Bollier (2016) the influence of leaders, norms and cultural factors have a direct impact on the way of managing the commons. During these periods, the development of knowledge adjusted to the surrounding reality allows the generation of particular strategies that help the sustainability of goods and resources.

To speak of commons management or governance we should focus on the commons considered by Bollier (2016) as a system: a) social, in order to manage the resources shared by a community and characterized by its identity; b) self-organization and independence of the State and the market; c) sustainable, so that collective wealth can be passed on through generations; and d) equity of use and access to common goods.

In governance, Ostrom's work suggests the need to create a polycentric structure that transversally shares local, national, and international levels regarding resource appropriation, policing and compliance, conflict resolution, and the daily performance of management activities associated with common goods.

The central idea of the governance of these goods, according to Bollier (2016), tends to achieve common purposes without the mediation of the market or the bureaucratic apparatus of the State. To this aim, governance seeks to establish regulations, avoid overexploitation, assign practices and rights in an equitable way and promote collective habits.

A recurring aspect in the management of common goods refers to regulations, for which the above-mentioned author specifies the need to control the use of resources and define a system of sanctions and negotiation mechanisms; that allow to establish controls on assets and resources.

Similarly, Bollier (2016) raises certain factors that give clear guidelines when managing common goods, since the individuals presented can shape strategies and define procedures. These factors include: regarding the resource, its nature, geographic location and scale; experience and participation of the people who are part, historical-cultural and natural features; existence of properly constituted, stable and accessible institutions.

Based on the above, the governance of common goods includes a set of characteristics on which actions and practices must be based on, such as: self-management, sustainability and cooperation; keeping in mind the possibility of establishing local, national and international scopes. From the perspective of Ostrom, the sustainability of these actions is only achieved with the direct participation of interested people, in the management of common goods; where motivation, incentives, equitable cost/benefit sharing and constant interaction are permanent and indisputable conditions.

3. Principles of the commons

The principles suggested by Ostrom for the management of common assets and resources come from analysing cases where success and failure set the tone for establishing general guidelines aimed at obtaining prosperous results. For Ramis (2015) Ostrom focused on the complete analysis of the dual success-failure phenomenon, of everyone - of nobody; and thus, defined a series of principles characterized by being: resistant and sustainable.

It should be noted that these principles seek to guarantee success taking into account self-organization when managing common assets and resources, as well as finding answers on how to establish incentives in order to achieve greater investment time and effort in governance of these. It is precisely in that search where the principles become a reference for communities to achieve their autonomy in managing their common goods, over time.

According to Bollier (2016) there are a variety of ways to manage the communal due to the particularities present in individuals, and, as a consequence, so there is no unique recipe; This is the reason why it is necessary to fix certain principles that are shared with the group. In this sense, D'Alisa (2015) presents the eight design principles for the sustainability of the management of common resources, based on the work of Ostrom, as follows:

1.Principle of exclusion: the establishment of limits allows a clear definition of the ownership of assets and resources; as well as offering information to people about their groups and their purposes.

2.Principle of context: Refers to the coherence between the rules of appropriation in terms of time, place, amount of assigned resources; provision rules, linked to material, human and economic resources; and local conditions.

3.Principle of participation: through this principle constitutive and operational rules can be created collectively, based on common agreements.

4.Principle of supervision: intended for the exercise of control and monitoring carried out by those involved.

5.Principle of incremental sanctions: contemplates the possibility of gradually executing sanctions, but without any revenge criteria, on those behaviours linked to individualism.

6.Principle of conflict resolution: establishes the need to have mechanisms to resolve conflicts.

7.Principle of self-organization: There must be recognition of the right to self-organize both.

IV. MATERIALS Y METHODS

This research work was carried out under the systematic bibliographic review modality, which brings together literature related to a topic of interest, focusing in this case on the study of the management of common assets and resources. According to Fortich (2013), this type of review consists of synthesizing the selected information, formulating clearly defined questions, using systematic methods for search, selection, evaluation and analysis.

Thus, Yubero (2019) establishes five steps to systematically carry out the bibliography review; in each of them a set of activities is proposed that are progressively described until the result of the search for information is clearly shown. In this sense, each of these steps is described below.




The bibliographic review to be carried out has as its main theme the management of common goods and resources, for which the following question is posed: How is the management of common goods and resources in the Spanish context? Thus, a clear delimitation of the topic to be consulted is established, reducing in a timely manner the search for later information.

Regarding the choice of terms or descriptors, the key theoretical elements present in the objectives defined for this study were considered. For this reason, the main keywords were defined for the search for information: common goods and resources; highlighting that the scope of management and the principles established for it, are aspects of consideration in the documents obtained.

The search for scientific literature was carried out between the months of March and June 2020. To answer the question posed, an exhaustive search was carried out in the main databases: Scielo, Redalyc and Google Scholar.

Table 1 shows the databases used, descriptors and the number of publications found, associated with the research topic.

Table 1. **Search descriptors**

Database	Descriptors	Publicacions
	Common assets and resources	23
	Common assets and resources	32
	Common assets and resources	52
Total Articles		107

Source: Own elaboration (2020)

In this first search, a total of 107 articles were found associated with the established descriptors. It should be noted that the search does not have any selection criteria with which to refine the results.

In this sense, it was decided to establish a set of criteria when carrying out a more refined bibliographic search in the aforementioned databases, as shown in Table 2. These criteria were classified as: Inclusion, considering all those aspects that are taken into account for the search; and exclusion, referring to the elements that determine the non-selection of documents for subsequent analysis.

Table 2. Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Articles whose theme is the management of common assets and resources (Main descriptor). Studies published from 2016 onwards. Articles published in Spanish or English. The study context is Spain.	Articles to which full text was not accessible. Articles that do not focus on the topic. Repeated articles. Practical guides.

Source: Own elaboration (2020)

1. Analyze the results

In order to obtain the required documents and their subsequent analysis, after the initial search based on the descriptors mentioned in Table 1, a new search with greater precision was carried out under the parameters established as selection criteria. For this, the following filters were established:

Database: Scielo

The options available for establishing selection criteria available in these databases were: language and date of publication, generating the following search sequences:

common goods and resources AND the :("is" OR "in") AND year_cluster :("2016" OR "2017" OR "2018" OR "2019" OR "2020")

In this case, 23 documents are presented that meet the given specifications. However, none of them is focused on the Spanish context.

Database: Redalyc

An advanced search was made in this database considering apart from the main descriptor, the year of publication placing it in the period between 2016 and 2020. Once the search was activated, 32 articles were obtained, resulting in a decantation Quick taking into account the Spanish context, obtaining 3 documents that responded to the defined criteria.

Database: Google Scholar

In the case of Google Scholar, a total of 52 articles were found, taking in addition to the indicated descriptor, the records between 2016 and 2020. Once reviewed with the aforementioned criteria, only 9 of them were considered for subsequent analysis.

In summary, after searching and reviewing the documents in the different search engines and databases, using the above-mentioned inclusion and exclusion criteria, the following search results were found: 9 valid documents, which will be analyzed to respond to the objectives set out in this work.

Table 3 shows the search results, specifying the following information for each document: title, authors, publication data, objective and electronic address. With these data, the information required for subsequent references is available, as well as the purpose established by the authors for each study.

Table 3. Bibliographic search results

TITLE OF THE DOCUMENT	AUTHORS	PUBLICATION DATA	OBJECTIVE	ELECTRONIC ADDRESS
Comunidad, recursos comunes y sistemas socio ecológicos: gestión del agua y construcción comunitaria en el sur de España	Ruiz, E. y Gálvez, C.	Hum Ecol 42, 847–856 (2014)	Social interaction to manage irrigation water and its impact on the community are examined.	https://scholar.google.es/scholar?q=management+of+common+pool+resources+in+spain&hl=es&as_sdt=0&as_vis=1&oi=scholart
Los comunales en el Pirineo Central. Idealizando el pasado y reelaborando el presente	Oriol, B; Vaccaro, I	Revista de Antropología Social, vol. 26, núm. 2, 2017, pp. 235-257 Universidad Complutense de Madrid Madrid, España	Understand the characteristics of community management and reflect on the opportunities it presents.	http://www.redalyc.org/pdf/838/83853471003.pdf
La España vacía está llena de bienes comunes Espacios de innovación para economías y relatos diferentes	Vivero J,	Papeles de relaciones ecosociales y cambio global Nº 147 2019, pp. 85-97	Locate the concept of common goods and review some examples in the Spanish State and analyze them in a timely manner.	https://www.researchgate.net/publication/337481936_La_Espana_vacia_esta_llena_de_bienes_comunes_Espacios_de_innovacion_para_economias_y_relatos_diferentes
La Economía del Bien Común en el ámbito local	Gómez, R; Morales, R; Rodríguez, C	CIRIEC-España, Revista de Economía Pública, Social y Cooperativa, núm. 90, agosto, 2017, pp. 189-222	Present the Economy of the Common Good at the municipal level based on five strategies.	https://www.redalyc.org/pdf/174/17452685007.pdf

Source: Own elaboration (2020)

Table 3. Bibliographic search results (Cont.)

TITLE OF THE DOCUMENT	AUTHORS	PUBLICATION DATA	OBJECTIVE	ELECTRONIC ADDRESS
El nuevo municipalismo: derecho a la ciudad y comunes urbanos	Blanco, I.; Gomà, R.; Subirats, J.	Gestión y Análisis de Políticas Públicas, núm. 20, 2018, pp. 14-28	Posing city empowerment challenges in horizontal governance networks.	https://www.redalyc.org/jatsRepo/2815/281557789002/281557789002.pdf
Formas de vida, usos y apropiación de recursos. Propuestas para el estudio de los comunes contemporáneos	Montesinos L.; Campanera, M.	Revista de Antropología Social, vol. 26, núm. 2, 2017, pp. 193-216. Universidad Complutense de Madrid Madrid, España	Analyze and understand anthropologically "the commons" from a complex and dynamic perspective.	https://www.redalyc.org/pdf/838/83853471001.pdf
Análisis de las agrupaciones de mariscadores/as a pie en Galicia (España) a partir e la teoría del gobierno de los bienes comunes de Elinor Östrom	Fernández, M.; Iglesias T.	XVIII Encuentro Internacional AECA. Lisboa, Portugal. 2018	Demonstrate compliance with the principles of design and institutional action developed by Elinor Östrom for the government of the commons.	https://aeca.es/wp-content/uploads/2014/05/154w2.pdf
guifi.net, una infraestructura de red procomún gestionada de forma colectiva	Baig, R. Roca, R. Freitag, F. y Navarro, L.	Fundación privada per a la Xarxa Oberta, Lliure i Neutral - guifi.net. Gurb, Catalunya	Analysis of a communication network that works collectively.	(2015) guifi.net, una infraestructura https://scholar.google.es/scholar?q=Guifi.net+bienes+comunes&hl=es&as_sdt=0,5
El desafío de la gobernanza de las aguas subterráneas: estudios de caso de España y Australia	Ross, A., Martínez-Santos, P.	Reg Environment Change (2010)	To evaluate the design principles of Elinor Ostrom applied in the Murray Darling basin in Australia and the Alto Guadiana basin in Spain.	https://link.springer.com/article/10.1007/s10113-009-0086-8#citeas

Source: Own elaboration (2020)

V.MANAGEMENT OF COMMON GOODS AND RESOURCES IN SPAIN

To analyze the management of common goods and resources in the Spanish context, 9 documents that met the inclusion and exclusion criteria considered in the previous section were used. This allowed the study of common assets and resources to be delimited in order to meet the objectives set for this research.

Based on this, the theoretical elements associated with the management of common assets and resources as the first point of interest, were identified through an exhaustive review of each document, establishing the task of reducing the data. In this case, coincidences were established in the reviewed studies in order to create a structure associated with the study topic. These actions have a qualitative approach, so a categorization is made in order to organize the material, and then triangulate and structure the information.

To categorize the data, each of the documents was read allowing the theoretical elements present to be identified. In Figure 1 the theoretical elements found are presented, which are described later.

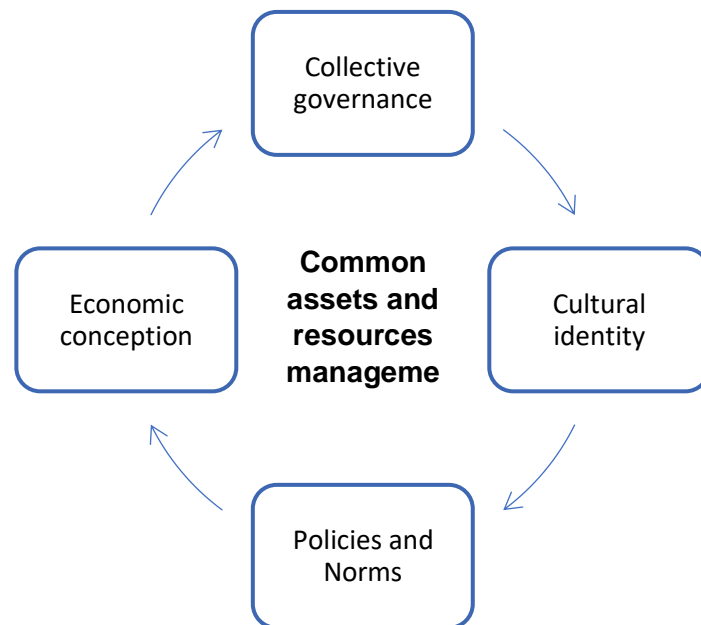


Figure 1. Theoretical elements of the management of common goods and resources
Note: The Author with information from D’Alisa (2015).

Collective governance

It refers to the effect of communally managing or governing common goods and resources, in order to strengthen their self-government, so that groups of people enjoy them collectively. It is considered a new form of governance, referring to natural and non-material resources, self-managed, sustainable and executed by citizens.

Cultural identity

The culture that shapes the management of common goods and resources in Spain has particular characteristics that define it, such as: equitable distribution of burdens, shared benefits, search for common well-being, respect for the closest environment.

Policies and standards

The management of common assets and resources needs to be based on social policies and norms through which particular actions can be executed and clearly define actions, sanctions, among others. In this case, the revised documents suggest that the governance of the commons should be done through transparency policies and policies of use subject to communal control.

Economic conception

From the perspective of the economy, they consider it as an economically viable development model, finding certain elements of the management carried out that allow it to be characterized. In this case, we have: the ability to transition to new types of non-capitalist economies, defining houses as the main accounting units.

For the management of common goods and resources, the exploitation objectives, resource evaluation, extraction and commercialization plan and financial plan must be established; converting is a way to fight privatization and commodification, in addition to exalting communalism. Thus, the management of the common good is a way of generating it, instead of competing for profit maximization.

After the definition of these theorists, the analysis of the documents under study was restarted to identify the principles of the management of common goods and resources in Spain. This process was carried out taking as a reference the principles defined by Elinor Ostrom, locating them according to the found narrative, as presented below:

- Principle of exclusion
- Principle of context

- Principle of participation
- Principle of supervision
- Principle of incremental sanctions
- Principle of conflict resolution
- Principle of self-organization
- Principle of nested properties

As mentioned above, the principles for the management of common assets and resources are fully met in the Spanish context. This suggests the attachment to the theory proposed by Ostrom, revealing the evolution of collective action organizations; according to the theoretical elements as an economically viable development model, which is presented as a third way between the public and the private. In this contribution, 4 basic components are considered to manage common goods and resources in Spain, as shown in graph 2 and described later:

Management component

The management of common goods and resources focuses its actions on collective governance, where the citizens involved contribute to self-manage processes, assets and resources to get the most out of them, in a space where their sustainability is guaranteed.

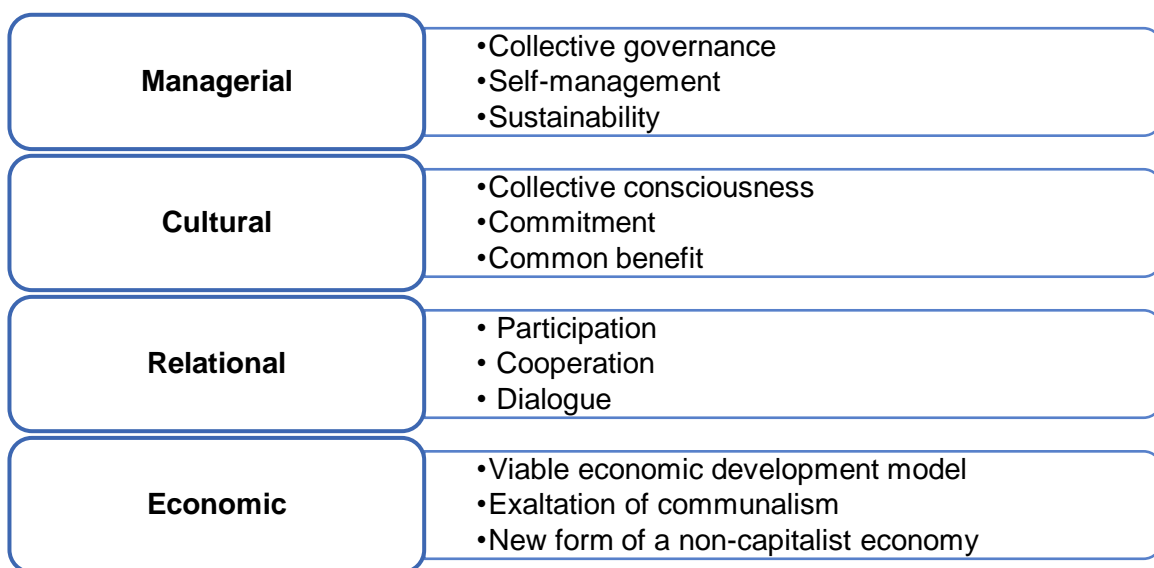


Figure 2. Components for the management of common assets and resources. Note: The Author with information from D’Alisa (2015).

Cultural component

The creation of a culture for the management of common goods and resources is essential when having practices to carry out the economic activities that are established.

Relational component

For the management of common assets and resources, relationships are established between people, institutions or organizations, not only for the execution of activities but for the establishment of norms, policies and decision-making.

Economic component

From the economic point of view, it is stated that this third option, which is open to the traditional public-private one, is considered as a viable economic development model.

Below we have **four examples** where we can see the description of the characteristics of the management of public goods in Spain.

- **Example 1: Governance and Municipality**

Regarding governance, Blanco, Gomà and Subirats (2018) point to the need to create a model of the basic features that express the realities on which its policies and dynamics of action must be deployed. In addition, they point out the existence of community governance of shared resources, where it is self-governing and self-managing, in this sense the authors describe governance as processes and social structures are managed by groups of people who enjoy and benefit from resources collectively.

The authors emphasize the care given to the transfer of collective wealth for the new generations, as well as the equity shown in the use and access of common goods and resources.

Arising from there the cultural identity, because the dependence on the territoriality of governance causes social groups to present particular characteristics that distinguish them. This means that, in the search for new economic forms for their development and supply, they create their own ways of executing processes, exchanging benefits, among others; maintaining management models for environmental, economic and social sustainability, (Blanco, Gomà and Subirats (2018)).

Table 4. Search for new economic forms in Spain.

Organization	Governance Space	Reference Movement
Alliance against energy poverty	Energy poverty	Neighborhood / Urban
Platform affected by the mortgage	Housing emergency	Social rights
The Kellys	Job insecurity, care and gender	Feminist / Union
Food Sovereignty Networks	Proximity sovereignty: food system and waters	Environmentalism
Water is life		

Note: The Author with information from Blanco, Gomà and Subirats (2018).

The authors consider that the elements that define the management of public goods and common resources in the Spanish case are generated from cultural or relational components, in this sense they describe that Spanish society has made claims since 2015 promoting the defence of the public services, labor reforms and general strikes.



Figure 3. View of Cooperativa Ecológica in Zaragoza. Source: <https://www.eldiario.es/>

At the same time, they support the practices related to exchange networks that can be carried out in agro-ecological consumer cooperatives that can be managed in empty urban spaces. Self-organization also has particular recognition, especially for self-management of the commons and sustainable community empowerment. Under this principle are concepts of self-government, management boards and self-managed spaces.

- **Example 2. Economy of the Common Good at the local level**

One of the principles of greatest recurrence in the documents analyzed is participation, Gómez, Morales and Rodríguez (2017) propose a global action of participation that encompasses the community, citizens, the management process, and democratic intervention, participatory budgeting, among others. Furthermore, the conformation of the organizations and the operational rules that lead to collective improvements are defined in a participatory way, arguing the need for an active intervention where all the social actors are involved.

	1.Human dignity	2.Solidarity	3.Ecological sustainability	4.Social justice	5.Democratic participation and transparency
A)Providers	A1. Ethical management of supplies	A2. Solidarity management of supplies	A3. Sustainable management of supplies	A4. Social management of supplies	A5. Transparent management of supplies
B)Financing	B1. Ethical management of finances	B2. Solidarity management of finances	B3. Ecological management of finances	B4. Social management of finances	B5. Transparent management of finances
C)Municipal employees	C1. Quality and equity in the workplace	C2. Fair distribution of workload	C3. Ecological behaviour of the human team	C4. Fair distribution of rent	C5. Internal democracy and transparency
D)Citizens and municipality organizations	D1. Basic services that guarantee the quality of life to all citizens	D2. Infrastructures and means for the generation of BC by the social agents	D3. Ecological conception in public management	D4. Fair taxation and social justice policies	D5. Transparent municipal management and citizen participation
E)Social ambit	E1. Social effect. Promoting values	E2. Fostering networks with other agents	E3. Promotion of ecological behaviour	E4. Debt and sustainable budget	E5. Promotion of democratic values and active participation

Figure 4. Matrix of the Common Good. Note: Taken from <https://www.redalyc.org/>

The aforementioned requires a support made up of policies and norms, which become a reference for the functioning of social groups, finding affinity in their need.

- **Example 3. Commons in Spain**

Vivero (2019) describes it by finding in the Spanish space with common governments the presence of a social system that has had the experience of managing resources in a shared way by a community and that has been characterized by its identity; likewise, the reviewed cases have shown independence from the State and the market, which indicates their autonomy of operation.

The author also considers that the practice of the economic model presented with the commons may cause divergences with the traditional approaches established by the market and the Spanish State. This situation also affects the economic conception of the types of goods, since when speaking of the common it is detached from the private and the public, emphasizing in this that far from being businessmen and state agencies, it is really the collective who exercises power over such assets.

From the economic point of view, it can be said that the management of common goods and resources from the narrative review of the documents found in the Spanish context has assumed the possibility of finding a different vision of doing things in the production and distribution of collective benefits, that deviate from traditional market dynamics. In accordance with the economic elements described in **figure 2**, these common resources cannot be commercialized, nor can they speculate with them due to their own nature; recognizing that the value they have is attributed to the use that is given by the beneficiaries, thus escaping from the proper processes established by the financial market.

- **Example 4: Welfare systems, social policies and common goods**

Montesinos and Campanera (2017) consider that in the management of the commons, a multilevel analysis of the policies of the different actors should be conducted; recognizing the intervention of different levels ranging from the local to the global, and the existence in each of them of multiple management and organization models in accordance with the objectives established in the initial project requirements.

This prevents seeing common goods as products with which economic transactions can be made, where supply and demand establish the parameters for their commercialization. Therefore, pricing, market research, or similar is ruled out, this model represents the new way of establishing accounting units, different from those traditionally conceived.

Additionally, they point out that the management of the commons is exempt from paying taxes for the exercise of economic activity, this can offer the viability of the model by allocating resources for the reinvestment and growth of the project, and consequently, translate them into higher collective benefits.

Another of the principles that stands out is that of nested properties, as envisaged by Ostron refers to the ability to organize in interconnected structures with similar regulation. In this aspect, this principle is shown referring to business and social networks based on cooperation and not on competition, the latter considered as the traditional economic trend.

VI.DISCUSSION OF RESULTS

Once the theoretical elements in the Spanish context have been identified, such as: collective governance, cultural identity, policies and norms and economic conception; It can be affirmed that the identity of the commons is constituted, as D'Alisa (2015) indicates. The ideas expressed in the documents analyzed allow us to recognize people's adherence to a value system created by themselves in Spain and in others countries.

Below we have **five cases** where is possible to identified the characteristic named above.

- **Case 1: Communal areas in the Central Pyrenees (Catalonia)**

In the review carried out, it was found that the norms and policies point, according to Oriol and Vaccaro (2017), to transparency, participation and consensus aimed at communal control regarding surveillance, rights and duties, sanctions; in addition to the sustainability of the planned activities.



Figure 5. Animals grazing on communal land in the Central Pyrenees. Source: Google (2020).

The authors explain that the current crisis and problems related to environmental management have contributed to the establishment of new forms of organization in communes. In the particular case of the counties of the High Pyrenees (Catalonia) its territorial organization is attributed due to the environmental functionality it has. The authors explain that these mountains are currently spaces for tourism and conservation of natural spaces, which due to their high levels of conservation have gained political interest where different initiatives have been generated for their updating.

As for the treatment of communal goods in these areas, the authors explain that these areas have some potential, but at the same time many limitations to carry out livestock activities or productive practices based on agriculture, in this regard comment that the Low temperatures and the shallow depth of the land are shown to be limitations for the development of productive practices.

Despite the above-mentioned, the authors explain that people have faced adversities by taking advantage of the diversity of resources, performing tasks of productive complementarity, the cultural, relational and economic elements described in Figure 2 are evidenced in this case in particular given that the extensive use of pastoral areas, distance between spaces that are the object of exploitation, coincidence in the requirements to do the work and the systematic use of resources tend to favor the coordination of domestic activities.

When carrying out the work under this scheme, the authors consider that the formation of integrated herds, the communal ownership of forests and pastures, as well as the forms of appropriation in relation to the altitude, are part of the environmental relations of the Pyrenees in this area.

- **Case 2: Grouping of shellfish workers on foot (Galicia)**

In this case, the communal controls expressed in the surveillance of use and exploitation of the commons, compliance with duties and rights, and sanctions for non-compliance with the provisions are expressed. It is important to indicate that the limits or principle of exclusion, as well as those of context, are associated by Fernández and Iglesias (2018) with the physical limits where the commons are managed and the coherence of operation with the local reality.



Figure 6. Seafood shellfish in Galicia. Source: <https://www.lavozdeg Galicia.es/>

At this point, the importance attributed by the communities to respecting the environment for the sustainability of the projects and, consequently, the economic development of the sector, is clear. All aimed at achieving benefits for the group and at the same time ensuring that subsequent generations can enjoy them without damaging the natural environment where they are generated.

- **Case 3: Water management and community construction (Granada)**

Ruiz and Gálvez (2014) describe a notion based on resource management and collective action. They consider that resource management needs collective action and that this will define a community according to the actions of its members, these actions help to improve the irrigation systems of that area and at the same time promote useful actions for purposes environmental.

They also consider that the community in La Taha is the one that promotes the irrigation system of that locality and therefore to understand these irrigation mechanisms in the Andean zone, these people must first be known, in this sense they explain that the community has important Values based on identity and culture that are relevant and then once this identity was established, the conditions for irrigation management were generated.



Figure 7. View of the Taha (Alpujarra, Granada). Source: <https://www.alamy.es/>

In accordance with the aforementioned, the authors consider that the main point of interest for the development of activities is collective action over adaptation and even situations of resistance to global processes that would otherwise manage water control (since either public or private). Another of the fundamental elements that has prevailed over time is the trust of the inhabitants with each other, in this sense, society participates and acts collectively in the management of certain assets.

- **Case 4: Guifi.net (Catalonia - Valencian Community)**

It is an open license that according to Baig, Roca, Freitag, and Navarro, (2015) is a collectively managed communication network. The authors explain that this type of initiative has been developed in the last 10 years and describe the case of Guifi.net as a satisfactory experience, based on principles explained in the management of common goods. The authors consider that the success factors are based on the fact that it is a neutral network, open to technological options offered by users, professionals, volunteers and public institutions.



Figure 8. Guifi.net Spain - Portugal nodes. Source: <https://www.researchgate.net>

The authors attribute the effective and prolonged operation of Guifi.net to the development of the community and participation, they describe that tools that have helped the functionality of the system have been promoted over time, including network planning and management tools, coordination, open participation with organizational tools, collaboration agreements and community licenses, as well as financial compensation and government collaboration agreements. They describe that the final result obtained is 13,000 participants, 40,000 nodes and 50,000 km of internet links.

- **Case 5: The challenge of groundwater governance: case studies from Spain and Australia**

The economic conception described in these basins is defined by Ross and Martínez-Santos, (2010) as the buffering capacity in the transition towards a new type of non-capitalist economy. In this sense, they redefine concepts used in economics such as the case of accounting units, exchange of goods and services, complemented by other terms such as: social and solidarity economy, participatory budgeting and liquid democracy.

Regarding the principles of management of common assets and resources established by Ostrom and based on the success-failure duality, in the aforementioned documentation. Compliance with these was found, which was used as a reference to establish general guidelines. Given this reality, the principles can allow for the sustainability in the management of the commons in Spain; aspect that is a characteristic of this economic management model.

Regarding the principles of exclusion, context, participation, supervision, incremental sanctions, conflict resolution, self-organization and nested properties, the diversity of the particular characteristics of each is recognized in the selected documents and according to Bollier (2016) The community makes the existence of a unique recipe that helps the management of the commons difficult, therefore the existence of these principles facilitate the process and must be shared with the community to establish agreements in each of them.

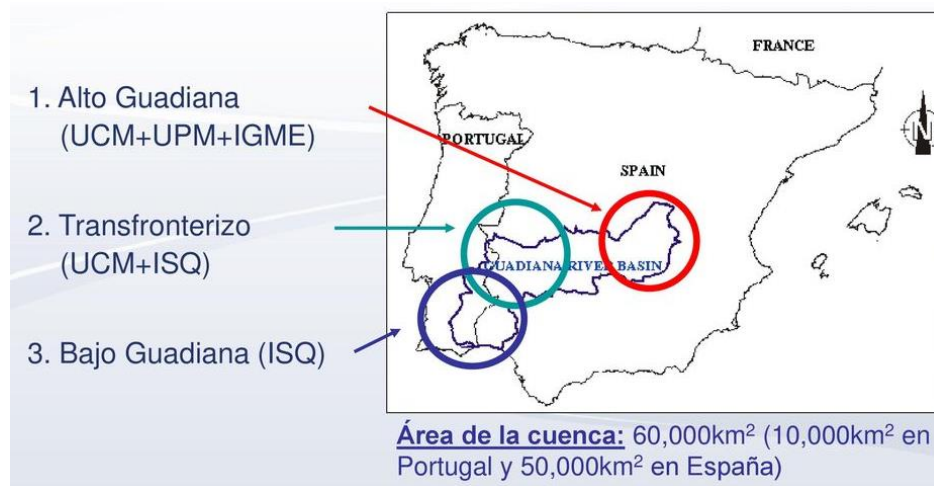


Figure 9. Alto Guadiana Basin in Spain. Source: Taken from Google (2020).

Supervision and incremental sanctions can be addressed from the policies and standards required for the management of the commons; for in the case of the Alto Guadiana Basin in Spain, common goods and resources are governed collectively according to the norms and institutions established for this purpose, since otherwise it would lose the sense of common.

The authors consider the need to articulate action networks and to take a look at the multi-stakeholder approach, or dialogue with stakeholders to establish communication channels for the project's results. Additionally, these authors point out that, in order to adequately take into account the different community areas of the Alto Guadiana Basin sectors in Spain, considering the various problems that may arise with the resource, the integration of entities at different levels is necessary, either at local, national or international level.

VII.CONCLUSIONS

The bibliographic review of the management of the commons in Spain has allowed configuring the particular approach from the recurring theoretical elements and the principles applied from the experience of the authors consulted. In this sense, shared governance, participation and integration of involved actors, autonomy of action and decision in the development of their activities, setting of policies and norms, among others; It has arranged a new form of development that is far from the traditional market-state duality.

Thus, the choice of a third possibility as an economic alternative for the development of communities represents the opportunity to seek improvement options collectively, with a paradigm shift where the commercial spirit is not involved. In this case, commons management limits excessive interest in making profits on things that should not be traded, given the economic nature of their approach.

The distance between the management of goods and common resources with commercial negotiations, study of the behaviour of supply and demand, accounting records, management principles, among others; makes a clear difference in the conception of the model. For this reason, since the review carried out, a theoretical structure is available where the components: managerial, cultural, relational and economic; establish a unique cohesion that responds to the perspectives of the Spanish context and characterizes the management carried out.

The aforementioned, offers the possibility of finding in this management alternative solid changes in the way of seeing and doing things, linked to strategies, policies, actions and economic decisions. This on the basis of the collective and the willingness to integrate interests from different sectors and levels, but oriented towards a common goal and the sustainability of resources.

- Recommendations

The cases described make it possible to determine that the infrastructures under study in Spain can be managed efficiently by treating it as a Common Good. Each of the described realities (Alto Guadiana Basin, Mariscadores in Galicia, Tierras del Pirineo Central, la Taha in Alpujarra, Granada, the case of guifi.net, among others.) They have various complexities and systemic differences; therefore, they require that apart from the cooperation of their inhabitants, models based on efficiency and economic and social well-being be designed that they differ from the already traditional models.

The use of management instruments will allow the differences, details and coherence of a collaboration model that has been developed to be evaluate; in this sense, the practices of common goods in the Spanish context must contemplate the following:

- Social Elements: Evaluation of the principles of Non-Discrimination, for which they are resources open to people who support this type of initiative.
- Economic Elements: Remember that it is a collective exchange resource that at the same time maximizes the use of resources.
- Environmental Elements: It is a model for sustainable growth in a win-win relationship between society and geographic space.

All the models and geographic spaces described, despite being heterogeneous, have in common the fact that they are against the privatization of infrastructures, they promote the participation, development and growth of a common model.

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