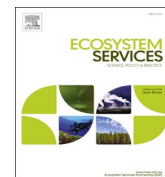




Contents lists available at ScienceDirect

Ecosystem Services

journal homepage: www.elsevier.com/locate/ecoser

Innovative legal tools applied in land stewardship for the conservation of ecosystem services in Catalonia[☆]

Aitana De la Varga Pastor^{a,*}, Joan Pons Solé^b^a URV, Tarragona Center for Environmental Law Studies (TCELS) (CEDAT), Av. Catalunya, 35, 43002 Tarragona, Catalonia, Spain^b INSTA – Serveis Jurídics Ambientals, Av. La Florida 3, 2, 43110 La Canonja, Catalonia, Spain

ARTICLE INFO

Keywords:

Ecosystem services
Land stewardship
Payments for ecosystem services
Environmental legislation
Millennium Objectives
Environmental protection

ABSTRACT

In this paper we analyse how the conservation of ecosystem services (ES) is integrated in Spanish and Catalan legislation on land stewardship. Analysing their implementation in Catalonia, we demonstrate that the legal land stewardship framework has innovative tools that can be supplemented by payments for ecosystem services (PES) and tax incentives toward comprehensive ES protection. By analysing several experiences in Catalonia currently under development, we verify that implementing all of these instruments and encouraging the involvement of public administrations and civil society as a whole is crucial to conserving ES. Overall, we demonstrate the importance of incorporating into law not only ES but also measures available for protecting them and the alternative instruments used to develop them.

1. Introduction

In this paper we examine the protection of ecosystem services (ES) in Catalonia specifically through land stewardship. We analyse the concept and type of protection and, bearing in mind the Millennium Objectives, discuss both the concepts outlined in the various legal instruments and the importance attached to this protection by the legal framework of the ES. We then analyse the concept of land stewardship and its construction as an ideal instrument for preserving and protecting ES. In this theoretical and practical study we also investigate complementary instruments such as Payments for Ecosystem Services (PES) and tax incentives. The present and future management of land stewardship for safeguarding ES may serve as a model internationally.

Article 45 of the Spanish Constitution recognises the right to an adequate environment.¹ Articles 148 and 149 of the Constitution divide the competences aimed at achieving this environment between the Spanish State and the Spanish autonomous communities (AC). The basic legislation on environmental matters is the responsibility of the State, whereas the AC (one of which is Catalonia) are responsible for

developing and implementing environment-related issues. In addition, the AC may also introduce further regulations aimed at protecting the environment. In accordance with the broad concept of environment,² both environmental services and land stewardship are included within it.³ The Catalan Statute of Autonomy assumes competences on environmental matters: article 144, on the environment, natural spaces and meteorology, for example, stipulates that the *Generalitat de Catalunya* (the autonomous government of Catalonia) is competent in this area, reserves the right to establish further rules of protection, and presents a list of what is involved in these shared competences. This means that regulating the environment will involve measures to regulate the ES and land stewardship.

2. Materials and methods, design and framework

To develop this article we have analysed relevant legislation, rulings, policies, and expertise in this field. Though this analysis has been conducted in an exegetic way, we have also taken into account numerous practical methods.

[☆] This paper has been written as part of the research project “Del desarrollo sostenible a la justicia ambiental: hacia una matriz conceptual para la gobernanza global”, financed by the Spanish Ministry of Economics, Industry and Competitiveness for the period 2014–2016 (DER2013-44009-P).

* Corresponding author.

E-mail addresses: aitana.delavarga@urv.cat (A. De la Varga Pastor), jpons@instajuridic.com (J. Pons Solé).

¹ 1. Everyone has the right to enjoy an adequate environment for their personal development as well as the duty to maintain it; 2. Public authorities will draw on collective solidarity to ensure the rational use of all natural resources to protect and improve people's quality of life and defend and restore the environment; 3. Those who violate the above will, in accordance with the law, receive criminal or administrative sanctions and be obliged to repair any damage caused.

² Spanish Constitutional Court Judgment 102/1995 embraced a broad concept of the term when it outlined what it understood by *environment*. See the section II. Legal foundations, B) environmental protection, parts 4, 5, 6 and 7 of the sentence.

³ Managing the environment involves the AC according to article 148.1.9, which must decide what the most suitable tools are for protecting the environment. Land stewardship is one of these tools.

First of all we will address the conceptualisation of the main concepts dealt with in this paper: Ecosystem services (ES) and land stewardship.

The term ES was first used in the 2005 United Nations publication of its Millennium Ecosystem Assessment (MA) and after this publication the concept began to have an impact. Then, between 2007 and 2010, a second UN international environment project – The Economics of Ecosystems and Biodiversity (TEEB) – gave it an even more widespread dissemination. For example, the World Business Council for Sustainable Development has actively supported and developed the concept. As Constanza et al. point out:

Probably the most important contribution of the widespread recognition of ecosystem services is that it reframes the relationship between humans and the rest of nature. A better understanding of the role of ecosystem services emphasises our natural assets as critical components of inclusive wealth, well-being, and sustainability. Sustaining and enhancing human well-being requires a balance of all our assets – individual people, society, the built economy, and ecosystems. This reframing of the way we look at “nature” is essential to solving the problem of how to build a sustainable and desirable future for humanity (Constanza et al., 2014:153).

The definition of ES as “the benefits people obtain from ecosystems” is used according to Fisher (2009:643–653). In addition to the definition used by the MA in 2005, also used are those by Daily (1997a:3): “the conditions and processes through which natural ecosystems, and the species that make them up, sustain and fulfil human life”; and Constanza et al. (1997:253): “the benefits human populations derive, directly or indirectly, from ecosystem functions”. As Fisher pointed out, each of these definitions emphasises different aspects. Daily, for example, understands ES to be “conditions and processes” as well as “actual life-support functions”, while Constanza et al. say they represent the goods and services derived from the functions and utilized by humanity. For the MA, services are benefits writ large (Fischer, 2009:645). Another notable definition is that used by De Groot (1992, 2002:394), De Groot et al. (2002:394) “the capacity of natural processes and components to provide goods and services that satisfy human needs, directly or indirectly”.

The concept of benefit must of course be interpreted more broadly than from the mere financial perspective, as the Millennium Ecosystem Assessment in Spain does when it defines benefit as “the direct and indirect contributions of ecosystems to human well-being” (MAGRAMA, 2011:11). This anthropocentric or instrumental meaning of the term stresses human well-being where “ecosystems are understood to be natural capital, i.e. systems of ecological integrity with an aptitude for wrestling with perturbations (resilience), while maintaining their functions or capacity to generate a flux of services for human beings” (MAGRAMA, 2011:15). In this way, the contribution of ecosystems to human well-being is made via a set of functions that have the capacity to provide services that satisfy the needs of society. In this respect,

the functions of the ecosystems are an intermediate concept between the ecosystems and biodiversity (intrinsic value) on the one hand and the services they generate (instrumental value) on the other. The main difference between functions and services is that functions exist independently of their use, demand, enjoyment or social appraisal and become services only when they are used, consciously or sub-consciously, by the population. In this way, the transformation of a function into a service necessarily involves identifying the beneficiaries, the type of enjoyment derived, and the location in space-time of their use (MAGRAMA, 2011:23).

This presupposes a superseding of what was traditionally known as natural resources or natural goods to provide a holistic vision in accordance with which the forests and rivers, for example, are not

merely forestry or water resources but a natural capital capable of providing a rich flow of services that goes beyond the idea of water or woodland resources.⁴

The MA (Haines-Young and Potschin, 2010:3) recognises four broad types of ES: those covering material *provisioning* services; those covering how ecosystems *regulate* other environmental media or processes; those related to people's *cultural* or spiritual needs; and *supporting* services, which underpin the other three types.

Although this MA classification, divided into supporting, regulating, provisioning and cultural services, is the most widely used, according to Fisher et al. (2009:644) “this classification is understandably not meant to fit all purposes, and this has been pointed out for contexts regarding environmental accounting, landscape management and valuation, for which alternative classifications have been proposed (Boyd and Banzhaf, 2007; Wallace, 2007; Fisher and Turner, 2008)”.

As Haines-Young and Potschin (2010:4) point out, “the problem is an important one to resolve, because unless we can be clear about what a service actually is, it is difficult to say what role “biodiversity” plays in its generation. Wallace (2007) has been one of the most recent authors to comment on the problems that the MA typology poses”.

According to Wallace (2007:240), “the task of managers is to influence ecosystem processes to ensure that the composition and structure of ecosystem elements continuously deliver human well-being.” The same author continues (2007:242): “it will be difficult to elaborate a single structural classification, although one is important for effective decision-making”, especially with regard to the socio-cultural category. For that reason, in general terms, there is a need for a subsequent development. As Fisher et al. (2009:643) point out, this is an evolving concept:

to do this, the scientific community needs to frequently check the validity of early concepts, including how ES are defined, and how the concept can be utilized by a wide range of stakeholders including scientists, economists, practitioners, policy makers, land managers and environmental educators.

2.1. Innovative features of land stewardship as instruments for ES conservation

The basis of land stewardship is voluntary agreements between owners and stewardship entities. Sánchez Sáez (2004:292) describes voluntary agreements as:

legal agreements between one or more public administrations with one or more individuals or legal entities subject to private law (usually companies or industrial associations but also individuals, landowners, etc.) of conventional legal status that, being able to possess a multiplicity of objects and be or not be expressly provided for in the legislation, have the common objective of establishing a legal relationship between all parties with the purpose of achieving greater protection for the environment.

All in all, according to Pallarès (2010:237), “the public aim, which must be pursued through the use of the previously mentioned instrument, should not be forgotten”.

In fact, stewardship agreements should encourage owners to make the ES they are preserving more visible. According to Vázquez (2011:3), this can be done in two ways:

- Through direct economic benefits (such as incentives, tax relief, direct or indirect subsidies, etc.).
- Through the possibility of trading in secondary markets with the economic value of the rights over resources and ES in function of the

⁴ Authors such as Pons (2014:20), however, make a distinction between functions on the one hand and supply, regulatory and cultural services on the other. The aim of this classification is to avoid double accounting for services.

Download English Version:

<https://daneshyari.com/en/article/6556453>

Download Persian Version:

<https://daneshyari.com/article/6556453>

[Daneshyari.com](https://daneshyari.com)