Education Excellence and Innovation Management through Vision 2020

Strategy Map for Protection of the Biosphere Reserve of the Iberian Meseta

João P. TEIXEIRA

Research Centre in Digitalization and Intelligent Robotics, Applied Management Research Unit -Instituto Politécnico de Bragança, Bragança, Portugal joaopt@ipb.pt

> Joaquín ROMANO Universidad de Valladolid, Valladolid, España romano@eco.uva.es

> Emilio CHINARRO Universidad de Valladolid, Valladolid, España emilio@eco.uva.es

Paula O. FERNANDES Applied Management Research Unit - Instituto Politécnico de Bragança, Bragança, Portugal, pof@ipb.pt

Abstract

UNESCO considered the cross-border region of the Iberian Plateau in 2015. In 2017, the project entitled "Iberian Landscape - Network of Rural Landscapes on the Border of the Douro: A Strategic Map of the Iberian Plateau" was approved by the POCTEP program of INTERREG. One of the project's actions is to develop a strategic map for this region. This paper presents the strategic map developed based on a set of challenges and a strategic vision for the region. This map was formalized in 4 strategic objectives, each one with its lines of action and a set of specific actions that support them.

Keywords: Sustainable Tourism; Cross-border Territories; Iberian Landscape; Rural Scenario; Local Economy.

Introduction

The cross-border natural reserve Meseta Ibérica, located at the border line between Spain and Portugal, as shown in Fig. 1, was declared by UNESCO as part of the biosphere reserve network, on 10 June 2015. The Iberian Meseta became so the first UNESCO reserve being managed by a European Grouping of Territorial Cooperation ZASNET, and the 15th transboundary Biosphere Reserve, out of 630 all over the world.

The cross-border biosphere reserve Meseta Ibérica covers a very wide area along the Northern Border of Spain and Portugal, at 1 132 607 ha. The reserve includes four natural parks: the Sanabria Lake Nature Reserve and surroundings, Montesinho Natural Park, Douro International Natural Park and Arribes del Duero Natural Park. Additionally, the reserve includes the Natural Regional Park of the Tua Valley and some areas included in the Natura 2000 network, such the protected landscape of the Azibo, Sierra de la Culebra, and the rivers Sabor, Maças, Fervença, among others.

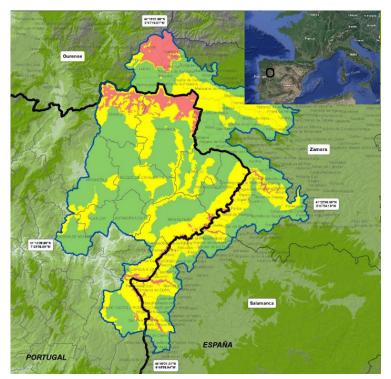


Figure 1 : Cross-border biosphere reserve Meseta Ibérica map.

In May 2017, the project entitle "Paisaje Ibérico - Network of Rural Landscapes on the Border of the Douro: A Strategic Map of the Iberian Plateau", was approved by the POCTEP program. This project aims to Protect and enhance cultural and natural heritage, as an economic base of the cross-border region. The main objective of the projects consists in Promote eco-efficiency of cultural and heritage landscape resources, as well as the protection of agroecosystems around the border of the Duero (Iberian Plateau Biosphere Reserve Area). The project can be consulted in http://www.paisajeiberico.eu/pt/ (in Portuguese language) or in http://www.paisajeiberico.eu/ (for Spanish language).

One of the actions under this project consists in the definition of a strategic plan for the protection of the Biosphere Reserve of the Iberian Meseta. This paper intends to report this strategic plan, described in section 3 below.

Landscape network

The landscape networks guide the implementation of a process of dialogue and undertaking collaborative actions in the framework of a platform with multiple actors, which systematize the exchange of information and discuss perspectives of the framework of life, in order to reach a common understanding about the conditions, challenges and opportunities of the landscape. This process guides the collaborative planning to elaborate a concerted action plan among the actors, taking care to define collaborative commitments and also to carry out a monitoring for the adaptive management, whose results feed the following rounds of dialogue and exchange of knowledge, as well as the design of new collaborative actions.

Operationally, intersectoral and intergenerational landscape activities should be carried out based on recognizing the processes of creation of the social fabric in the territory at a local scale and its role in biodiversity. It is important that landscape networks generate dynamics of knowledge and social learning, and be inserted into the base of regulated and non-regulated educational programs that incorporate and give priority to raising awareness in those forms of life that materialize this goal of sustainability of the rural systems.

Overview of the Reserve of Iberian Meseta Landscape

The Iberian Meseta reserve is integrated in the Portuguese regions of Terra Quente and Terra Fria in the Northeast Transmontano, and the Spanish Municipalities of Sanabria, Aliste and Sayago (Fig. 2). These zones have their own management processes, dependent on the region, which must be articulated depending on whether they are natural protection areas such as the listed natural parks or historical zones of the various localities. The different natural landscapes of the Iberian plateau united by the banks of the river Douro and by a fluvial network provide an integrated articulation of the entire frontier region.

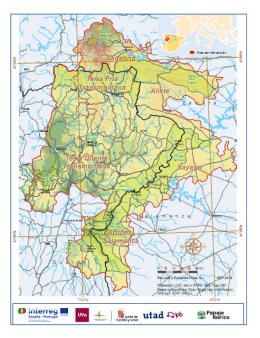


Figure 2 : Regions of the Iberian Meseta.

It is the landscapes themselves, common on both sides of the border, defined by the banks of the Douro river and the agricultural and cattle activities practiced on both sides, which mark the cultural values that characterize these settlements and determine how they occupy and use space forming networks of different scopes and scales (Romano and Chinarro, 2018).

The depopulation of the interior areas and the aging of the population in these areas reveal the weakness of local organizations in the face of the global tensions imposed by the strength of markets and an increasingly urban society. But they also reveal the public policies that until the 1980s were marked by the marginalization of the municipalities of these zones (Campesino and López Trigal, 2017), on the Spanish side of the border.

Since the entry of Portugal and Spain into the European Union at the beginning of 1986, cooperation policies in the border territory, in particular the Iberian Meseta, have assumed an integrated management of these territories. This should lead to the end of the isolation of these regions, however, integration in a European and global context exalts a deep transformation of the landscape. This transformation manifests itself in the various pressures introduced in the patterns of rural behavior by changing the socioeconomic model specially introduced by the Common Agricultural Policy (CAP) in agricultural and livestock activities. Extensive traditional livestock farming has been replaced by intensive livestock farming, and practices of transhumance and use of community grazing areas have been lost (Molinero, Alario and Cascos, 2013).

Landscapes must be valued not only for their recognition or ability to establish economic relations or for their production or consumption capacity, but also for their social and ecological coexistence (Pinto-Correia, Almeida y González, 2015)

Strategic Map of the Iberian Meseta

In the present section it will be present the strategic map of the Iberian Meseta, namely, for the Douro cross border between Trás-os-Montes region (Bragança, Portugal) and Castilla y León region (Zamora, Spain). The six villages that were under study and belongs to the *cross-border* biosphere reserve "*Meseta* Ibérica" (RBMI) are for Portugal side: *Rio de Onor, Bemposta* and *Atenor*; and for Spain side: *Fariza, San Martín de Castañeda* and *Riomanzanas* (Fig. 3).

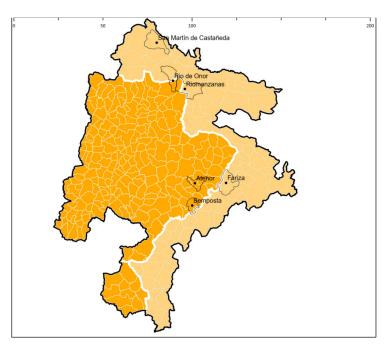


Figure 3: Villages under study.

Source: http://www.paisajeiberico.eu

The landscape of biosphere reserve "*Meseta Ibérica*" is unique and singular and a focus on tourism activity can come to stand out by creating opportunities and competitive advantages and differentiating, local and regional, supporting in the areas that may value the traditions and culture. However, tourism activity can have an impact on local cultures. Therefore, it is intended to present some strategic guidelines geared towards ecotourism and to contribute positively to the environmental, social, cultural and economic well-being of the landscape of biosphere reserve "*Meseta Ibérica*" and local communities. The biosphere reserve "*Meseta Ibérica*" landscape presents a potential of resources that can allow its economic exploration, reflected and cautious, based on the endogenous development.

In this sense, some challenges (Table 1) reflect the 'Vision' of the RBMI region (Fig. 4) with a view to defining priorities for action, making it possible to affirm the RBMI region as a tourist destination of excellence. The 'Vision' is essentially based on 3 pillars that intends to support the achievement of the strategic objectives that are proposed.

Table 1: Challenges of action for the RBMI region

Challenges of action			
To safeguard and preserve the natural, patrimonial, cultural and territorial resources of tourist competitiveness.			
Strengthen the economic activities of tourism demand and supply.			
Reinforce the role of tourism and its potential for dynamism as an engine of the economy.			
Create opportunities for the region in order to enable its balanced and sustainable occupation.			
To value the actions that diversify and strengthen the business initiatives.			
Ensure cross-border territorial cohesion.			

Source: Own elaboration

The 'Vision' is essentially based on 3 pillars that intends to support the achievement of the strategic objectives that are proposed; and can be observed in the figure below.

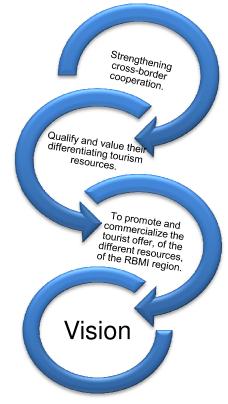


Figure 4: RBMI Vision

Based on the 'Vision' and the 'Lines of action' for the *cross-border* biosphere reserve "*Meseta Ibérica*", and to serve as a basis for the implementation of some actions that may be oriented towards the sustained growth of tourism in the region under study, the strategic guidelines presented in this document are based on the following strategic objectives:

- Strategic objective 1: Promote the RBMI region;
- Strategic objective 2: To value the RBMI region and local communities;
- Strategic objective 3: Creation of cooperation networks;
- Strategic objective 4: Boost the local economy.

Considering the information previously presented as well as the contributions collected during the observation period in the visit to the villages, some proposals were structured and will be presented. Given the nature of the information processed and systematized and based on the points that were considered most relevant to the region's tourism success, the proposals were organized in axis, which reflect the critical success factors for the RBMI region. Each axis is organised in a set of actions considered as crucial to reinforce the competitive position of the region (Tables 2 to Table 5).

Lines of Action	Actions	
1.1. Position tourism as a factor of competitiveness and leverage of regional and local economy	 To promote and develop events that contribute to the tourist promotion of the RBMI region, the valorisation of local economies, their endogenous products and their stories and traditions. Encourage increased tourism demand, moderate and sustainable, involving local communities and promoting regional products, thus leveraging the regional and local economy. 	
1.2. Reinforce the RBMI region as a tourist destination to visit, invest and live	 To stimulate tourism promotion actions in the RBMI at a national and international level, valuing the local flavours and knowledge in a differentiatin way in the globalization of products without identity. Develop cross-selling partnerships between tourism and other sectors of activity, enabling cross-participation in events of different economic activities, maximizing synergies and capturing domestic and foreign direct investment. 	

Table 2: Strategic objective 1: Promote the RBMI region

Lines of Action	Actions		
2.1. Conserve, enhance and appreciate the historical and cultural heritage	 Create and promote program of awareness studies. To value the local gastronomy by the quality of the regional products, cross-border, (<i>Mirandesa</i> meat, goat, sheep, sausages, <i>butelo</i>, cheese, chestnut, almond, olive oil, <i>casula</i>, mushrooms, honey, wine, etc). To value and promote local and cross-border popular festivals. To value and spread the <i>Mirandesa</i> language (<i>Mirandês</i>), through the creation of play activities and inclusion of activities in <i>mirandês</i> in the future Museum of Language in <i>Bragança</i>. Identify public and private historic buildings with identity value for the responsible entities can search incentives for their conservation. This heritage must be included in the tourist itineraries. 		
2.2. To value and preserve the authenticity of the RBMI region and the experience of local communities	 Creating initiatives to boost cross-border intangible heritage. To value the living spaces of local communities, stimulating the contribution of tourism to the improvement of the quality of life. Preserve the rounds of the wineries (in <i>Atenor</i>). Promote traditional local and cross-border games. 		
2.3. Economically promote the natural and rural heritage and ensure its conservation	 Support the maintenance of herds of goats and sheep as forms of contribution for the maintenance of clean grazing areas and characterization of the own landscape of the Iberian <i>Meseta</i>. Create and signal cross-border pedestrian and MTB routes. 		
2.4. Promote and support the rural regeneration of the villages while maintaining the original building as an identity of the construction of the region	 Create support programs for the rural regeneration of village buildings by maintaining the built style based on local materials such as stone, clay, wood, etc. Conduct construction workshops using traditional raw materials. Limit the construction of buildings that do not respect an architectural style typical of the place. 		
2.5. Valuing nature tourism	 Valuing activities in nature such as donkey rides, bird watch, walking tours. Stimulate the wildlife sighting with tours programs that include the bird watch or the sighting or other wild animals. 		

Lines of Action	Actions		
3.1. Promote and reinforce thematic tourist itineraries throughout the year	- To promote, with a cross-border perspective, the local actors and visitors, thematic itineraries linked to local products, whether at the level of gastronomy, sports activities, festivities or handicrafts.		
3.2 . Mobilize the work in networking and in team work	 Create cross-border collaborative and consortium initiatives that contribute to the strengthening of local tourism strategic assets and/or compete to increase competitiveness. Promote cross-border cooperation as a way to make the RBMI region more attractive. 		
3.3. To actively involve society in the tourism development process of the RBMI region	 To create initiatives that promote the participation of the community in the processes of co-creation of projects/initiatives for the tourist development of the RBMI region. Develop studies to monitor tourism activity. 		

 Table 4: Strategic objective 3: Creation of cooperation networks

Table 5 :	Strategic	objective 4:	Boost the	local economy.
-----------	-----------	--------------	-----------	----------------

Lines of Action	Actions		
4.1. Strengthen and create businesses that favour the promotion of local products	 Create local accommodation spaces that combine the comfort and the offer of regional products. Generate actions that promote synergies between the creative industries and tourism, providing visibility to the RBMI region and improving the tourism experience. Create initiatives to promote the sustainability of the RBMI region. 		
4.2. Promoting local community employment through tourism activities	- Encourage the establishment and dynamizing of networks of producers of goods and services for the tourism industry that promote the employment of the local community. Support mechanisms should prevent the involvement of entities that do not involve the local community in the majority.		
4.3. To value popular customs and cultural activities as a tourist product	 To value popular customs and cultural activities as a tourist product, such as the <i>pauliteiros de Miranda</i>, the pipers, the <i>caretos</i>, etc. Encourage the creation of local crafts such as the <i>Palaçoulo</i> knives, or the door locks - <i>'carabelho'</i>, among other products. 		

Ecotourism strategy based on autochthonous races

The territory of the Iberian Plateau Biosphere Reserve offers the highest concentration of autochthonous breeds in all Europe in danger of extinction, and livestock activity is an essential pillar in these landscapes. The sustainable use, development and conservation of the world's livestock genetic resources are of fundamental importance for agriculture, food production, rural development and for the environment. Recognizing the need to develop an effective framework for the management of these resources and to address the threat of genetic erosion, 109 countries met in September 2007, at the first International Technical Conference on Animal Genetic Resources for Food and Agriculture. , held in Interlaken (Switzerland). The Conference adopted the Global Plan of Action on Animal Genetic Resources, which includes 23 strategic priorities for action to promote the lucid management of these vital resources (FAO, 2007).

Ecotourism offers an extraordinary potential in the preservation of the autochthonous races and their associated landscapes, from their valorisation as goods of use, option and existence. Facilitating on one side the approach of visitors to the knowledge of unique livestock management systems, essential in the conservation of biodiversity recognized in the natural parks that make up the Iberian Plateau. And provided, on the other hand, and food products of extraordinary quality, whose high economic value also contributes to increase the profitability of farms, preserving the landscape to be managed extensively and take advantage of fodder resources of really rural areas.

Conclusions and Discussion

This paper presents a strategic map for the sustainable development of the Iberian Plateau region based on a set of challenges and a strategic vision for the region. This map was formalized in 4 strategic objectives, each one with its lines of action and a set of specific actions that support them.

Romano and Chinaro (2018) describe that only 18 of the respondents, of the enquire, in this region, know that they are in a region of the Biosphere Cross-Border and they are not clear what this represents. Even, showing some scepticism related to the experience they have with the limitations and restrictions introduced in the natural parks in relation to their activities with grazing, hunting or even cutting wood. There is a clear increase in control but very little cooperation and no compensation from regional or national administrations managing protected natural areas. It is hoped that the strategic objectives presented here will contribute to a setback of this sentiment feel by the populations of the regions of the Biosphere Cross-border.

It is hoped that policies will pass through the capitalization of space as patrimonial property and also of its inhabitants, even in daily activities such as grazing, be recognized as guardians of the traditional knowledge essential for the conservation of the culture and soul of these places and landscapes.

Acknowledgements

This work is supported by International Funds under the Project 'Paisaje Ibérico' – INTERREG_0421

References

Campesino A. J. y López Trigal, L. (2017): "Un cuarto de siglo de cooperación transfronteriza en La Raya/Raia ibérica", Prólogo, Polígonos, Revista de Geografía, nº29, p 5-9.

FAO (2007): Plan de acción mundial sobre los recursos zoogenéticos y la declaración de Interlaken, Comisión de Recursos Genéticos para la Alimentación y la Agricultura de la FAO.

Molinero, F.; Alario, M. y Cascos, C. (2013): "El paisaje de La «Raya» de Portugal en Castilla y León: un espacio de frontera contrastado y singular". XXIII Congreso de Geógrafos Españoles.

Romano, J. (2017): "Landscape and economy: an approach from the European Landscape Convention", in Council of Europe: Landscape dimensions, Council of Europe, p. 191-216, Strasbourg.

Romano, J. and Chinarro, E. P. (2018): "Red de Paisajes en la Gestión Estratégica de las Reservas de la Biosfera. Estudio del caso de la Reserva de la Biosfera Trasfronteriza Meseta Ibérica", in International Conference on Regional Science, Valencia, 2018.

Teresa Pinto-Correia, Mara Almeida & Carla Gonzalez (2016) A local landscape in transition between production and consumption goals: can new management arrangements preserve the local landscape character?, Geografisk Tidsskrift-Danish Journal of Geography, 116:1, 33-43, DOI: 10.1080/00167223.2015.1108210