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# ECONOMIC DEVELOPMENT PLAN FOR THE SERRA DE TRAMUNTANA

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X L'autor autoritza l'accés públic a aquest Treball de Fi de Grau.

Paraules clau del treball:

Serra de Tramuntana, World Heritage Site UNESCO, Economic Development Plan, tourism sector, cluster.

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## 1. SUMMARY

The Sierra de Tramuntana was appointed as a World Heritage site by UNESCO in 2011. Since then, several measures have been carried out to promote the cultural value of the region and to maintain the traditional activities. However, much remains to be done; therefore this paper provides a development plan related to the tourism industry in order to have benefits over the rest of the regional economy.

(Spanish): La Sierra de Tramuntana fue nombrada Patrimonio de la Humanidad de la UNESCO en el 2011. Desde entonces se han llevado a cabo varias medidas para promover el valor cultural de la región y para mantener las actividades tradicionales. Sin embargo, aún queda mucho por hacer; por lo que este trabajo pretende aportar un plan de desarrollo económico relacionado con la industria del turismo con la finalidad de que tenga beneficios sobre el resto de la economía regional.

## 2. INTRODUCTION

As a result of the cultural heritage value of the landscape of the Sierra de Tramuntana, it was registered in 2011 as a World Heritage Site by UNESCO. Different measures have been carried out by the institutions with the aim of encouraging the economic development of the site, preserving the cultural and traditional heritage. However, these traditional activities are in the process of disappearing as a result of the aging population and the shift of the labor force to the tertiary sector, especially to tourism industry.

To avoid this loss of traditional culture of the region that has created a unique landscape, it has been conducted an analysis of other cases of UNESCO's World Heritage sites which have succeeded in their efforts to conserve the world's heritage. The success stories that have been chosen for this project are the Coffee Cultural Landscape of Colombia, the Teide National Park and the Province of Shiretoko. These three cases have been chosen to analyze the prosperity of the environment from different perspectives, where the reinforcement of local identity through tourism and the export of its own value have been the key to the sustainable development.

Studies that show the importance of tourism to boost local economy and increase social welfare are several. Tourism also provides linkages benefits to other sectors of the economy that generates more wealth in the region. Therefore, it has been proposed a plan for the economic development in the Tramuntana area based on the creation of a tourism cluster that allows the innovation of private companies, the prosperity of other sectors in the economy and thus, to export the cultural, traditional and natural value to the rest of the world.

### 3. DATA AND CHARACTERISTICS OF THE SITE

#### 3.1 Area of the Serra de Tramuntana

The world heritage site of the cultural landscape of the Serra de Tramuntana is placed in the north of Mallorca, in the Balearic Islands, Spain. It is an exceptional territory that was declared World Heritage Site by UNESCO in 2009. The study conducted for this nomination by the Consell de Mallorca and other public and private agencies limited the area to be considered as world heritage in the following manner<sup>1</sup>:

1. A core area that comprises a surface area of 30,745 ha. As it is explained in the nomination file, this perimeter constitutes the geographical area in which the values of the cultural landscape become apparent and are expressed with maximum intensity in spatial terms. This area has the most protected one and it is where the most important part of the protection is taken.
2. A buffer zone that completes the central area with the aim to guarantee the protection and integrity of the property by creating a peripheral cushion. In this way the core area is protected from any possible development pressures and other potential threats.

The buffer zone has a surface area of 52,720 hectares and it surrounds the core area completely up to the northern and southern boundaries of the Tramuntana area where the orographic is less abrupt.

The buffer zone coincides with those existing areas that have a special protection appointment by the Balearic regulation related with the natural spaces. These are: Natural Areas of Special Interest (ANEI) and Rural Area of Scenic Interest (ARIP), added to which we have the so-called Settlement Areas in Landscape of Interest (AAPI).

Furthermore, the island of Dragonera also forms part of the buffer zone. It has a surface area of 271.9 hectares and it is separated from Mallorca by no more than 900 meters on its closest side.

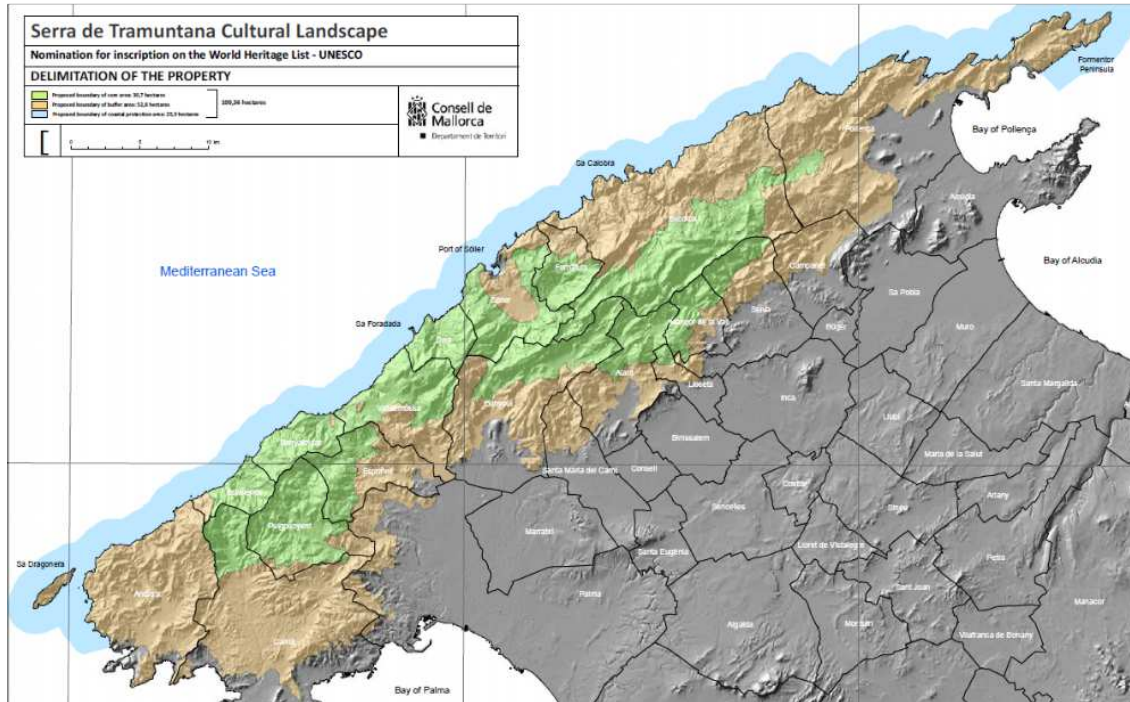
3. A coastal protective area that completes the boundaries of the buffer zone and comprises a strip of sea running parallel to the maritime edge of the Tramuntana area. This extends perpendicularly from the coastline to a distance of one nautical mile (1,852 meters) out to sea. The coastal waters defined in this manner cover a surface of 25,857 hectares, and encircle the core area on its maritime side.

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<sup>1</sup> CONSELL DE MALLORCA, *Cultural Landscape of the Serra de Tramuntana. Proposal for inscription in the World Heritage List (UNESCO). Serra de Tramuntana. Vol I.*, 2010, p. 33.

As it can be seen in the map below, the green area is considered the core area of the World Heritage site, the brown area is the boundary of the buffer zone and the blue area is the boundary of the coastal protected area. Totally, 109,36 hectares of protected area.

Figure 1. Map of the inscription of the property



Source: Consell de Mallorca, 2011

An analysis of the Tramuntana area was carried out in order to determine the boundaries of the core area, with the aim of identifying the presence and spatial distribution of the landscape's features, as well as making a quantitative assessment of them. As the nomination file explains this was done by means of fieldwork – an examination of the terrain and consultation of existing bibliographic works – as well as a subsequent analysis of the territory consisting of the - utilization of layer superimposition techniques, using Geographical Information Systems. The following variables were used in the analysis:

- Presence of hillside terraces.
- Presence of traditional water supply systems for the collection and utilization of water resources.
- Presence of popular systems of engineering for the prevention and control of erosion and floods.
- Presence of oil presses (oil manufacturing buildings).
- Presence of items of heritage related to the sale of ice.
- Presence of holm-oak woods.
- Presence of publicly-owned estates.

- Presence of public footpaths, tracks and hiking routes.
- Presence of archaeological sites.
- Presence of traditional defensive architecture (towers and castles).
- Presence of historical gardens.
- Presence of traditional rural estate houses.

After each of these features had been mapped, the work was to superimpose the layers to analyze the highest density of cultural value in the area. These areas where the highest value is represented are considered as the core area. Later these limits were compared with the administrative limits and the legal designations for its protection, with the aim of ensuring effective administration of the whole area.

At the same time, some areas were considered as degraded zones due to the urban development. So they were removed from the core area and from the buffer zone. This is the case of the coastal tourist towns of the Port of Sóller (Sóller) or Cala de Sant Vicenç (Pollença), and also certain periurban coastal and inland areas of the municipalities of Pollença, Andratx or Calvià.

From an administrative point of view, the area formed by the core area and the buffer zone includes 20 municipalities, 1 of which (Deià) is included in its entirety and the rest partially: Andratx, Alaró, Pollença, Fornalutx, Escorca, Sóller, Mancor de la Vall, Deià, Banyalbufar, Puigpunyent, Estellencs, Esporles, Valldemossa, Bunyola, Palma, Calvià, Santa Maria del Camí, Lloseta, Selva, and Campanet.

The core area comprises 15 municipalities: Calvià, Estellencs, Banyalbufar, Puigpunyent, Esporles, Valldemossa, Bunyola, Deià, Sóller, Fornalutx, Escorca, Selva, Mancor de la Vall, Lloseta and Alaró. Only one of them –Deià– is included in its entirety in the core area, although the greater part of Puigpunyent, Estellencs, Banyalbufar and Mancor de la Vall is included.

The core area contains publicly-owned estates that occupy a total of 6,704 hectares, accounting for 21% of the area. The largest of these estates is Galatzó, with a surface area of 1,354 hectares, followed by La Comuna de Caimari, which covers 725 hectares.



Figure 2. Distribution of ownership in the Tramuntana area

<b>DISTRIBUTION OF OWNERSHIP IN THE TRAMUNTANA AREA (CORE AREA)</b>		
<b>Ownership</b>	<b>Surface Area (Ha)</b>	<b>%</b>
<b>Private</b>	<b>25,226.2</b>	<b>79.0</b>
<b>Public</b>	<b>6,704.0</b>	<b>20.9</b>
State	1,713.2	64.4
Regional Government	1,126.2	42.3
Consell de Mallorca	1,203.4	45.2
Town Councils	2,661.2	100.0
<b>Total</b>	<b>31,930.9</b>	<b>100.0</b>

Source: Proposal for Inscription in the World Heritage List (UNESCO) Cultural Landscape of Serra de Tramuntana

In total the aforementioned core area contains an estimated resident population of 8.000 people, most of them from the urban nuclei that it includes. Nevertheless, the population is around the 40.000 inhabitants if we take into account the buffer zone.

### 3.2 Geographic characteristics

The Serra de Tramuntana is a mountainous area that runs parallel and close to the north-western coast of Mallorca. Visually it has a very rugged appearance. The western slopes actually border on the sea, and the eastern ones with the island's central plain. From a physiographic point of view, it can be differentiated a central sector, where the highest altitudes are situated; a northern sector, characterized by a succession of narrow valleys that alternate with sharp peaks and profusion of coastal cliffs; and a southern sector, less abrupt and with broader valleys<sup>2</sup>.

The mountain range is 90 km long and has an average width of 15 km, and it has a surface area of around 83,500 Ha (835 km<sup>2</sup>). Its differences in altitude range from sea level to a maximum height of 1,445 meters above sea level (Puig Major).

<sup>2</sup> *Ibidem.*, p. 36

Mallorca's Serra de Tramuntana mountain range is a good example of a Mediterranean mountain agricultural landscape, reflecting the transformations brought about by man in unfavorable surroundings. This unique landscape has evolved organically due to social and economic needs, changing in an evolutionary manner in response to the difficulties found in the natural environment. The aim of the population living in the area has been to obtain spaces that can be used for growing crops, rearing livestock and to make use of the forests. It is all marked by a strongly Mediterranean flavor, due to local climatic features, which allow for the cultivation of olive trees and to lesser extent vines, both of which are still operational today, the legacy of the classic Mediterranean trilogy.

### 3.3 World Heritage Site of the UNESCO

The UNESCO developed a carefully criteria with the aim to range the characteristics of the heritage sites. These characteristics were defined according to the definition of the site: natural, cultural or immaterial property. Thereafter, it was defined the criteria with the aim to classify the heritage properties and thus, ensure the proper management of this heritage sites.

In the case of The Cultural Landscape of the Serra de Tramuntana, it is considered as an example of the Mediterranean agricultural landscape, which has been transformed during centuries to deal with the limited resources of the environment and become a productive and habitable place.

The system of terraces and cobbled road network, common to many Mediterranean landscapes, is here combined with an articulated network of devices for the management of water, revolving around farming units of feudal origins. Several villages, churches, sanctuaries, towers, lighthouses and small dry-stone structures punctuate the terraced landscape and contribute to its actual character.

The criteria followed to nominate the Serra de Tramuntana as a World Heritage site are as follows<sup>3</sup>:

Criterion II: The landscape of the Serra de Tramuntana exemplifies the exchange between the Muslim culture and the Christian one, which is representative in the Mediterranean area. That means that we can find an example of the Arabic methods of water collection and management technology, with the system introduced after the Christian conquest of the agricultural know-how and the system of the territorial control. By this cultural interaction, a terraced agricultural landscape was created, featured by an articulated waterworks network, orchards, vegetable gardens and olive groves, which were earlier organized around small farm holdings, and later in large estates (*possessions*) and which nowadays make up the physical and functional features of the Serra de Tramuntana.

Criterion IV: The cultural landscape of the Serra de Tramuntana represents an example of a terrace farmed landscape. There it is combined an interconnected and highly

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<sup>3</sup> *Ibid.*, p. 205.

specialized system of waterworks for collecting and storing water, featuring canals, that are underground channels to harvest and transport water (canals, ditches, storage basins), with a system of terraces supported by dry-stone walls so as to make possible the cultivation of vegetables as well as fruit and olive trees in the terraced plots and including a sophisticated drainage system to avoid soil erosion.

Criterion V: The settlement pattern of the Tramuntana area bears significant witness to human adaptation to difficult environmental conditions, which has ingeniously made a region with scarce resources, both in term of land and water, suitable for farming and living. The feudal land subdivision system, applied to extreme orographic conditions, combined with the sophisticated waterworks technology of Arabic origins has resulted in complex farming units. Their land distribution and use pattern, comprising rocky areas on the tops of mountains, strips of woodland, slopes with terraces, extensive grazing land, fields for reaping, vineyards or fruit crops on flatter land, ensured over time the full exploitation of the existing resources. The Tramuntana area thus pays testimony to the continuous evolution of human settlement in a rugged and steep area of the island.

In this way, the Outstanding Universal Value is justified because the landscape of the Tramuntana area is a faithful reflection of the isolation that the island of Mallorca experiences over the centuries due to its remoteness from continental lands and because it was a border region, half way between Africa and Europe, subject to invasion from both north and south, which led to major cultural interchanges. The singularity of the landscape is defined by concepts such as insularity, the orographic layout and climate, water as a means of subsistence and aesthetic value in the form of the sea, Islamic and Christian cultural legacies, admiration on the part of philosophers, travelers, painters, musicians, poets and writers, and a wealth of legends, traditions and festivities linked to the Tramuntana area.

### 3.4 Economic characteristics

Despite many traditional activities have been abandoned gradually over time, the agricultural environment, population and associated customs and treatments of the land are still maintained in many of the areas. Moreover, the Tramuntana area is still an important source of resources for Mallorca's society, supplying not only agricultural, forestry and livestock products, but also significant water supplies that are decisive for the rest of the island.

The economic activity of the Serra de Tramuntana presents an important diversification. In the inside parts of the area the economic activity of its inhabitants has been focused during years in the agricultural and forestry sector. But, the touristic boom has made a displacement from land works to the touristic sector and workers are employed in services as bars, hotels, restaurants, and other touristic establishments.

The agriculture is still important in the economy of the Serra de Tramuntana, and some economic programs have been carried out to maintain its traditions, as it will be explained below.

Despite this, the area of the Tramuntana it is suffering the depopulation and the aging of its inhabitants. In this way, the population working in the agriculture, livestock and forestry sectors is becoming less. The touristic sector is the economy's propeller of the area, especially during the summer season.

The touristic activities that are taken in the Tramuntana area are more focused in the rural tourism and in the sport and adventure activities than in other parts of the island of Mallorca. This is due to the characteristics of the area, as the difficult access and the absence of flat and sandy coastal sections. In this way, the Tramuntana area has been safeguarded by the intense process of tourism development that some coastal areas in Mallorca have suffered, so that, although it has lost part of its traditional agricultural and forestry-related function, it still boasts high environmental standards in several respects: the quality of the air, low noise levels (resulting in noiseless places), and high visual appeal. All this characteristics are valued for the kind of tourism received.

### 3.5 Current management of the area

In 2011, The Serra de Tramuntana was declared World Heritage Site and, as it has been commented before, the Council of Mallorca, in conjunction with other Institutions, developed a management plan for the inscription in the UNESCO.

This plan was elaborated through the citizen collaboration. This is important because the character and the values of the landscape of the Serra de Tramuntana are the result of the relationship between the local population and the territory.

The aim of this report was to develop strategies and programs for the protection, conservation, divulgation and a sustainable economic development of the values of the Serra de Tramuntana for the short and long term. This was made in base of 10 priorities and key objectives: <sup>4</sup>

1. The maintenance and promotion of good practices in the agricultural crops, livestock and forestry services in a traditional and economically sustainable way.
2. The protection of the cultural, ethnological and ethnographic values of this cultural landscape.
3. The conservation of the environment, maintaining or increasing the level of biodiversity of the area, and the protection of habitats, species or specific geological formations.
4. Recovery of abandoned terraces, hydraulic systems and other heritage assets.
5. The development of rural tourism which can enhance the maintenance of agricultural and livestock sector, create additional income and help preserve rural areas and traditional uses.

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<sup>4</sup> *Ibid.*, p. 939.

6. A proper touristic and recreational use from ecological, social and economic terms.
7. The creation of infrastructures and services that help a better understanding of the cultural landscape, as interpretation centers, reception offices, signed routes and other items for public use.
8. Interpretation activities, environmental education and citizen participation with the aim to achieve a better understanding and appreciation by the population relation the natural environment, cultural heritage and cultural landscape.
9. The promotion of scientific work and researches to have a deeper understanding of the environmental, cultural, ethnological and landscape values.
10. The promotion of entities that protect the values of the land and to boost the creation of rights related with the environmental issues.

Once the Serra de Tramuntana was declared World Heritage Site, it was established the Consortium of The Serra de Tramuntana for the management of the site and its buffer zone. It is currently composed by the regional government of the Balearic Islands and the Council of Mallorca, and aims at coordinating all the different cultural and natural policies, which are being implemented in the site. It also includes a coordinating institution for the involvement of local stakeholders.

The targets of the Consortium of The Serra de Tramuntana are:

- To promote policies to improve and preserve the elements, tangible or intangible, which contains the Serra and have motivated the declaration as World Heritage.
- To promote and finance the executions of works, provision of services and the establishment of facilities related with the declaration as a World Heritage.
- To promote cultural initiatives and projects oriented to the conservation and enhancement of the landscape and cultural heritage of the Serra.
- To promote the involvement of private initiative in the conservation and upgrading of the cultural landscape, especially with the impulse of land stewardship agreements.

Despite, this document was elaborated to have a line to be followed; the undertaken measures have been insufficient to ensure the proper development of the cultural landscape heritage.

Figure 3. Budget for the Serra de Tramuntana (2012-2014)

Consell de Mallorca

DESPESES: CLASSIFICACIÓ ECONÒMICA

PRESSUPOST DE DESPESES 2012

Pág. 1

PRESSUPOST: CONS - PRESSUPOST CONSELL INSULAR DE MALLORCA

--- Classificació ---			DENOMINACIÓ DE LES APLICACIONS	Crèdits inicials
Orgànica	Programa	Econòmica		
17910			CONSORCI DE LA SERRA DE TRAMUNTANA	200.000,00
4			TRANSFERÈNCIES CORRENTS	200.000,00
00	17910	46701	APORTACIÓ AL CONSORCI DE LA SERRA DE TRAMUNTANA	200.000,00
			<i>Total programa . . .</i>	17910
				200.000,00

Consell de Mallorca

DESPESES: CLASSIFICACIÓ ECONÒMICA

PRESSUPOST DE DESPESES 2013

Pág. 1

PRESSUPOST: CONS - PRESSUPOST CONSELL INSULAR DE MALLORCA

--- Classificació ---			DENOMINACIÓ DE LES APLICACIONS	Crèdits inicials
Orgànica	Programa	Econòmica		
17910			CONSORCI DE LA SERRA DE TRAMUNTANA	200.000,00
4			TRANSFERÈNCIES CORRENTS	200.000,00
00	17910	46701	APORTACIÓ AL CONSORCI DE LA SERRA DE TRAMUNTANA	200.000,00
			<i>Total programa . . .</i>	17910
				200.000,00

Consell de Mallorca

DESPESES: CLASSIFICACIÓ ECONÒMICA

PRESSUPOST DE DESPESES 2014

Pág. 1

PRESSUPOST: CONS - PRESSUPOST CONSELL INSULAR DE MALLORCA

--- Classificació ---			DENOMINACIÓ DE LES APLICACIONS	Crèdits inicials
Orgànica	Programa	Econòmica		
17910			CONSORCI DE LA SERRA DE TRAMUNTANA	2.000.000,00
4			TRANSFERÈNCIES CORRENTS	2.000.000,00
00	17910	46701	APORTACIÓ AL CONSORCI DE LA SERRA DE TRAMUNTANA	2.000.000,00
			<i>Total programa . . .</i>	17910
				2.000.000,00

Source: Conselldemallorca.net

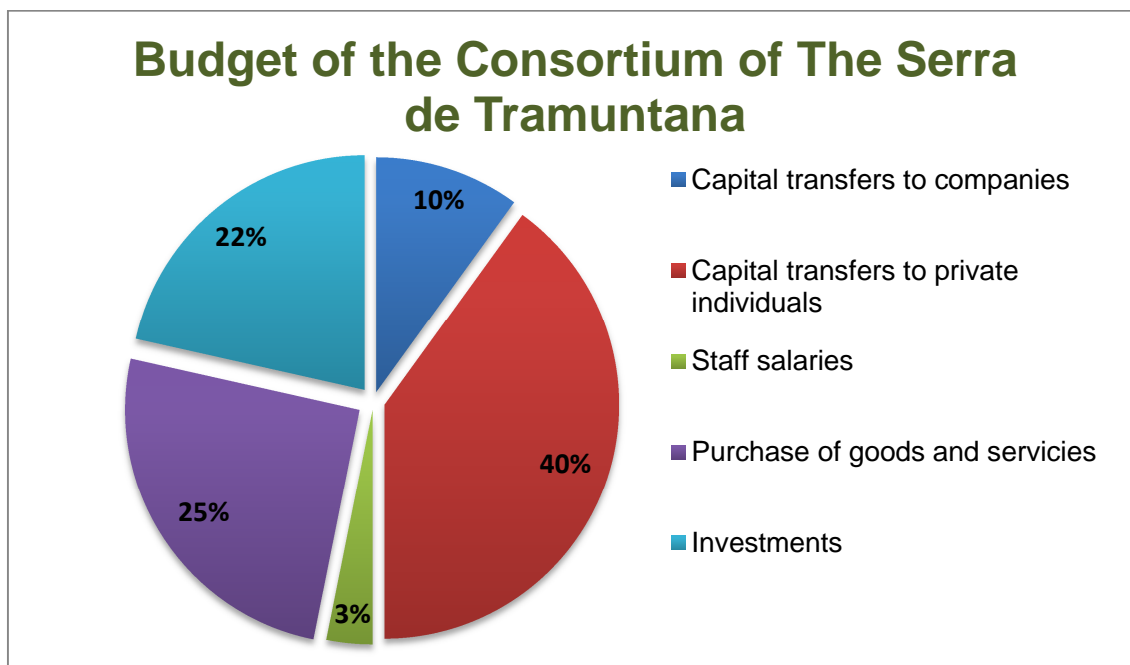
The budget allocated for the Consortium of The Serra de Tramuntana in 2012 and 2013 has been 200.000€ each. Part of this budget (approximately 136.760 €) has been allocated to do some measures for the maintenance of merger's areas and water collection systems. The remaining part of the budget was directed to the leader of the Consortium, which is in charge of the evaluation of the measures to be carried out and the maintenance of the Cultural Landscape.

In this way, there have been serious discussions about the work made in the Site because the budget was not enough to carry out all the measures needed.

However, for the 2014 the budget designated for the Consortium has risen to 2 million of euros and recently has been announced where is going to be allocated this quantity.

In the following graph we can observe the distribution of the budget:

Figure 4. Budget of the Consortium of the Serra de Tramuntana



Source: *Aprovació definitiva del Pressupost General del Consorci Serra de Tramuntana Patrimoni Mundial, bases d'execució i plantilla per a l'any 2014, 6664.* BOIB

We have two differentiated parts:

First, an amount of 1.000.000 € for public subsidies with the aim of recovery the agricultural landscape and its surroundings and the recuperation of the ethnological elements mainly related to the harvesting, conduction and storage of water, which are situated within the territory of the Serra de Tramuntana.

This quantity will be allocated to:

- 200.000€ for capital transfers to private companies. Half of this amount will be allocated to subsidize activities related to the recovery of the agricultural landscape and environment. And the other half of the budget will be assign to subsidize the activities related to the recovery of ethnological elements linked to the harvesting, transmission, utilization and storage of water.
- 800.000€ for capital transfers to private individuals. For this amount, half of the budget will be assigned to the recovery of the agricultural landscape and half will be allocated to the recovery of ethnological elements linked with the use of the water.

The recuperation of the agricultural landscape and its environment it is considered in the following assumptions: activities of regeneration of agricultural landscape, improvement of agricultural and livestock conditions, forest fire prevention activities, elimination of vegetable fuel and its utilization.

The consideration of ethnological elements linked to the harvesting, transmission, utilization and storage of water there are considered activities as the restoration and strengthening of channels, fountains, water wheels, sinks, ditches, tanks and laundries. As well as the elements linked with torrents, bridges of dry stone, or other elements related with water conductions. Even there are contemplated some viewpoints or lime ovens.

Secondly, we have an amount of 1.000.000€ allocated in other issues:

- 63.239,12€ assigned to staff salaries.
- 506.760,88€ assigned to the purchase of goods and services.
- 430.000€ allocated in other investments.

As we can see, for the 2014 the amount of money allocated to the Serra de Tramuntana has grown greatly. Some measures have been taken as the creation of a dry stone school to recover some dry stone elements, or the placement of some banners that informs to the passersby that they are enter in a World Heritage Site.

Despite this, there is a long way to go for the sustainable development of the Serra de Tramuntana and its valuable landscape elements.



## 4. UNESCO'S BEST PRACTICES

With the aim to develop an economic plan for the Tramuntana area, some case studies, considered by the UNESCO as best practices as a World Heritage Site, have been analyzed. In this way, we can draw a line to be followed in order to achieve a sustainable management of the Site.

First, it is analyzed the case of the Coffee Cultural Landscape of Colombia. This area is considered by the UNESCO as an example of sustainable economic development that is maintains in harmony with the environment and the regional culture. Coffee production has created a unique landscape that must be protected and strengthened. Thus, the government and the parties involved in coffee production work together creating a network with the aim that the decisions taken by the government have real implications in the local production. Thereby, the Coffee Cultural Landscape of Colombia is considered as a good practice through the strengthening of the production, the involvement of the population in the project and because the consideration of the coffee and its natural and cultural environment as a national symbol worthy of admiration.

The second case study is the Teide National Park. It is considered World Heritage Site for its landscape created over the years. Although, the economic activity is not further of the tourism and apicultural activities, we are interested in this case because of the measures carried out there, to ensure the maintenance and the protection of the landscape and the environment.

Finally, it has been chosen the case of the Province of Shiretoko in Japan, which is considered as a success by the UNESCO due to the management carried out by the government and the parties involved in the maintenance of the maritime coasts. Fisheries control and other measures to protect species are interesting and useful to consider actions that can be implemented in the Serra de Tramuntana coastal perimeter.

Do not forget that the Serra de Tramuntana is a site that has to be considered from two perspectives. The economic one, that has to be strengthened through the traditional activities that have led to the creation of the exceptional environment; which is the reason whether to analyze the Colombian case. And the natural landscape, that has to be maintained and protected in order to not be affected by external events, such as fires, droughts, etc. For this reason it is interesting to analyze the practices that are carried out in the Teide National Park and in the Province of Shiretoko.

### 4.1 The Coffee Cultural Landscape of Colombia

This case has been selected because it is considered by the UNESCO as one of the best practices due to the combined work of the national and regional governments with the Colombian Coffee Growers Federation (FNC) and the coffee growers as well as the implication of the civil participants. In this way, several measures have been carried out

to achieve a sustainable growth in order to maintain the value of the world heritage site in nature, architecture and cultural terms.

The Coffee Cultural Landscape of Colombia was selected as a world heritage site in 2011 (at the same time as the Serra de Tramuntana) because it represents an exceptional example of a sustainable and productive cultural landscape.

In the nomination, it was taken into account 6 coffee growing regions that comprise 348.120 hectares among core area and buffer area. These regions are the places where the highest part of the cultural, natural and economic values are represented, and that are considered as a national symbol that the public and private institutions want to make known around the world.

In these regions, are taken into account some urban areas that are situated on the relatively flat tops of hills above sloping coffee fields and they represent an exceptional image of the combination of the architecture of the Antioquian colonization with Spanish influence. These are areas where the social coffee life is taken, with a representative connection point in the families as a core of the activity in these regions.

With regard to the typical coffee farms that we can find in the regions considered, they are located on a challenging landscape of steep mountains with “slopes of over 25% (55 degrees) which articulate the form and design of the coffee landscape, its architectural typology, and the lifestyle of its communities; thus, its authenticity”.

In 2012 the Coffee Cultural Landscape of Colombia was considered as an example of best practice. The measures that have been carried out are providing effective sustainable growth due to the combined and coordinated work of the public and private institutions, coffee growers and civil population. These measures are focused in the maintenance and strengthening of the production and conservation of the coffee growing areas.

These are some of the characteristics of the institutional network and some measures that have been carried out, even before the nomination of the UNESCO as a world heritage site:<sup>5</sup>

- Combined work. The combined work of the national and regional governments with the Colombian Coffee Growers Federation (FCN) to achieve a sustainable growth of the coffee growing areas.

The federation was founded in 1927 as a business cooperative that promotes the production and exportation of Colombian coffee. It currently represents more than 500,000 producers, most of whom are small family owned farms. It has developed some indicators to certificate that the measures that are carried out are the appropriate ones.

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<sup>5</sup> Document of the Coffee Cultural Landscape of Colombia as a best practice. Num. 1121 of the UNESCO WORLD HERITAGE LIST.

In this way, the strategic plans are designed in combination of the public institutions with the private actors that manage and have a closest relationship with the needs of the coffee growing plantations.

- Involved population. Another characteristic of this cultural landscape is the aim of the public and private institutions to involve the population into the national heritage. This is made in order to create a national symbol and to encourage the coffee growers to participate in the measures that the government wants to establish, having an idea of the real value of this heritage site.

This is made through the communication and incentivizing the coffee growers to express their own ideas and to reinforce their property rights. In this way, the coffee growers have incentives to invest in their lands with a common objective.

The Colombian government indicates this point as a full and active participation of the coffee actors: the coffee producers elect members who serve on departmental and municipal committees of coffee growers. Members of the departmental committees also serve as delegates to the National Congress of Coffee Producers, the Colombian Coffee Growers Federation's highest authority. The FNC has a major presence in the municipalities and departments located in the CCLCC principal area, which includes 47 municipal, 4 departmental committees of coffee growers, in which more than 400 agents of the Federation's Extension Service constantly assist producers in their farms. Thus coffee producers living in the property do have means to participate directly through their elected representatives in all actions affecting their sustainability.

In addition, regular meetings among stakeholders take place, through local, regional, technical and national Committees for the CCLC's institutional framework created under the agreement signed among the 4 department's governors, the Ministry of Culture and the FNC. These open meetings have allowed stakeholders from local governments, the tourism sector and a number of academics to voice their opinions and be aware of CCLC's management plan, main projects and priorities.

In terms of addressing the needs of coffee producers a number of services are offered to coffee growers, which include:

The Purchase Guarantee Policy. Probably the most important service offered to the coffee growers in the region. Through this policy, the Federation is able to provide a place near the farms of the producers where they can sell their coffee at transparent price that is in line with current international market prices and receive cash payment for their coffee.

Research, development and knowledge transfer. These activities are managed by Cenicafé, the Federation's research centre, and the Extension

Service of the Federation. Thanks to their collaborative efforts, coffee growers can make use of scientific advancements and inventions that increase their productivity. To improve cultivation methods the federation offers a certified technical assistance under the international ISO standards.

Brand and sales strategies are defined to add value to the coffee growers. To defend the reputation of Colombian coffee as the best coffee in the world some operations are carried out.

Quality control. Guarantees minimum standards of quality for coffee exported from Colombia to demanding international markets. This obsession with excellence and quality, and the care and commitment involved in producing coffee that meets such standards, is the basis for the reputation and the premiums paid for Colombian coffee.

Social investment to improve the well-being and quality of life of coffee-growing communities. Through programs the federation supports investment in education, health care, information systems, financing, basic services and infrastructure.

- Legal framework. The Colombian Government through the Ministry of Culture, the regional authorities and the Colombian Coffee Growers Federation signed a cooperation agreement between institutions in 2009 for the preservation of the Coffee Cultural Landscape with the design of different projects to achieve a sustainable development in economic, social and environmental programs.

Also, the Colombian Government announced in 2011, the recognition of the World Heritage site of the Coffee Cultural Landscape as a Colombian Cultural Heritage, which means that the government will provide instruments for specific actions or projects. As an example it would restrict actions and activities that may affect or create negatives impacts on the area recognized as a National Cultural Heritage or it will ensure that all planning and land management instruments such as, municipal and departmental policies related to the use of land, include special measures aimed to protect the CCLC.

There are also departmental, regional and national technical committees, integrated by representatives of all authorities, universities, environmental and economic organizations involved in the management of the CCLC. These committees were created in 2009 and had been the major instrument to administrate and ensure sustainability of this heritage site.

- Territory protection. With the aim to protect the heritage value of the site some policies have been developed related with the use of the land.

Moreover, information about the regulation of the land considered in the coffee areas and boundaries is given to the local governors and mayors.

- Coffee is the main economic resource in the regions considered. For this reason many measures and initiatives implemented by the government are addressed to improve its production and value. The main part of these measures is financed by the Colombian Coffee Growers Federation and the Ministry of Culture.

Furthermore, the local and regional CCLC authorities and the FNC are working in a combined strategy to obtain fresh resources from expected taxes to the mining and hydrocarbons industries. These resources used to be directed only to the regions and municipalities where the mining and hydrocarbons industries have projects in place. From 2012, part of these revenues will go to a regional development fund and to a science and technology innovation fund, these two funds will finance strategic projects in municipalities and regions where no exploration projects are been carrying out.

The projects submitted for consideration of the national and regional authorities, will ensure the implementation and management of the policies and measures needed to maintain the value of the site, approx. USD\$ 80 million.

- Staffing training and development. To ensure knowledge transfer and educational programs directed to preserve and manage the Coffee Cultural Landscape, there are some educative institutions as the Federation Research Center – CENICAFE, or the Manuel Mejia Foundation. The region’s universities have developed research areas—in undergraduate and postgraduate degrees—into architectural and urban cultural heritage as an effort to consolidate the professional training of architects.

Moreover, the Ministry of Culture developed the Heritage volunteer networks Program to promote the cultural heritage through activities regarding study, recuperation and socialization, through which children, youths and adults can unite for a common purpose: to identify, value, promote and enjoy the diverse cultural legacy of this cultural heritage site.

- Sustainable development. Any initiate or program implemented or operated by The Colombian Coffee Growers Federation has to complain with FNC sustainability standards. These standards are based on the expertise gained through more than eight decades of work and democratic participation of all coffee growers in Colombia.

One of these effective mechanisms is that all coffee crops renovation plans need to be established in varieties that are better adapted to climate change. Also, the FNC has developed a methodology to measure the incidence of coffee production on water pollution and carbon foot print. With this instrument it is now adopting the necessary technical standards to draw base lines at farm level and start reducing coffee growing's carbon footprint. This is complemented with reforestation and biodiversity conservation programs already in effect in the region, financed in part by the Global Environmental Facility of the World Bank.

Moreover, the FNC in association with the national government and international cooperation had implemented a project called "Huellas de Paz", an initiative that aims to provide productive options and increase social capital in the region.

- Education and interpretation programs. To promote a successful management and maintenance there is a need to communicate and educate the local population and visitors. In this way, the FNC has designed and initiated implementation of an educational strategy, which uses all available communication tools that the FNC has developed during years.

This strategy consists in a combination of media tools such as:

A weekly TV program called "Las aventuras del professor Yarumo". This TV program has been on air since 1985 supporting all educational initiatives developed by the FNC.

A local radio stations in rural areas, where the FNC provides short but valuable information to coffee growers, about events, projects, activities, prices, etc.

Local newspapers owned by the Departmental Coffee Growers Committees, where major objectives, projects and events of the region are explained.

The FNC in association with Fundación Manuel Mejía, the agricultural education center, will develop a Coffee Cultural Landscape -CCLC e-learning course directed to tour operators in the region.

Moreover, in the Municipal and Departmental Coffee Committees the FNC will provide posters, flyers and different printed tools to inform and educate about CCLC.

In addition local universities have developed a number of academic programs related to the different aspects of the CCLC, educating urban populations about its importance.

- Tourism and interpretation. Additional to this educational strategy, the FNC is developing e- learning courses directed to tour operators and agencies, accompanied by virtual trips that explain all the coffee experience from the farm to the cup.

The Departmental Coffee Committee of Caldas is developing a regional visitor's center where not only tourism information can be obtained, but also detailed information regarding the coffee business.

#### 4.2 Teide National Park

The Teide National Park is interesting as a case study due to the realization of management activities following environmental standards, the local stakeholder participation, some education and interpretation programs and a control of public use.

One of the main objectives is to deal with two threats that the Park has. These are: the presence of non-native herbivores that destroy part of the landscape and the effects of the climate change.

To cope with these problems some measures are carried out to protect plants and the environment and other projects to ensure a sustainable development of the national park.

However, the case that we are interested in is the management plan that is carried out and how the local population is involved in the projects.

- The National Park has a Patronage that acts to guarantee the participation of the local stakeholders in the decision that are going to be taken in the site. The Patronage includes representation from the State General Administration, the Administration of the Autonomous Community of the Canary Islands and the local municipal administrations. Also, the social agents are part of the Patronage, as well as all the institutions, associations and organizations related to the National Park. Among its functions, the Patronage reports for National Park's Management Plan which are the observations that the local stakeholders have. It is also responsible to approve the annual report of activities and results of the site, and proposes measures to correct problems or improve current managements
- The local population is encouraged to the consultation and participation in the preparation of management plans that regulate life in the national park. This popular participation occurs before it has been processed by the administrations. To this end, the Administration prepares a list of agents involved in the process to carry out. This includes institutions, associations, nature conservation groups and individuals who are affected by the measure. Thus participation is encouraged; debate and involvement in the measures are taken.

- In order to guarantee that the objectives of the Management Plan are met and that the Park is managed correctly, the Patronage voluntarily allows itself to be audited by external organizations. These audits are carried in two simultaneous ways:
  - Annual reports and five or ten-year audits by the Council of Europe according to the requirements of the European Diploma of Protected Areas.
  - Annual audits within the ISO 14001 system and the EU Eco-Management and Audit Scheme (EMAS), a voluntary regulation of the European Union which recognizes that Teide National Park has implemented an Environmental Management System and that the Park has made a commitment to continually improve which is verified through strict independent audits.
- The management plan includes a financial prevision for the period that the plan is active. This guarantees more or less constant funding to allow the Park to be manager adequacy. In addition, the demands of the Management Plan itself require a progressive increase in the budget, increasing from 2,848,237 € in 2001 to 4,600,226 € in 2010. Another important point in the financial management of Teide National Park is the fact that it processes multiyear expenditure reports that commit budget items for subsequent years, reducing the possible effects of economic downturns.
- A program to monitor the evolution of the ecosystem is carried out which focuses on quantifying the impact of these two factors. This control is carried out on two networks of permanent plots of sample land which span all of the habitats that exist in the National Park and the different ecotones between them.
- Since 2001 Teide National Park has a list of established job positions which has been continually growing, increasing from 22 to 28 over the last decade. Every year these personnel have access to a wide range of refresher courses or new training both within the National Park and in other centers available to the Administration of the Autonomous Community of the Canary Islands or the State Administration.
- Strengthening local production. Beekeeping is a traditional activity that takes place in the national park and of which, its honey is highly regarded on the island and has great value. Production takes place every year under the standards set and regulated for sustainable production.
- Another aspect worth mentioning within the context of sustainable development is rabbit hunting by the local population. Hunting permits are strictly regulated and related to biological conservation activities, as it is the



principle activity designed to control the population of this introduced herbivore.

- Another activity for which it is considered good practice, are the training courses for schools and for the population in terms of landscape and environmental value of the national park.
- Related with the management of tourism the Teide National Park is an example to be followed.

The management of more than 3,000,000 visitors a year requires a great deal of effort and long term planning, supported by a series of measures that guarantee the protection of the natural resources<sup>6</sup>. These measures, according to the UNESCO Best Practice Document are:

- Zoning, defined in the Management Plan (PRUG), which creates different categories of sectors in the Park's territory, each with a different regime restricting its usage to a greater or lesser degree, depending on the natural values contained in the sector and their conservation. The highest category of protection is the "Reserve Area", which does not allow access (not even on foot) except for scientific or management purposes.
- Channeling mass tourism to stay around the highways by establishing a network of lookout points, parking areas and other facilities.
- Closing non-paved trails and installing lateral protection on the edges of the highways to avoid the dispersion of vehicles, which has allowed large areas of the National Park to remain isolated and far from human intervention.
- A suitable surveillance system which covers the entire area of the National Park, but focused especially in sectors where visitors usually concentrate.
- Establishing a network of 35 trails covering a total of 155 km, all of them suitably signposted, which allows practically the entire Park to be visited on foot.
- Availability of facilities and information which interprets the surroundings, allowing visitors to gain a clear and concise idea of the richness and importance of the National Park's natural heritage. This work is supported both by the 2 visitor centers and the information

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<sup>6</sup> Document of the Teide National Park as a best practice. Num. 1258 of the UNESCO WORLD HERITAGE LIST.

booths, as well as a network of information panels available throughout the trail network and in the main areas where visitors concentrate.

One of the most emblematic places in Teide National Park is the summit cone of the volcanic edifice, which many people wish to visit because it is the highest point in Spain. In this case, however, a carrying capacity has been established and a specific usage regime stipulated in the access norms for visitors to the Telesforo Bravo trail.<sup>7</sup> Visitors must obtain a permit which they can solicit by telephone. In 2001 9,918 permits were given for 29,220 people, while in 2010 these numbers doubled to 17,190 permits for a total of 51,594 people.

Normally the more than 3,000,000 visitors to the National Park come to the park using an external tour guide generally contracted by tourism companies. In order to guarantee that these guides provide accurate and quality information the National Park provides a course for them every year. The guides need to complete in order to be certified to work in the National Park.

#### 4.3 Shiretoko

As it is described in the report for the inscription of the site in the World Heritage Site recognition, the Shiretoko Peninsula is located in the north-east of Hokkaido, the northernmost island of Japan. The site includes the land from the central part of the peninsula to its tip (Shiretoko Cape) and the surrounding marine area. It provides an outstanding example of the interaction of marine and terrestrial ecosystems as well as extraordinary ecosystem productivity, largely influenced by the formation of seasonal sea ice at the lowest latitude in the northern hemisphere. It has particular importance for a number of marine and terrestrial species, some of them endangered and endemic, such as Blackiston's fish owl and the *Viola kitamiana* plant. The site is globally important for threatened seabirds and migratory birds, a number of salmonid species, and for marine mammals including Steller's sea lion and some cetacean species.

In this way, the protection of this region is important in order to maintain the habitat of the extended number of species. The work that has been made in the area to reinforce the value of the site has been considered as a best practice by the UNESCO due to the following aspects:<sup>8</sup>

- The creation of the Shiretoko World Natural Heritage Site Regional Liaison Committee in 2003 with the aim to discuss the proper management of the site through the alliance and cooperation, informed by the viewpoints of local

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<sup>7</sup> Document of the Teide National Park as a best practice. Num. 1258 of the UNESCO WORLD HERITAGE LIST.

<sup>8</sup> Document of the Province of Shiretoko in Japan as a best practice. Num. 1193 of the UNESCO WORLD HERITAGE LIST

governments, related organizations, and people engaged in the conservation and use of the site on a daily basis.

- With the aim to provide scientific advice on the management activities it has been created the Shiretoko World Natural Heritage Site Scientific Council. It is in charge of different departments but one of the most important is the one that controls the maritime resources. For this reason it has been developed the Marine Working Group for the management of the fishery resources and the marine ecosystem. This group is composed by natural scientists, social scientist, and representatives of administrative authorities, of fisheries cooperative associations, and of NGOs.

These organizations and their interrelationships have helped to ensure participation, to exchange information and opinions, and to build consensus between the wide-ranging interests of multiple users of the ecosystem services, supporting the legitimacy of the management plans and rules.

- Local stakeholder can share their needs and interest with the national organizations and it is taken into account for the development of the measures that are going to be taken.
- Especially, the management of fishery resources is a big issue in Shiretoko. Promoting the resources' proper management and sustainable use are being ensured by taking measures in accordance with fishery laws and the voluntary efforts of fishers and their organizations. Sustainable productivity of biodiversity is ensured by the legal restrictions relating to the conservation of the marine environment and ecosystems and the fisheries. It is also ensured through the self-management measures carried out by fishers and their organizations, including the no-take zones and no-take periods. These autonomous management measures of fishery operators are officially recognized in and incorporated into "The Marine Management Plan".
- The site is appropriately protected according to national laws and regulations by various bodies.
- Marine area surrounding the Shiretoko peninsula is designated as property or buffer zone, where proper management and sustainable use of fishery resource is the issue. There, sustainable productivity of biodiversity is ensured by the legal restrictions relating to the conservation of the marine environment and ecosystems (Makino et al. 2009), and the fisheries. It is also ensured through the self-management measures carried out by fishers and their organizations; these management efforts include the no-take zones and no-take periods. And these efforts are done under "Marine Management Plan".
- With regard to sustainable use of resources, especially fishery resources as the key issue in Shiretoko, the Marine Management Plan and participation of local fishers in adequate management of the resources are effectively working.

The Multiple Use Integrated Marine Management Plan was drawn up by the Marine Working Group in December 2007. It defines management measures to conserve the marine ecosystem. Its objective is “to satisfy both conservation of the marine ecosystem

- Tourism is an increasingly important issue within the property. Large numbers of tourists visit the property in summer and the numbers of tourists are also increasing in winter to view the sea ice. A consolidated ecotourism strategy, based on the protection of the natural values of the property, the promotion of high quality nature based experiences for visitors and promotion of the local economic development is required to ensure conservation of the property values. For this reason, the local offices of the Ministry of the Environment and the Forestry Agency together with Hokkaido prefectural government established the Committee on the Proper Use of Nature and Ecotourism, which covers both the Regional Liaison Committee and the Scientific Council. They started formulation of Shiretoko Ecotourism Strategy in 2010.

As a conclusion, the provincial Shiretoko is considered best practice because of the relationship between organizations and institutions that are part of the site. Thus it is ensured the participation and consensus among all affected sectors, including experts and local communities.

## 5. ECONOMIC DEVELOPMENT PLAN

As it has been mentioned previously, the measures undertaken to reactivate the economy of the Sierra de Tramuntana are few and insufficient. The subsidy to private companies and private individuals for the recovery of traditional elements it can be considered as a good measure to encourage certain actions in the population. However, the real effects on the local economy are scarce.

Despite the Serra de Tramuntana has been exploited to a lesser extent than the rest of the island of Mallorca due to its rugged terrain and difficult access, its scenic and cultural attractions has made the area an interesting destination for rural and adventure tourism. These activities can be considered as a kind of tourism that enhance maintenance and recognition of the value of the landscape and culture. For this reason, measures to encourage quality tourism in the mountains are required, because of all the benefits that it entails.

One of the principles developed for the initial plan prepared for the inscription in the WHS list of the UNESCO was: *“The development of rural tourism which can enhance the maintenance of agricultural and livestock sector, create additional income and help preserve rural areas and traditional uses.”*

This is in line with the fundamentals of the World Heritage sites of the UNESCO, because many studies indicate that the benefits of tourism in local or regional economies are because several studies on the benefits of tourism economies are large.

The document of the UNESCO, the Tourism Specialization and Economic Development explains: *“According to the literature on economic growth and tourism, international tourism may affect growth through several channels beyond the direct revenues from receipts. The foreign direct investment associated with tourism can bring managerial skills and technology with potential spillover benefits to other sectors. Policies designed to foster tourism, by improving security, stability, and openness, can also enhance growth in other sectors.”*

Although some authors argue that the tertiary sector reduces productivity growth because resources shift towards this technologically stagnant sector, other authors claim that most of these services are intermediate goods, which produce positive spillovers and facilitate economic growth.

Ultimately, empirical studies that investigate the impact of tourism on growth generally find a positive correlation between tourism receipts and the growth rate, especially for poor countries.<sup>9</sup>

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<sup>9</sup> AREZKI, Rabah; CHERIF, Reda; PIOTROWSKI, John (2009) *“Tourism Specialization and Economic Development; Evidence from the UNESCO World Heritage List”*, Page 4.

Following these arguments, countries provide sustainable growth to the World Heritage sites through the promotion of the tourism sector. Whether they are natural or as they are cultural sites, they can be benefited from tourism activities, as it has been seen in the cases of success stories of UNESCO.

For this reason, it is needed to create an articulated system of companies related to the tourism sector that enhance the value of the Tramuntana area and provide benefits to other sectors of the regional economy, such as agriculture and traditional activities.

This is the reason why this economic development plan will be focused on supporting the idea of the creation of a cluster for the touristic sector.

### 5.1 The Touristic Sector

As we have seen in the success stories of UNESCO, a significant percentage of their economic development is based on promoting tourism. In the case of Colombia, through tourism, national coffee is exported and also the regional culture is showed through it. In the case of the province of Shiretoko the domestic tourism plays a important roll in the conservation of its natural value. The main measures of the government are to get involved the population in the feat of the maintenance and conservation of space and species. The same applies to the Teide National Park, where tourism is regulated and is the main activities in the park, where some local tourism activities, such as beekeeping, are enhanced because tourists are interested to try the local products as own honey.

It is important to consider that the benefits of tourism depend on natural or demand factors which vary from one environment to another. In the case of Spain, the tourism sector is important, and a degree of specialization in tourism in local or regional areas involves a significant effect on the wealth of the place. The touristic sector, in Spain, takes a 6% of the national GDP. In the case of the Balearics islands, this effect is even of higher proportion. So, even though the kind of tourism differs slightly from the rest of the island of Mallorca, the Serra de Tramuntana also benefits from the arrival of tourists, and therefore the rest of the sectors and activities of the site can be benefited.

It is considered that tourism is the way in which local products can be exploited and traded internationally. Local entrepreneurs enjoy this international market information, saving costs of internationalization and establishment. Thus, these local producers and entrepreneurs can establish the product in the local market taking advantage of the arrival of tourists.

For the success of this connection between tourists and local activities it is necessary to provide information for the approach to local tourism activities.

Several studies about the effects of tourist arrivals and their contribution to national growth analyze the correlation between the arrival of tourists and autochthon consumption in the region:

*“The author compares the effects of non-resident and resident tourism on GDP in Spain and Italy. The results suggest that domestic tourism exerts a more positive and*

*significant impact on growth that does international tourism. This could be explained by the fact that national tourist yearn for their own food, culture, and local products more than international tourists. On the other hand, international tourists have insufficient information about local products or are wary of the quality and sanitary standards of local goods.”* As it is explained in the paper of Diversification by Deepening Linkages with Tourism.

Figure 5. Effects of Domestic and International Tourism on GDP Summary of Estimated Coefficients

	Domestic Arrivals	International Arrivals
Spain (17 regions)	0.016	-0.001
Italy (20 regions)	-0.005	0.013
Both countries (37 regions)	0.008	0.001
Coastal regions (24 regions)	0.029	0.006
Internal regions (13 regions)	0.012	-0.015
Mediterranean coast (15 regions)	0.027	0.007

Source: Diversification by Deepening Linkages with Tourism. Compiled by author, from Cortés-Jiménez (2005)

Note: \*\*\* stands for a 1% significance level; \*\* for 5% significance level; and \* for 1% significance level.

In this table we can see that tourists with greater knowledge of the local market represent a greater impact on host economy.

Thus, it is essential to create a connection between the tourists and the environment so that the benefits of tourism have effects on other sectors of the local economy.

## 5.2 Touristic cluster

In order to interconnect the productive and non-productive sections of the Serra de Tramuntana to generate profits on the set of the local economy, in this paper the creation of a cluster of tourism enterprises it is proposed in order to encourage and promote traditional, cultural and natural values.

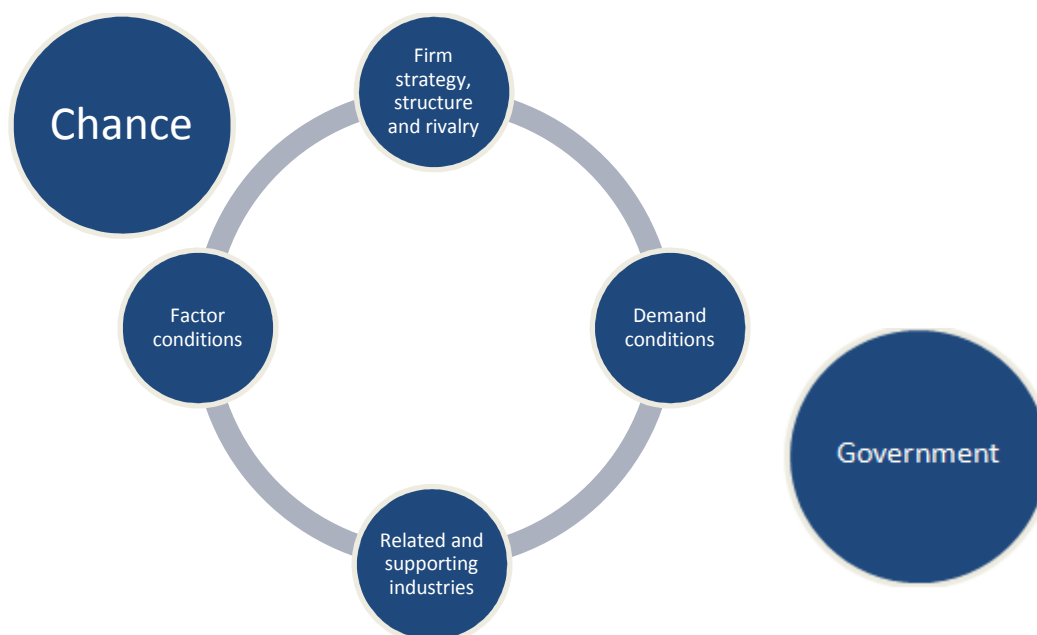
A cluster is a congregation of companies in the same sector, working together and taking advantage of economies of scale in order to collaborate to achieve common benefits and gain competitiveness. They are usually companies that share a geographical area. For the tourism sector, companies tend to group together to get a chain to consumers, in order to provide further information. According to the UNWTO a tourism cluster is the geographical area in which the overall tourism experience takes place, a condition that justifies that only concerted action by all actors of the sector are able to satisfy the full tourist experience for visitors.

The cluster concept was popularized by the economist Michael Porter in 1990, in his book *The Competitive Advantage of Nations*. The concept of competitive advantage is the main reason why companies tend grouped.

A way to see the effects it would create a tourism cluster in the Serra de Tramuntana is through the so-called "national diamond model" of Porter to analyze how nations (in our case a region) acquire competitive advantage in particularly industries<sup>10</sup>.

With this model, he concluded that each country acquires competitive advantage in a particular industry from the combined effects of the following four broad attributes: factor conditions, demand conditions, related and supporting industries, and firm strategy, structure and rivalry. In the meanwhile, two outside variables, government and chance, are another dimension indicating the government action needed to create/improve the economic development environment of a country, such as economic stimulus policy. These six attributes interact with each other and constitute a dynamic and stimulation competitive environment which eventually establishes the industrial global competitive advantage of a country.

Figure 6. The complete system of tourism competitiveness in the case of the Serra de Tramuntana.



<sup>10</sup> HONG, Wei-Chiang (2008) *“Competitiveness in the Tourism Sector; A Comprehensive Approach from Economic and Management Points”*, Page 26.



#### Factor conditions:

The Serra de Tramuntana has some attributes and resources valuable in order to make the region a competitive touristic place. These factors are characteristics of the site in which it has a comparative advantage, but the upgrading of these resources is needed to achieve a successful economic development.

These factors are: human capital with knowledge in tourism and with incentives to innovate in this sector. The climate and landscape of the mountains are also factors that contribute to being a competitive destination. It is vital to make to know the landscape and its historical and traditional characteristics. As well, there are several traditional villages where the visitants could find many activities that can be interesting. There is, also a traditional and diverse gastronomy that can be enhance to be demanded by those visitants. It is needed to innovate and invest in these elements to make the region a desirable touristic destination.

#### Demand conditions:

Evidence shows that local demand is vital for businesses to be more competitive because the demanding customers enable companies to know and meet emerging needs and become more innovative enterprises.

Local demand is composed of regular visitors looking for different activities that can be developed in the rest of the island of Mallorca. Thereby, it is interesting to invest in sports and adventure, or relaxing activities.

The same is true in the case of international demand where most visitors of the site look for different activities than the rest of the island of Mallorca, more focused to tourism of sun and beach. These international tourists are mostly from countries in Northern Europe, especially Germany, and countries such as Russia or Japan. We can see that this type of tourism is sophisticated, with a character of look for quality goods. So it is interesting to have a network of specialized goods and services in this type of tourism with high purchasing power.

It is important to differentiate that the potential of the region is to promote quality tourism rather than quantity.

#### Related and supporting industries:

It is necessary to promote relations between all sectors and tourism, to enhance the integration of the suppliers business as the agriculture sector, industry, services, public organizations, research centers and training, etc. with distributors, tour operators, travel agencies etc. with tourism businesses themselves to work together to create value for tourists and for local people themselves.

Firm strategy, structure and rivalry:

Local competition: there are several companies working in the industry dedicated to adventure or relax activities, so there is already some competition. However, there are several sectors of the tourism industry in which there is a lack of rivalry needed to be more competitive.

International rivalry; between countries, Spain has a long history as a tourist destination and consequently tourists arriving already know that there is a certain culture and some valuable elements that they consider when they choose a tourist destination.

Government:

The government it is interested in the touristic sector as it is seen that is the propeller of the economy in the region. In this way, some policies are taken in order to incentive touristic companies to invest in innovation. However, certain policies may cause a negative effect on tourism in the Tramuntana region, because the search for more number of tourists rather than look for quality of the tourism, there is the risk of overexploitation and loss of benefits. Consequently, it is needed to strength the touristic sector with policies that enhance the tourism of quality and innovation.

Moreover, at the local level, municipalities and other public institutions must provide leadership to crystallize the necessary structuring of the target and cluster development.

Chance:

It is needed to conduct strategic planning scenarios to be able to adapt to business changes in demand or other circumstances as natural disasters, political decisions by foreign governments, significant shifts in world financial markets or exchanges rates, etc.

According to Porter's theory, the creation of the cluster increases the productivity of the companies in the sector, drives innovation, stimulates the creation of new businesses, reduces opportunistic behavior and increases the pressure of coordination between undertakings.

Moreover, the collocation dynamics and spillover effects that emerge from the clusters of firms around the tourist nuclei establishment make it an efficient form of investment. Specifically, entrepreneurs establishing their discoveries in the tourism economy tend to benefit from the following costs and learning advantages:

- Infrastructure: Reduced cost in communication, energy, distribution, technology.
- Input Factors: Lower-cost access to employees, finance, and support services.

- Promotion: Joint marketing, export promotion delegations, reputation-building.
- Standard-Setting: Common and streamlined standards reduce cost and red tape.
- Know-How: Observing other firms saves cost of generating know-how internally

As a member of a cluster, a tourism-led entrepreneur can learn about productivity more quickly and at lower cost by observing other firms' business know-how and capitalizing on informational spillovers. In addition, his membership in the cluster endows him with a marketing brand and other reputation effects that facilitate visibility and the placement of products in both local and international markets. An isolated firm, in contrast, would have to devote far more resources to learning and logistics in order to achieve a similar level of competitiveness. Thus, the agglomeration economies of tourism lower transactions costs and create incentives for new activities<sup>11</sup>.

Additionally, because the nature of tourism demand is multi-faceted and absorbs a broad variety of goods and services, we would expect the regional production of the Serra de Tramuntana to become more evenly distributed across all sectors of the host economy rather than concentrated in a few commodities. Both effects, increased discovery activity and a more even distribution of production, will yield a more diversified economy.

In addition, several studies link the creation of tourism clusters with increased production of the more traditional sectors of the region, such as foodstuff and agriculture. Diversification by Deepening Linkages with Tourism: *“According to their findings, the industries that have generated the highest number of new exports in the past decade are mineral products and metals (14 and 11 per cent of total discovery share, respectively), vegetable products and foodstuffs (10 and 7 per cent, respectively), wood and wood products (8 per cent), transportation (8 per cent), and textile and footwear (7 per cent each). These are key sectors of a tourism cluster, that is to say, they are typically associated through backward linkages with the tourism economy.”*

Thereby the creation of a tourism cluster will encourage local producers in the agricultural, manufacturing, and services sectors who, whilst producing very different types of goods, share the commonality of catering to the tourism economy. From a diversification standpoint, a revealing corollary of this is that, once there is a group of inter-related industries that come together in a geographically close space, new types of varied clusters with very different purposes emerge around the original cluster.

For this reason, one might think that the aids of the public organizations are not needed when the cluster is stable and innovative enough. However, at the beginning, some

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<sup>11</sup> LEJARRAJA, Izaskun; WALKENHORST, Peter (2007) *“Diversification by Deepening Linkages with Tourism”*, Page 12.

economic incentives have to be considered in order to make entrepreneurs invest in this project.

Consequently, the profits of create an initial cluster with the aid of the institutional governments will lead the regional economy of the Serra de Tramuntana to a successful case of economic development thought innovation and, at the same time, it will maintain the traditional and cultural values of the World Heritage site.

## 6. CONCLUSIONS

The Serra de Tramuntana has some cultural and traditional values that have created a unique landscape, which must be preserved through the economic development of the region. Traditional activities such as agriculture or livestock are declining, so it is needed to carry out some measures that provides incentives to demand these goods in order to increase wealth of the region is needed.

We have analyzed the case of the Coffee Cultural Landscape of Colombia, where it is an example of the increase of the social welfare of the region through the promotion of the quality and its cultural and traditional making process. This good has been exported as a national symbol of quality. The institutional assistance and the creation of an articulated set of companies and agricultural cooperatives enhance the innovation of the sector and the spread of the know-how.

Thus, in the Sierra de Tramuntana, in a pattern of reinforcing quality tourism through a cluster of companies related to this sector, innovation and productivity of the region will be enhanced, with multiplier effects on the rest of the regional economy. This is because a greater information and connection between companies will improve the exchange of goods and services and also will stimulate the growth through the competitiveness. The effects of the creation of a touristic cluster, reinforced by the government, will increase the benefits for the hold industry and for other sectors of the Serra de Tramuntana. In this way, the measure carried out by the public sector would make the road for the private companies to increase the wealth of the touristic sector and even to increase the profits of the traditional and outdated industries and to the rest of the economy.



Source: Serradetrantana.com

## 7. BIBLIOGRAPHY

AREZKI, Rabah; CHERIF, Reda; PIOTROWSKI, John (2009) *“Tourism Specialization and Economic Development; Evidence from the UNESCO World Heritage List”*, International Monetary Fund.

BALEARS NATURA *“Paraje natural de la Serra de Tramuntana. Uso y actividades permitidas”* [en línea]

BOIB, NUM.18 EXT. (2011) *“Ruta de pedra en sec. Sección II - Consejos insulares”*

BOIB (2007) Num. 54 Ext. *“Secció I- Comunitat Autònoma Illes Balears”*

BOIB (2007) Num. 79 *“Secció I- Comunitat Autònoma Illes Balears”*

CONSELL INSULAR DE MALLORCA, DEPARTAMENT DE PRESIDÈNCIA (April 2014) *“6664\_Aprovació definitiva del Pressupost General del Consorci Serra de Tramuntana Patrimoni Mundial, bases d’execució i plantilla per a l’any 2014. Núm. 52. Secció I. Disposicions generals.”*, BOIB, *Bulletí Oficial de les Illes Balears*.

CONSELL DE MALLORCA (December 2013) *“El presupuesto del Consell de Mallorca para 2014 será de 330,46 millones de euros, un 7,8 por ciento más que este año”*, [Conselldemallorca.net](http://Conselldemallorca.net)

CONSELL DE MALLORCA (2010) *“Cultural Landscape of the Serra de Tramuntana. Proposal for inscription in the World Heritage List (UNESCO). Serra de Tramuntana. Vol. I.”*

CONSELL DE MALLORCA (2010) *“Cultural Landscape of the Serra de Tramuntana. Proposal for inscription in the World Heritage List (UNESCO). Serra de Tramuntana. Vol. II.”*

CONSELL DE MALLORCA (2010) *“Cultural Landscape of the Serra de Tramuntana. Proposal for inscription in the World Heritage List (UNESCO). Serra de Tramuntana. Vol. III.”*

CONSELL DE MALLORCA (2010) *“Cultural Landscape of the Serra de Tramuntana. Proposal for inscription in the World Heritage List (UNESCO). Serra de Tramuntana. Plan de gestión. Vol. IV.”*

CONSELL DE MALLORCA *“Cultural Landscape/ An end to autarky (19th and 20th centuries)”* [serradetrabutana.net](http://serradetrabutana.net)

CONSELL DE MALLORCA (2009) *“Pla director sectorial de carreteres (Illa de Mallorca)”*

CONSELL DE MALLORCA *“Pedra en sec. Projectes europeus”* [Conselldemallorca.net](http://Conselldemallorca.net).

EUROPA PRESS (July 2014) *“La Serra aparta el peligro de la desertización en 270 hectáreas”*. *Ultima Hora Noticias*.

GOVERN DE LES ILLES BALEARS (June 2014) *“Aprobación definitiva de la modificación de las Bases Generales de Ejecución del Presupuesto del Consorcio Serra de Tramuntana Patrimoni Mundial para el ejercicio 2014, Núm. 11380, Sección I. Disposiciones generales.”* BOIB, Boletín Oficial.

HONG, Wei-Chiang (2008) *“Competitiveness in the Tourism Sector; A Comprehensive Approach from Economic and Management Points”*, Physica-Verlag.

IBESTAT (2011) *“Les Illes Balears en xifres 2010”*. Ibestat Palma de Mallorca.

INSTITUTO NACIONAL DE ESTADÍSTICA *“Censo de población y viviendas”*

JURADO, Laura (January 2014) *“Aumenta un 13,2% la partida para Cultura”*, El Mundo.

LEJARRAJA, Izaskun; WALKENHORST, Peter (2007) *“Diversification by Deepening Linkages with Tourism”*, The World Bank.

MALLORCA RURAL (2008) *“Els margers, un tresor europeu”*

MESTRE, M. (October 2013) *“Estudi de la delimitació de l'àrea urbana de Palma de Mallorca i la seva relació amb el sistema urbà mallorquí”*, Barcelona: UAB.

PERELLÓ, Biel (2000) *“La Serra de Tramuntana. El perquè del Parc.”*, Mallorca Web.

SALVÀ TOMÁS, P. A. *“La decadencia de la población activa agraria en la Serra de Tramuntana de la isle de Mallorca en Mayurqa, vol. 19, 1979-80, pp. 31-61”*.

SERRA DE TRAMUNTANA, MALLORCA. PATRIMONIO MUNDIAL *“Los municipios de la Serra de Tramuntana, Noticias”* [en línea].

THE GENERAL CONFERENCE OF UNESCO (1972) *“Convention Concerning the Protection of the World Cultural and Natural Heritage”*

UNESCO WORLD HERITAGE CENTRE (2008) *“World Heritage Information Kit”*

UNESCO (2011) *“Cultural Landscape of the Serra de Tramuntana Num. 1271”* [en línea]

UNESCO *“Sharing best practices in World Heritage management”*

- Document of the Coffee Cultural Landscape of Colombia as a best practice. Num. 1121 of the UNESCO WORLD HERITAGE LIST.
- Document of the Teide National Park as a best practice. Num. 1258 of the UNESCO WORLD HERITAGE LIST.
- Document of the Province of Shiretoko in Japan as a best practice. Num. 1193 of the UNESCO WORLD HERITAGE LIST.

UNIVERSITAT AUTÒNOMA DE BARCELONA (2014) *“Bases per a la gestió del paisatge de la Serra de Tramuntana, 13 propostes i 55 projectes”*

## 8. ANNEX

1. Screenshot of the Budget of the Consortium of The Serra de Tramuntana for the year 2014:

### Secció I. Disposicions generals

CONSELL INSULAR DE MALLORCA  
DEPARTAMENT DE PRESIDÈNCIA

**6664** *Aprovació definitiva del Pressupost General del Consorci Serra de Tramuntana Patrimoni Mundial, bases d'execució i plantilla per a l'any 2014.*

La Junta Rectora del Consorci Serra de Tramuntana Patrimoni Mundial, en sessió celebrada el 20 de març de 2014, aprovà inicialment el Pressupost General del Consorci Serra de Tramuntana Patrimoni Mundial, bases d'execució i plantilla per a l'any 2014.

El BOIB núm. 41, de dia 25 de març de 2014, publicà l'acord d'aprovació inicial.

Transcorregut el termini d'informació pública sense que s'hagi presentat cap reclamació, s'entén definitivament aprovat el Pressupost General del Consorci Serra de Tramuntana Patrimoni Mundial, bases d'execució i plantilla per a l'any 2014, el resum per capítols del qual és el següent:



<b>PRESSUPOST PROPI</b>			
<b>INGRESSOS</b>		<b>DESPESES</b>	
<b>Operacions corrents</b>		<b>Operacions corrents</b>	
1. Imposts directes	0,00 €	1. Remuneracions personal	63.239,12 €
2. Imposts indirectes	0,00 €	2. Compra de béns corrents i serveis	506.760,88 €
3. Taxes i altres ingressos	0,00 €	3. Interessos	0,00 €
4. Transferències corrents	2.000.000,00 €	4. Transferències corrents	0,00 €
5. Ingressos patrimonials	0,00 €		
<b>Total operacions corrents</b>	<b>2.000.000,00 €</b>	<b>Total operacions corrents</b>	<b>570.000,00 €</b>
<b>Operacions de capital</b>		<b>Operacions de capital</b>	
6. Alienació d'inversions reals	0,00 €	6. Inversions reals	430.000,00 €
7. Transferències de capital	0,00 €	7. Transferències de capital	1.000.000,00 €
<b>Total operacions de capital</b>	<b>0,00 €</b>	<b>Total operacions de capital</b>	<b>1.430.000,00 €</b>
<b>Operacions financeres</b>		<b>Operacions financeres</b>	
8. Variació d'actius financers	0,00 €	8. Variació d'actius financers	0,00 €
9. Variació de passius financers	0,00 €	9. Variació de passius financers	0,00 €
<b>Total operacions financeres</b>	<b>0,00 €</b>	<b>Total operacions financeres</b>	<b>0,00 €</b>
<b>TOTAL INGRESSOS</b>	<b>2.000.000,00 €</b>	<b>TOTAL DESPESES</b>	<b>2.000.000,00 €</b>