

Water is the principal element of the Earth's surface. Spaces such as rivers, lakes and seas are normally perceived by people as natural spaces, and even as 'wild' spaces, despite having been appropriated, used and transformed by humans throughout times. Leisure and tourism activities are amongst the most important drives for the transformation of these spaces, thus, they should be central in the management and sustainability of the water environments. On another dimension, water, which is critical to life, is a scarce resource, since only a fraction is fresh water. This means that tourism may conflict with other activities and creates additional pressures over water resources which have to be soundly managed.



# WATER AND TOURISM

RESOURCES MANAGEMENT, PLANNING  
AND SUSTAINABILITY

WATER AND TOURISM

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## NEW OPPORTUNITIES FOR WATER ENVIRONMENTS. RIVER TOURISM AND WATER LEISURE ACTIVITIES

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### **The timeless importance of water: 'heritagization' and 'musealization'**

Water has always fascinated humans. It has been responsible for establishing the earliest human settlements and today it still influences population distribution. The coast and shore are just as attractive as rivers and lakes. The reservoirs that supply drinking water provide opportunities for the utilization of various factors that are important in daily life and in social economics. They offer accessibility, mobility, the satisfaction of basic needs – contributing to nutrition, for instance – and are the setting for recreational pursuits. They have symbolic significance, too, associated with religion and the divine.

Rivers have always been present, in every era of human civilization, and they simultaneously represent plenty and destruction, life and death, and down the centuries they have become identified with the societies they support. Indeed, the power and image of many civilizations is intrinsically linked to the successful exploitation of water (Mauch and Zeller, 2008).

Rivers attracted and settled the earliest communities; they have gone hand in hand with the progress of history and civilization, because the most fertile fields, many major cities and the first factories can be found on their banks. They are identified with economic

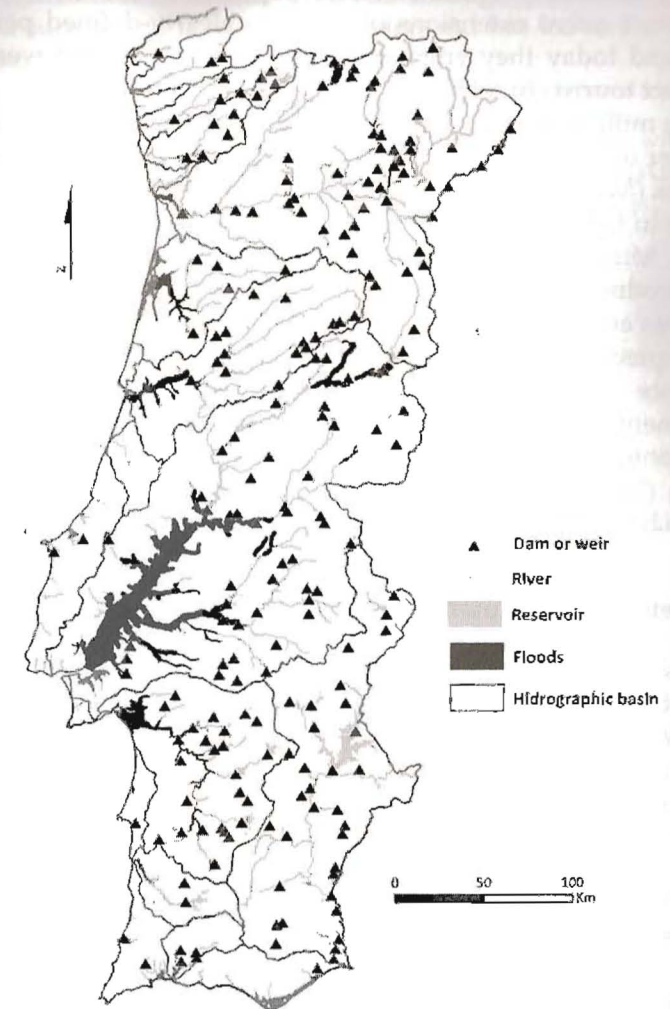


progress and the advance of human society: from farming and fishing communities to industrial and post-industrial societies. Rivers "because they are linear and structure the landscape, because of the biological activation associated with the presence of water and riverbank ecosystems, because of the cultural, humanized heritage (...) [bear witness to] a mutual accommodation of society and nature" (Saraiva, 1999: 95). A range of human activities have always been linked very closely to rivers: the supply of water for drinking, fishing, farming, industry and, more recently, leisure and tourism.

The attraction of riverbanks is crucially important in the history of humankind, such that organizations and people are willing to take risks to locate their property and belongings there, and settle there. So we have a game of trade-offs between the perceived threats and destructive effects or disruption of human activities and their property and the relocation of activities. This behaviour has led to the cyclic exposure of some riparian populations to flooding. There are various situations in Portugal worthy of mention. Figure 7.1 shows that the main Portuguese rivers are liable to flooding and this is particularly important when inhabited localities are invaded. Low-lying valleys liable to flooding are very favourable to rice cultivation, dividing walls with salt production and fish-farming (separated by water salinity levels). The floods caused by the River Tejo (in the Santarém valley), River Douro (in Régua and Foz), River Mondego (in Coimbra and Baixo Mondego) bursting their banks are territorial markers that bestow highly individual features to these areas. It has been necessary to build dikes, weirs and dams (references of water architecture) (Figure 7.1), and these are witnesses to such historic episodes (collective memory of the localities) are records of tourist interest.

The length of time over which water has been used by human societies meant that engineering and architecture specific to water environments have been developed, and are now tourist attractions. This is certainly the very much the case in Portugal. Water-related architecture is of great interest in many parts of the world and Portugal is certainly no exception: bridges, special structures of reference on all of the nation's rivers; springs and fountains that bring water from the rivers to the people; aqueducts and their arcades, landmarks of other modes of channelling water for people's consumption; spas, offering health treatments associated with rivers and streams; dams, which join opposite banks and create aquatic landscapes; and water mills (fluvial or marine), relics of traditional activities now fallen into disuse. These are some of the architectural forms we interact with. In fact, these human constructions – some of

Fig. 7.1 – The risk of flooding in Portugal: present dams and weirs



Source. Based on SNIRH and the Associação Portuguesa de Recursos Hídricos.

which are true monuments, bold, beautiful and inspiring – have in water the main reason for being built, and enjoy a very close and intimate relationship. Furthermore, today they lie within the scope of museology, with proposals related to water (tide-mills) or their products (salt).



Aqueducts are real works of engineering that cut through towns and fields and leave an indelible mark on them. But they were necessary to supply water to large population centres. Aqueducts were in fact active extensions of rivers in clearly-defined periods of history and today they enhance the regions where they were built and attract tourists to them.

Tide mills and water mills have also been categorised as heritage. A number of them have been restored and turned into restaurants or museums (Moinho de Maré de Corroios, in the Tejo estuary, Museu da Água in the Barbadinhos Steam Pump Station, Museu da Água in Mértola, Museu da Água in Coimbra for instance) providing new tourist products in the region.

It was at the start of this century that local river resources began to be appreciated, with local authorities starting to understand the importance of investing in tourist attractions based on fluvial environments. Among relevant initiatives are: the Zêzere Ecomuseum, in Belmonte (2001), the Rio Minho Aquamuseum in Vila Nova de Cerveira (2005), the River Museum created in Alcoutim (2006), and the Fluviário (fluvarium) de Mora (2007).

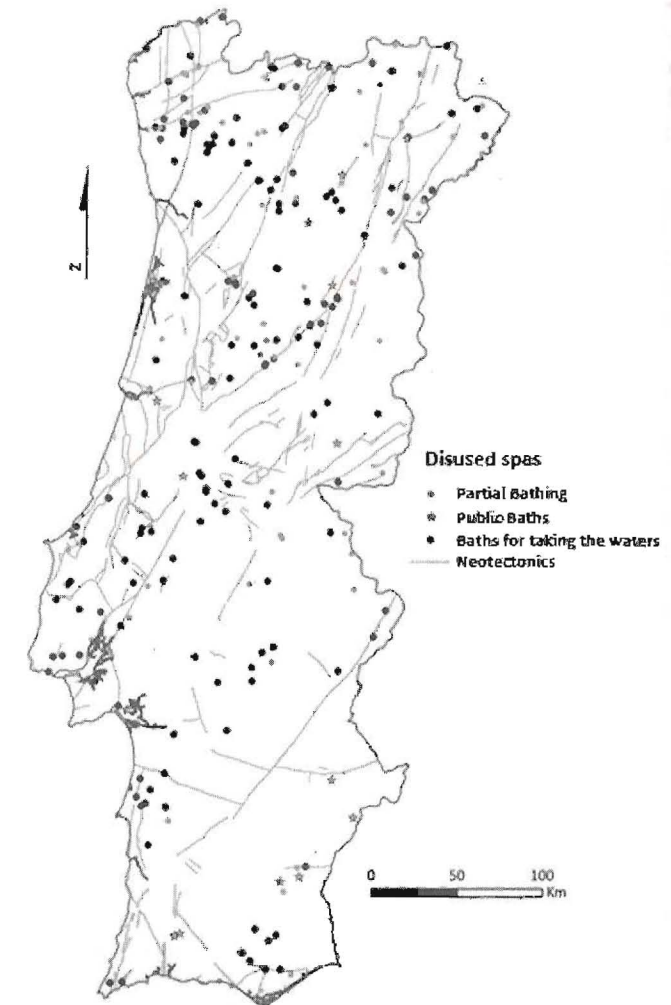
#### Water, leisure and tourism: the affirmation of river tourism

Freshwater is a valuable tourist resource on which the appeal of a tourist destination can depend (Lootvoet and Roddier-Quefelec, 2009). Water, particularly when it is clear and cool, is essential for exploiting leisure and tourism services the world over: "water resources, both linear and enclosed, are a vital ingredient of the countryside scene, whether for purely visual pleasure or for the direct support of recreational activities" (Glyptis, 1991: 8). Water does indeed have a great fascination for a large number of people; it is even the main motivation for choosing a destination, and marine, river and lake environments are equally important. It is no accident that water has been called "the sparkle in the jewel of landscape" (Patmore, 1983: 205). A range of tourist products have been built up around water: river tourism, nautical tourism, sun and sea, spas, health and wellbeing, active leisure and adventure tourism. The National Strategic Plan for Tourism (PENT) 2007 includes what are regarded as the 10 strategic products for tourist development in Portugal, based on the suitability and competitive potential of Portugal, market share and likelihood of growth.

A tourist product that has received considerable attention, in terms of both supply and demand, is that of spas and wellbeing

tourism. This has long been associated with health and the treatment of illnesses, and relied on the geological features and neotectonics. The diversification of tourist products through the combination of increased supply and levelling out of demand has led to the function of spas being rethought (Figure 7.2).

Fig. 7.2 – Distribution of disused spas subject to concessions together with defects and warm springs for partial bathing, public baths and baths for taking the waters, together with the neotectonics, in mainland Portugal



Source: Carta Geológica de Portugal 1:500.000 (at <<http://www.aguas.ics.ul.pt/>>)



The crisis that hit health spas as an economic venture, due to problems in attracting clientele, in fact led to the "revitalization of underused amenities, the restoration of former spas and unoccupied warm springs, the exploitation and diversification of services of some and the promotion of the image of all of them by cultivating new purpose" (Santos and Cunha, 2008: 212-13). The facilities that used to be for health are now interlinked with alternative medicines, non-invasive medical treatments and beauty, they are involved with leisure, in our society where *appearance* is valued more and more, and a *healthy body* it is an absolute essential for the majority of the middle and upper classes (Santos and Cravidão, in press).

The changeover from a model of leisure with spa amenities to a culture of sun and beach meant that the geography of tourism in Portugal changed from the first quarter of the 20<sup>th</sup> century. The spas lost ground to coastal bathing resorts and places like Figueira da Foz, Espinho and Póvoa do Varzim came to the fore, all of them having casinos (Costa, 2010: 266 ff).

The end of the 20<sup>th</sup> century and the start of the 21<sup>st</sup> have offered another change in our relationship with aquatic environments. There was another shift in the second half of the 20<sup>th</sup> century. The rivers have increasingly been subjected to human intervention with the construction of canals standardized in line with the need to transport goods and with the building of dams to control flows and to be exploited in other ways: to generate electricity; to form reservoirs of water for industrial and household consumption and irrigation purposes, with the lakes increasingly becoming aquatic environments suitable for recreational and tourist activities. The dams and modification of river courses have been very important in controlling excessive flows and so reducing the risk of serious flooding. They have also served as a resource for exploiting freshwater tourist activities. According to Glyptis (1991: 9) "artificial water bodies support a range of recreational uses", and so there has been a great deal of tourist-related investment in hotels, in sailing clubs, in tourist activity enterprises, and in marinas beside lakes created by dams and weirs. They are perfect locations for holding events, good examples being the Caniçada, Aguieira, Castelo de Bode, Montargil and Alqueva dams. In this context the creation of nautical centres in inland regions has been very important (examples being the Centro Náutico do Zêzere, Centro Náutico de Castelo de Bode, Centro Náutico de Constância – where the River Zêzere joins the River Tejo – and the Centro Náutico de Reguengos de Monsaraz – on the Alqueva reservoir. They certainly illustrate some of the investment made in the hinterland of Portugal to encourage leisure and tourism.

River tourism covers all pursuits linked to rivers, lakes and lagoons and embraces nautical and aquatic activities, and it has been steadily gaining in popularity (Damien, 2001). 'Nautical activities' include boating and going through huge locks on rivers like the Douro, and nautical recreation on leisure craft, and 'aquatic activities' include fishing, bathing/swimming, canyoning, hydrospeeding/ riveboarding, rafting, sailing, waterskiing, and so forth. So it is important to pinpoint the potential of Portugal in terms of river tourism, exploiting first the 'aquatic activities' and then the 'nautical activities'.

### **Aquatic activities related to leisure and river tourism**

According to Cavaco and Simões (1998: 200), "riverside recreation has changed its profile and course of development in recent decades. First, because leisure pursuits have social value today, for a great many reasons. Second, because massified leisure and sun-and-sea tourism appeal to the emergence of alternatives, thereby paving the way for the development of riverside recreation and tourism".

Interest is growing in nurturing outdoor leisure activities in non-maritime aquatic environments: rivers, reservoirs, estuaries, lakes, lagoons. People are increasingly choosing leisure and tourist activities that take them away from the coast and find forms of recreation in non-maritime aquatic environments, particularly on rivers and near their banks. Even in the 1930s a study on the Lima and Mondego rivers acknowledged that "an element of scenographic value, the river is thus a major 'caligeográfico' and tourist motivation" (Machado, 1930: 75). Ramalho Ortigão mentions in his book *As Praias de Portugal* (The Beaches of Portugal), which was first published in 1876, that "so healthy, so hygienic, so little used in Portugal, unfortunately, river bathing spots could largely replace the costly sea-bathing, to some advantage. If my humble voice could be heard by the town halls of our rural municipalities, it would ask them to consult their medical or health officers on this issue of hydrotherapy, and benefit their citizens by building a small wooden booth on their river where people who were instructed to take this option could bathe for free" (Ortigão, 2002: 164).

One product that is becoming increasingly valued by local authorities is river bathing. River beaches are now a direct alternative, or perhaps combined with, sun and sea tourism. So the utilization of the potential of bathing and recreation areas in non-marine water environments is a form of democratization through leisure activities.

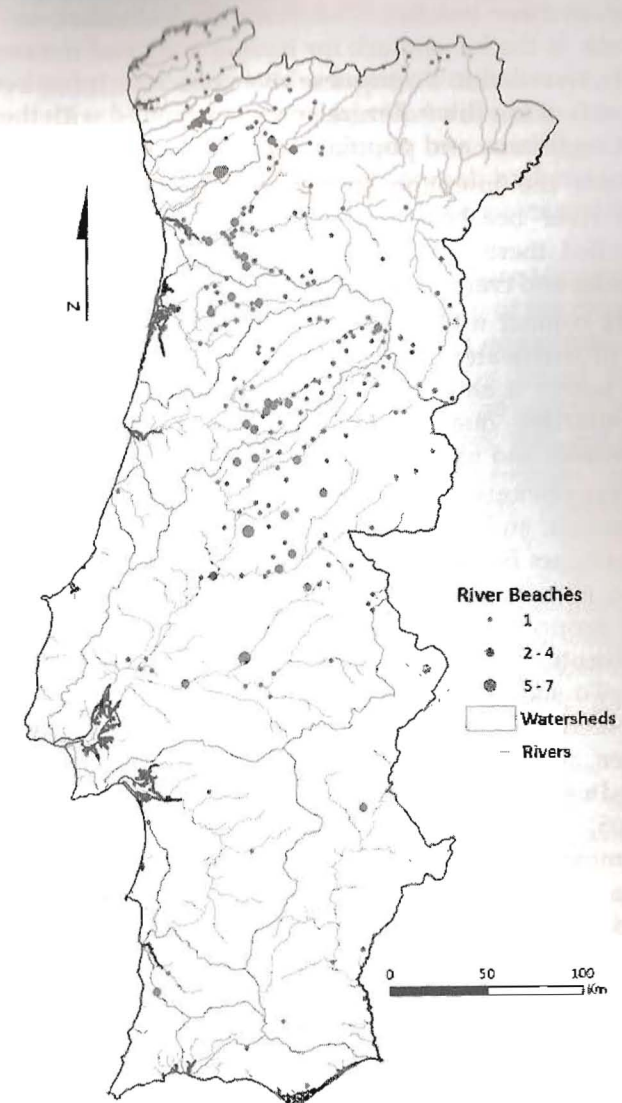


The relationship with rivers, lakes, lagoons and reservoirs has meant that, prompted by natural water resources, high quality tourist products have emerged in areas that are less densely-populated, less accessible, have poor infrastructure and a distinct lack amenities. Less mass usage of such areas, plus highly varied and dynamic landscapes, the chance to visit places where traces of traditions can still be found, and which are far removed from the crowds, stresses and strains of life in the city (although they are increasingly easy to get to) are factors that are creating a new niche that must be developed and motivated.

In fact, "if local authorities act, on their own or jointly with private investors, the recreational potential of riverbank areas, with their combination of landscapes and watersports, can be exploited in completely different ways from the coastal resorts. The range on offer varies widely and the quality falls short of what is wanted. Blue flags are few and far between, quality of services is less than ideal, they are often hard to get to (though this may be a qualifying factor for river recreational spots)" (Santos and Cunha, 2008: 213).

Figure 7.3 shows the huge scale of investment that has been made in river beaches in Portugal. While a lot of river beaches are still not included on the list compiled by the *Guia de Portugal* (<<http://www.guiadeportugal.pt/>>), often because they do not have the qualities required for certification, their distribution is evidence of the importance of this mode of utilizing natural resources in conjunction with structures and amenities created by humans in non-marine water environments. The main hydrographic basins are those of the Mondego, Tejo, Vouga, Douro and, in the northwest of Portugal, the Minho, Lima, Cávado and Ave, and most of Portugal's river beaches are found in them. But not all rivers are exploited to the same extent. Obviously weirs and dams, gulfs, creeks and reservoirs offer reasonable space for bathing, but this must be linked to organisation of the banks and the provision of minimum services (safety and hygiene), plus places to eat and socialize. All this depends heavily on the political will of the local authorities. The most attractive rivers for freshwater-related activities are fairly easy to pinpoint. Some are worthy of special mention, however, because they are linked to extreme sports (discussed below), like the River Minho, the River Paiva which rises in the Serra da Nave, in Moimenta da Beira, and the River Teixeira, and others. Others deserve attention because of the scale of investment, e.g. the River Pêra, with its Praia de Ondas das Rocas, framed by the Serra da Lousã, and the River Ceira, in Avô, which has a river beach where visitors can enjoy leisure

Fig. 7.3 – Location of river beaches in mainland Portugal



Source: Based on *Guia de Portugal*, <<http://www.guiadeportugal.pt/>>, and on *Atlas do Ambiente*, <<http://www.iambiente.pt/atlas/est/index.jsp>>.



activities, heritage and nature and the sense can really run free. There is the Fróia river beach on the river with the same name, in Sobreira Formosa, Proença-a-Nova which is another fine example of quality investment in river beaches. The Praia de Valhelhas, in Valhelhas, near Guarda, is the benchmark for having achieved the coveted Blue Flag, rarely awarded to Portuguese river beaches. It has been created from a stretch of the River Zêzere and is associated with the *Vallecullia* Festival of traditional and popular music.

It is not the intention to defend the variety and quality of Portugal's river beaches, and those mentioned above are simply examples. But there are some genuinely valuable exploitations of natural nooks and crannies that have now become tourist products.

In this context it is hoped there will be major investment the provision of freshwater bathing areas in the area around the Alqueva reservoir, where it should be possible to achieve a combination of non-mass-tourism quality with practices generally linked with summer crowds and tourists.

It seems obvious that increased spare time should lead to more leisure interests, and these have become more and more varied with outdoor pastimes becoming especially important. Here we find that a great many extreme sports that until very recently were the province of a small group of people now account for tourist trips or visits in which adventure tourism and active recreation are the main objectives. To show how accessible these activities are (less extreme and more recreational), the 'harder' character has been removed and their 'softer' nature emphasized, as in 'calm water canoeing', 'soft hydrospeeding' and 'soft canyoning' (Hudson, 2003; Shephard and Evans, 2005). Buckley (2006: 1) uses the term 'adventure' "to mean guided commercial tours where the principal attraction is an outdoor activity that relies on features of the natural terrain, generally requires specialized sporting or similar equipment, and is exciting for the tour clients".

There has thus been a democratizing and commercializing of extreme sports through active recreation and adventure tourism. So, while some practitioners are professionals, a great many of these activities are acquiring an ever-greater commercial value and are enjoyed by amateurs, sometimes as 'serious leisure', which Stebbins (1992: 3) defines as "the systematic pursuit of an amateur, hobbyist, or volunteer activity that is sufficiently substantial and interesting for the participant to find a career there in the acquisitions and expression of its special skills and knowledge". According to Tomlinson (1997) extreme sports are concerned with individualism, higher performance

levels, redefining performance levels, and the person satisfaction that comes from exerting ourselves to the utmost. We can have pleasure in sports without being threatened by a stronger adversary. Our adversary is a much more implacable: the planet and its elements: air, earth and water.

Many active recreation and adventure tourism pursuits offer intimate contact with nature, with flight and desertion only being the ultimate option. Leisure now features overcoming instead of compensating, in the challenge between oneself and nature, making the adventure more thrilling, a once-in-a-lifetime experience which Stebbins (2006) calls "project-based leisure".

Actually some active recreation and adventure tourism activities need technical knowledge and an understanding of the characteristics of the environment, not to mention specialized equipment, guidance and supervision. Tourist activity agents have found investment opportunities in many of these activities and the specificities of the relatively close-at-hand natural resources. Firms that are more fun-oriented and interested in regional tourist products, and which organise and sell recreational, sports or cultural activities – in a natural medium or in purpose built facilities, i.e. tourist activity enterprises and maritime-tourist operators – have their own legislation<sup>1</sup> enabling agents wishing to operate in the market to find out the requirements for doing so. Important safeguards are thus provided relating to the interests, safety and satisfaction of tourists, who are recognized as being increasingly exacting (Decree-Law 108/2009, of 15 May).

The legislation passed in the meantime is invested with great importance, since it allows the product to be both qualified and known. The legal framework provides for the registration and granting of a licence for engaging in the activity, with Turismo de Portugal being responsible for organizing the Registo Nacional dos Agentes de Animação Turística (National Register of Tourist Activity Agents) – RNAAT. Examination of the RNAAT shows that in 2010 (on 17 May) there were 792 licensed tourist activity agents operating in Portugal.

Many of these active recreation and adventure tourism activities of a relatively extreme nature that fulfilled "this new way of occupying free time was almost always developed in territories which until then had not had any kind of mass enjoyment exploitation. The[activities] are to some extent outside the traditional lines of development and exploit the direct contact with nature" (Cunha and Cravidão, 2008: 133). This happened with many of the companies that developed products focused on water environments, particularly non-marine ones (Figure 7.4).

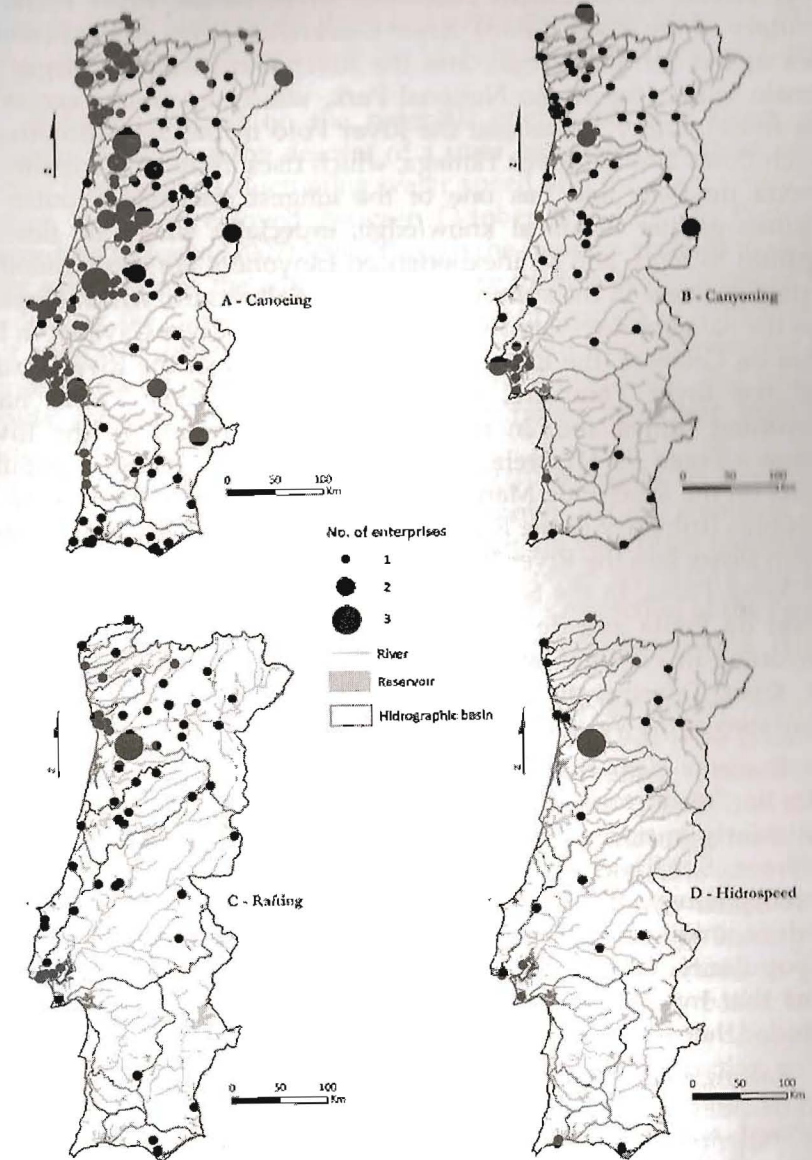


Rivers were especially favourable for active recreation and adventure tourism due to the challenges they offered and the specialization they required (Moreira, 2009). Recreational activities on rivers are many and varied; some let you 'go with the flow' and enjoy the countryside, like canoeing; others require physical effort and give an adrenalin rush, like whitewater kayaking, canyoning, rafting and hydrospeeding. In Central Portugal "the Mondego, Vouga and Lis rivers and their hydrographic basins, plus other rivers, offer excellent conditions for sailing, canoeing, rafting, angling and other sports." (Costa, 2010: 276).

Canoes were used for tourism or exploration in the 19th century and today there has been a revival of interest in them. The River Mondego offers the best natural conditions for canoeing and its regular flow makes it particularly suitable for people with little experience. An equally good experience for people with little technical knowledge is rowing down the River Zêzere, especially the stretch from the Castelo de Bode dam to the village of Constância. The descent of the River Alva, meanwhile, included rapids and weirs that make it a much more thrilling experience. Other suitable places for canoeing are the River Guadiana, the Alqueva reservoir, River Cávado, River Lima, River Douro and River Beça, to name but a few. This activity is offered pretty well all over the country by tourist activity agents, as Figure 7.4-A shows. There are concentrations in the River Tejo basin, related to the Castelo de Bode dam, on the River Mondego around Coimbra, on the Mondego, Ceira and Alva rivers, on the River Vouga close to the River Caima, in the River Douro hydrographic basin and scattered along its main tributaries, and, further north, in the hydrographic basins of the Lima and Cávado rivers. It is interesting to see how places as far inland as Miranda do Douro, on the International Douro, Penha Garcia and Moura have made use of nearby water environments to promote this activity.

Another active recreation and adventure tourism pursuit is descending rivers and streams and exploring the beds – canyoning. It needs specific geomorphological conditions since it is practised in reaches where there are steep drops and the valley walls are steep and closed in, because this is where the steepest slopes and deepest gullies and defiles occur – true canyons. They are made up of hard rocks like granite, quartz, schist and basalt. There are usually cliffs, relatively abundant waterfalls and fairly deep natural pools, all of which form natural obstacles. Canyoning is "regarded by many as the most multidisciplinary of all the escapist sports" (Cavaco and Simões, 1998: 202).

Fig. 7.4 - Tourist activity firms offering canoeing (A), canyoning (B), rafting (C) and hydrospeeding (D), by parish, on hydrographic basins, rivers and reservoirs in mainland Portugal, in May 2010.



Source: Based on information from the Registo Nacional de Agentes de Animação Turística, May 2010.



Canyoning first started in both the Serra do Gerês and Madeira in the late 1980s but it took nearly ten years before it appeared in the Azores (1997)<sup>2</sup>. Canyoning is practised mostly in the north of mainland Portugal (Figure 7.4-B), in the Serra do Gerês along the River Arado, River Castro Laboreiro, River Fafião, River Fecha (a tributary of the River Caldo), River Carcerelha, River Âncora (which rises in the Serra de Arga), and the River Olo (rising in Fugas do Ermelo within the Alvão National Park, which conditions access to this route). Other routes use the River Poio in the Serra do Alvão, which flows into the River Tâmega, which rises in the municipality of Ribeira de Pena and has one of the longest canyoning routes. It requires greater technical knowledge, especially when the flow is medium to high, and so inexperienced canyoneers are recommended to only go there in the summer. The River Saltadouro, which empties into the Salamonde reservoir which supplies the River Cávado, in the Serra da Cabreira, the River Cabrum, a tributary of the River Douro and the River Pombeiro, a tributary of the River Paiva, have canyoning routes, too. In the Serra de Montemuro; on the River Caima – Fraga da Mizarela in the Serra de Arada is also a popular route; on the Ribeira de Manhouce, in the reach above the Ribeira de Vessadas (tributary of the River Teixeira) and on the River de Frades, which flows into the River Paivô and on that river, too, a tributary of the River Paiva, in the Serra da Freita; on the River Teixeira, in the Serras da Freita and de Arestal, one of the most famous rivers for canyoning in Portugal, and on the River Paraduça which flows into the River Teixeira; on the River Lordelo and River Branco, both tributaries of the Vouga.

It seems clear that Portugal has great potential for canyoning, with its “niche tourist territories” (Cavaco and Simões, 2009: 34), particularly in northwest Portugal, Madeira, and the Azores islands of Flores, S. Miguel and S. Jorge. The combination of geology and geomorphology, diversity of wildlife and flora and good rainfall produce unique conditions to enjoy this sport. Canyoning is growing in popularity, largely because it is an adventure tourism extreme sport that involves risks and allows visitors to get to know some secluded, hard-to-get-to places.

Rafting is another pastime that surged in popularity in the last four decades of the 20<sup>th</sup> century (Jennings, 2007) and the early years of this millennium. Even though, according to Buckley (2009) it has received less attention in the literature, it nonetheless offers a wide variety of options, with a range of combinations between two quite distinct situations: one has more participants, lasts for a shorter time,

requires less technical expertise, is relatively cheap and is enjoyed in fairly accessible places, while at the other extreme we have an option for a small number of people, lasts longer and requires considerable technical expertise, is quite expensive and takes place in more remote areas. So a rafting trip can last less than an hour and cover just a few miles or it can last several days and cover hundreds of miles, like a trip down the Colorado river in the USA, in the Grand Canyon (Jonas, 2007).

Rafting is based on the potential energy of river flows and involves navigating the descent of a river on a raft. The sport needs strong flows and as fluctuating water speed and force are important factors it is best enjoyed between October and June, in Portugal. According to Jonas (2007), even though the dangers amount to only a brief spell of time, the adventure of facing them is key in terms of the identity of the rafters. Routes have different degrees of difficulty to suit people of different levels of experience. The most exciting are the winding routes which make for frequent, unexpected and violent rapids; sometimes the risks are such that rafters need help from the banks along the route.

According to Swarbrooke et al. (2003) rafting is an adventure tourism activity since it is based on unknown natural elements that are unpredictable, which do only seem, but are very often hazardous. As Buckley (2009) notes, in rafting, as in other adventure tourism activities, the key elements for the safety and satisfaction of the rafters are the guides, the equipment and the logistical conditions, not to mention the natural features of each route.

Rafting emerged as an active recreation/adventure tourism activity on the River Minho in the mid 1990s, and this river is still an excellent place to learn since its flow is such that rafting is possible all year round, though with changes from day to day. This is due to the dams. Currently the rivers with the best natural conditions for rafting are the Minho, Tâmega, Olo, Sabor, Tua – only practicable when there is heavy rainfall – the Mouro and the Paiva. The last-named is the very best place in Portugal for rafting and is known as having the clearest waters in Europe. Tourist activity agents registered to offer rafting in mainland Portugal were, in May 2010, mostly based to the north of the River Tejo, and very close to the main hydrographic system (Figure 7.4-C). It is also possible to go hydrospeeding on the same rivers. This is another active recreation/adventure tourism activity which involves white water, but in this case the descent is made on a board which resembles a sled, face down, with the legs in contact with the water and using flippers. There were only 25 tourist activity agents registered in mainland Portugal as of May 2010



offering hydrospeeding (Figure 7.4.1). They are located close to the main rivers, with the parish of Burgo in the municipality of Arouca, near the River Paiva, being particularly popular.

### Nautical activities related to leisure and river tourism

In terms of nautical activities the building of locks has made it possible to take advantage of bodies of water in rivers and improve their navigability. This is exemplified in Portugal on the River Douro. Just to be on a boat when the lock fills or drains is in itself a wonderful, and different, experience. But what is really interesting is river navigability, and here the River Douro achieves moments of breathtaking beauty. The tourist market has exploited this resource with the creation of specific products accommodating a full range of time scales and pockets.

This river has in fact enjoyed the greatest investment in terms of navigability. The 1960s to the 1980s saw the construction of major hydroelectric projects on the Douro. The Carrapatelo was the first, in 1971, and the last was the Crestuma-Lever dam, completed in 1986, and it was about 10 years later that the river cruise industry really began to grow, as we shall see below. Two factors played a part in this growth of demand. First was the control of the flow with the construction of the dams, and second was the award of UNESCO World Heritage status to Porto's historic centre (1996) and the Alto Douro Vinhateiro region (2001). "In older times there was the coming and going of boats laden with cargos of wine. Today we have different boats, bigger, safer and faster, and instead of wine they have a cargo of tourists" (Simões, 2008: 213). Tourist cruises on the River Douro cover a stretch of 210 km from the estuary to Barca d'Alva; it contains around 50 river quays and about 54 tourist boats operate on it<sup>3</sup> run by about 23 operators<sup>4</sup>. The variety of trips is enormous, from short cruises on small vessels to excursions that go to Régua, Pinhão or Barca d'Alva; there are ship-hotels, for week-long cruises, and themed cruises (almond blossom, grape harvest, castles...). River tourism is actually an opportunity to discover the heritage and visit unique sites and learn about the economic development of localities, and "to see the original shape of the landscapes and their riches" (Damien, 2001: 10). According to Damien (2001) the attraction of the water has made it possible to exploit three distinct geographical areas: 'blue', those directly linked to the water; 'green', those associated with trails on the banks, and 'grey', the surrounding build urban landscape.

Tourist activity agents have found investment opportunities in boat trips and river excursions. The River Douro is by far the best example, but the Tejo and Guadiana are also important in relation to these activities. The River Guadiana has been gaining ground in terms of leisure and tourism activities, largely thanks to the Alqueva dam complex. Filling of the reservoir started in 2002, and the municipalities of Portel, Moura, Évora and Beja have all felt the benefits since the reservoir has allowed a considerable expansion of active recreational activities in a water environment, in inland Portugal (Figure 7.5).

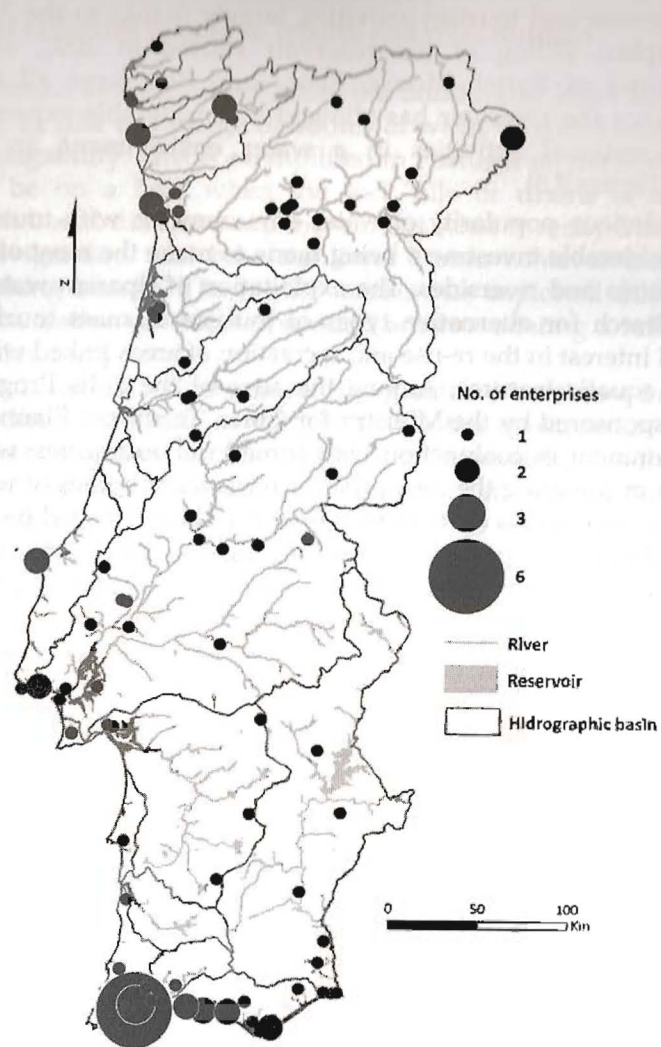
The obvious popularity of water environments with tourists has led to considerable investment being made to make the most of coastal areas, lagoons and riversides. The exploitation of riparian waterfronts and the search for alternative types of tourism to mass tourism has prompted interest in the re-use and recreation of areas linked with non-maritime aquatic features. Among the aims of the Polis Programme, which is sponsored by the Ministry for Cities, Territorial Planning and the Environment in conjunction with some local authorities, was very important in pursuing the restitution or retrieval of bodies of water for the public, since access to them had long since been affected by various usages – public and private (industrial, military, transport...). In this context "urban planners, architects, geographers and tourists are linking a town's image more and more with that of its river, to the point where urban developments strive to make rivers and canals focal points" (Damien, 2001: 92).

The Council of Ministers Resolution 90/2008 establishes that a series of regeneration and upgrading operations will be undertaken in risk areas and natural areas that have fallen into degradation on the coast. This project is called *Polis Litoral – Operações integradas de requalificação e valorização da orla costeira*, and it embodies the need to make better use of the potential and opportunities in water environments, both marine and river-related. Moreover, 2010 is the year of the creation of the Polis dos Rios ('Polis' for rivers) initiative, with the aim of regenerating and upgrading the country's riverine areas. It is planned to implement it now in the Douro, Vouga, Mondego and Tejo estuaries, in coordination with the Polis Litoral project.

So riversides today are attracting investment and fostering development of great value in terms of image and symbolism. They can become territorial emblems, as has happened with conference centres, hotels, parks and gardens, cultural and sports amenities, giving the land nearby significantly more value. Since the rivers flow



Fig. 7.5 – Tourist activity firms offering boat trips and river excursions by parish, on hydrographic basins, rivers and reservoirs in mainland Portugal, in May 2010.



Source: Based on information from the Registo Nacional de Agentes de Animação Turística, May 2010.

through several municipal areas these projects are of strategic benefit to regional development (Simões and Vale, 2002).

## Conclusion

Human societies over the centuries have always had a close relation to the rivers they supported in one way less or more sustainable different kinds of economies. Currently rivers provide a wealth of outdoor recreational activities. In post-modern society and in post-fordist economy we can assist of a widespread of services related to water environments and of an emergent new form of tourism: river tourism. In Portugal in most recent years this trend is evident, many of small enterprises find in local water resources and in leisure and tourism activities new economic opportunities for employment and income selling emotions and experiences, creating facilities, namely associated with rivers.

Rivers usually offer two kinds of tourism activities, one of them is located on the river banks, beside the rivers, and the other take place on the rivers. The most typical activities that we can find on the rivers are tours and sightseeing cruises – short or long distances, downstream or upstream, these activities always offer an exciting experience through scenic and cultural landscapes, including natural and built environments that changed along its shores – and water sports, most of them are identified as forms of adventure tourism like white-water canyoning, rafting, hidrospeed, amongst others. Many of these activities could be included in *niche tourism* and for this river tourism potential the natural feature of water is very important. With respect to river tourism, nautical and aquatic activities are increasingly gaining importance in Portugal, and infrastructure in support of these activities has expanded to keep pace. Quays have been renovated, navigability projects have been developed for rivers, particularly on the Douro, the Arade and the Guadiana, and new marines and recreational harbours have been incorporated in riverside regeneration projects. A few initiatives have been mentioned here where the investment in the navigability of Portugal's rivers – “non-navigable rivers have limited recreational potential, with the very important exceptions of walking and angling” (Patmore, 1983: 207), and idea also highlighted by Glyptis “non navigable rivers support mainly angling and informal bank-side recreation” (1991: 9) –, and in the creation of harbours and marinas inland, where there is most potential, is regarded as strategic.

It is absolutely essential to upgrade the areas where many of the active recreation and adventure tourism activities take place, to create support amenities in strategic places where canoeing, rafting and



hydrospeeding and similar activities start and finish, and it is essential to improve the supply of activities on offer and to internationalize the canyoning routes and itineraries.

Water quality and its regular supply are of the utmost relevance to many leisure and tourist activities offered in inland water environments, and may compromise tourist exploitation. The various uses and interests of the different agents and interest groups absolutely must be reconciled if environmental and economic sustainability are to be achieved. In the context of river tourism, whether this concerns nautical or aquatic activities, it is crucial to know which parts of the country offer most potential for which recreational activities, to know what infrastructures and facilities they have, to understand possible demand for such activities, its seasonal fluctuation and what motivates it, to understand interest in additional tourist products, and various other factors. Only then is it possible to structure the supply of and promote demand for river tourism. In Portugal, river tourism is a tourist product which should be valued, and this involves investing in the navigability of Portugal's rivers and creating resorts for active recreation and adventure tourism, and promoting a structured range of tourist products.

Active recreation and adventure tourism activities offered in non-marine water environments must be supplemented with a properly structured range of products on land so as to exploit local natural and cultural assets. So the 'heritagization' and 'musealization' of the aspects associated with water have been a strategy which is gaining ground in Portugal, but they have to be properly organised.

So water, and the exploitation of its related resources through reorganization, upgrading, functional re-assignment, and various rehabilitation schemes are fundamental to territorial sustainability strategies as a presumption of local and regional social-economic development and the affirmation of the national territory within the framework of international tourism.

## Notes

<sup>1</sup> The first law passed in Portugal to regulate the establishment and operations of the tourist activities agency business was Decree-Law 204/2000, of 1 September, amended by Decree-Law 108/2002, of 16 April. This and other legislation passed in the meantime was revoked by Decree-Law 108/2009, of 15 May. The recent dates of these laws show not only that the activities themselves are relatively recent but also that they are expanding, and strategically important.

<sup>2</sup> The information on canyoning was obtained from the *Associação de Desportos de Aventura Desnivel*, an organization that has promoted and offered sports and nature-related adventure activities since the mid 1990s.

<sup>3</sup> According to the Instituto Português e dos Transportes Marítimos, (Delegação do Norte e Douro).

<sup>4</sup> Figure arrived at from an internet search which yielded references to the following operators: Barcadouro, DouroAcima/Turisdouro, Douro Azul, Arisdouro, Rentdouro, Quinta dos Agros/Liberdouro, Rota do Douro, Tomaz do Douro/Via D'Ouro, Douro Verde, Rotas d'Águas, Amor Douro, Companhia Turística do Douro, Crosieurope, Douro à Vela, Douro Adventure, Endouro, Eurotur, Portowellcome, Sabor Douro e Aventura, Sociedade de Transportes Catraeiros do Douro, Portodouro, Manos do Douro, Fozcôa invest.

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