

ET2050: Outermost Regions Report

Caption: This ET2050 Outermost Regions Report analyses the development of ultra-peripheral European territories.

Source: MCRIT, ESPON. ET2050: Outermost Regions Report. 27.02.2012, 67 p.

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ET2050

Outermost Regions Report

Territorial Scenarios and Visions for Europe (ET2050)



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1. Summary

In the entire European area there are a total of seven ultraperipheral regions: the Canary Islands, the Azores and Madeira, in the Atlantic Ocean, and which, from the 16th century, ports of call for Spanish and Portuguese transoceanic maritime voyages; Martinique, Guadalupe and Guiana, in the Caribbean, which were later colonised by France as was Reunion Island in the Indian Ocean. The majority of these territories had a strategic localisation value for the European metropolis which lost territories in Africa and America in the 19th and 20th centuries. The Ultraperipheral European territories constitute a territorial singularity in themselves for evident geographical and historical reasons.

Owing to their singularity they have shared similar developmental determining factors, and today they face similar economic challenges. The territorial determining factors must not be considered to be strictly determining: the determining factors which made their industrial development difficult during the decade of the seventies are the same which as those which make these territories excellent tourist destinations, especially for the European market, or strategic placements for the location of specialised technological installations.

However the result between the negative effects and the advantages of these territorial determining factors is manifestly unfavourable, as is demonstrated by several studies on indirect costs linked to ultraperipherality in the agricultural and fishing sectors. The EU provides various subsidies on the basis of these reports in order to attenuate these negative effects. The territorial determining factors of the ultraperipheral European regions may be summed up as follows:

- They are very distant from the European continent in geographical terms.
- They are isolated, either because they are oceanic islands, or because they are bordered by poorly populated, basically forested areas with relatively low levels of development, in addition to the lack of direct communication with their geographical surroundings and the difficulty of trading relationships due to the fact that they belong to different economic areas.
- They are areas with a small surface area, with scarce natural resources.
- The archipelagos are highly fragmented, a factor which provokes a double insularity in the smaller islands.

2. The Territorial Context

In the entire European area there are a total of seven ultraperipheral regions: the Canary Islands, the Azores and Madeira, in the Atlantic Ocean, and which, from the 16th century, ports of call for Spanish and Portuguese transoceanic maritime voyages; Martinique, Guadelupe and Guiana, in the Caribbean, which were later colonised by France as was Reunion Island in the Indian Ocean. The majority of these territories had a strategic localisation value for the European metropolis which lost territories in Africa and America in the 19th and 20th centuries. The Ultraperipheral European territories constitute a territorial singularity in themselves for evident geographical and historical reasons.

2.1 Geographic description

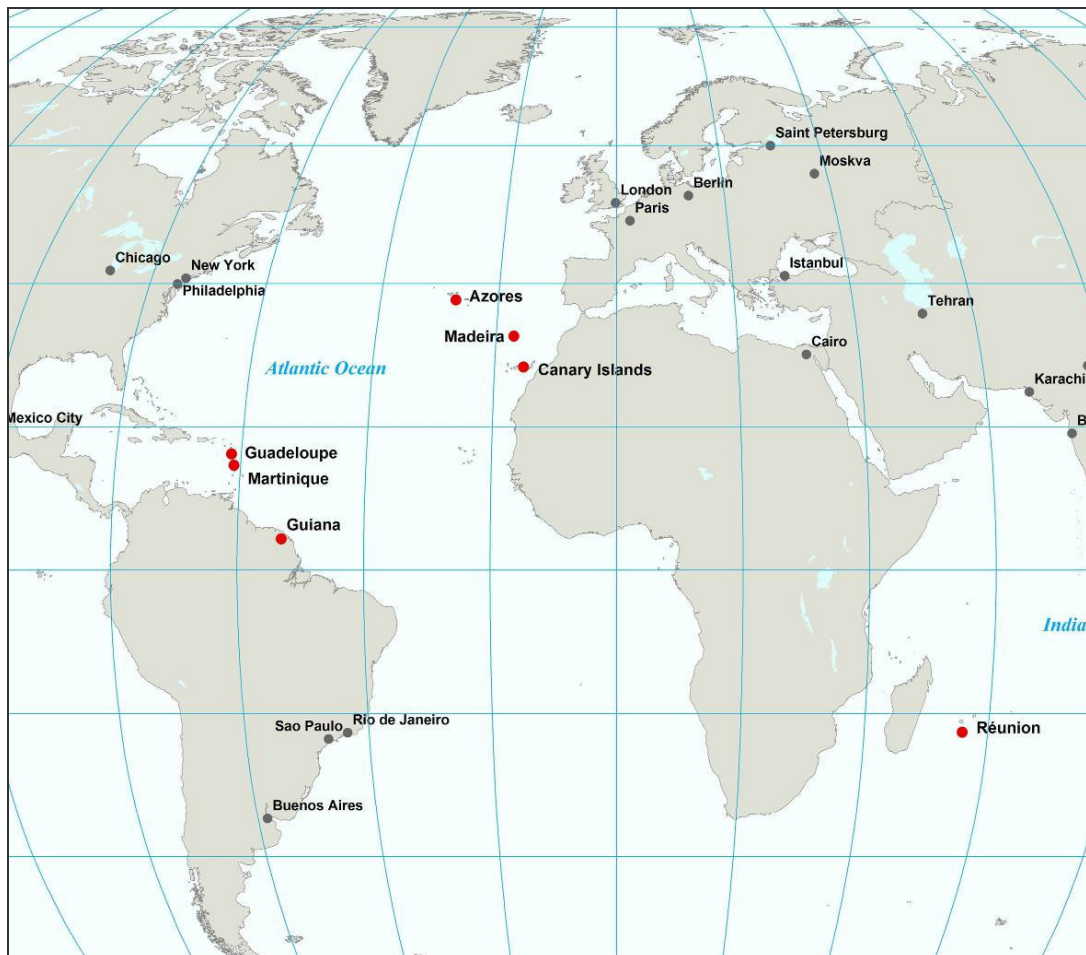


Figure 2-1. Map of the Ultraperipheral Regions. Mcrit, 2011

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The archipelago of the Azores comprises nine volcanic islands located in the North Atlantic Ocean 2,000Km from Lisbon and 4,000Km from New York. Total land area is 2,335Km². Of this area, 51% is used for agriculture.

The archipelago of Madeira comprises two inhabited islands: Madeira and Porto Santo. Nearly 98% of the population lives on the island of Madeira. The city of Funchal is the main economic center of the archipelago. The archipelago was discovered and populated in the XV century by the Portuguese. Because of the geomorphologic features of the islands, the agricultural surface represents only 9% of the total area. In Madeira, the area above 1,000m of altitude comprises one fourth of the total surface of which only 11% has a slope below 16%.

The Canary Islands comprises seven volcanic islands and is one of the Spanish Autonomous Communities.

Martinique is a volcanic island with a surface of approximately 1100Km² located in the Caribbean, 7000Km from France, 3000Km from New York and 120Km from Guadeloupe.

Guadeloupe is an archipelago that comprises eight inhabited islands. It is located in the Caribbean and has a surface of 1.705Km². The two main islands are Basse-Terre (848Km²) and Grande-Terre (590Km²). The former is mountainous and has a large production of banana. The latter is more flat and its soil is suitable for the production of sugar cane.

French Guyana is located in South America between Suriname and Brazil with an area of 83534Km².

Reunion is a volcanic island located in the Indian Ocean, 700Km East of Madagascar and 200Km West of Mauritius. It has a surface of 2512Km², of which 25% is arable.

Country	Surface (km ²)	Density (hab/km ²)	Population 1990	Population 2010	GDP per capita (\$) 1998	GDP per capita (\$) 2008
Azores (Portugal)	2.333	105	239.000	245.374	8.800	15.200
Canary Islands (Spain)	7.447	280	1.610.000	2.088.225	12.900	20.800
Guadeloupe (France)	1.705	263	413.000	449.619	12.500	19.500
French Guiana (France)	83.534	3	131.000	225.751	12.400	14.100
Madeira (Portugal)	795	311	254.000	247.399	10.300	21.400
Martinique (France)	1.100	362	375.000	398.733	14.300	21.600
Réunion (France)	2.512	327	652.000	821.168	11.400	17.900

Figure 2-2. Basic Data. Eurostat, 2011.

2.2 Interrelations with EU27 and rest of the World

According to *The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality* (INTERREG III B, 2005), the territorial determining factors of the ultraperipheral European regions may be summed up as follows:

- They are very distant from the European continent in geographical terms: the ultraperipheral regions are located more than 3,000 km from the European continent (Maastricht), Madeira, the Canary Islands and the Azores are the closest (between 3,000 km and 4,000 km), while Guadeloupe, Martinique, Guiana and Reunion are the furthest away (Reunion is more than 9,000 km away). The other EU29 regions are at an average of 1,000 km.

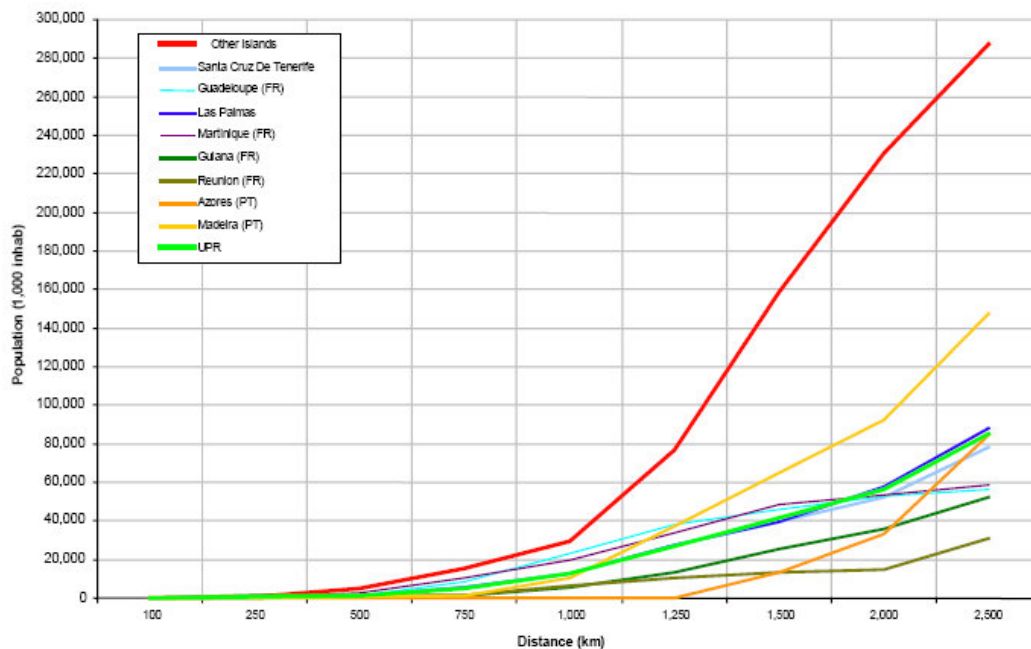


Figure 2-3. The Accessible Population from the Borders of the Ultraperipheral Regions and other Insular Regions. Source: *The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality* (INTERREG III B, 2005)

- They are located at a great distance from the capital of their mother country (between 1,000 km and 2,000 km, for the closest -Madeira, the Azores and the Canary Islands -, and between 6,000 km and 10,000 km for the most distanced – Guadeloupe, Martinique, Guiana, Reunion-). The other EU29 regions are relatively close to the capitals of their respective mother countries, with the exception of the Island of Corsica (located at some 870 km).
- While the inhabitants of European insular regions must travel an average distance of 500 km to reach that threshold population, Reunion and the Azores need more than 1,200 km, -or more precisely 1,500 km in the case of the Azores – the Canary

Islands and Madeira have a population which is 15 times larger than its own at more than 1,000 km, and only Guiana, Guadeloupe and Martinique have figures of between 750 and 1,000 km.

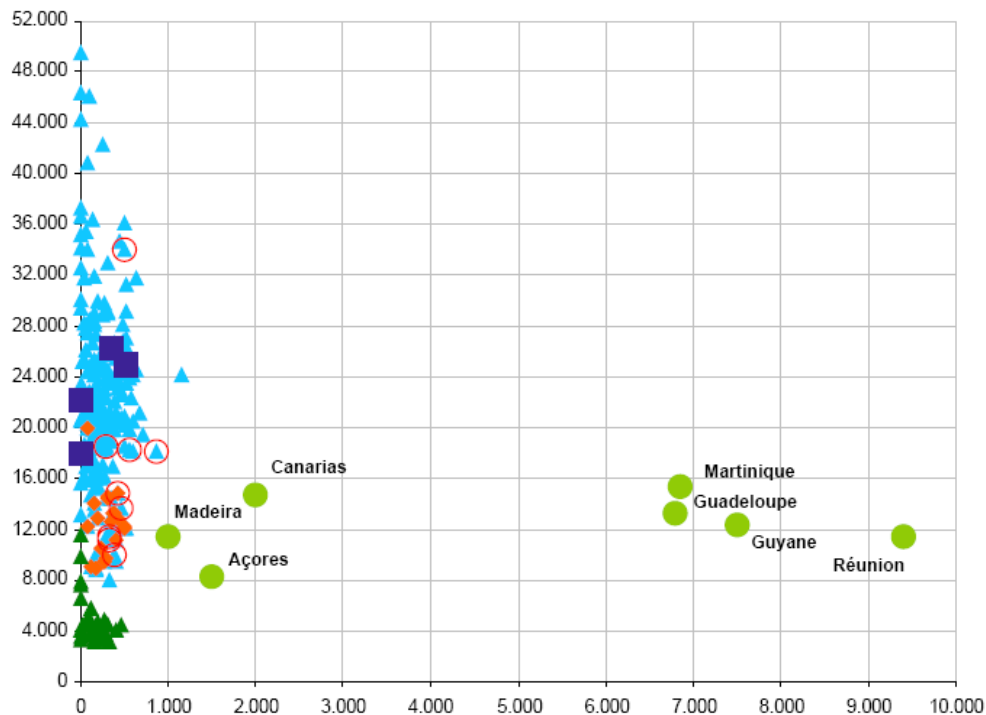


Figure 2-4. Relationship between the distance to the capital of the mother country (in Km) and the Per Capita GDP (in euros/ inhabitant/ year). Source: The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality (INTERREG III B, 2005)

- They are isolated, either because they are oceanic islands, or because they are bordered by poorly populated, basically forested areas with relatively low levels of development, in addition to the lack of direct communication with their geographical surroundings and the difficulty of trading relationships due to the fact that they belong to different economic areas. Together with the peripheral Nordic regions, these regions are the most isolated in the EU29 group with a population of below 5 million inhabitants at a distance of 500 km; while on the continent the population is between 20 and 90 million inhabitants.
- They are areas with a small surface area, with scarce natural resources. The archipelagos are highly fragmented, a factor which provokes a double insularity in the smaller islands.
- With the exception of the Canary Islands the rest of the ultraperipheral regions have a low minimum wage with respect to the access cost to their respective capitals (the relationship has a value of between 1,748 for the Azores and 4,98 for the Canary Islands. Although the access cost to Paris is much higher from the French ultraperipheral regions. The Portuguese regions have a lower access cost to Lisbon with relation to minimum wages, owing to the low minimum wages of this country.

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Other insular European regions have a much greater relationship, with values of between 3.55 (Notio Aigaio in Greece) and 7.98 (the Balearic Islands in Spain).

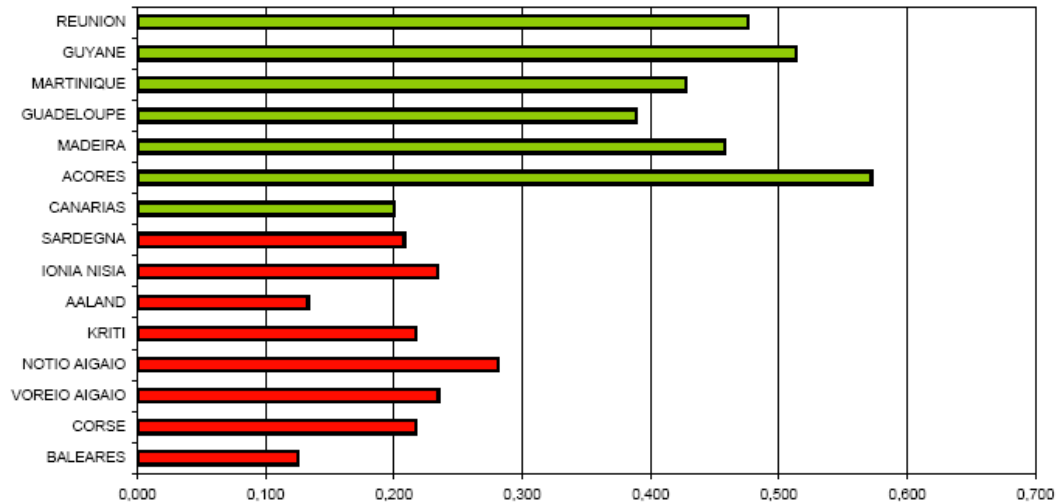


Figure 2-5. The Relationship between Minimum Wages and the Cost of Access to the Capital of the Mother Country from the Ultrapерipheral Regions and other Insular European Regions¹. Source: The Ultrapерipheral Regions of the European Union: Indicators for the Characterisation of Ultrapерipheralities (INTERREG III B, 2005)

- According to *GEOSPECS European Perspective on Specific Types of Territories* (ESPON, 2011), Regional insertion poses challenges: on one hand, neighbouring countries are mostly less developed countries, making them less attractive partners for trade while, on the other hand, there are linguistic and institutional barriers.

¹ The access cost for all regions in the European continent is equal to the access cost in car or ferry, calculated on the basis of journey time, the value of the time, and the operating costs of the vehicle. For insular and ultraperipheral regions this cost is the minimum between the cost of access in car and ferry and the cost for air travel. This indicator has been calculated only for regions of EU countries with a minimum wage, -data obtained from EUROSTAT databases and from the national statistical institutes of the mother countries of the ultraperipheral regions -.

3. Diagnosis of the Present State of the macro-region region

3.1 Emerging territorial seeds

Emerging territorial seeds in Guadeloupe

- Port Autonome de la Guadeloupe – container terminal or transshipment of large vessels
- SINERGÎLE: Pole of Competitiveness of Guadeloupe. The cluster aims to unite around these topics, up to private sector partners and the research world, in Guadeloupe and the Caribbean. The partners have already joined the cluster are divided into several areas: Renewable energy (solar, wind, geothermal, hydro), material, training centers, agencies and research laboratories, Engineering consultant, industrial.

Emerging territorial seeds in French Guiana

- Industrial plants for the transformation of fisheries products (two projects understudy led by CO.GU.MER and SAF)
- Project for setting up a port for the fishing fleet in the Municipality of Remire
- HARMONIE Project (cf. supra) in the gold mining sector and the setting-up of the Mining Technical Pole of Competence (“Pôle Technique Minier”) to support the structuring of the sector
- International Exportation Free Zone (project of the Chamber of Commerce since 1996) with the objective to create a free zone for re-exporting manufacturing products. This is a project within the framework of the renovation of the port of Dégrad des Cannes (ERDF supported)
- Project «Guiana, base avancée» aiming at attracting national sport teams for the preparation of the FIFA World Cup (Brazil, 2014) and Olympic Games (Brazil, 2016) that includes development of sport and tourism infrastructures (4 star hotels).
- Industrial Cluster «Maison de la Forêt et des Bois de la Guiana» in the wood sector
- «Centre européen de la biodiversité» (CEBIO) – European Centre for Biodiversity (cf. supra)
- Completion of the infrastructures of the University: for 2007-2013, the infrastructures for the research pole, the university library, student hostels and the university restaurant are planned. The medicine and health pole has still not been planned.
- Setting up several projects for developing renewable energies: biomass, wind energy (a farm project), and solar energy.
- Project of Internet connection from Macapa, capital of the Amazonian state of Amapa in Brazil (border with French Guiana) to Cayenne (supported by the INTERREG IVA Amazone cross-border programme and the French Development Agency). Other projects regard the potential of doubling the AMERICAS II cable to ensure a back-up service for French Guiana.

Emerging territorial seeds in Martinique

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- Innovation related projects and “soft” projects
- Support to the Technical Institute of the Banana crop
- Creation of a Technical Institute of tropical products
- Creation of a cluster on medicinal and aromatic plants
- Structuring of entrepreneurial clusters in traditional sectors such as fisheries, agro-food, tourism
- Support to research programmes on land pollution (chlordécone) • Infrastructure projects (including delivering of added value services)
- Setting up of logistic platforms for imports and exports (infrastructures, logistic services, training programmes)
- Modernization of water management and water treatment infrastructures and up-grading of waste recycling infrastructures
- Creation of a deep water port used as a platform for dispatching freight around the zone (project in competition with Guadeloupe)
- Rehabilitation and up-grading of the economic zone fostering the access to business premises and improving the services provided to companies (a study led by the Chamber of Commerce is in progress) o Collective public transport with the TCSP (tramway), already included in the ERDF operational programme (delay is expected).
- Creation of a second tourist pole in Saint-Pierre

Emerging territorial seeds in Réunion

- Re-positioning of the construction (BTP) sector in a perspective of sustainable development
- Development of a RTDI agro-nutrition-environment platform
- Structuring a Pole “Fisheries & Sea Resources”
- Funding an optical fibre cable Réunion-Madagascar (with connection to EASSY cable) to ensure a back-up
- Energy autonomy
- Harbour infrastructures
- Setting up a regional (Indian Ocean) ‘Health-Humanitarian platform of education, training and services

Emerging territorial seeds in Martinique

- Re-dynamising the tourism industry by creating a second tourist pole in Saint Pierre
- Setting up an entrepreneurial cluster programme to improve competitiveness and structure sectors
- Creation of a logistic platform for imports aiming at reducing production and transportation costs through

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- Supporting the innovation processes for the diversification of agricultural products and agro-industries/agro-food products towards an innovative agro-food cluster

Emerging territorial seeds in Canary Islands

- Renovating the tourism model
- Setting up and implementing a comprehensive cluster policy in a perspective of competitiveness
- Developing and implementing a programme of internationalisation

Emerging territorial seeds in Azores and Maderia

- A coherent and comprehensive energy strategy based on renewable energies with an integrated approach
- Development of the tourism sector through a systemic integrated approach
- International medical care cluster
- Sea cluster based on biotechnologies and natural resources
- Development and internationalisation of the University of the Azores
- Setting up a Technology Park

3.2 Main Territorial dynamics

Canary Islands

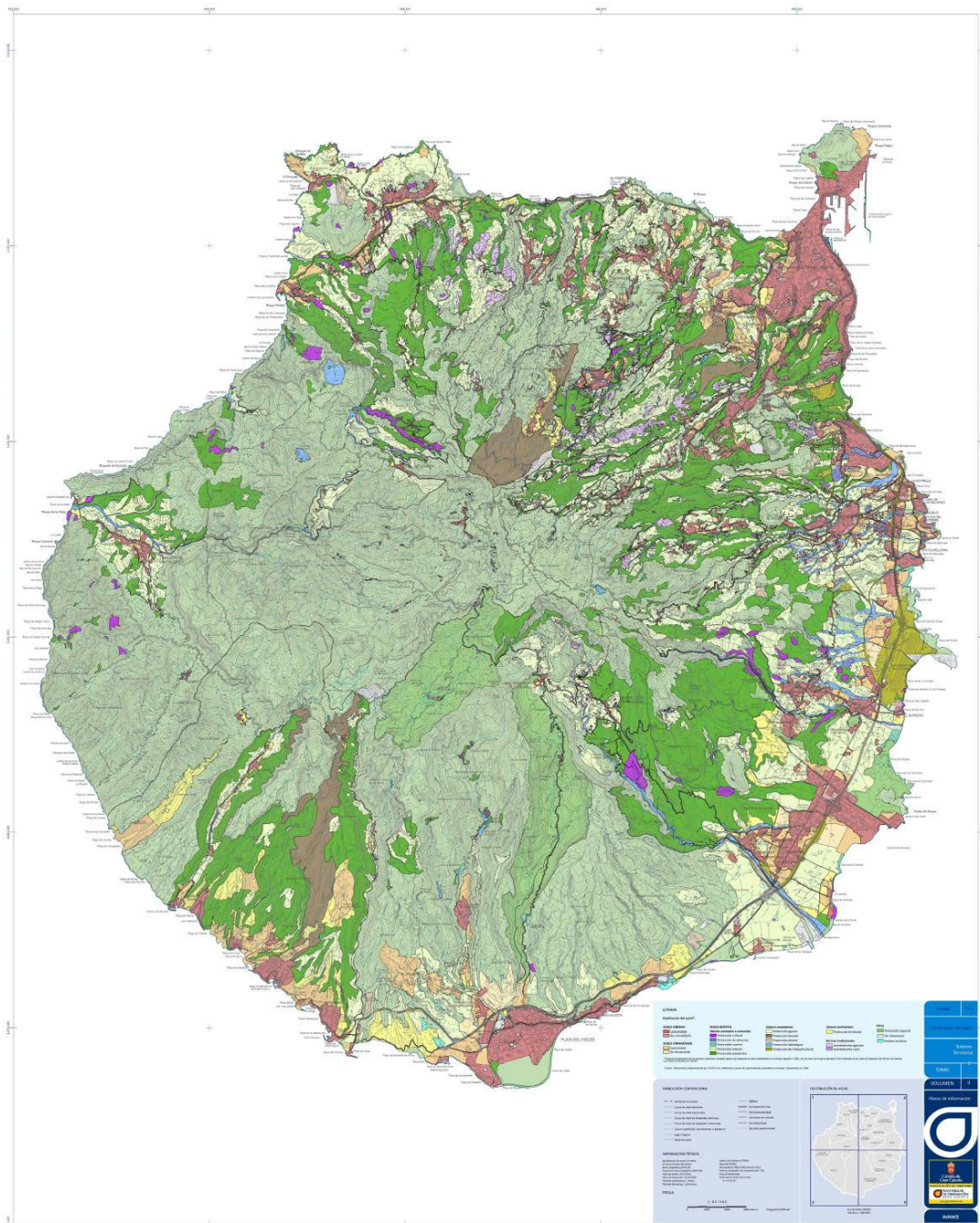


Figure 3-1. Land use in Gran Canaria. Source: Plan Insular de Ordenación Canaria, 2011.

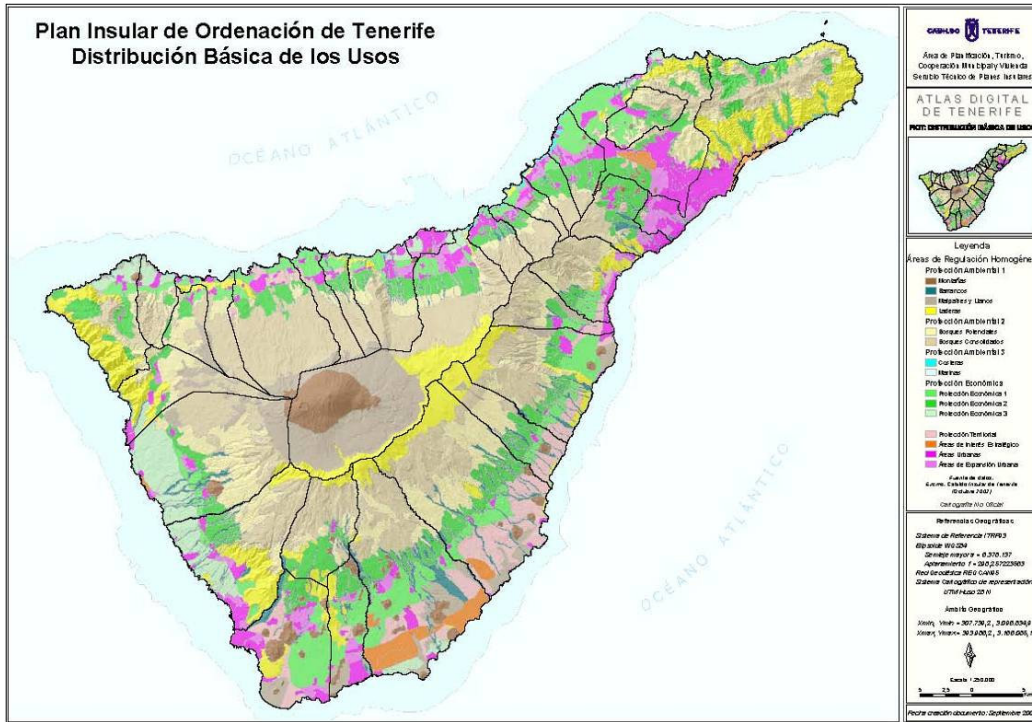


Figure 3-2. Land use in Tenerife. Source: Atlas Digital de Tenerife, 2010.

Região Autónoma dos Açores

According to *The New Azores Regional Plan as a tool to regulate the sprawled growth in the insular Portuguese territory* (Fernando Brandao Alves, Paulo Conceição, Joa Granadeiro Cortesao, Paulo Pinho, 2008), the territorial dynamics in Açores are listed below:

- The urban occupation in this archipelago was structured over two main aspects: the islands biophysics/climatic structure and the historical influence of the settlement processes. Relatively to the first aspect, the geological origin of the islands induced, considering some exceptions, in an altimetric profile characterised by cliffs or more gentle slopes, but that rapidly reach very high altitudes. The bioclimatic conditioning that high altitudes produce in the adaptation of the vegetal species and in the environmental comfort, leads to an obvious concentration of the urban settlements in the lower platforms under the 350m. Above this altitude the usual levels of rain and fog present constraints to the agricultural exploitation, with the exception of pastures. This is the reason why one always finds, in the majority of this archipelago's islands, an urban occupation concentrated in the seacoast fringes, and an interior territory, of altitudes above the 350m, which is mostly desert.
- Relatively to the second aspect, the colonist character of the settlement has given place to a parcelling process of the territory with agricultural aptitudes, structured by

the communication roads. This fact is associated to a built occupation structured, generally, nearby the roads, resulting on spread out linear agglomerations. This pattern identifies the mainly sprawled growth in the Azores territory. In parallel, the dependency on the sea as a privileged communication way in the historical process of colonization, leded to the human settlements establishment in the seacoast areas with better conditions to provide shelter to the harbours.

- Because in these places the activities profile is diversified, namely through the concentration of administrative and commercial activities as well as services, leaded, in some cases, to the creation of a set of agglomerations with a more compact character and a bigger dimension relatively to the linear agglomeration pattern

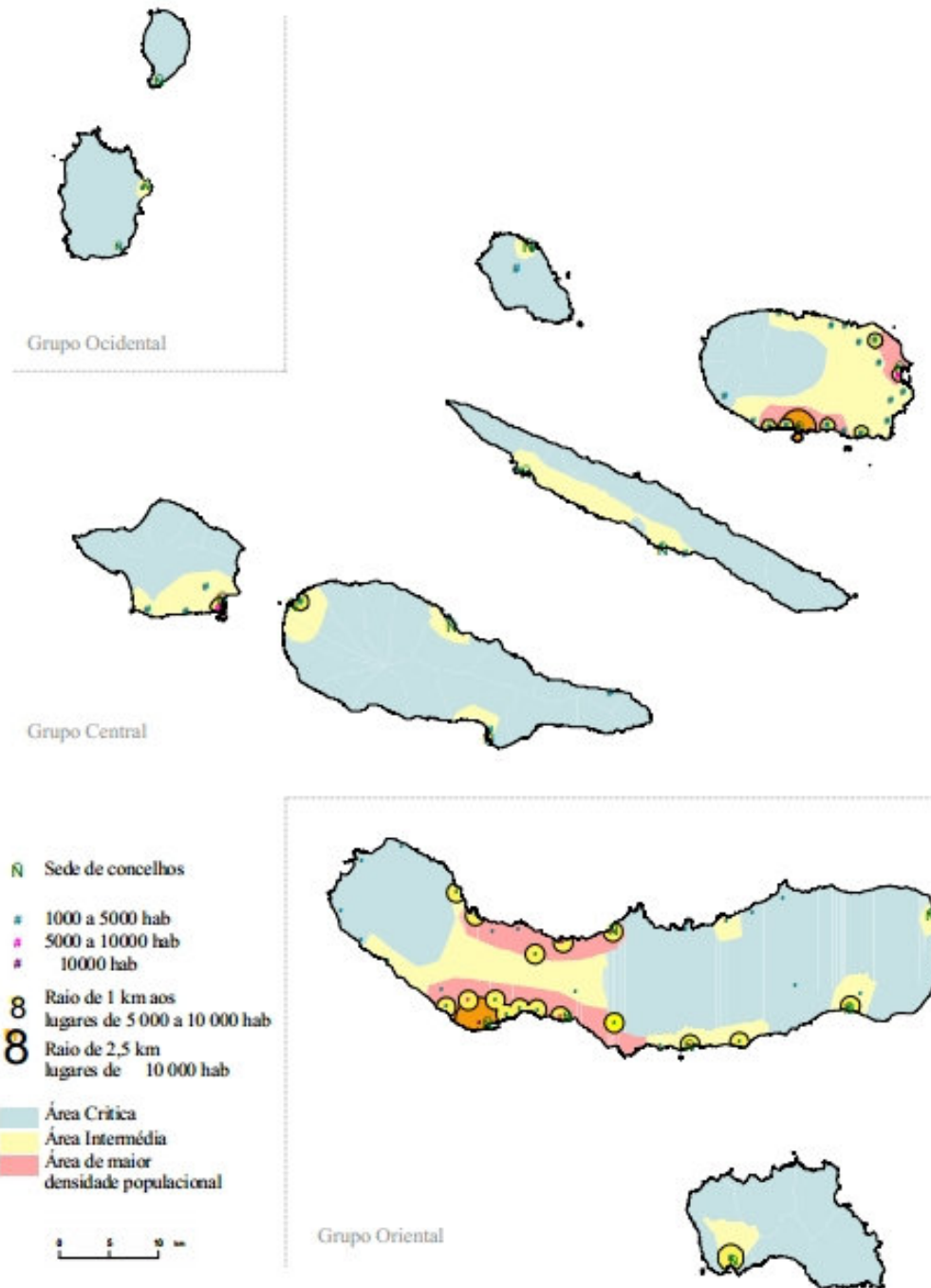


Figure 3-3. Settlement in Azores Autonomous Region. Source: *Programa Nacional da Política de Ordenamento do Território, 2007.*

Região Autónoma da Madeira

According to *Programa Nacional da Política de Ordenamento do Território (2007)*, the territorial dynamics in Madeira:

A ocupação do território na Ilha da Madeira permite verificar que a sua utilização urbana tem particular significado no litoral sul, de forma especialmente intensa na mancha contínua que se localiza entre a aglomeração do Funchal e extremo oriental da Ilha: esta forma de ocupação ocorre de modo mais disperso no restante território seja utilizando as localizações particularmente significativa a expressão territorial da ocupação relativa a espaços florestais e naturais, no âmbito dos quais as áreas protegidas em virtude da ocupação por Laurissilva adquirem manifestamente grande relevância e correspondem a potencialidades e a oportunidades muito significativas. A Ilha do Porto Santo conserva uma parcela importante do seu território com essa característica, mesmo verificando-se que a ocupação urbana adquire já algum significado. Salienta-se que as Ilhas Desertas e Selvagens se mantêm como reservas naturais.

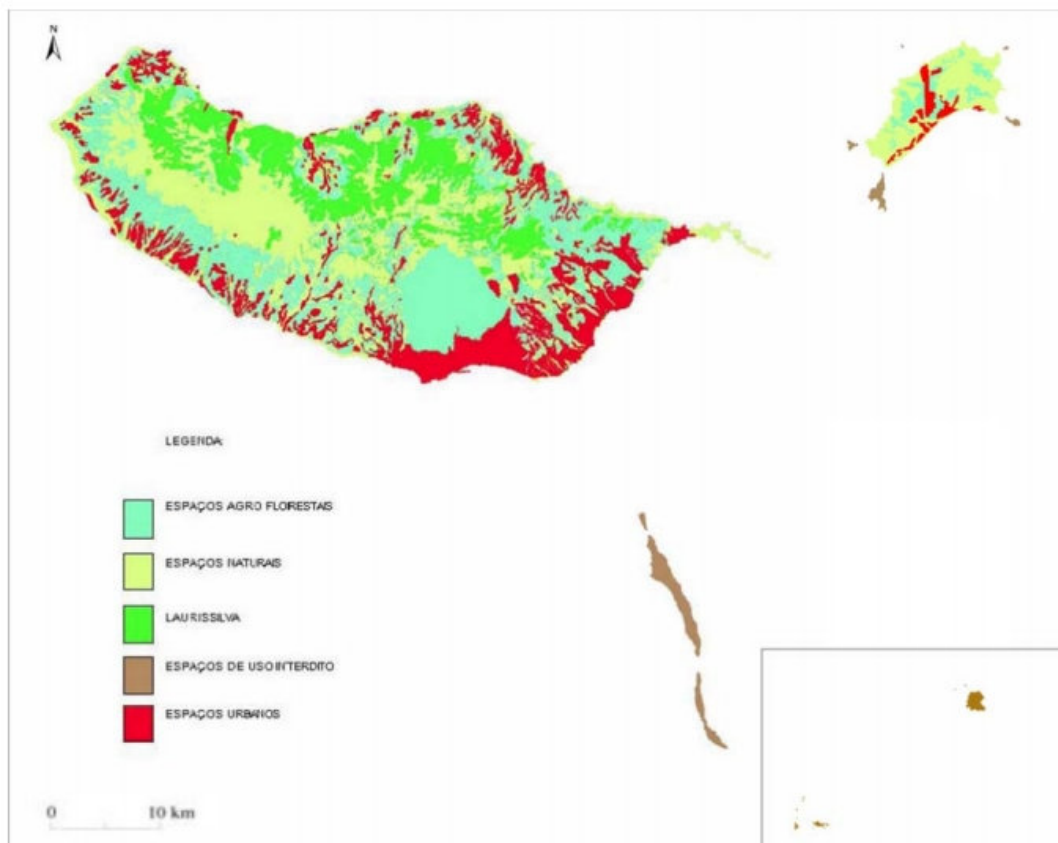


Figure 3-4. Settlement in Madeira Autonomous Region. Source: *Programa Nacional da Política de Ordenamento do Território, 2007*.

Départements d'Outre-mer (DOM)

According to *l'Observatoire du Littoral*, the patterns of land cover on the coast of Dom is characterized by:

- **Une pression humaine très forte dans les communes littorales.** En 1999, la population des communes littorales des Dom approche 1,5 million d'habitants. La densité de population est forte sur le littoral de Martinique, de Guadeloupe et de l'île de la Réunion, soit environ 300 hab./km². Elle est le reflet d'une densité de population élevée sur l'ensemble du territoire de ces 3 îles, amplifiée en bord de mer. Elle est supérieure à la moyenne littorale métropolitaine estimée à 270 hab./km². À l'inverse, la densité est très faible sur le littoral de Guyane : 3,5 hab./km².
- L'essentiel de la population des Dom se concentre en bord de mer. Ceci s'explique par le relief accidenté à l'intérieur des terres sur l'île de la Réunion (piton des Neiges – 3 069 m et piton de la Fournaise – 2 631 m), sur Basse-Terre (massif de la Soufrière – 1 467 m), en Martinique (montagne Pelée – 1 397 m) ou par la forte densité de la forêt humide et l'absence d'axes de communication en Guyane.
- Par ailleurs, la population des Dom a fortement augmenté durant la dernière période intercensitaire (1990 à 1999). Ceci est principalement dû aux soldes naturels très excédentaires dans ces territoires. La densité de population a augmenté de 21 hab./km² dans les communes littorales des Antilles et de 47 hab./km² à la Réunion.
- La pression humaine est donc très forte et s'accroît sur un territoire restreint, d'une haute valeur patrimoniale.
- **L'occupation du sol des départements d'outre-mer suivant la distance à la mer:**
 - o L'île de la Réunion. Le taux d'artificialisation du littoral réunionnais est le plus important des 4 Dom. Les territoires artificialisés couvrent 28,2 % des terres situées à moins de 500 m de la mer et encore plus de 10 % entre 2 000 et 5 000 m des rivages. En dehors des cultures entretenues - canne à sucre, arbres fruitiers, ou vanille -, les terres agricoles représentent de faibles surfaces. Les cultures entretenues sont importantes dans les plaines littorales, entre 500 et 5 000 m de la mer, puis elles régressent au profit de la forêt à mesure que le relief s'accroît. Les zones humides sont peu importantes au regard des autres Dom et ne représentent que de faibles surfaces. Enfin, on note une importante rupture de l'occupation du sol à partir de 5 000 m de la mer. À partir de cette distance, les territoires artificialisés et agricoles ne représentent plus que de faibles surfaces et les espaces naturels dominent en occupant plus de 80 % de l'espace.
 - o La Guadeloupe. Le taux d'artificialisation des rivages de Guadeloupe est sensiblement le même qu'en Martinique : 16,5 % à moins de 500 m de la mer. Il diminue progressivement en s'éloignant de la mer et n'est plus que de 2,6 % entre 5 000 et 10 000 m des côtes. On note une nette rupture de l'occupation du sol à partir de 5 000 m de la mer. De 0 à 5 000 m, la part des territoires agricoles augmente progressivement, les cultures entretenues dont la canne à sucre étant de plus en plus importantes, alors

que les zones humides, les mangroves et la végétation basse régressent. De 5 000 à 10 000 m de la mer, la forêt couvre 67,6 % du territoire et l'agriculture ne représente plus que 24,9 % du territoire contre 55,8 % entre 2 000 et 5 000 m de la mer.

- o La Guyane. L'occupation du sol du littoral guyanais est différente des autres Dom. Les espaces naturels au sens large (forêts, zones humides, surfaces en eau, plages et végétation basse) couvrent plus de 95 % du territoire quelle que soit la distance à la mer prise en compte. A contrario, les terres agricoles et les espaces artificialisés couvrent des surfaces très faibles. En bord de mer, les zones humides, plages et dunes dominent. En s'éloignant des rivages, les marais et la forêt prennent une place de plus en plus importante alors que les espaces typiquement littoraux (mangroves et plages) régressent.

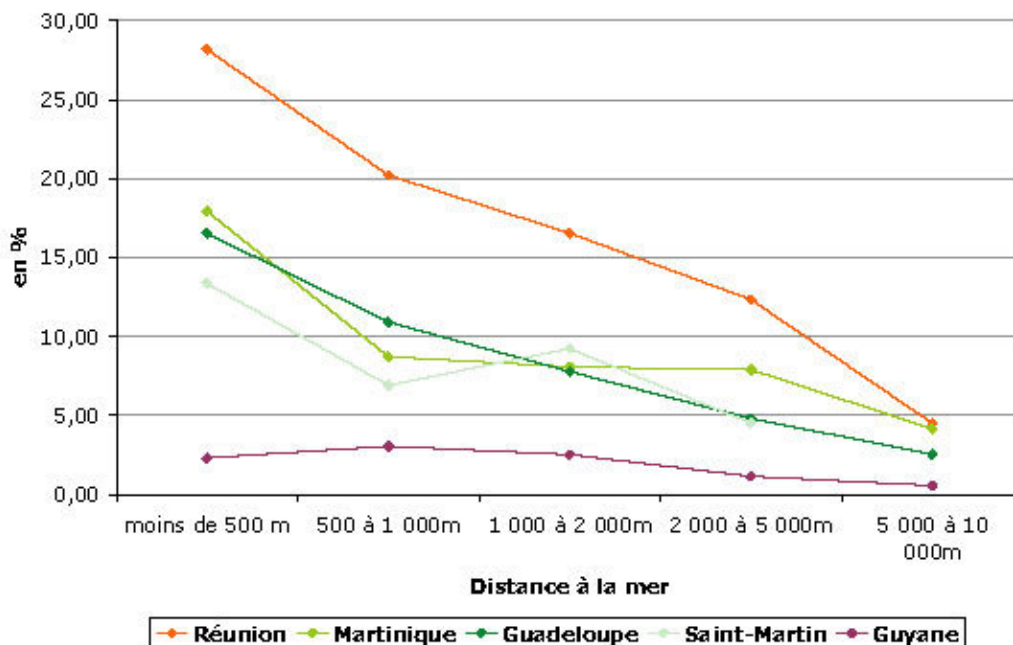


Figure 3-5. Coastal artificialisation of Dom depending on the distance to the sea. Source: Occupation du sol sur le littoral des Dom, Observatoire du Littoral.

Occupation du sol dans les différentes zones tampons entre -10 000 m et +10 000 m du littoral de Martinique

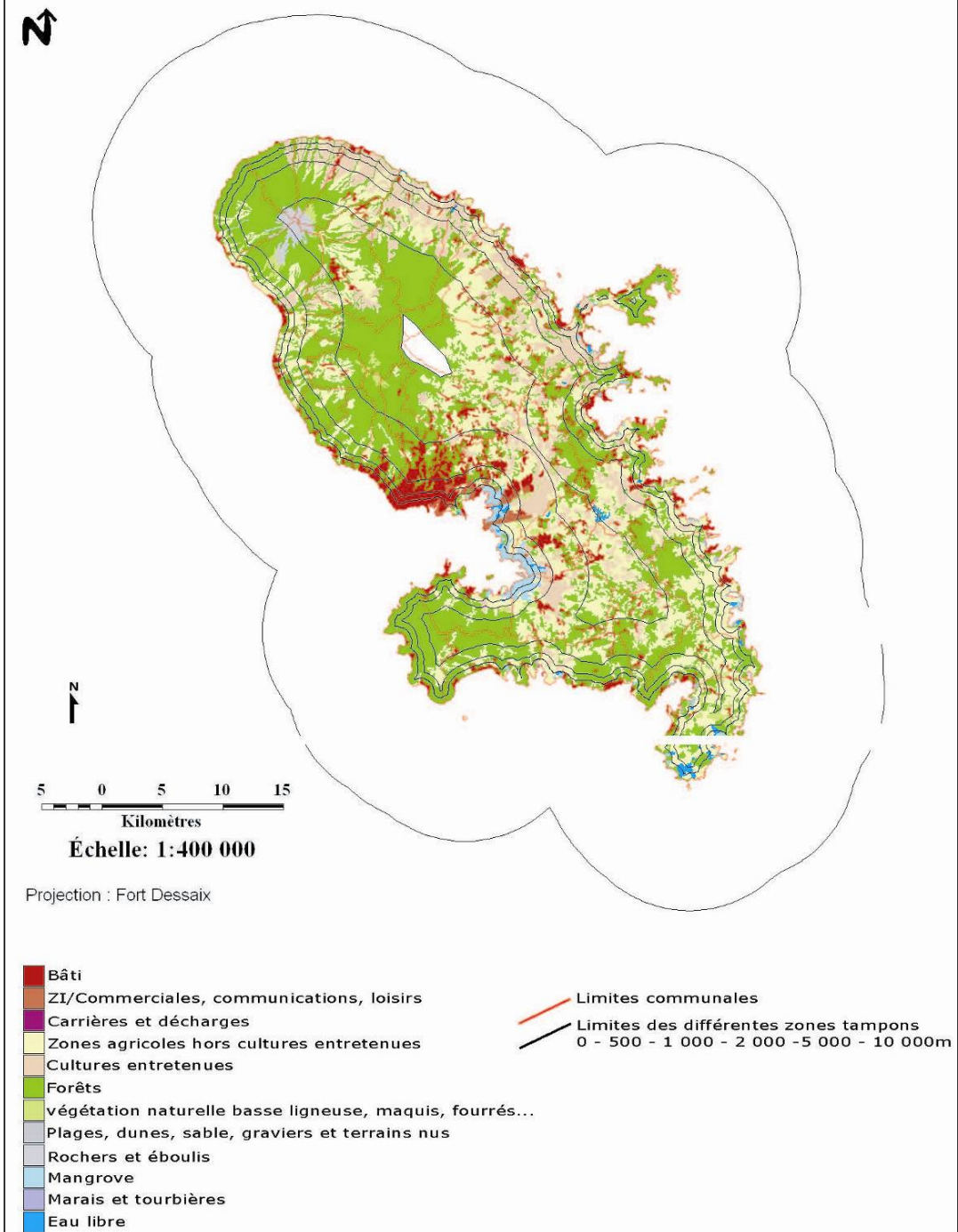


Figure 3-6. Land cover along the coast of Martinique. Source: Occupation du sol sur le littoral des Dom, Observatoire du Littoral.

Occupation du sol dans les différentes zones tampons entre -10 000 m et +10 000 m du littoral de Guyane

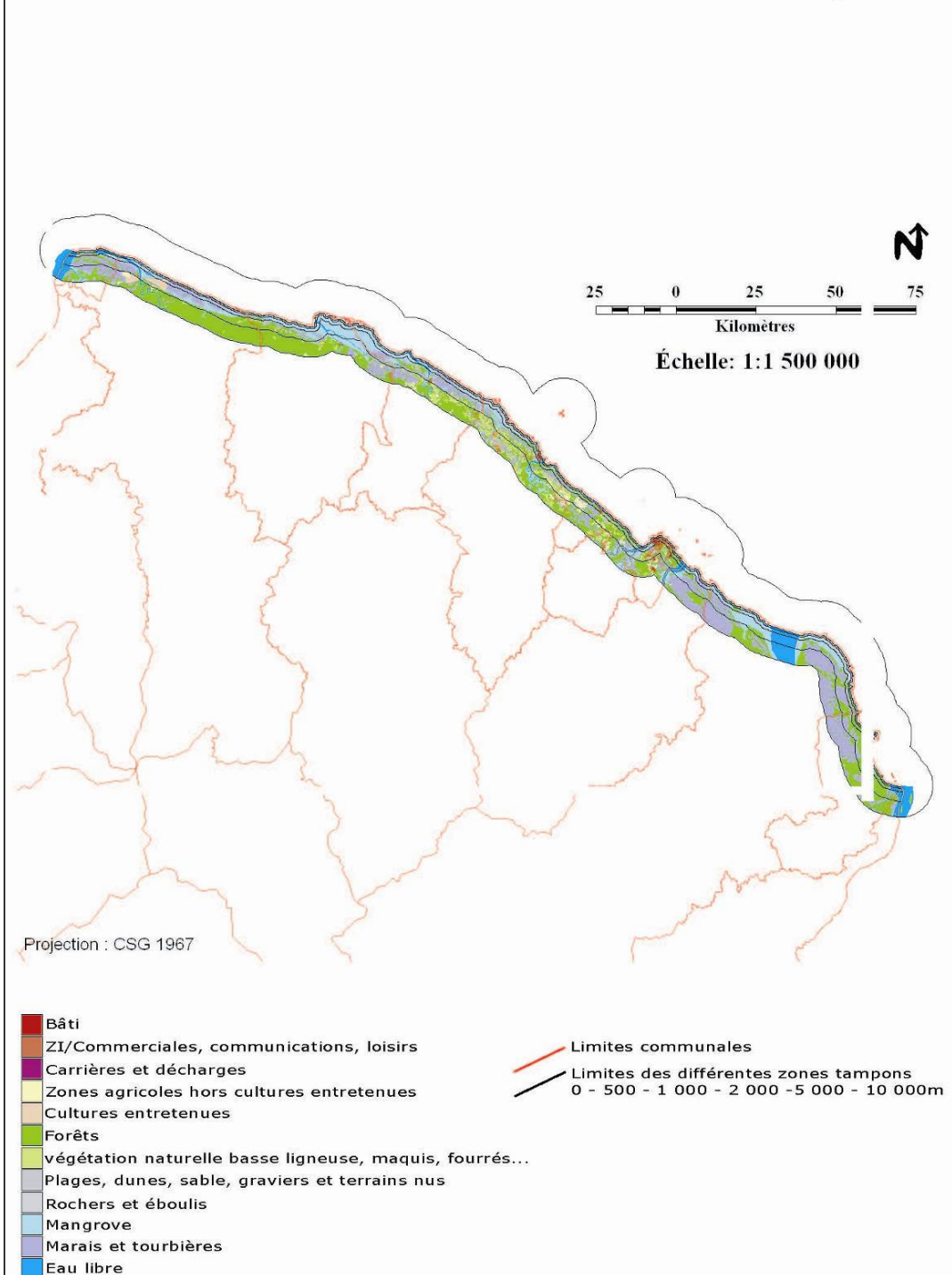


Figure 3-7. Land cover along the coast of Martinique. Source: Occupation du sol sur le littoral des Dom, Observatoire du Littoral.

Occupation du sol dans les différentes zones tampons entre -10 000 m et +10 000 m du littoral de Guadeloupe

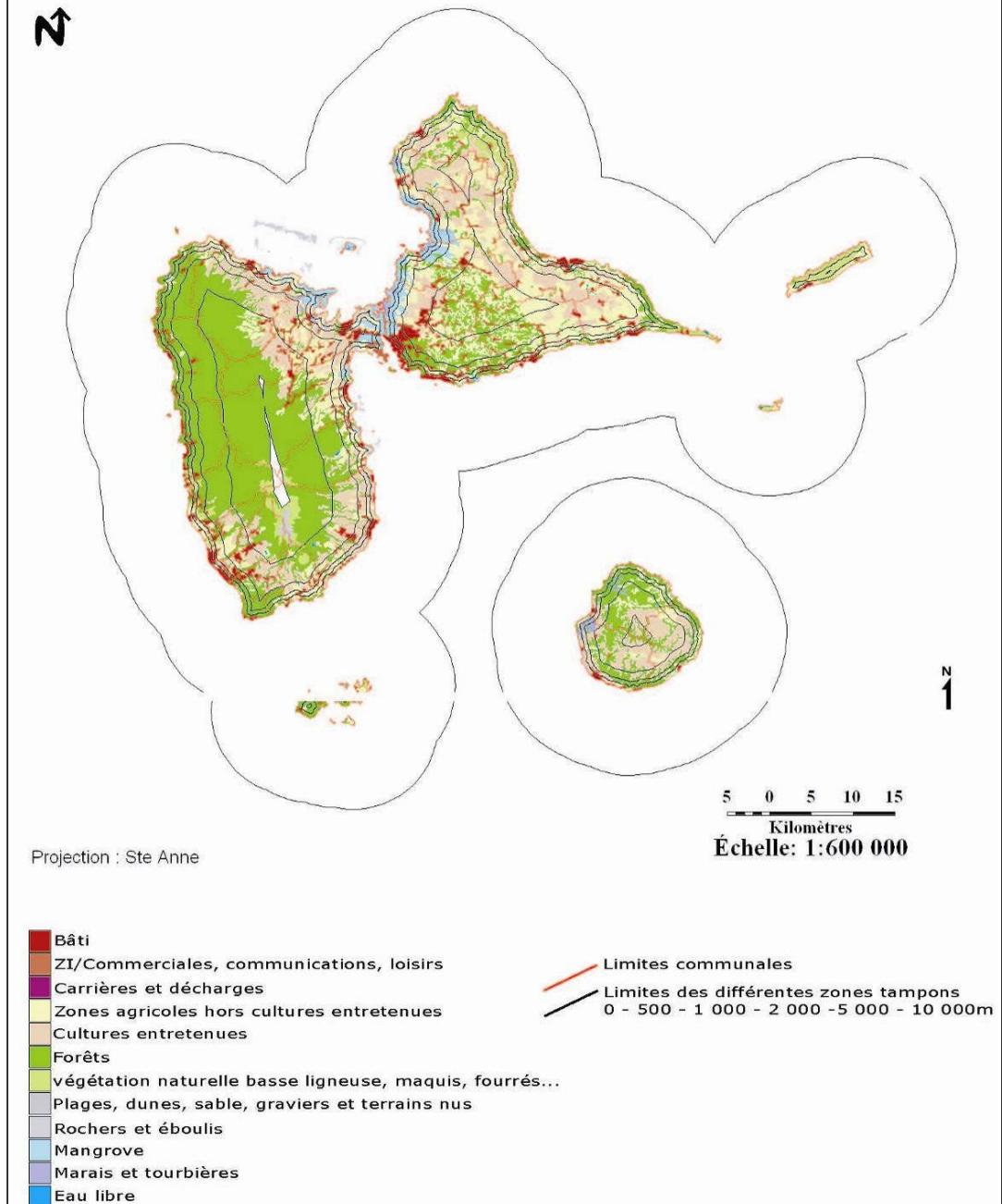


Figure 3-8. Land cover along the coast of Guadeloupe. Source: Occupation du sol sur le littoral des Dom, Observatoire du Littoral.

Occupation du sol dans les différentes zones tampons entre -10 000 m et +10 000 m du littoral de la Réunion

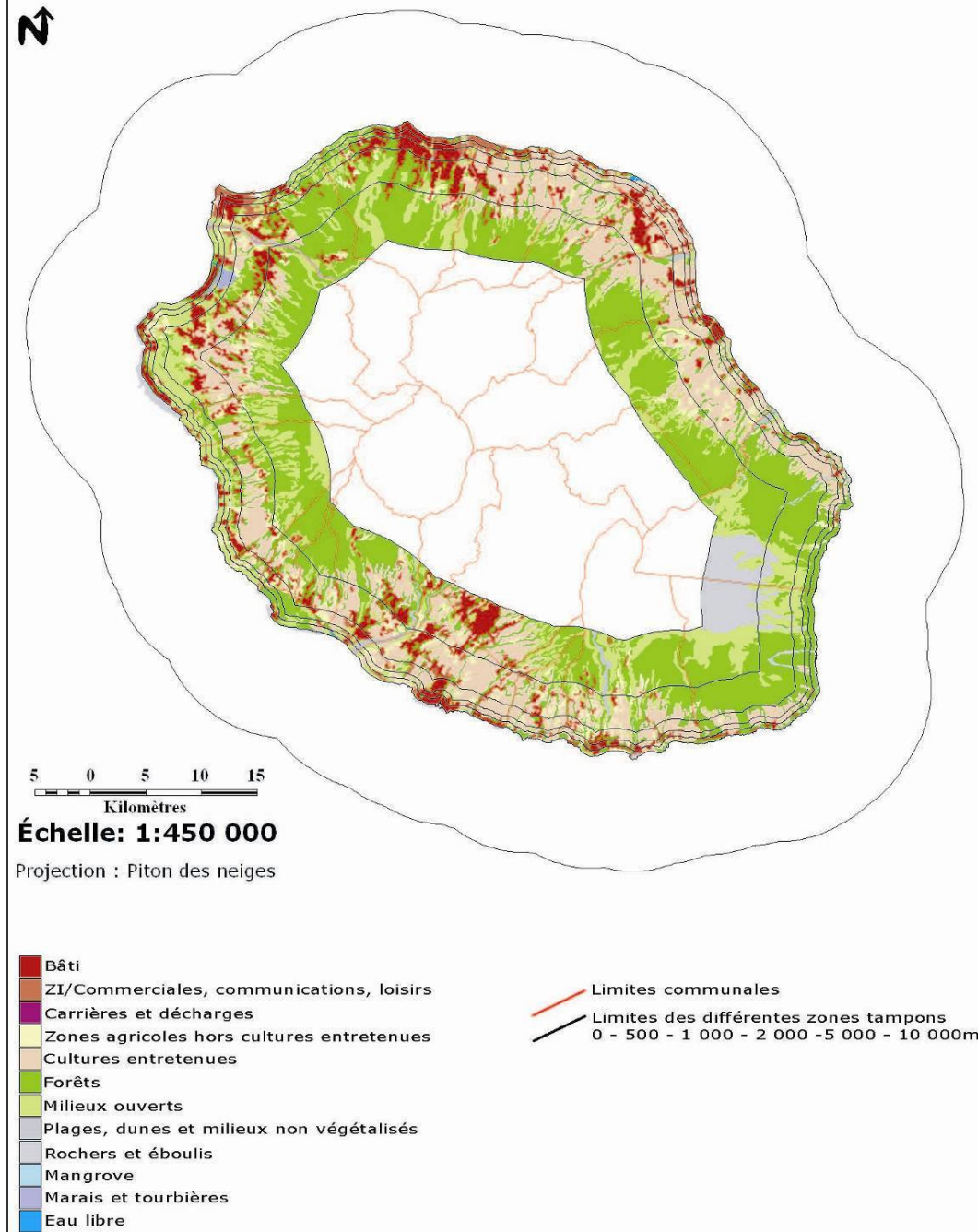


Figure 3-9. Land cover along the coast of Guadeloupe. Source: Occupation du sol sur le littoral des Dom, Observatoire du Littoral.

3.3 Strengths, Weaknesses, Opportunities and Threats (SWOT analysis)

According to Growth Factors in the Outermost Regions (*European Union, Regional Policy, 2009*), the main handicaps of the Outermost Regions are presented below:

- **ORs share most of the features of the small economies:** small size of the domestic market, greater tendency to monopolistic structures in production and trade, scarce domestic natural resources and labour supply, narrow domestic output as well as little diversification, inability to influence international prices, small export base and high import ratio to GDP, high degree of structural openness to trade, higher transport and communication costs of islands or land-locked territories etc. Such features have implications for the economic performance of small economies, in line with the endogenous growth theory which identifies key drivers such as private investments, human capital, sector specialization and competitive advantage, openness to trade, as the necessary conditions for growth.
- **Remoteness, insularity and small size.** ORs are far from the main European markets and scarcely integrated even with their mainland; tourism and agricultural products link the local economy with mainland EU. Remoteness has a negative impact on most sectors because of the transport costs, which affect mobility of factors (labour and capital), trade and in general all forms of integration with the EU. To deal with remoteness however in the past transport infrastructures have been built and a mildly positive trend in the maritime transport of freight can be observed in the last decade in all ORs except the Portuguese Islands.
- **Air transport of freight increased in the late 90ies but then remained stable.** At the same time air transport of people increased substantially almost everywhere thanks also to the opening of low cost routes. These trends helped to mitigate the isolation of the regions. Apart from Guiana, the ORs are archipelagos of small islands. Accessibility issues affect ORs not only in their trade and exchanges with the EU but also within their geographic areas and within the same archipelago.
- **Small size of the domestic market** is an economic disadvantage which discourages private investment and produces a tendency to develop monopolistic structures and higher costs for the consumers for many goods and services, lowering the standard of living and penalizing the competitiveness of the regions. Remoteness however does not affect Tourism, a sector for which the ORs' environmental and cultural diversity can be a competitive advantage.
- Tourism is particularly developed in Madeira and the Canary Islands but less in the Azores. In the French ORs, the hosting capacity remains underutilised and the sector has not been able to pull the local economic growth. The data on tourism indicate that the sector's impact on the development of ORs differs greatly in size and performance.
- **Difficult topography and climate.** The climate of these regions varies from maritime (e.g. the Azores) to tropical (e.g. Guadeloupe, Martinique and Réunion), to equatorial (Guiana). Most ORs are of volcanic origin and are characterised by very diverse relief from steep to flat, sometimes within the same region. Most of the social and economic life is concentrated in the coastal areas which are particularly exposed to extreme climatic events. Environmental risks are therefore high and the consequences of natural events such as floods, droughts etc. can be dramatic (e.g.

the flood in Madeira in 2010). Furthermore, ORs must deal with other natural risks such as earthquakes, cyclones and tsunamis. Availability of drinkable water and problems linked to waste disposal are amongst the most important issues. The population density is very high in all ORs except Guiana and the Azores. It ranges from 260 inhabitants per square km in Guadeloupe and the Canary Islands to 350 in Martinique, while the EU27 average is approximately 114. The weight of agriculture, fishing and forestry in total gross value added provides an indication of exposure to climate change risks such as increased frequency of droughts with negative impacts on crops, reductions in the fish stocks etc. From this point of view, the Azores are very vulnerable but the issue is also relevant in the other ORs insofar as they aim at strengthening the productivity of their agricultural sector to lessen the external dependence on food supply.

- **Economic dependence on a few products.** The traditional economic activities in the ORs are livestock farming (meat and dairy products), fishing, agricultural products such as sugar cane and rum, bananas, tomatoes and potatoes, plant and flower cultivation etc. On average agriculture, forestry and fishing generate less than 5% of gross value added but the traditional economic activities are important for the regional cultural identity, for the preservation of the landscape and tourist attraction and for their employment intensity. On average 80% or more of gross value added is generated by the service sector and over 15% is produced by industry. The Azores are the only exception with nearly 15% of gross value added generated in agriculture, forestry and fishing, while the service components account for approximately 70% of the total. Within the service sector, the share of public administration is particularly high in the French ORs. The structure of output and employment indicates a dependency on food imports and income transfers in most regions.

According to Growth Factors in the Outermost Regions (European Union, Regional Policy, 2009), the potential of the Outermost Regions are presented below:

- **Unique features and opportunities.** Despite their handicaps, ORs benefit from specific drivers based on their endogenous potential. They have exceptional biodiversity and marine ecosystems, good potential for the development of renewable energies and leading-edge agro environmental research; they can act as laboratories for studying and mitigating the effects of climate change. Moreover, they belong to the European Union and benefit from the EU funds as well as from the mainland support; they have a better skilled workforce, public services, and more advanced know-how than the other small islands or regions of their geographical area. This works as an opportunity to develop trade but also as a competitive obstacle since the cost structure is much higher than that of the other islands.
- **Growing and catching up economies.** The potential of ORs materialized in a fast growth experienced during the last fifteen years. The real GDP increased at a substantially higher rate than in continental Europe (except in Guiana). The high rate of growth explains their catching up speed, and is mostly due to the size of public investments and to rising private consumption acting as drivers of growth.
- **Positive population dynamics:** further growth potential and pressure on the labour market.

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- The ORs' demographic features are characterized by a mildly positive population dynamics, lower than EU27 average growth (+0.4% per year in the period 2000-2007), except in the case of Guiana (+4%) and, to a lesser extent, the Canary Islands (+2.3% in 1998-2008). The dependency ratio is below the EU average (38.1%) especially where the combination of natural growth and mortality is "favourable" (e.g. the Canary Islands, Réunion, Madeira and the Azores).

<p>Strengths</p> <ul style="list-style-type: none"> High-quality agricultural produce Tourism, key sector Quality of life / Way of life/ Style of life Tropical climate Good inter-island links Positive demographic balance 	<p>Weaknesses</p> <ul style="list-style-type: none"> Small size of the market affects the competitiveness Remoteness (from EU) and insularity Higher cost of transport High prices of import goods Fragmented territory and difficult access due the topography Dependency on tourism
<p>Opportunities</p> <ul style="list-style-type: none"> Ideal location for experimentation to combat the effects of climate change Remarkable biodiversity and wealth of marine ecosystems Scientific portals for their geographical areas Renewable energies (wind, tidal and wave). Research and hi-tech industries Project of port infrastructures for developing services (logistics, naval repair) Development of transport and trade with African countries Creating more technology-based and/or innovation-based jobs (aquaculture, renewable energies, biotech) 	<p>Threats</p> <ul style="list-style-type: none"> Transportation costs: internal interisland and with third countries Economic dependence on a few products (bananas) Water scarcity Climate Change effects (flooding, coastal erosion) Lost of biodiversity Change in EU and national regulations concerning the Outermost Regions

4. Relevant past evolutions and trends by sectors

4.1 Demographic and socio-cultural aspects

According to *The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality* (INTERREG III B, 2005):

- Together with the peripheral Nordic regions, these regions are the most isolated in the EU29 group with a population of below 5 million inhabitants at a distance of 500 km; while on the continent the population is between 20 and 90 million inhabitants.
- A high population density (above 200 inhab/km²), Martinique being the most densely populated region (330 hab/km²), followed by Madeira (310 hab/km²), Reunion (250 hab/km²), the Canary Islands (220 hab/km²), Guadeloupe (210 hab/km²), and the Azores (100 hab/km²); however the region of Guiana has an extremely low density (1.6 hab/km²). Other EU29 regions (EU15, EU10, EFTA, Bulgaria and Rumania) generally have densities which on average are above 100 inhab/ km².
- Growth of the younger population (in terms of the population of between 20 and 29 years of age in the year 2020 with respect to the year 2000) for the Canary Islands (0.601), Madeira (0.753) and the Azores (0.876). These regions have values above the regions of Martinique (1.012), Guadeloupe (1.058), Reunion (1.110) and Guiana (1.584). The average in Europe is between 0.60 and 1.20.

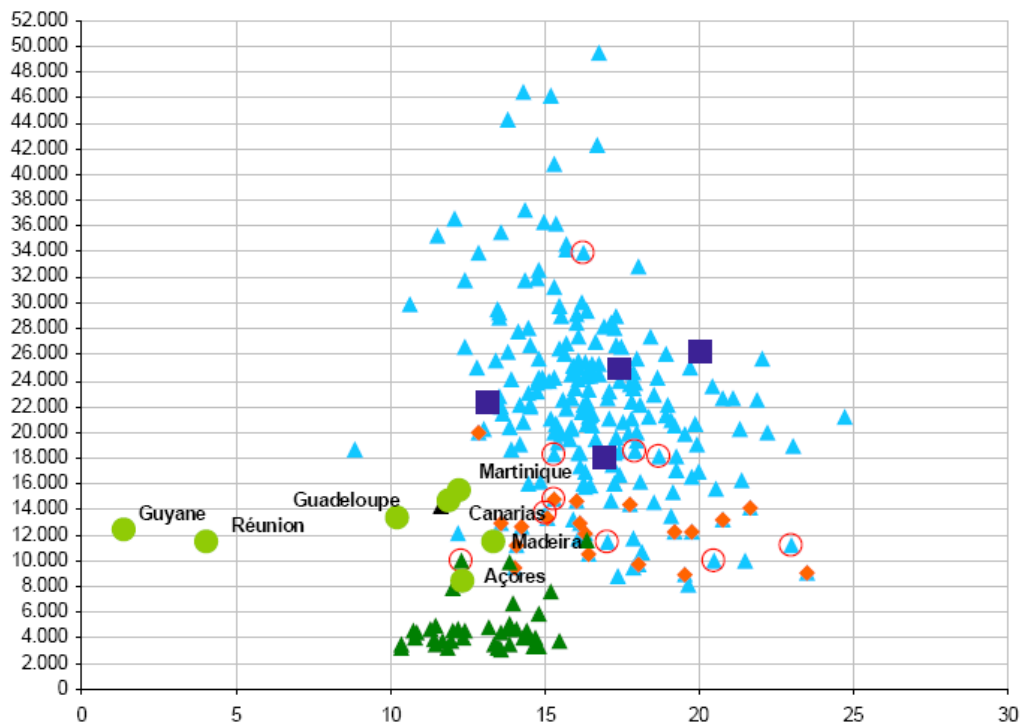


Figure 4-1. The Relationship between the Population over 65 (in %) and the Per Capita GDP (in euros/inhabitant/year). Source: *The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality* (INTERREG III B, 2005).

- The birth-rate in the Canary Islands (1.29) and Madeira (1.41) is below that of the rest of the EU29 regions which have values of above 1.5; only the Azores (1.67) exceeds this value. The peripheral Nordic regions have a birth rate of between 1.490 (Oevre Norrland) and 2.04 (Pohjois Suomi).
- A low percentage of the population with higher education (values below 5%), in particular in the Azores (5%) and Madeira (5%), and with the exception of the Canary Islands (32%). The majority of the EU29 regions have percentages of between 10% and 35% of the population with higher education.

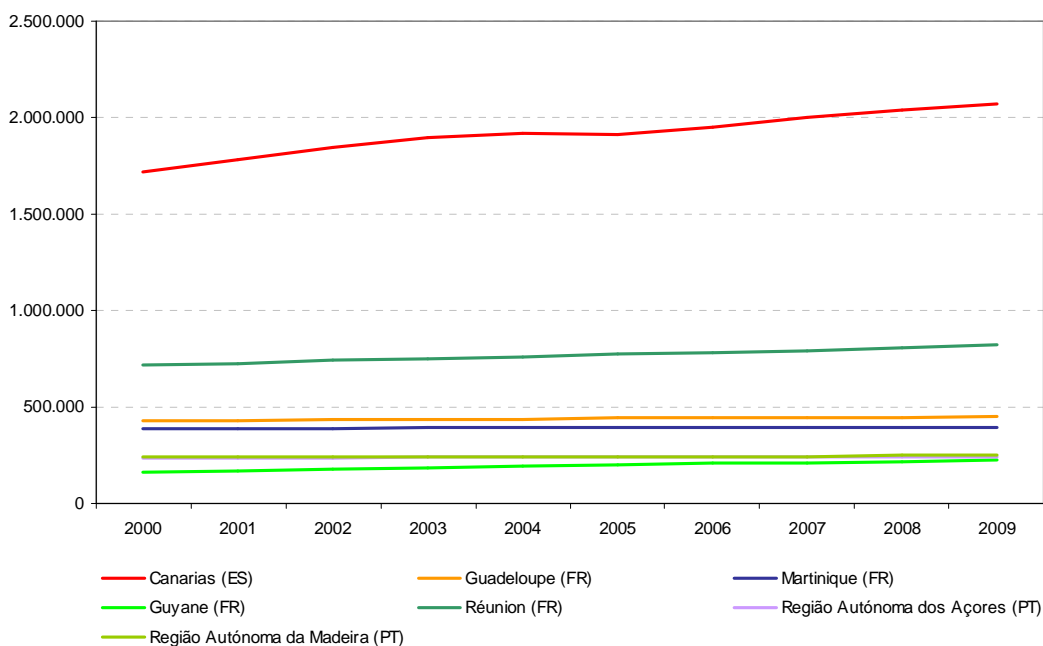


Figure 4-2. Population growth in outermost regions, 2000 - 2009.
Source: EUROSTAT, 2011

4.2 Economy, trade, foreign investments

According to *Growth Factors in the Outermost Regions* (European Union, Regional Policy, 2009), traditional sectors of the outermost regions are agriculture, fishery and tourist services:

- A high proportion of the workforce of most ORs is employed in agriculture, this fact means that they also design their unique environmental and cultural landscape and to a varying degree assure an export good and a supply for the local food market. Given the accessibility and isolation of these regions, agriculture cannot be progressively dismissed if the ORs want to lessen the local dependency on imports and to preserve the landscape.

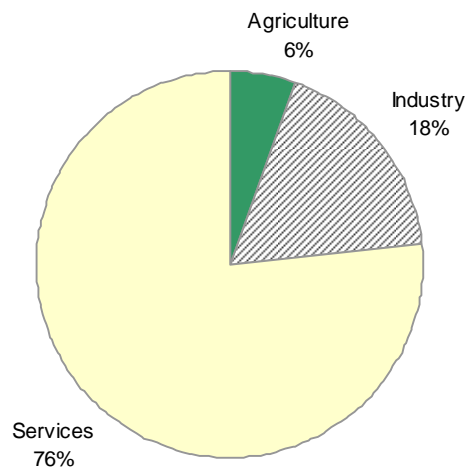


Figure 4-3. People employed per sector in OR's. Source: The Impact of Tourism on Coastal Areas: Regional Development Aspects,

- Tourism has a relevant potential in most ORs and in some of them is a key sector for employment and external trade; in the ORs tourism is based on an exceptional natural and cultural environment. The conflict between tourism and environmental preservation of the coastal area and of the green spots need to be seriously tackled by these regions as a necessary condition for making tourist development sustainable in the long term and allow the take off of alternative tourism products. Although tourism is well developed, its products are still traditional and suffer from increasing external competition; its potential is therefore based on a product differentiation which should increase the quality, the value for money, and should allow the tourist supply of the ORs to occupy new niches of specialized tourism, at present unexploited (eco and environmental, social, cultural and health tourism).

According to *The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality* (INTERREG III B, 2005):

- The active population figures for the ultraperipheral regions (with values comprising between 40% and 50% of the active population) is comparable to that of the rest of the European regions (between 35% and 55%), and in some cases below that of the EU10 Objective 1 regions. Madeira is notable as it has one of the highest active populations within these regions (with 48% of its population active) comparable to that of some of the Nordic peripheral regions, while in Guiana (37% active population figures) and Reunion (38% active population figures) the active population is at the lowest levels.

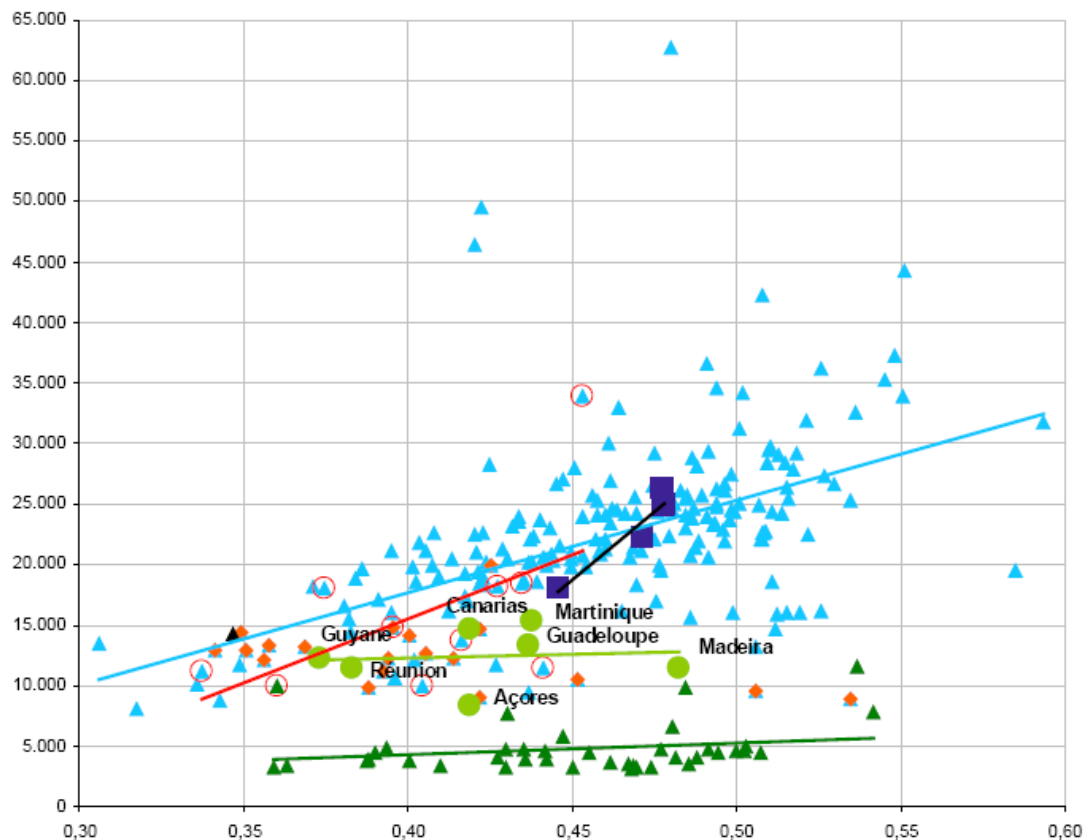


Figure 4-4. The Relationship between the Active Population/Total Population (1999) and the Per Capita GDP (in euros/inhabitant/year). Source: The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality (INTERREG III B, 2005).

- Percentages of population employed in the tourist sector of above 4%: The Canary Islands (12%) takes the first place, followed by Madeira (10%) and the Azores (5%). For the majority of the EU29 regions, the percentage of employees in this sector is inferior (to the order of 1% to 6%).
- Between 4% and 12% of the population are employed in agriculture while the Non-Objective 1 (UE15) regions have around 3% of their employed population working in the agricultural sector.
- High unemployment figures, even highly superior to those corresponding to the majority of other regions. Reunion has the highest unemployment figure (33.3%), followed by Guadeloupe (29%), Martinique (26.3%) and Guiana (20.5%). The Canary Islands, the Azores and Madeira have values in common with the majority of the EU15 regions (between 2% and 15%).
- Per capita income (GDP) medium-low (values of between 8,000 and 15,000 euros/inhabitant/year) with respect to other European regions (15,000 and 35,000 euros/inhabitant/year); are only higher than the per capita income of the Objective 1 regions (below 5,000 euros/inhabitant/year) which correspond to the 10 new member countries of the EU. The Azores have the lowest GDP (8,337.90

euros/inhabitant/year) followed by Reunion (11,417.20 euros/inhabitant/year) while the highest GDP of these regions corresponds to Martinique (15,403.70 euros/inhabitant/year) and the Canary Islands (14,686.20 euros/inhabitant/year).

- The average number of Internet users in relation to the rest of the European regions. With the exception of the Azores (11.4 users/100 inhabitants) and Madeira (13.7 users/100 inhabitants), the regions of Guadeloupe, Martinique, Guiana and Reunion coincide in the number of internet users per 100 inhabitants (22.6 users/100 inhabitants).
- The use of new technologies by companies (measured in terms of the proportion of companies with their own website) is around 40% of companies, a percentage which is generally above that of EU10 Objective 1 regions, EU 5 Objective 1 regions, and the values of some non-peripheral insular regions. The Azores (32.2%) and Madeira (35.3%) have a lower proportion of companies with their own website with respect to the rest of these regions (Guiana 45.3%, Reunion 45.3%, Martinique 45.3%, the Canary Islands 44.7% and Guadeloupe 45.3%).
- The ultraperipheral regions of the Azores (580,218 overnight stays), Reunion (1,081,000 million overnight stays) and Madeira (4,961,781 million overnight stays) do not exceed 5 million overnight stays; while the Canary Islands stands out as the most frequented European region with a total number of 9 million overnight stays.
- In Maderia, agricultural sector has an important role in preserving the landscape and the ecological equilibrium. The banana is one of the main agricultural products. Tourism is an important and expanding activity in the archipelago.
- In Canary Islands, The geological features of the islands constrain the development of the agricultural sector. Production of banana and tomato, raising cattle and fishing are the main activities in the primary sector. These productions have an important role in maintaining the populations in rural areas and therefore preserving the landscape and the environmental equilibrium. The service sector is well developed. Tourism plays a crucial role in the economy of the archipelago.
- In Martinique, the production of banana for export is very important to the island.
- All outermost regions are characterized by a small local market size, both in terms of population and purchasing power. This small size, when combined with high trade costs, implies that many products are not sold in that market.

4.3 Internal territorial specificities/ disparities

According to *The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality* (INTERREG III B, 2005), the main structural similarities which characterise the regions are:

- Higher living standards in their respective geographic areas, which has been a factor of attraction but also a source of higher costs and lack of competitiveness.
- A productive structure based on services and on construction while the manufacturing sector is weak and subsidized. The excess weight of the public sector in total employment leaves little room for entrepreneurial spirits and social dynamics to develop new emerging sectors.

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- A large flow of transfers from the mainland and the EU have sustained private consumption and disposable income (These transfers vary and in some ORs may well be around 30 to 40% of the GDP).
- The lack of qualified manpower and of specialized skills acts as a self-perpetuating mechanism preventing the development of productions and services which need more intensive knowledge productions to counterbalance the remoteness and size handicaps. Moreover, this mechanism tends to encourage the brain drain.
- The lack of regional integration has created self centred, protected and dependent economies which cannot develop their potential unless these main socio economic and structural factors are radically changed.
- Population needs and social standard aspirations are rising faster than domestic production.
- Environmental services for water as well as waste disposal and treatment are a common problem; at the same time there has been a greater use of renewable energies, but significant room for increasing their weight and lessening their dependence remains.
- Small islands (with the exception of Guiana) are very fragile from the environmental point of view given the scarcity of land and the conflict over its use for different functions, from residence to production, from infrastructure to agriculture. All functions are concentrated in the small coastal strips and flat portions of land which are congested and over utilized.
- These common environmental and land-use features require special attention to sustain the development patterns which limit the boundaries for development, and require a careful exploitation of the endogenous resources, within strict land use regulations, which at present are not adequate to assure sustainability.
- The differences among the ORs are not less relevant than their similarities; they are mainly structural and concern the degree of autonomy in external trade and their ability to develop internal specializations.
- The degree of dependence on imports is much higher in the French than in the other ORs, as a result of the past heritage of colonial economies on the one hand and of a long term orientation toward self-sufficiency on the other. The coverage of import with export varies from 6% in the French regions to more than 50% in the Portuguese and Spanish ORs which also have a larger tourist sector except for the Azores.
- The degree of self-sufficiency in local food consumption in the Canary Islands, Madeira and the Azores is much larger than in the other regions and guarantees greater economic independence and lower prices for low income brackets. The Spanish and Portuguese ORs are, on the whole, less dependent on transfer forms from the other EU regions.
- Development patterns between French regions and the other ORs differ, since the former tried to develop an import substitution strategy which was not really successful, while the latter focused on private construction and tourism to achieve more autonomy from public transfers. The higher productivity growth in the French ORs has in fact been generated by a sudden drop in the activity rate in 2003, and

had an impact on internal prices fuelled by high public salaries, rather than on competitiveness of tradable production. On the other hand the other ORs were characterized by an extensive growth of the private sector and lower factor prices.

- The degree of dependence on major infrastructure investments from the mainland and, in general, on public transfer is significantly more pronounced in the French ORs than elsewhere; partly due to a generous welfare system and social standard equalization policies, that are less evident in Portugal and Spain, though still relevant.
- The development pattern based on tourism and related services and a relatively greater weight of agriculture has favoured the Canary Islands and Madeira. The Azores also have a more balanced pattern of production among sectors, which show less dependence on public service employment. In the French regions the tourist sector did not emerge as a driving force for development and as a specialization able to compete in the fast rising world tourist market, as a result of high costs and, sometimes, lack of skills and quality.
- Guiana is a special case since its fast development has attracted a large flow of migrants from the surrounding regions; a positive natural population growth and this migratory flow have created an excess labour supply that the small local economy cannot possibly absorb in a short time.

4.4 Energy

According to *Growth Factors in the Outermost Regions* (European Union, Regional Policy, 2011), the energy trends are listed below:

- The Outermost Regions have had severe problems to assure the regular supply of fossil fuels and are penalized by higher cost of provision, due to accessibility and distribution handicaps. During the past years, the development of renewable energies has been pursued and favourable natural and environmental conditions exist in different regions to develop different renewable sources from biofuels to wind, solar and photovoltaic.
- In addition, in some ORs there is a growing experience in RTDI on renewable energies which to draw upon for their development. The insularity and small size encourage a wider development of small plants of renewable energies, which could aim to satisfy a much more significant share of total energy demand, given the higher cost of traditional sources and their unreliability.
- At the present time a number of experimental plants and of good practices may set the conditions for a more planned and organized development of these sources at the regional level.

4.5 Agriculture

- According to *The Ultrapерipheral Regions of the European Union: Indicators for the Characterisation of Ultrapерipheralіty* (INTERREG III B, 2005), Outermost regions have followed patterns, which are distinct from regions on the European continent yet similar to each other. These patterns have been marked by different stages of exterior dependence and specialisation, which could be qualified as

monocultivation. From stopover ports for transoceanic maritime routes, these regions became centres of intensive agriculture, for sugar cane or bananas

- According to *Proposal for a Regulation of the European Parliament and of the Council laying down specific measures for agriculture in the outermost regions of the Union* (European Economic and Social Committee, 2011), agricultural production in the outermost regions is extremely fragile however, mainly because of the problems created by their remoteness, the size and fragmented nature of local markets, poor climate conditions, the small size of holdings and low crop diversity. Taken together, these factors mean that production in the outermost regions is significantly less competitive than in mainland Europe. Local agriculture is heavily dependent on the outside world both for the supply of inputs and to sell its products, yet it is very isolated from the sources of supply and markets.
- Banana production accounted for more than a quarter of agricultural production in Guadeloupe, more than half in Martinique and almost a third in the Canaries.
- Bananas grown within the EU accounted in 2008 for about 11% of total EU consumption. They are produced for the main part in the outermost regions (the Canary Islands, the French overseas departments of Guadeloupe and Martinique, the Azores and Madeira) situated in tropical or sub-tropical areas, as well as certain quantities (approximately 1% of the total) produced in Cyprus, Greece and continental Portugal.

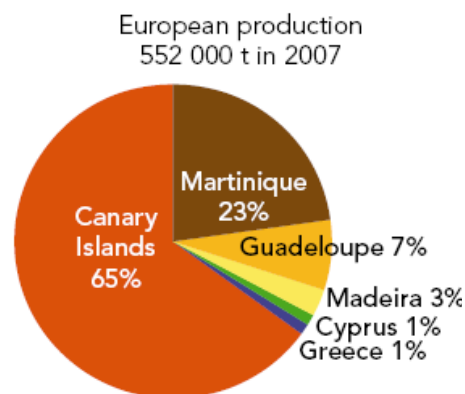
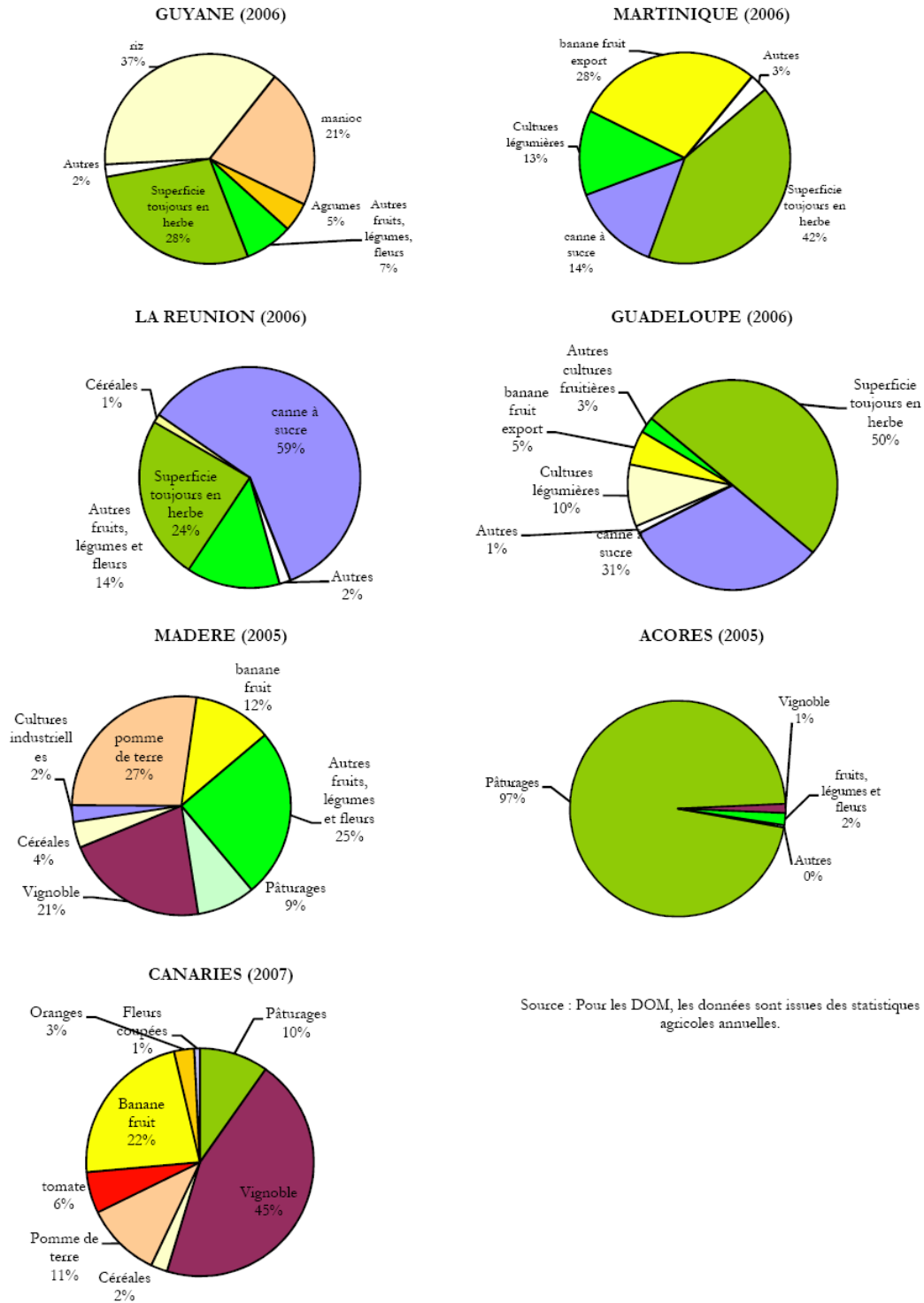


Figure 4-5. Banana's production in EU. Source: Denis Loeillet and Thierry Lescot, CIRAD, 2007.

- Sugarcane accounted for almost a third of agricultural production and more than 60% of agricultural land in Réunion.

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Source : Pour les DOM, les données sont issues des statistiques agricoles annuelles.

Figure 4-6. Main crops of the outermost regions (depending on area covered). Source: Evaluation des mesures mises en oeuvre en faveur des régions ultrapériphériques (POSEI) et des petites îles de la mer Égée dans le cadre de la politique agricole commune, European Commission, 2009.

4.6 Habitat (urban development)

According to *The new Azores Regional Plan as a tool to regulate the sprawled growth in the insular Portuguese territory* (ISOCARP Congress 2008), the urban development trends in Azores Archipelago's are listed below:

- The urban occupation in this archipelago was structured over two main aspects: the islands biophysics/climatic structure and the historical influence of the settlement processes. Relatively to the first aspect, the geological origin of the islands induced, considering some exceptions, in an altimetry profile characterised by cliffs or more gentle slopes, but that rapidly reach very high altitudes. The bioclimatic conditioning that high altitudes produce in the adaptation of the vegetal species and in the environmental comfort, leads to an obvious concentration of the urban settlements in the lower platforms under the 350m. Above this altitude the usual levels of rain and fog present constraints to the agricultural exploitation, with the exception of pastures. This is the reason why one always finds, in the majority of this archipelago's islands, an urban occupation concentrated in the seacoast fringes, and an interior territory, of altitudes above the 350m, which is mostly desert.
- Relatively to the second aspect, the colonist character of the settlement has given place to a parcelling process of the territory with agricultural aptitudes, structured by the communication roads. This fact is associated to a built occupation structured, generally, nearby the roads, resulting on spread out linear agglomerations. This pattern identifies the mainly sprawled growth in the Azores territory. In parallel, the dependency on the sea as a privileged communication way in the historical process of colonization, led to the human settlements establishment in the seacoast areas with better conditions to provide shelter to the harbours.
- Because in these places the activities profile is diversified, namely through the concentration of administrative and commercial activities as well as services, led, in some cases, to the creation of a set of agglomerations with a more compact character and a bigger dimension relatively to the linear agglomeration pattern. These compact nucleuses are morphologically characterized by an urban tissue of small dimension streets that, although with an organic structure, suggests an orthogonal shape.

According to *Human activity and damaging landslides and floods on Madeira Island* (D. Baioni, 2011), in Madeira:

- Urban development in coastal areas, in particular in the urban centres like Funchal and Machico, has also occurred along the coastline, occupying beaches and cliff top areas.
- Urbanization on Madeira has expanded to use all of the space available. The shortage of space has forced new construction onto riverbanks; this has brought about the constriction and occupation of river mouths (in particular those that cross the cities of Funchal and Machico which have become major new construction zones), and led to the occupation of the flood plains.

According to *French Guiana and Suriname Better mutual economics knowledge for better cooperation* (2011):

- In French Guiana, the main cities are Cayenne and Kourou, which are located along the central coast. Together they account for 73% of the population and almost all economic activity. Another center of population concentration is located in the town of Saint Laurent du Maroni, which is in western French Guiana across the border with Suriname. It has 19,211 inhabitants, which represents 12% of the total population.
- In French Guiana land settlement and development is complicated by the existence of two or three population centers and the way they attract the vast majority of people. These urban and semi-urban concentrations means large regions that are located far away from urban centres are marginalized and under-developed in both countries.

According to *Modelling with stakeholders to integrate biodiversity into land-use planning e Lessons learned in Réunion Island (Western Indian Ocean)* (ELSEVIER, 2011):

- Land-use is organised into urban and agricultural belts in the so-called lowlands (<2000 m), and pristine vegetation in the uplands. At present, more than 80% of the 802,000 inhabitants (INSEE, 2009) live on the coastal fringe where most of the socio-economic activities are concentrated. Population increased of 1.5% per year since 2000 and it is predicted to reach 1 million inhabitants in 2030.
- Since the creation of a National Park in 2007, 43% of the island's surface is protected within statutory reserves (i.e. areas specifically dedicated to biodiversity conservation). The distribution of the protected areas network is biased toward the uplands: the mean altitude of protected areas is 1306 m versus 873 m for the whole island. This lack of protection in the lowlands is a consequence of a combination of factors including the persistence of fewer pristine lowland habitats and higher pressure from other activity sectors (urbanisation and agriculture).

Ecological habitat category grouped per altitude	Area before human colonization (km ²)	Current area (km ²)	Transformed (%)
Recent lava flow	97	95	2
Wetlands	8	7	12
Subalpine	205	177	14
Mountain	564	400	29
Submountain	449	210	53
Coastal	14	3	78
Lowland	1165	115	90
Total	2504	1008	60

Figure 4-7. Area of ecological habitats grouped per altitude categories, nowadays and before human colonization. Source: Modelling with stakeholders to integrate biodiversity into land-use planning e Lessons learned in Réunion Island (Western Indian Ocean), ELSEVIER, 2011.

4.7 Transport and mobility issues: bottlenecks, relevant infrastructure plans

The *Ultrapерipheral Regions of the European Union: Indicators for the Characterisation of Ultrapерipheralіty* (INTERREG III B, 2005):

- The **potential accessibility by air** is the lowest in the EU29 region total (around a value of 36), with 100 as the average value of the European regions as a whole). Those regions with greater potential air access (values above 80) are located close to those airports with greater capacity and services.
- The **multimodal accessibility** potential (in terms of the total number of activities available, weighted in a destination location by the cost of access to them via a determined mode of transport) hardly reaches a value of 40, 100 being the average accessibility value for the European regions as a whole. The potential multimodal accessibility of the rest of the regions is concentrated between the values of 40 and 80, as is the case of the peripheral Nordic regions, followed by the insular regions. The Non-Objective 1 EU15 regions, the Objective 1 EU15 regions and the Objective 1 EU10 regions have a potential accessibility which is equal or superior to this (mainly between 40 and 100).
- **Low potential accessibility** by road (in terms of the total activities available in a destination location per unit of cost), with values of between 0 and 20, (100 being the average accessibility average for the European regions as a whole) which they share with the peripheral Nordic regions. For the other European regions accessibility reaches values from 20 to 180.
- **Global accessibility** (measured in terms of the average distance of a region to the other regions) is equal to or more than 3,000 km (Madeira 2,970 km, the Canary Islands 3,256) reaching the order of 8,000 km (the Azores 4,521 km, Guiana 7,601 km, Martinique 7,882 km, Guadeloupe 7,885 km and Reunion 8,452 km). For the majority of the European regions the average distance to the rest of the EU29 regions is between 1,000 and 2,000 km.

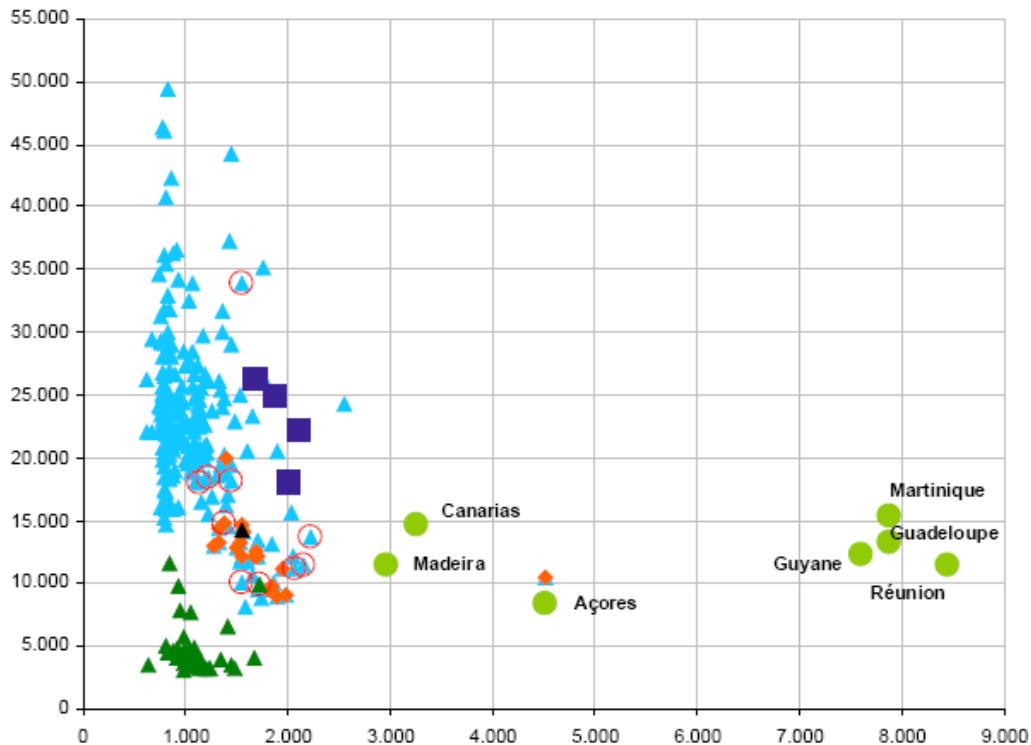


Figure 4-8. The Relationship between the Global Accessibility Index (GAI) (in km) and the Per Capita GDP (in euros/inhabitant/year) (2000). Source: The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality (INTERREG III B, 2005).

- The population at a distance of 1,000 km is to the order of 25 million inhabitants; continental regions have an accessible population at this distance of around 60 million to 240 million inhabitants.
- The population at 1,500 km of distance is to the order of 50 million of inhabitants with a minimum population figure of 1,295,000 inhabitants (the Azores). The accessible population of the ultraperipheral regions at 1,500 km is minimal in relation to the rest of the European regions (which reach between 80 and 380 million in habitants).
- The capacity of commercial airports of between 500,000 (Guiana) and 13 million passengers a year (the Azores), is similar to the European regions as a whole whose values in some cases exceed 18 million passengers a year. The Canary Islands have the largest passenger per year capacity of all the ultraperipheral regions (30 million passengers/year).

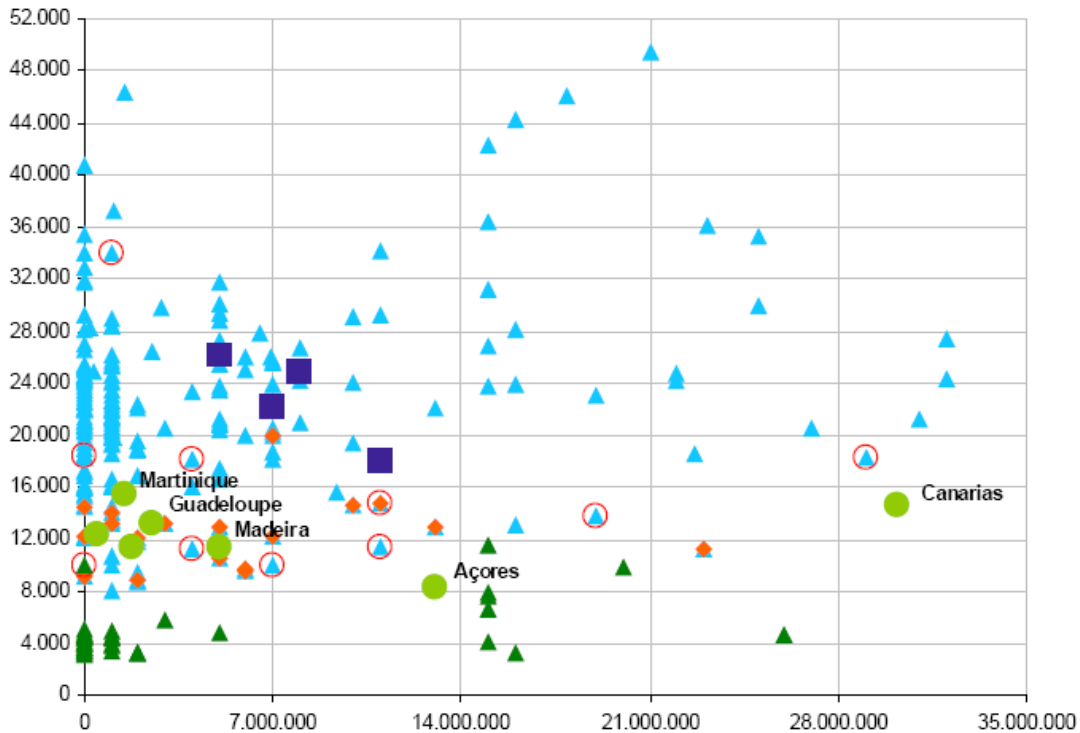


Figure 4-9. The Relationship between Commercial Airport Capacity (passengers/year) and the per capita GDP (in euros/inhabitant/year). Source: The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality (INTERREG III B, 2005).

- In the airports of Madeira, Guiana and the Azores, the number of embarked passengers is 600,000 per year, while the regions of Reunion, Martinique and Guadeloupe have between 600,000 and 1,200,000 embarked passengers a year. The Canary Islands (14,702,000 passengers embarked /year) is the ultraperipheral region with the highest number of embarked passengers per year, which is even higher to the figure of the Balearic Islands (13,257,000 embarked passengers/year).
- Relatively **low road density** in EU29 regions (with values close to 0.20 km/km²) and particularly higher in the ultraperipheral regions of Martinique (1.820 km/km²), Madeira (0.735 km/km²) and Reunion (0.393 km/km²). However the Canary Islands (0.098 km/km²), Guiana (0.009 km/km²) and the Azores (0.004 km/km²) hardly reach the European average of 0.10 km/km².
- **Goods loaded:** 71,000 tonnes (Madeira) and 6,818,000 tonnes (the Canary Islands), while some EU15 Non-Objective 1 regions exceed 8,000,000 tonnes. Between 2,077 tonnes (Martinique) and 19,529 tonnes (the Canary Islands) of goods are unloaded every year. The Canary Islands is one of the EU29 regions with the largest number of tonnes unloaded.

4.8 Land uses patterns

According to *The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality* (INTERREG III B, 2005)

- The Useful Agricultural Surface Area (UAS) is below 30%. The Azores is the sole exception as it has a UAS which is superior to the majority of EU29 regions (52.711% UAS).

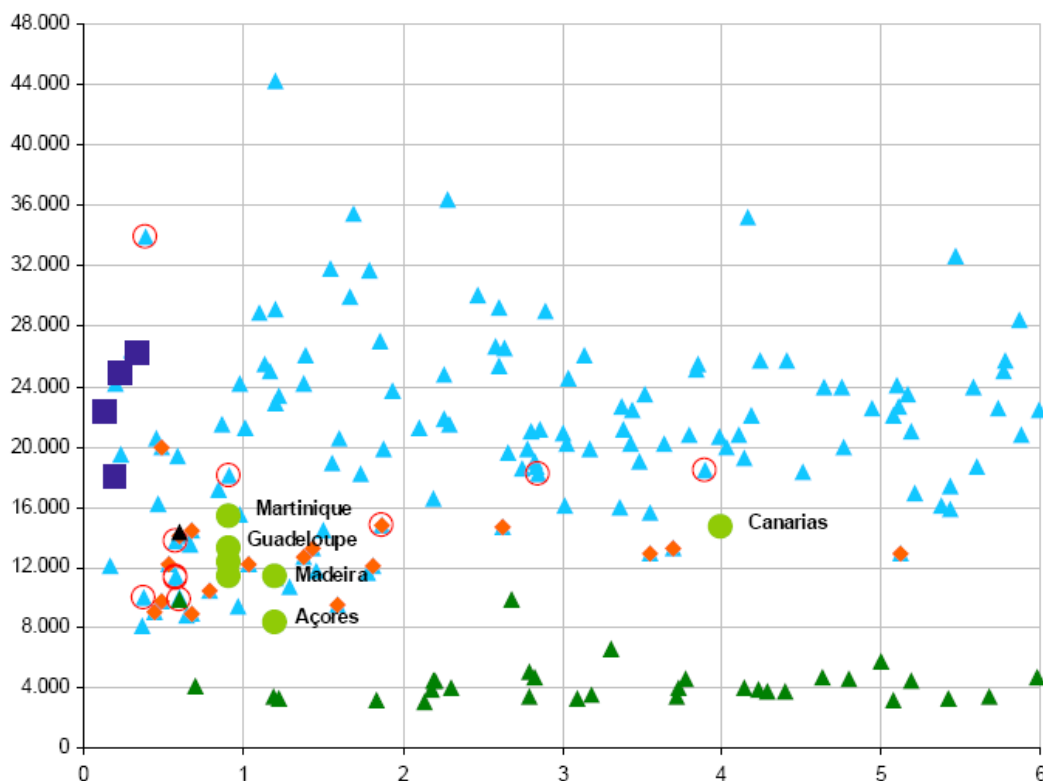


Figure 4-10. The Relationship between the CORINE Artificial Surface Area/Total Surface Area and the Per Capita GDP (in euros/inhabitant/year). Source: The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality (INTERREG III B, 2005).

- The natural surface area comprises values of between 40% and 50% (the Azores 46.2% and Madeira 46.2%), those with a larger natural surface area (Martinique, Reunion, Guadelupe, and Guiana) have values of above 80% and even 90% (the Canary Islands). The other EU29 regions have a natural surface area which is generally below that of 60%.

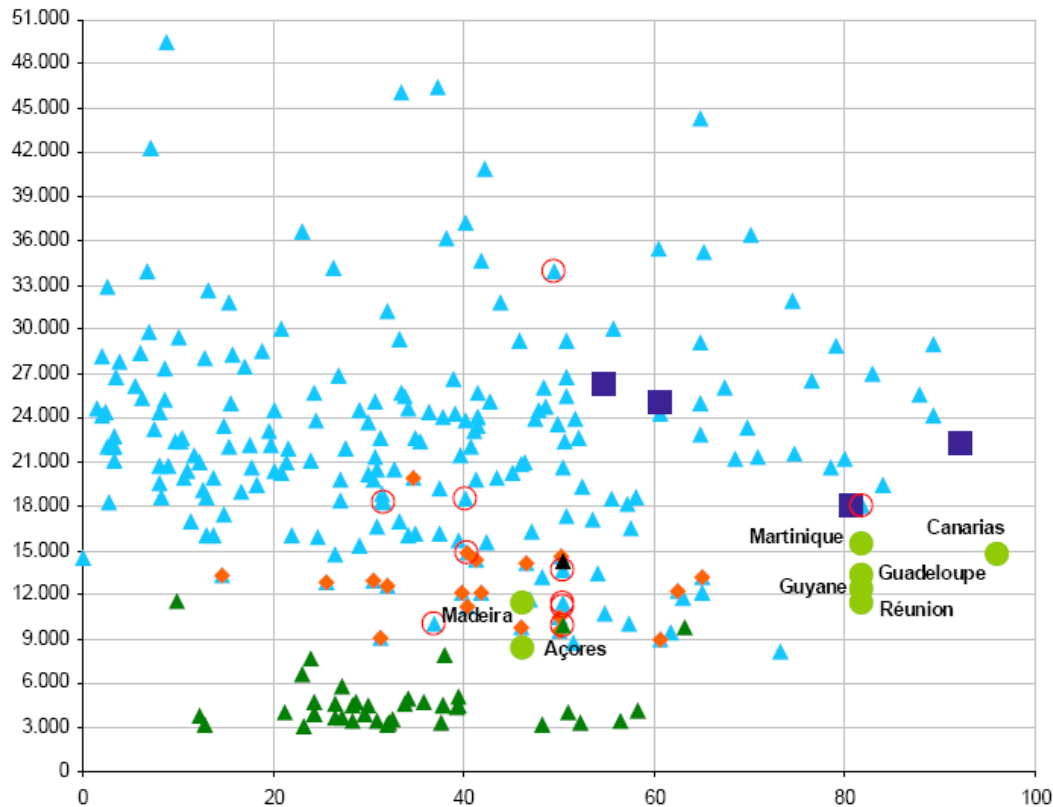


Figure 4-11. The Relationship between the CORINE Natural Surface Area/ the Total Surface Area and the Per Capita GDP (in euros/inhabitant/year). Source: *The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality* (INTERREG III B, 2005).

4.9 Environmental management and Climate Change

The Outermost Regions share specific characteristics which make them particularly vulnerable to climate change impacts, namely:

- Concentration of population, socio-economic activities and infrastructure along the coastal zone;
- High sensitivity to extreme weather conditions (e.g. hurricanes, cyclones, drought, floods, volcanic eruptions);
- Dependence on water resources (coastal aquifers) highly sensitive to sea level changes.

Although flooding, erosion and freshwater shortage pose a certain threat to the coastal zones of the outermost regions, recent climate change discussions for the outermost regions primarily focus on the loss of biodiversity, a main factor influencing the important tourism industry of the islands.

According to *The economics of climate change adaptation in EU coastal areas* (European Commission, 2009) the vulnerability of the coastal zones of the outermost regions are described in the following paragraphs:

- Flooding and erosion. As most of the infrastructure, settlements and facilities are located on or near the shore, loss of land due to SLR is expected to disrupt the economic and social sectors in the outermost regions. Furthermore erosion will have profound adverse impacts on the tourism industry. Nevertheless, erosion rates differ widely across the different outermost regions. In Guyana about 45% of the coastline is currently subject to erosion, in Guadeloupe 14% whereas Madeira does not yet experience erosion along its coast. The vulnerability to erosion might be aggravated by the expected increase in intensity and frequency of extreme weather events such as cyclones and floods.
- Freshwater shortage. Climate impact assessment studies for the outermost regions highlight that climate change and SLR are likely to threaten freshwater resources through saltwater intrusion within freshwater aquifers. Furthermore, the frequency and intensity of droughts is expected to intensify in the future.
- Loss of coastal eco-systems. The outermost regions are home to a great number of animal and plant species and have a rich biodiversity compared to continental Europe. To date, the coastal eco-systems are already under severe threat from the impacts of human activities (e.g. pollution, over-exploitation of resources, urbanisation). Climate change is likely to exacerbate this threat. The outermost regions are concerned about the consequences of the loss of biodiversity as this is an economic growth factor, tourist attraction and an important element for human well-being. Coral reefs for example have a huge influence on the life of people in some of the outermost regions. They function as natural breakwaters along the coasts and represent one of the most important natural resources for food, beach sand and building materials. These corals are being threatened by SLR, a rise in sea surface temperature and an increase in extreme weather events. Martinique for example, has lost in specific sites about 30% of its coral reefs in one year time (2005-2006). Furthermore, due to the increase in sea surface temperature many species of Martinique will likely have to migrate to the north where the sea surface temperature is more moderate. In Guadeloupe the flood-prone freshwater eco-systems situated behind the mangroves seem to be the most vulnerable. These eco-systems are locked-in between the mangroves and human settlements. As a result, they are unable to expand inlands to protect against SLR and at risk of salination. The biodiversity of the Canaries is most impacted by a change in wind patterns. Cool, humid north south winds are expected to turn to the east-west. As a result, humid coastal areas in the north of the islands could become dryer, while the currently semi-desert southern coasts could become more humid. This change in wind directions might lead to a migration of numerous species.

4.10 Governance and international agreements

A stronger partnership for the outermost regions (COM [2004] 343)

This communication sets out the operational recommendations in the Commission's working paper A stronger partnership for the outermost regions: situation and prospects.

The Commission has accordingly selected three priorities for action which will guide the future development strategy for these regions: competitiveness, access and the offsetting of other constraints and integration into the regional area (including in particular justice and home affairs). These priorities run alongside the efforts being made by the Community under the Lisbon and Göteborg strategy for a competitive European Union capable of sustainable economic development. The priorities for the outermost regions will therefore be implemented through special instruments: the policy on economic and social cohesion through its financial instruments and the other Community policies.

Strategy for the Outermost Regions (COM [2007] 507)

Since 2004, the EU has had an integrated strategy, based on active partnership between the EU institutions, national governments and the Outermost Regions. The three priorities are to make the regions more accessible, more competitive and more integrated with the countries around them. These priorities – and other measures – are explained in the Strategy for the Outermost Regions (COM [2007] 507):

- Promoting accessibility. The proposed measures are part of the efforts to reduce the difficulties engendered by the remoteness of those regions;
- Improving competitiveness. The aim of that priority is to create an economic environment conducive to the establishment of undertakings. Otherwise undertakings continue to be part of a restricted, fragmented and remote local market;
- The regional integration priority. The aim of integration is to develop trade in goods and services between those regions and neighbouring third States. The integration of the ORs into the immediate geographical environment needs to be encouraged

The Outermost Regions – an Asset for Europe” (COM [2008] 642)

In the age of globalisation and of research to improve European competitiveness, there is a need to support the development of growth sectors where the OR have the potential for specialisation and a strong comparative edge. These sectors also constitute fertile ground for the development of cutting-edge initiatives and pilot projects of significant interest for Europe. This new paradigm, centred on making the most of the assets of the OR as a springboard for economic development, must lead to a renewal of the strategy focussing, in particular, on sectors with high added value, such as agri-food, biodiversity, renewable energies, astrophysics, aerospace science, oceanography, vulcanology or seismology, and the important role of the OR as outposts of the European Union in the world.

4.11 Limits and patterns of growth

According to *The economics of climate change adaptation in EU coastal areas* (Policy Research Corporation, 2008), impacts of climate change suppose a threat for the outermost regions:

- The specific characteristics of the Outermost regions aggravate vulnerability to climate change and complicate adaptation, these include the high concentration of population and socio-economic activities along the coastline, remoteness from the mainland, insularity, small size, difficult topography and economic dependence on a few products and sectors (often tourist related);
- As most of the infrastructure, settlements and facilities are located on or near the shore, loss of land due to SLR is expected to disrupt the economic and social sectors in the outermost regions. Furthermore erosion will have profound adverse impacts on the tourism industry. Nevertheless, erosion rates differ widely across the different outermost regions. In Guyana about 45% of the coastline is currently subject to erosion, in Guadeloupe 14% whereas Madeira does not yet experience erosion along its coast⁴. The vulnerability to erosion might be aggravated by the expected increase in intensity and frequency of extreme weather events such as cyclones and floods.
- Climate impact assessment studies for the outermost regions highlight that climate change and sea level rise are likely to threaten freshwater resources through saltwater intrusion within freshwater aquifers. Furthermore, the frequency and intensity of droughts is expected to intensify in the future.
- The outermost regions are home to a great number of animal and plant species and have a rich biodiversity compared to continental Europe. To date, the coastal ecosystems are already under severe threat from the impacts of human activities (e.g. pollution, over-exploitation of resources, urbanisation). Climate change is likely to exacerbate this threat. The outermost regions are concerned about the consequences of the loss of biodiversity as this is an economic growth factor, tourist attraction and an important element for human well-being.

4.12 Wildcards

5. Integrated scenarios

5.1 Baseline scenario by ESDP and EU Cohesion Policy

According to Spatial scenarios in relation to the ESDP and EU Cohesion Policy (ESPON; 2007), the integrated baseline scenario Outermost Regions by 2030:

- The territorial characteristics of the Ultra Peripheral regions (UPR) are extremely different from those of the regions of continental Europe. While continental Europe has been seriously affected by population ageing, most ultra-peripheral regions have been facing, by 2030, strong natural population increase, especially French Guyana, Martinique, Guadeloupe, Mayotte and La Reunion. The demographic evolution in the Portuguese and Spanish UPR has been less significant. In some remote islands of the archipelagos, population ageing and depopulation are even a problem. The pressure of external immigration has continued to be significant and has even been increasing. The volume of illegal immigration has been growing.
- The economy of the UPR has remained excessively dependent upon mainland Europe. Because of higher labour costs than in the neighbouring countries on similar production (of bananas, sugar etc.), there are no markets for such products at proximity. Imports from extra-European origin are concentrated on oil products and main exports are oriented towards Europe. Transport costs are excessive compared with those of mainland Europe, with maritime transport taking care of the transport of goods and air the transport of people. Both transport modes are directly dependent upon the price level of crude oil. With increasing oil prices, the accessibility of the UPR has been decreasing, as no alternative transport modes exist between the UPR and mainland Europe or other countries. The development of low-cost airlines has however significantly alleviated the handicap of long distances, as long as fuel prices were not too high.
- The labour market of most UPRs has remained weak and unbalanced with few qualified jobs and low availability of qualified manpower for existing jobs caused by the out-migration of qualified people. The economy of the UPR is more sensitive to various exogenous factors than that of continental regions, be it the impact of globalisation (trade liberalization of tropical products), of evolutions in neighbouring countries (economic evolution in the Indian Ocean region) or of public decisions (taxes on energy products, CAP evolution, structural policies). The UPR have therefore been more subject to asymmetric shocks than European mainland regions. In addition, the UPR play an important part in geo-strategic considerations of public or private stakeholders. Most of them are located on important maritime or air transport routes. They are also strongly related to the European policy of security and defence. These factors have contributed to maintaining a certain level of stability for specific functions (ports and airports and related services, control of immigrants etc.).
- The UPR generally have a significant renewable energy (solar, wind) potential which has not been optimally exploited. They are also subject to significant natural hazards (hurricanes, typhoons, tornados, tsunamis), the impacts of which have not been sufficiently anticipated, with resultant damage. Some decisions in the field of environmental policies (for instance the disproportionately large share of areas

designated under Natura 2000) are beneficial for the maintenance of biodiversity but detrimental for other land use types, including economic ones, because of the scarcity of available land on islands. Island regions are also more vulnerable to issues of maritime security and marine pollution. A number of UPRs have additional natural handicaps to those of insularity and remoteness: mountain areas, archipelagos with remote islands etc.

- Under baseline assumptions, the UPR are more differentiated in 2030 than they were in the early 2000s because of differently changing contexts in the respective world regions where they are located. The islands of La Reunion and Mayotte have benefited from booming economic development in the Indian Ocean region, while the UPRs in the Atlantic, especially the Caribbean ones, have been more affected by the competition of neighbouring countries. While the out-migration of qualified people has continued, illegal immigration has intensified. The UPR have been increasingly used by illegal immigrants as a bridge towards mainland Europe, although controls and measures against illegal immigration have also intensified. The support of the Structural Funds has been maintained but progressing liberalization measures, especially of the CAP, have affected indigenous productions. The benefits of low-cost airlines have been partly jeopardized by steadily growing oil prices.

5.2 Cohesion scenario by ESDP and EU Cohesion Policy

In this scenario, the main priorities of public policies at EU level, in a context of growing globalisation, are focused on economic, social and territorial cohesion and not on global competitiveness. This does not mean that the improvement of competitiveness is excluded, but rather, that in case of incompatibility between cohesion and competitiveness priority will be given to cohesion

- Considering the amount of support allocated by the Cohesion Policies to the UPR in the early 2000s, EU support in the context of the cohesive scenario has not been significantly higher than under the baseline one. Differences with the baseline scenario in terms of the territorial impacts of structural and cohesion policies are therefore not extensive, but a number of distinctive impacts have nevertheless appeared. Transport services with Competitiveness scenario mainland Europe and in rural and less developed parts of the UPR have been more supported. This policy has been of particular importance in the archipelagos. The shift from Pillar 1 to Pillar 2 in CAP support has benefited areas with low productivity in agriculture, but has been of more modest significance, in terms of employment and yields, in fertile agricultural areas affected by increasing external competition and decreasing price support mechanisms. The pro-active policies of economic and socio-cultural integration had beneficial impacts, both in terms of the integration of young people into labour markets and in the maintenance of a peaceful civil society. More emphasis than in the baseline scenario has been put on the development and promotion of indigenous productions and comparative advantages in terms of heritage, soft tourism, and handicraft products etc. Significant efforts have been made to develop the various renewable energy sources and to reduce the dependence on fossil energy. Substantial preventive measures against the impact of natural hazards have made it possible to limit physical and human damage and maintain a sufficient level of security in spite of a higher occurrence of hazards

caused by climate change and sometimes seismic activity. The policy of strict immigration control has made an efficient and substantial coast guard necessary around most UPRs, while in French Guyana, land borne immigration has proved more difficult to contain, despite increased controls of main transport axes. By 2030, most UPRs are still extremely dependent upon mainland Europe, but some have been successful in promoting sufficiently indigenous resources to create dynamics and to counterbalance a number of their disadvantages.

5.3 Competitiveness scenario by ESDP and EU Cohesion Policy

It is based on the assumption of a significant reshaping of EU policies originating in the disappointing results of the implementation of the Lisbon Strategy during the period 2000-2005. The EU budget is being reduced and EU expenditures are being targeted towards R&D, education, ICT and strategic external accessibility, including in structural policies. The CAP is subject to rapid and radical liberalisation, with a significant reduction of support, of external tariffs and of export subsidies. The budget of structural policies is also being reduced, with a part of former EU interventions being re-nationalised and EU support being concentrated on the most competitive areas of less developed regions. As a counterpart, public services are further liberalised and privatised, labour markets are regulated in a more flexible way and the third pillar of EU policies (foreign policy, justice, security etc.) is being strengthened. Widening of the market through further EU enlargements is part of the strategy of increased competitiveness.

- Under competitive assumptions, most UPRs are in 2030 in a much worse situation than they were in the early 2000s. The main factors of change have been the weakening of structural and CAP policies in a context of strengthened liberalization. Compared with the baseline scenario, the number of jobs in agriculture and other indigenous activities has strongly declined. Support for the maintenance and development of infrastructure and services of general interest has been progressively but substantially reduced, generating a trend towards obsolescence and insufficient supply. Only where investments in world-oriented mass tourism were profitable, were jobs maintained or developed. It has not been just qualified people who have migrated towards mainland Europe, but also numerous other people in search of jobs. Due to sharply increasing unemployment rates, social unrest has become a basic problem and illegal and criminal activities (smuggling, trade with drugs and weapons etc.) have strongly developed in most UPRs. Insecurity has seriously increased, not only in cities. Through the liberalized immigration policy, a strong influx of immigrants has been using the UPR as a first step towards mainland Europe. It has been necessary to develop in these regions specific infrastructure and services for the transit of immigrants. Due to a lack of support from structural funds, the potential of these regions in the field of renewable energy sources has hardly been exploited. Dependence upon fossil energy sources has therefore increased, with a weakening impact on the economy. Preventative measures against the impact of natural hazards were hardly implemented, so that serious damage has frequently been caused.

6. Visions

7. Policies

7.1 Integrated policy programs

In the Treaty on the Functioning of the European Union, the outermost regions are covered in Article 349, which requires that EU policies must be adjusted to their special circumstances.

In the past, specific support programmes have been developed for these regions: POSEIDOM for the French overseas departments (1989), POSEICAN for the Canary Islands (1991) and POSEIMA for the Azores and Madeira (1991) – Their aims were to improve infrastructure, promote job-creating industries and develop human resources.

In 2006 the support system was reformed, and replaced by POSEI programmes, with funding allocated to each of the three EU countries to which the regions belong.

Since 2004, the EU has had an integrated strategy, based on active partnership between EU institutions, national governments and the outermost regions. The three priorities are to make the regions more accessible, more competitive and more integrated with the countries around them.

In 2004, the EU set out a comprehensive strategy for the OR based on active partnership between the European institutions, Member States and the OR, centred around three areas: reducing their accessibility deficit, making them more competitive and improving regional integration. Additional measures were proposed in the Communication entitled 'Strategy for the outermost regions: achievements and future prospects'.

In October 2008, a new Commission policy paper, *The outermost regions – an asset for Europe* set two objectives:

- Address new difficulties facing the outermost regions – globalisation, climate change, demographic trends, migratory flows, sustainable management of natural resources, including marine resources and agricultural products.
- Exploit the regions' assets to boost economic development, with particular focus on sectors with high added-value, such as the agri-food industry, biodiversity, renewable energy, astrophysics, aerospace, oceanography, vulcanology, seismology, and to promote the regions' role as outposts of the EU in the world.

POSEI Programmes

The EU's outermost regions benefit from the POSEI arrangements (*Programme d'Options Spécifiques à l'Éloignement et l'Insularité*) in the agricultural sector. These programmes are designed to take account of their geographical and economic handicaps such as

- Remoteness,
- Insularity,
- Small size,
- Difficult topography and climate,
- Economic dependence on a few products.

Territorial Scenarios and Visions for Europe (ET2050)



The outermost regions are an integral part of the Union and, under the TFEU, their specific characteristics are to give rise to differentiated and specific treatment in various sectors.

They give the Union both a very widely spread set of maritime territories, of biodiversity and an even more diversified economy, for example by supplying agricultural products such as bananas, rum, cane sugar, and other exotic fruits and vegetables in demand by European consumers.

The outermost regions present enormous opportunities and are a valuable asset in European relations with adjacent countries.

They are also attractive in certain research and high technology fields: Astrophysics Institute in the Canaries, European Space Agency in French Guiana, Oceanography and Fisheries Department of the University of the Azores, etc.

The financial allocations for the POSEI programmes in 2010 are:

- Spain: € 268.4 million,
- France: € 278.4 million,
- Portugal: € 106.2 million.

Like the POSEI programmes, these measures have two aims:

1. To limit the additional costs involved in transporting certain agricultural products to these regions and (Specific Supply Arrangements (SSA))
2. To foster the development of local production. (Measures to assist Local Agricultural Products (MLAP))

The 2006 reform has given encouraging results concerning the management of POSEI as well as the maintenance and, in certain cases, the development of local agricultural productions. The supply in essential products, whose additional costs have been partially covered by the POSEI scheme, has also been guaranteed. It can therefore be maintained that the reform of the POSEI programmes is well adapted in order to reach its essential objectives.

Cohesion Policy 2007 - 2013

Transnational Cooperation Programme Madeira-Açores-Canarias (MAC) 2007-2013

The long term objective of the programme is not only to increase the level of cooperation between Madeira, Açores and Canarias and their integrated development, but also to enlarge the natural area of socio-economic and cultural influence of the three archipelagos and to increase the possibilities for exchanges with their geographic entourage. This later activity will be carried out in a coordinated manner with other Community external cooperation instruments, namely the European Development Fund (EDF).

The specific objectives of the programme, to be developed to attain its final objective are:

- The promotion of Research, Development and Innovation (R&D+I) in order to reduce the relative retard of the three regions in this aspect with relation with the continent;

Territorial Scenarios and Visions for Europe (ET2050)



- To increase the level of protection and to improve the management of coastal areas and marine resources;
- The sustainable management of hydraulic resources, energy (in particular renewable) and waste;
- The prevention of risks and natural disasters (seismic, volcanoes, maritime, climatic, etc);
- The promotion of the development of third countries in the geographic area; and
- To strengthen the institutional cooperation capacity of the intervening agents (public and private) of the three regions and participating third countries.

INTERREG IV Caribbean' programme 2007-2013

The objective of the cooperation strategy of the 'INTERREG IV Caribbean' programme 2007-2013 is to support the harmonious, concerted and sustained development of the Caribbean area, based on economic growth, job creation and respect for the environment. It aims to deepen regional cooperation and strengthen territorial cohesion based on competitiveness, attractiveness and integration of the area and exploitation of its assets and resources.

This operational programme has four priorities:

Priority 1: Innovation, knowledge-based economy, opening up and improving the connectivity of the territories [approx. 44% of total investment]

The objective of this priority is to: enhance the economic growth potential of the Caribbean area through innovation, research, a knowledge-based economy and technology transfer; enhance the economic activities linked to tourism development, social economic solidarity, in particular through better coordination in the field of air and maritime transport, trading platforms and digital networks and services, and improved communication.

Priority 2: Environment, sustainable management of resources (terrestrial, maritime) and risks [approx. 30% of total investment]

The aim is to encourage concerted sustainable management policies for natural areas, through the creation of common structures and pilot projects on waste management, water resources, coastal management and biodiversity. The programme should thus make it possible to develop regional capacities in these areas, including soil pollution, energy management and production, and enhance natural areas to the benefit of sustainable tourism development based on eco-tourism.

Priority 3: Developing common services and synergies between the institutions and the territories in order to strengthen social cohesion and integration [approx. 20% of total investment]

The aim of this priority is to address the need to strengthen cooperation between civil society players, so that the population can take better account of the social, cultural, linguistic and historical dimensions of the Caribbean area.

To this end, the scope of cooperation will be widened through dynamic projects aimed at the general public, in the fields of education (school exchanges, occupational mobility), culture and disease prevention, through:

Territorial Scenarios and Visions for Europe (ET2050)



the joint use of infrastructures;

improving the mutual knowledge between institutional, administrative and legal systems;

strengthening coordination capacities with respect to development strategies and the management of the Caribbean territories.

Priority 4: Technical assistance [approx. 6% of total investment]

Technical assistance is to be provided in the fields of management, monitoring and control and for evaluating the programme and its projects, as well as for the communication and promotion activities. This priority also aims to mobilise appropriate resources to meet the requirements of stimulating and promoting the area, which is characterised by geographical fragmentation and cultural and linguistic diversity.

Operational Programme 'Indian Ocean'

The transnational cooperation strategy in the Indian Ocean area for 2007-2013 constitutes the international strand of a wider development strategy, incorporating all European, national and regional public funding for the island of Réunion. It is particularly directed towards:

- sustainable development;
- enhancement of the environment;
- regional economic integration;
- human development and international solidarity in the Indian Ocean.

The operational programme is centred on three priorities:

Priority 1: Sustainable development and the environment [about 43.5% of total investment]

The aim of this priority is to enhance the expertise that can contribute to sustainable development at regional level, strengthen the fight against natural hazards (cyclones, emerging diseases, etc) and develop the sector of research and innovation.

Priority 2: Regional economic integration [about 29% of total investment]

There are two main objectives under this priority: to support the Réunion private sector in economic cooperation projects and to promote the exchange of knowledge through the networking of skill centres, including in the fields of maritime safety and the management of fishery stocks.

Priority 3: Promote human development and international solidarity to ensure harmonious regional integration [about 27.5% of total investment]

The aim of this priority is to develop privileged links among the populations, with a view to promoting exchanges in the fields of sport and culture, and to support solidarity actions and develop cooperation measures in the areas of training, education and integration.

7.2 Territorial impact of European Policies

According to *Growth Factors in the Outermost Regions* (European Cohesion Policy, 2011), the impacts of Specific Supply Arrangements are listed below:

- The SSA helps agricultural producers and the agro-food industry to build up stocks and to supply the markets during the frequent breaks in supply. Therefore the SSA plays an important role in ensuring supply to the end users in the ORs. The effects of the SSA are more significant when used for products aimed at covering the needs of the agricultural and/or agro-food sectors. The effects are more limited when the SSA products are intended to direct consumption needs.
- The additional costs that operators have to cope with can be broken down into additional transport costs, storage and industrial additional costs. The evaluation reveals that additional costs fluctuate and are dependent on worldwide changes in transport costs. The latter are very volatile, especially maritime freight in bulk, where as the SSA supports remain steady. Therefore, from one year to the next, the aid compensation rate for additional costs fluctuates widely.
- The objective of the SSA advantages is to reduce the price of agricultural products essential for human consumption, for the processing of other products, and as agriculture inputs. For this purpose, they should be passed on by direct beneficiaries to the end users (agricultural producers, 2nd processors and consumers depending on the type of SSA products).
- One of the main effects of the SSA, is to support the agro-food industry (AFI). The aid compensates a significant part of the production costs of the AFI and supports their sustainability in a context of competition with imported products. The SSA effect on the AFI is very important: as AFI is an essential sector for jobs creation and regional consumption reducing the importation dependency and the prices at a regional level. Furthermore, it plays a significant role in securing supply to the territories. Finally, the SSA aid diminishes the animal feeding stuff prices and, by the way enhances the profitability of local animal breeding activities.

According to *Growth Factors in the Outermost Regions* (European Cohesion Policy, 2011), the impacts of Measures to assist Local Agricultural Products are listed below:

- It can be considered that the POSEI programs are in general effective in improving the competitiveness of local production, even if it is not for all the sectors and each territory. Concerning the sectors, the support is the more effective for:
 - The export sectors: banana and sugar which benefit from a very strong support, and obtain good results,
 - The bovine meat sector and, to a lesser extent, the milk sector.
 - The fruit and vegetable sector is the least effectively supported, in spite of its good potential.
- The MLAP maintain, and sometimes even develop, the agricultural sector, by mitigating negative factors such as: high conflict of use for land, small holdings often run by part time farmers, a difficult climate, remoteness, small sized market, strong competition from imported equivalent products. Moreover, agriculture is

often an important pillar of these economies and has a major social role. The instruments established by the POSEI programs are the same as the EU instruments within the continental regions (ex: price support, production aid, aid to dispatch local production outside the territory, etc.). It is definitely justified to use these instruments in programs, whose explicit objective is to guarantee the continuation and the development of agricultural activities and implicitly to increase the market shares of the agriculture (at least on the local market). It should however be stressed that the structural handicaps of the ORs mean that a great number of agricultural activities would not be (or very poorly) profitable without assistance.

- The budgets are much higher for large export sectors, in particular for banana and sugar, than for other sectors. These two sectors are important in terms of job creation, maintenance of industrial structures, trade balance and flow of exports (effect on the total cost of freight, if the boats return empty). These two sectors (banana and sugar) were reformed recently and need clear messages on their future in terms of support. as operators (producers, operators of marketing and/or processors) have made recent investments financed by loans.

8. References

8.1 ESPON Projects

Polytechnico di Milano (2010). ESPON SS-LR - Spatial Scenarios: New Tools for Local-Regional Territories. European Union.

Free University of Brussels - IGEAT (2007). ESPON Project 3.2 - Spatial scenarios in relation to the ESDP and EU Cohesion Policy. European Union.

Netherlands Interdisciplinary Demographic Institute (NIDI) (2010). ESPON DEMIFER - Demographic and Migratory Flows Affecting European Regions and Cities. European Union.

Innobasque (2010). ESPON ReRISK - Regions at Risk of Energy Poverty. European Union.

Free University of Brussels – IGEAT (2010). ESPON FOCI - Future Orientation for Cities. European Union.

Labein-Tecnalia- Technology Centre (2013). ESPON EU LUPA - European Land Use Patterns. European Union.

Polytechnics of Milan – DIG (2010). ESPON TIPTAP - Territorial Impact Package for Transport and Agricultural Policies. European Union.

TU Dortmund University (2011). ESPON CLIMATE – Climate Change and Territorial Effects on Regions and Local Economies en Europe. European Union.

University of the Highlands and Islands (2010). ESPON EDORA - European Development Opportunities in Rural Areas. European Union.

8.2 Other relevant documents

Baioni, D. (2011). *Human activity and damaging landslides and floods on Madeira Island*. Natural Hazards and Earth System Sciences

Behrens, K., Gaigne, C. *Developing the 'outermost regions' of Europe: Some lessons from economic geography*

Brandao, F., Conceição, P., Granadeiro, J., Pinho, P. (2008) *The new Azores Regional Plan as a tool to regulate the sprawled growth in the insular Portuguese territory*. ISOCARP

Briggulio, L.: Los pequeños estados insulares: indicadores de ultraperifericidad. Seminario de indicadores de ultraperifericidad en Las Palmas de Gran Canaria 16-17 Enero 2004.

Commission of the European Communities (2004). *Communication from the commission. A stronger partnership for the outermost regions*.

Commission of the European Communities (2007). *Strategy for the Outermost Regions: Achievements and Future Prospects*. .

Eurisles: Regional Disparities: Statistical Indicators. Linked to Insularity and Ultra-peripherality

European Commission (2004): *Mountain Areas in Europe: Analysis of Mountain Areas in EU Member States, acceding and other European countries*

Territorial Scenarios and Visions for Europe (ET2050)

- European Union (2011). *Growth Factors in the Outermost Regions*. Regional Policy.
- European Union (2010). *The Outermost Regions. European regions of assets and opportunities*. Regional Policy.
- European Parliament (2001). *The Cost of Peripherality*.
- Fortuna, M.: Un Indicador Económico para las Regiones Ultraperiféricas. University of the Azores, Seminario de indicadores de ultraperiféricidad en Las Palmas de Gran Canaria, 16-17 Enero 2004
- Geurs, K.T.; Ritsema van Eck, J.R. (2001): Accessibility Measures: Review and Applications. Evaluation of Accessibility Impacts of Land-use Transport Scenarios, and related Social and Economic Impacts. Bilthoven: RIVM.
- Lagabrielle, E., Botta, A., Daré, W., David, D., Aubert, S., Fabricius, C. *Modelling with stakeholders to integrate biodiversity into land-use planning e Lessons learned in Réunion Island (Western Indian Ocean)*. ELSEVIER
- Lorincz, A. (2011). *The importance of the Outermost Regions for Strengthening EU foreign and Regional Relations*.
- ORÉADE-BRÈCHE (2009). *Evaluation des mesures mises en oeuvre en faveur des régions ultrapériphériques (POSEI) et des petites îles de la mer Égée dans le cadre de la politique agricole commune*
- PLANISTAT (2003): Analyse des régions insulaires et des régions ultrapériphériques de l'Union Européenne, Partie II: Les régions ultrapériphériques – Commission Européenne
- Santos, C.: El sistema estadístico de Madeira: características, funciones y problemas suscitados por el proyecto UCEST, Directora de Estadística de Madeira, Seminario de indicadores de ultraperiféricidad en Las Palmas de Gran Canaria, 16-17 Enero 2004
- Schürmann, C.; Spiekermann, K.; Wegener, M. (1997): Accessibility Indicators. Berichte aus dem Institut für Raumplanung 39. Dortmund: IRPUD.
- Schürmann, C., Talaad, A. (2000): Towards a European Peripherality Index. Final Report. Report for the General 16th Directorate on Regional Policy of the European Commission. Dortmund: IRPUD.
- Spiekermann, K.; Neubauer, J. (2002): European Accessibility and Peripherality: Concepts, Models and Indicators. Nordregio WP 2002:9, Stockholm: Nordregio.
- Trujillano, C., Font, M., Jorba, J., Ulied, A., Xalabarder, M. (2005) *The Ultraperipheral Regions of the European Union: Indicators for the Characterisation of Ultraperipherality*. Mcrit.

8.3 Websites of reference

POSEI programmes and specific measures in favour of the smaller Aegean islands	http://ec.europa.eu/agriculture/markets/outermost-regions/intro_en.htm
European Commission. Regional Policy	http://ec.europa.eu/regional_policy/
Las Regiones Ultraperiféricas de la Unión Europea: Análisis de Ultraperiféricidad	http://www.mcrit.com/rup

9. Experts and institutions

List of relevant experts and institutions in the framework of macro-region