



Vol. I

ABSTRACT

Extension Proposal

LA PALMA BIOSPHERE RESERVE





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introduction

A BIOSPHERE RESERVE IN EVOLUTION

Background and general rationale for extension

The island of La Palma was the first of the Canary Islands to have a Biosphere Reserve. On the 30th of June, 1983, the UNESCO declared 511 hectares of the “El Canal y Los Tiles” estate a Biosphere Reserve. At the time, it was the smallest, but at least, it was the first island Reserve.

The protected area was situated on the north east slopes of the island of La Palma, in the borough of San Andres y Sauces. Later on, in 1994, this land was included in the Las Nieves Nature Park that was created by the Canary Island Natural Spaces Act, Law 12/1994 of 19th of December.

The protection objective of the original El Canal y Los Tiles Reserve was the Macaronesian Laurel Forest. But, the role of Biosphere Reserves evolved dramatically to become a pioneering benchmark of sustainable development. So, despite the undoubted values of this area and their importance in the Canary Islands as an educational source for conserving and researching these habitats, the designated area soon became a corset that made it impossible to appropriately fulfil the three functions that the MAB programmed had laid down for Biosphere Reserves (conservation, logistics and development). Only two of these aspects could be adequately addressed in the small area of the original Biosphere Reserve.

This led to a proposal being made in the 90s, to extend the area under protection. This first extension was adopted by MaB in 1998, increasing the area of the Reserve to 13,240 hectares; 27 times the size of that emblematic area of the El Canal y Los Tiles estate. In fact, the 511 hectares originally declared a Reserve remain as the core zone of the present Reserve, but the protected area now encompasses an entire district, from the mountain tops to the coast. Furthermore, the island of La Palma’s Biosphere Reserve also underwent a change of name,



because, by extending the area, it was no longer exclusively associated with the property on which the original Reserve was declared.

The new area contained a wide range of representative habitats of the island of La Palma, with all the diversity provided by the transition from the coast up to the mountain peaks, and, more particularly, this extension brought into play the role the inhabitants of the area as the architects of a new model of integral development within the borders of the Reserve.

There were several reasons for this first extension. Some were endogenous; such as the fact that it became apparent that the objectives to be pursued within the philosophy of the MaB Programme, were very limited in such a small area; and others exogenous, which can be summarised in two: the new vision provided by the Seville Conference, with its Strategy, and the integral declaration of new island territories, such as Lanzarote and Minorca, as Biosphere Reserves.





The declaration of a whole island as a Biosphere Reserve was, of course a change of perspective from the first Reserves, in that it is now understood that in this kind of small, fragile places with a complicated co-existence between conservation and social and economic development, the territory cannot be fragmented even more for conservation purposes. On the contrary, an integral approach has to be articulated for such a complex situation. International practise has shown that this is evidently one of the characteristics of small and medium-sized islands, where land and human activities are in constant and ever-changing interaction, making it very difficult to take areas of a certain size out of their island context.

Furthermore, in the case of La Palma, the management and development advances generated in the scope of the new reserve, and the MaB Programme strategy quickly started to have an influence on the rest of the island. In fact, in the last three years, there has been an assimilation process in which the sustainable development strategies and initiatives, whether or not they have been generated within the present limits of the Reserve, have adopted initiatives, plans and programmes that are completely in line with the strategy drawn up for the Biosphere Reserve.

This phenomenon can be clearly seen in key programmes and initiatives that affect the island as a whole, but with the premises of the MaB Programme, such as:

- The Leader+ Rural Development Programme, aimed almost exclusively at “revaluing the natural and cultural resources included in the sites of community interest in the framework of the Natura 2000 Network”.
- Adopting the Island of La Palma Sustainable Development Plan (La Palma Cabildo – Island Council).
- The rural tourism strategy established on the island, based on environmental and cultural innovation, diversification and integration.
- The advances made in the system of public use of natural spaces that have made it possible to develop an experience that is presently becoming a regional benchmark.
- The recovery of traditional products and the introduction of new environmentally-friendly methods that will enable La Palma to become a model for catalysing traditional productive sectors, associated with landscape conservation and production by re-valuing their products.
- The major function of the La Palma Environmental Information and Awareness Plan (PLASIA) (La Palma Cabildo).
- A highly innovative Solid Waste Plan.



- Without forgetting the Hydrological Plan that places the emphasis on the function of the new transition zone.

These and many other initiatives are also becoming well established in the framework of the search for new sustainable technological solutions. One must not forget that the La Palma BR was a pioneer in highlighting the need to take an Information Society view; i.e. the need to use new technologies for management, development and co-operation policies in the Biosphere Reserve Network. In fact, in 1996, it promoted the first International Conference of Biosphere Reserve Islands with this basic objective.

The island has, in fact, evolved towards an island wide strategy of sustainability, in which the pioneering Canal y Los Tiles Reserve has played an important part. Since those 511 hectares were declared a Biosphere Reserve in 1983, the island society has matured towards a greater appreciation of the natural environment and they have become progressively more aware of how to use resources. At the same time, the degree of community participation and the channels of information about the objectives of the Reserves have increased spectacularly. This debate is now essential in La Palma when they are discussing the future options that will finally banish the phantoms of the development trends that have devastated much of the natural and cultural heritage of neighbouring islands.

The extension of the reserve is being proposed at a key moment when it is essential to analyse an appropriate and sensible implementation of the new regional frameworks and plans like the Infrastructure Management Plan (PDI), the Regional Development Plan (PDR) and the Common Support Framework (MAC), as well as specific action initiatives like the La Palma Foothills Development Plan (Canary Island Government).

That is why this proposal, apart from having an impact on conservation and research-related objectives, will also affect some key points included in the Seville Declaration, such as the following:

- establishing biosphere reserves in a broad variety of environmental, economic and cultural situations, encompassing from largely unaltered regions to urban areas. In the case of coastal and marine environments, the need and the possibility of applying the concept of biosphere reserve are particularly important.
- Reinforcing the new regional, inter-regional and thematic networks of biosphere reserves as components of the World Wide Network of Biosphere Reserves .



- extending the transition zones to cover zones that are vast enough to favour ecosystem management and harness the biosphere reserves for studying and demonstrating sustainable development methods on a regional scale. For this purpose, greater attention must be paid to transition zones.
- bringing together all interested players and sectors in a common task that will make it possible to promote biosphere reserves at a local level and in the networks. Information should circulate freely between all parties involved.

The founding of the Management Consortium of the present Biosphere Reserve, whose statutes contemplate its extension, clearly supposes a greater involvement of the island and municipal authorities, a greater involvement of the private sector and social associations and the acceptance of new perspectives and responsibilities, which are an inspiration for attaining sustainability and conservation objectives.

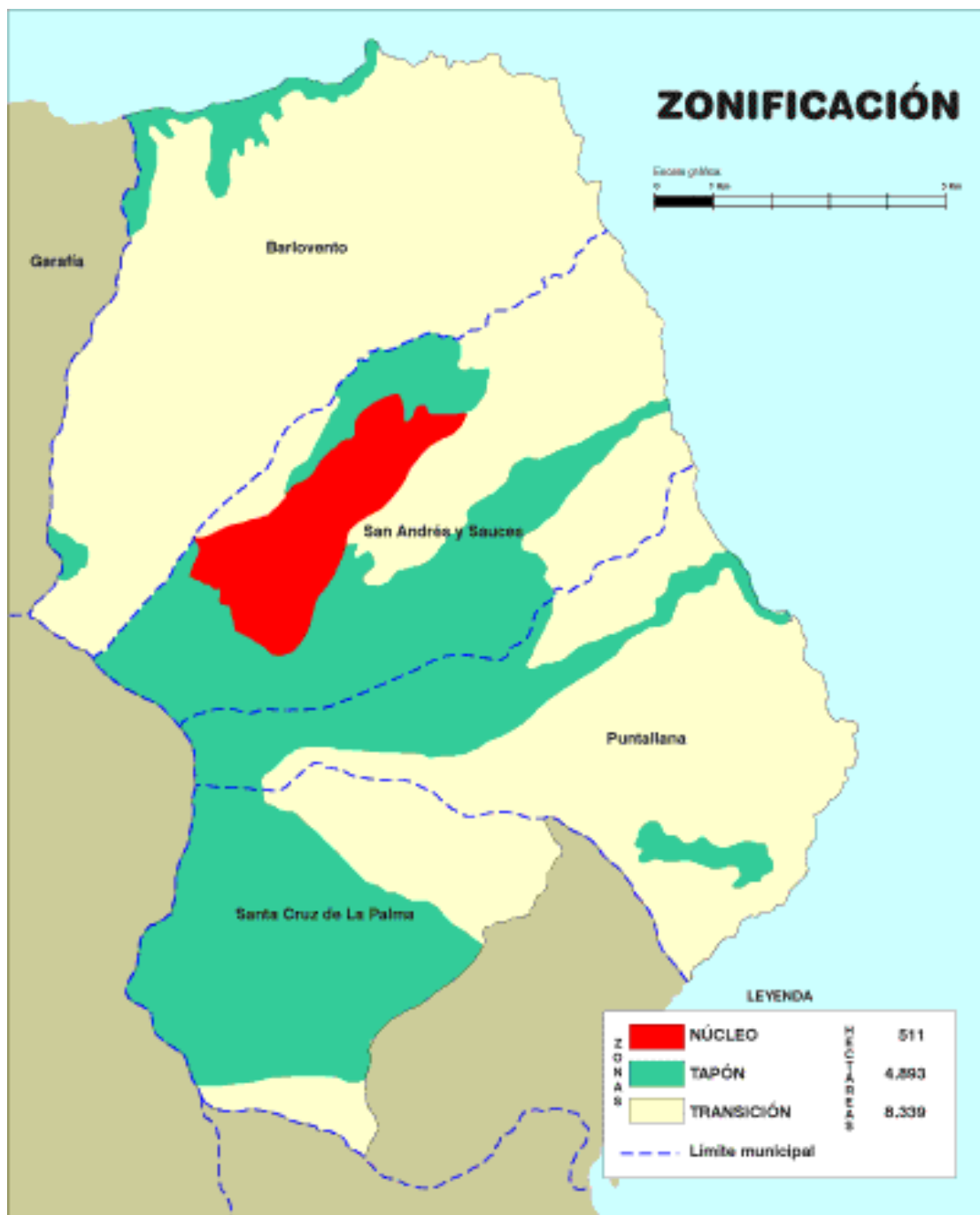
Including the whole island in the Biosphere Reserve will make it possible to bring in areas of undoubted environmental quality, like the Caldera de Taburiente National Park, but it also makes it possible to extend the principles of sustainability to those urban and rural areas that have undergone a greater transformation, and which are the ones that generate the greatest burden on island ecosystems. Furthermore, this extension would be fully coherent with the process of drawing up Agenda 21s for all the island municipalities that is just starting.

On the other hand, the creation of the Canary Island Network of Biosphere Reserves is an inspiration for the La Palma initiative, in that it generates a grid for co-operation and exchange of pilot experiences, in line with the sixth guideline of the Seville Strategy.

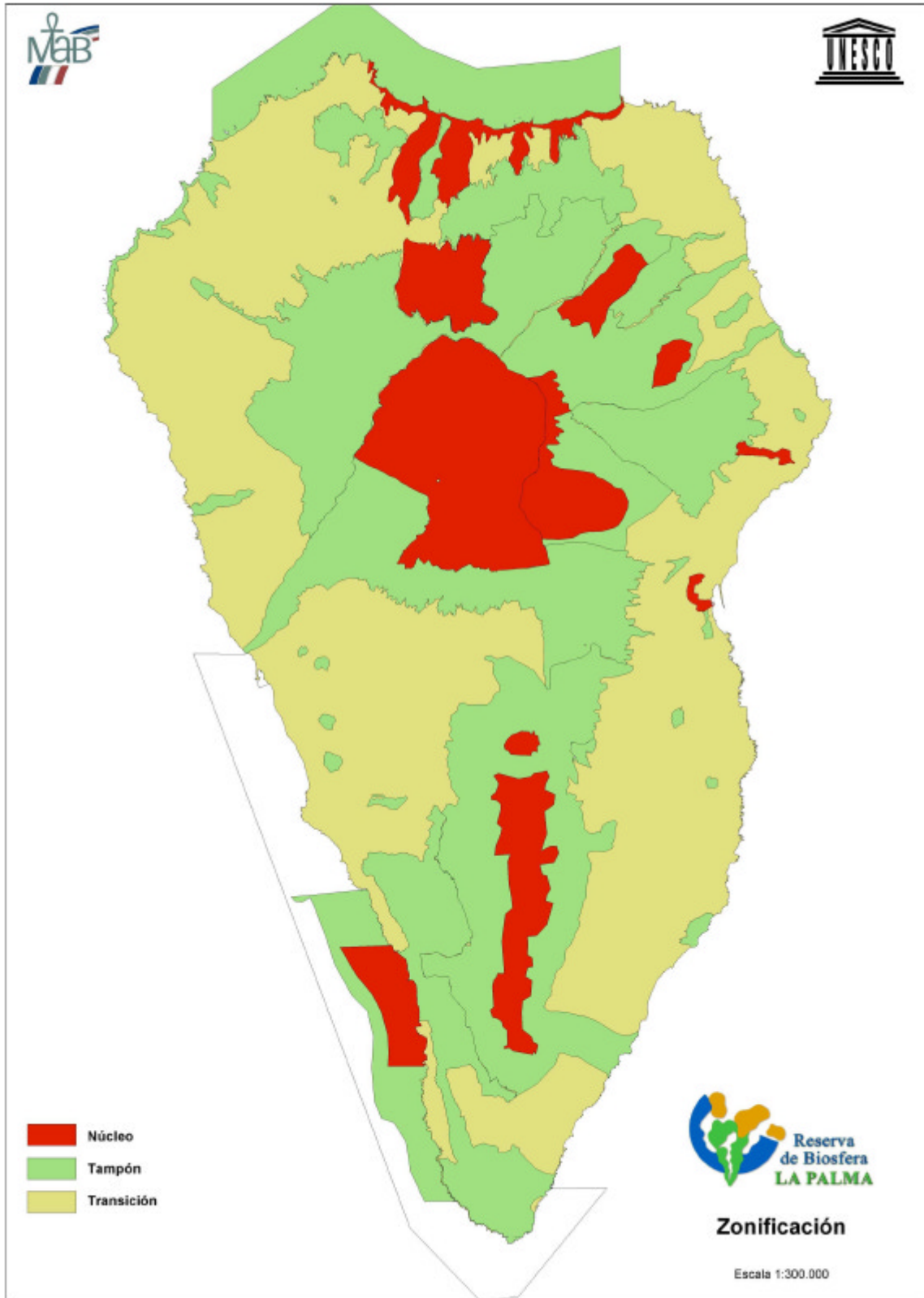
Their firm decision and determination to put in place co-operation systems for promoting sustainability in zones with a similar profile, has led the management consortium to found the Biored Club, an international, non-profit making association. This association is currently made up of 12 European Union rural development agencies that benefit from the LEADER EU Initiative.

In short, this is a proposal to create a new area where this constantly evolving Biosphere Reserve can develop.

SCOPE OF THE PRESENT BIOSPHERE RESERVE



PROPOSED BIOSPHERE RESERVE – EXTENSION TO COVER THE WHOLE ISLAND

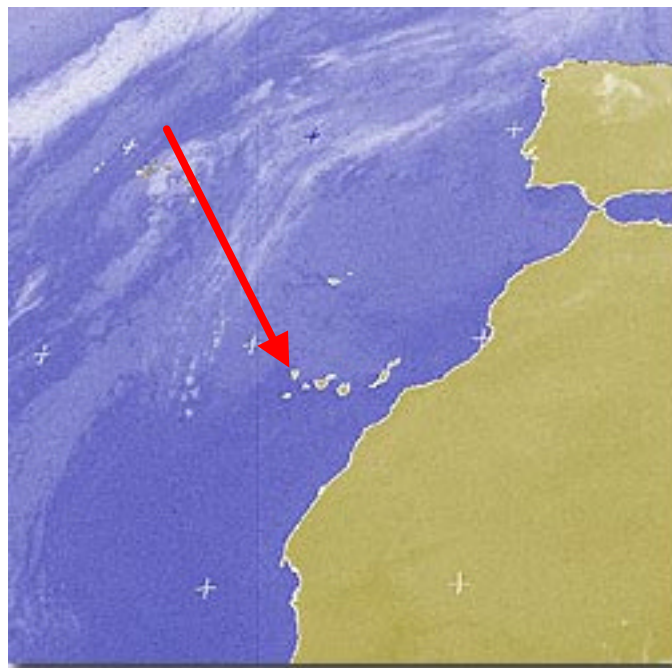


1.
DENOMINATION
PROPOSED NAME



2. COUNTRY

SPAIN



3.

FULFILLING

BIOSPHERE RESERVE FUNCTIONS





3.1. CONSERVATION FUNCTION

It can be safely said that La Palma amply meets the necessary conditions for considering the whole island a Biosphere Reserve, as it contains a high degree of biodiversity, with well conserved ecosystems and habitats of great importance, with an extensive representation of the most characteristic ecosystems of the Macaronesia region. There is a large number of endemic plants among the vegetation, many of which are endemic to the island, while both the invertebrate and vertebrate fauna are outstanding, without losing sight of the great interest of the marine communities.

The importance of this territory, therefore, is not merely local, it transcends the regional level, as 229 of the species found in La Palma are exclusive to the island.

Declaring the whole island of La Palma a Biosphere Reserve signifies creating a territory in which practically all the vegetation layers to be found in the Canary Islands are represented, extending the presence of the ecosystems of the Archipelago already found in the Reserves of Lanzarote and El Hierro. Including the Caldera de Taburiente National Park in the extension of the Reserve means that one of the most natural areas of the Canary Islands will be included in the Reserve, an area whose environmental and cultural values and its connections with the Auritas, the pre-Hispanic settlers of the island, have made it emblematic.

What is more, the island of La Palma also holds a major cultural heritage. This heritage not only encompasses a wealth of archaeological sites, including some of the best engravings to be found in the Canary Islands like Cueva de Belmaco and La Zarza, as well as abundant remains of burial mounds in the mountain peaks of the Caldera, it also represents the survival of a cultural legacy based on a mixture of Afro-American and European currents, which have given way to the peculiar idiosyncrasy of La Palma in the Canary Island context.

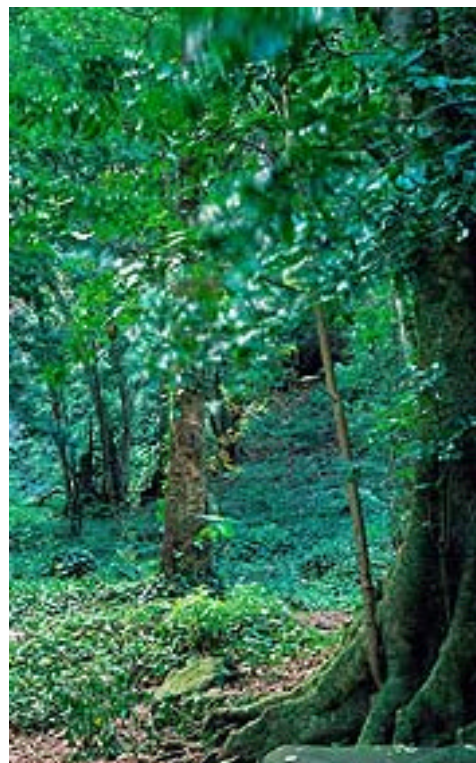
To a large extent, this explains why the island of La Palma has conserved so many of its natural values, which, in turn, explains why 33% of the island has been declared Protected Natural Space by the Canary Island Natural Spaces Act, Law 12/1884, of the 19th of December, currently included in Legislative Decree 1/2000, of the 8th of May, which adopts the modified



text of the Canary Island natural areas and planning legislation. These natural values have also been recognised by the European Union, with the Commission Decision of December 28th, 2001, which adopts the list of Sites of Community Importance for the bio-geographic region of Macaronesia, in application of Council Directive 92/43/EEC.

The Network of Sites of Community Importance makes it possible to endow the island with an adequate network of protected areas, by recognising their connectivity and thus solve the current problem of lack of connectivity between some Natural Spaces.

In the new scope of the BR, advanced endangered species and habitat handling systems become far more coherent because they avoid territorial fragmentation that is not representative of the real situation.





3.2. DEVELOPMENT FUNCTION

Based on the recommendations of the Agenda 21 of the United Nations Conference on sustainable development of islands and Small Island States (Barbados 1994) and the guidelines emerging from the European Conference on Sustainable Island Development (Minorca 1997) and taking the Seville Strategy as a reference, La Palma has built an action model with practical and palpable interventions in the fields and areas that determine the future of the island.

So, apart from a stringent and effective conservation policy for the biodiversity and the representative landscape sites of this region that are to be found on the island, there are also specific sustainable policies in key development sectors: water, energy, agriculture, livestock, transport, tourism, fishing, communications and waste, essential aspects in all island regions, for which suitable solutions must be found. In fact, for the Canary Islands, La Palma has always been, and continues to be, a driving force of sustainability innovation in areas like rural development, choosing new forms of environmental and rural habitat tourism, while the islands were moving towards uncontrolled development. This is a responsible view of the use of land and its resources that also included aspects of technological innovation in areas like telemetry for sustainable development.

This is a pioneering attitude that can be seen in outstanding actions such as the fact that La Palma has adopted the World's first Protection of the Skies Act, or the fact that in 1996, La Palma organised the first International Conference of Biosphere Reserve Islands with this basic objective.

The main role that should be given to the Network of Biosphere Reserves, compared with the other Protected Natural Areas, is precisely its innovation potential in implementing sustainable development pilot and demonstration projects. The complete integration of the human factor in Reserve management means we can go beyond conservation policies and management also takes the social and economic environment into account as a priority component in the objectives of the Reserve.



The large number of sustainable development related initiatives, programmes and projects, includes some aspects that give the island of La Palma a special capacity for becoming a benchmark for sustainable development, with special impact in island regions:

a) The island has a Sustainable Development Plan called the La Palma Strategic Bases Document.

The process of this Sustainable Development Plan has been a real challenge to attain general participation. For over a year, it has been widely discussed, sector by sector, covering the full spectrum of the island's civil society. The document was finally adopted by all the municipal boroughs, social and economic partners and by all political powers.

The fundamental areas and aspects addressed by the document include the strategy of sustainability in:

Re-adapting socially and regionally decisive productive systems: bananas and the traditional agro-livestock complex.

Defining the development of responsible tourism and acceptable carrying capacity, admitting innovation, diversification and the full environmental adaptation of the activity.

Accelerating R+D processes and the full incorporation of the Information Society to promote sustainable development and value added services.

Favouring connectivity between different sectors and promoting innovation for environmentally friendly production: new links with the following sectors: foothills, fish-farming-fishing, organic agriculture and handicrafts.

Planning infrastructures that are in line with the reality of the island and the specificity of its environment. Introduction of the culture of respectful design.

Consolidating the logistic support centres: Canary Island Astrophysics Institute (technology), ZEC (investments), Development Agency and Business Logistics Centre (entrepreneurship), "Excellency Plan" (strategic marketing), SIG La Palma (administrative and regional management modernisation), CIAB-ICIA-Institute of Natural Products (research) and Overseas Promotion Agency (promotional connectivity).



b) The Biosphere Reserve and municipal Agenda 21s.

One aspect considered innovative in the practise of the development function of Biosphere Reserves is the articulation of its strategy with the implementation of Agenda 21s at a local level, in each borough.

In the course of this year, all the boroughs of the island of La Palma have adopted the Aalborg charter for sustainable municipalities, whilst also appointing the respective local agents responsible for their development.

The present BR Consortium is developing the necessary assistance to enable municipalities to adopt their local Action Plans by the end of the year, once they have completed the pertinent environmental diagnosis and started the information and participation process.

c) Sustainable Rural Development and the Leader + Programme.

As we can see by referring back to the UNESCO's Seville agreements, a major part of the strategy of island reserves coincides fully with the position of Programmes like Leader +. As stated in the Commission's Communication to Member States of April 14th, 2000, whereby guidelines are set on the community rural development initiative (LEADER +), the purpose of this initiative is to foster the application of original, high quality integral sustainable development strategies aimed at:

- Revaluing the natural and cultural heritage,
- Improving the economic environment, in order to help create employment,
- Improving the organisational capacity of communities in favour of Sustainable Development.

In this sense, the La Palma Leader + Programme is considered the best model programme put on the table in the Canary Islands in the Leader + evaluation, and one of the leading sustainability and rural development benchmarks in Europe.



3.3. LOGISTIC FUNCTION

The logistic function of support for environmental demonstration, education and skill-building and research and observation projects is covered in a structured manner in specific fields.

The present Los Tiles Biosphere Reserve has a Research Centre, equipped with a laboratory to provide support for the scientists undertaking field work, especially in the area of the laurel forest.

La Palma has an Environmental Education and Training Planning Document, the PLASIA, which defines lines of action in matters of Environmental Education and Training.

The Los Tiles Interpretation Centre has a permanent exhibition of the present Reserve, including a multi-media hall and Environmental Interpretation resources for groups. Furthermore, there are plans to use the Quinta Verde centre, in Santa Cruz de La Palma, as the strategic facility for interpreting the Natura 2000 Network, with the support of a series of environmental information points to be located in the remaining environmental amenities.

The Teneguía volcanoes, the cones of which have been proposed as the core zone of the Reserve, also have an Interpretation Centre for the volcanic activity of the area, where the last volcanic eruption in the Canary Islands took place in the 20th century.

The planned amenities also include two nature classrooms, one in the area of the Puntagorda Wax Myrtle forest and the other on the slopes of Barlovento, preferably in Cubo de La Galga, for interpreting in the Biosphere Reserve and as environmental workshop centres.

On the other hand, the La Palma Cabildo (Island Council) has started implementing the project to create a Rural World Interpretation Centre, to maintain the enormous wealth of



knowledge of the traditional country way of life alive, with respect to crops, farming techniques, livestock experiences, and all the body of traditions related to this traditional way of life.

These resources will be complemented by those of the Caldera de Taburiente National Park, which has a Visitors' Centre in El Paso; a Nature classroom and another small interpretation and reception centre in the Park itself, at the camp site.

Finally, consideration must be given to the international importance of the Roque de Los Muchachos Astrophysics Observatory, located in the core zone, one of the main centres in the world for scientific development in the field of astrophysics.

Los Tiles Interpretation Centre



4.

CRITERIA

FOR THE DESIGNATION





4.1. A MOSAIC OF REPRESENTATIVE ECOLOGICAL SYSTEMS

Extending the Los Tiles Biosphere Reserve to include the entire island of La Palma makes it possible to reinforce the presence of island ecosystems that presently have a more limited presence within the borders of the current Reserve.

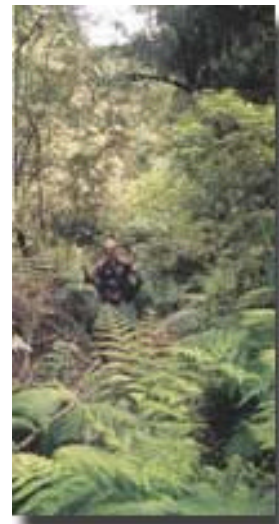
On the island of La Palma, there is a mosaic of representative ecosystems of the Macaronesia Region, such as the **spurge scrub**, the **transitional thermophile forests**, the **laurel forests** and the more long-suffering **tree heath and wax myrtle** forest, the **Canary Island pine forests** and the **Alpine scrub** dominated by broom plants.

By extending the boundaries of the reserve to cover the rest of the island, we can include the most valuable ecological systems of the region, which are not fully represented in the present area. It even makes it possible to include coastal and marine areas and habitats that play a fundamental role in island territories.

These ecosystems have evolved with a varying degree of human intervention, first by the pre-Hispanic aboriginal settlers who had a subsistence economy based on livestock, the gathering of shellfish and primary agriculture, and then, with the arrival of European settlers, the hilly regions were progressively brought under the plough, which led to the regression of the thermophile forests of which only isolated relicts remain, and the laurel and wax myrtle forests, as the best farming and grazing lands were in their potential range.

All over the island, there are also important manifestations of highly interesting cultural landscapes sculpted by man coexisting with the natural habitats. Specialisation in banana plantations for decades is the predominant note in many of these cultural landscapes. This has led, first of all, to the creation of a surprising landscape that covers practically all of the lowland areas of the island between Puntallana and Los Llanos de Aridane, and, secondly, it has modified the territory, adapting it to the needs of this crop. The best example of this are the terraces that have been built in areas of difficult terrain, where dry stone walls have been erected, in order to create the small flats on which the bananas are grown.. This has led to

seemingly impossible plantations clinging to the mountain sides, many of which remain in production.



4.2. IMPORTANCE FOR CONSERVING THE BIOLOGICAL DIVERSITY

According to BIOTA data, the Canary Island Government's Terrestrial Biodiversity Data Base, the island of La Palma has 4,885 species, 980 of which are endemic, giving a 20% rate of endemic species. Furthermore, of the 980 endemic species described for La Palma, 229 are exclusive to the island.

More specifically, the vegetation of La Palma is characterised by its diversity, an aspect that is especially striking if we consider the small area in question. This feature of the vegetation is related to the characteristics of the flora, the location of the island and, above all, to its mountainous nature, which in combination with the climatic conditions, offers a wealth of different kinds of vegetation, organised in different layers. That is why La Palma shelters a representation of all the different layers of vegetation to be found in the Canary Islands, except for the high Alpine vegetation that is only found around the summit of Mt. Teide, on the island of Tenerife.

The island has one of the best examples of humid mountain Laurel Forests that covers a large area because of the special configuration of the island terrain.

Apart from the high proportion of endemic species that can also be found among the fauna, where animal species endemic to La Palma and the Canary Islands have been recorded that belong to sub-genera that are exclusive to Macaronesia (this is the case of the blue tits -*Parus caeruleus*-, lizards and a large number of invertebrates), the importance of the marine communities should also be highlighted, with their complex and highly diverse bio-geographic spectrum.

With regard to species of economic importance, La Palma has conserved a large amount of genetic wealth in comparison with other islands, which can be seen in some varieties of vine and potato, or the black pig.

4.3. SUSTAINABLE DEVELOPMENT

the chance to test and demonstrate sustainable development methods on a regional scale

Apart from fulfilling the objectives of conserving biodiversity and maintaining important natural habitats more satisfactorily on an island scale that is far more coherent with the management systems and the legal scope of these natural areas, extending the reserve also meets the need for consolidating a coherent sustainable development strategy on the island, based on the experience built up within the present reserve.

In fact, the scope of many of the new sustainable island development initiatives that have emerged goes far beyond the limits of the present reserve. These new lines of action have won La Palma a place as a pilot zone for promoting sustainable development in the Macaronesia Region, and in a network of other islands with which close co-operation is maintained.

In short, it gives expression to the initiatives in course that justify the need to extend the reserve to guarantee that the innovation measures and new sustainability management methods will become efficient bench marks at both a local and a regional level:

1.

The existence of an island-wide Sustainable Development Plan with major methodological innovations and genuinely wide involvement of both the public and private sectors, drawn up after an extensive process of debate.

2.

The decision to include in the Biosphere Reserve strategy the process, already in course, of launching Agenda 21s in every municipality on the island, which is a completely innovative complement in all island territories (declared BRs or not).

3.

The existence of an advanced Public Use Plan for natural spaces, whose initial achievements have already made it a regional bench mark that cannot be ignored.



4.

The integral approach to using telemetric resources for integrating management and information systems, creating a model for integrating the island in the Information Society for the benefit of sustainable development, in co-operation with other islands, and

5.

The strategy launched within the framework of the Leader + Programme, aimed at revaluing natural and cultural resources in the rural world, which has already established itself as a regional and Europe-wide bench mark.

6.

The possibility of developing new forms of responsible tourism, in the broadest sense of the term, based on the wealth of experience accumulated in the field of rural tourism. The La Palma Reserve opens the doors to new, innovative forms of tourism in this area.

7.

Promoting the high value and environmentally friendly products, based on revaluing traditional farming and livestock systems and bringing them in line with the new demands of the market.

8.

The projects, programmes and initiatives concerned with sectoral policies of sustainable development:

Alternative energies, waste management, Hydrological Plan, alternative transport, Network of Trails, conservation actions on the coast.

9.

Taking on board sustainable development strategies in the fishing industry and in the marine environment, with the creation of a Marine Fishing Reserve, at the request of fishermen and other social groups.

4.4. SUFFICIENT SIZE to fulfil its functions as a BR

The zoning established covers, both in surface area and in diversity of situations, an appropriately sized space for comfortably fulfilling the functions established for Biosphere Reserves, in concordance with the guidelines that have come out of the Seville Strategy and later recommendations.

The scale of the island added to the complexity and singularity of its habitats, resources, activities and settlements, offers us a complex mosaic that is large enough to address the major conservation and development challenges in a complex island system, characteristic of a medium-sized island.

The core zone, with over 10,000 hectares, contains representations of the main habitats and sites of singular ecological importance on the island, accounting for almost 14% of the island's surface area.

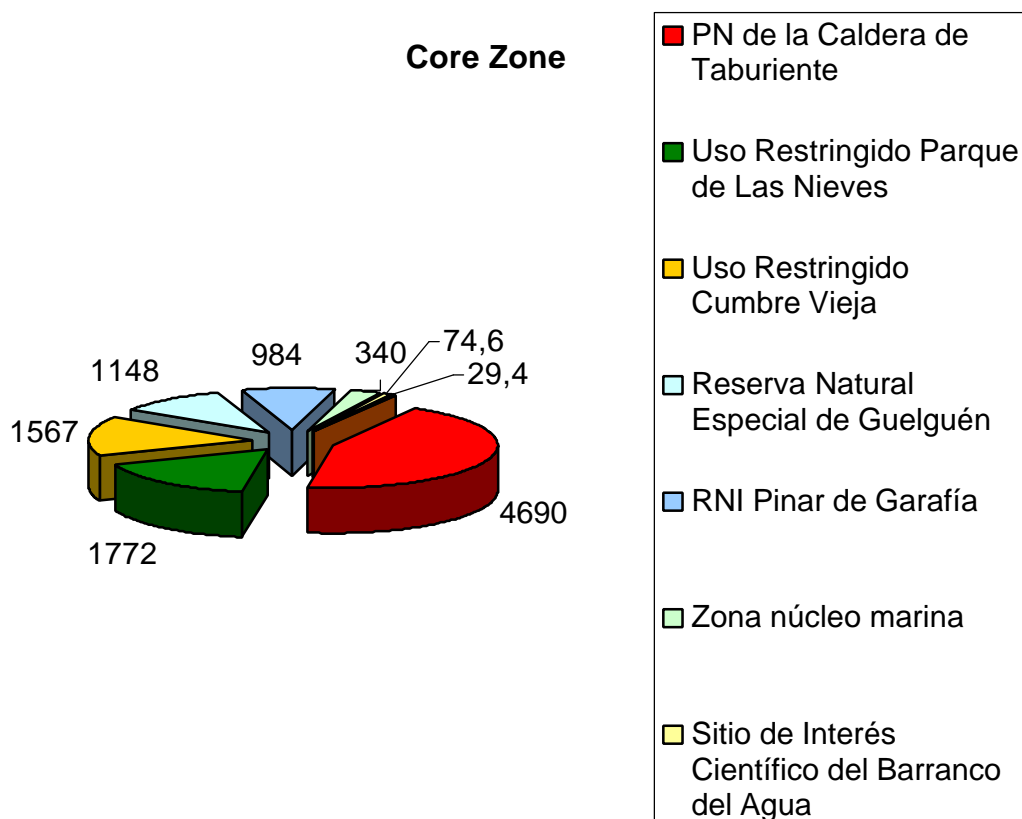
The buffer zone covers 36% of the island's area, and is essential as a guarantee area and an interface with productive activities as a whole. This is an extensive zone that, together with the core zone, complements and guarantees the input of vital resources like water, the production of natural and rural landscape, as a foundation for developing responsible tourism, and which is the home of traditional practises that are a fundamental link in maintaining a creative and productive relationship with the natural spaces.

50% of the territory, with a population of over 80,000 inhabitants, makes up the framework for developing a strategy of sustainability. This is an area in which one can find a rich rural environment in the process of revaluation, including new perspectives for managing marine resources, and which holds an exceptional historic and cultural heritage, with fine manifestations like the old quarter of Santa Cruz de La Palma.

In short, it is a space that is large and complex enough to put a genuinely island-wide strategy of sustainable development into practise.

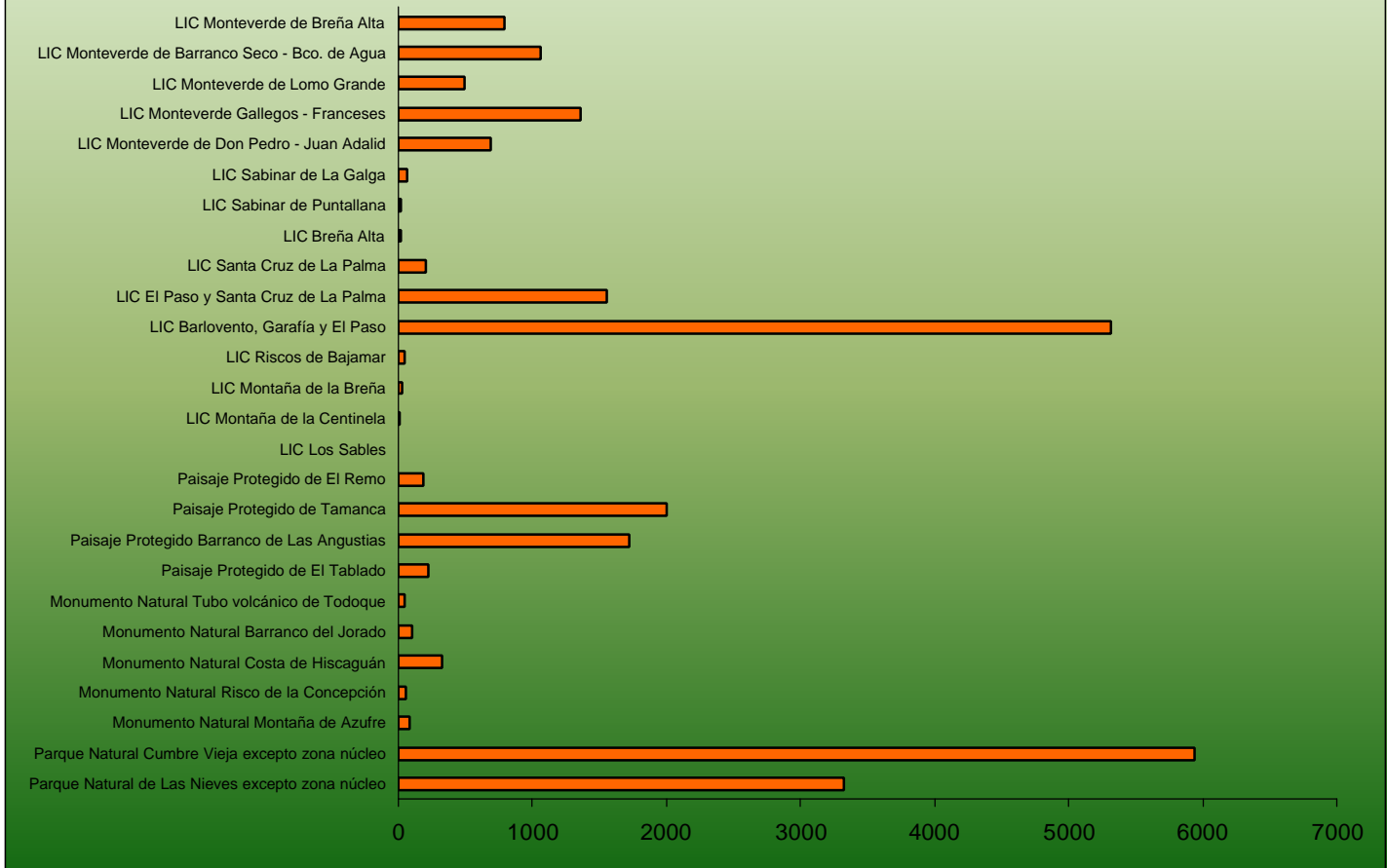
DIMENSION OF THE ZONES

CORE ZONE	
TERRESTRIAL CORE ZONE (ha)	
National Park of La Caldera de Taburiente	4690
Pinar de Garafía INR	984
Special Nature Reserve of Huelguen	1148
Restricted Use Zone of the Las Nieves Nature Park	1772
Restricted Use Zone of the Cumbre Vieja Nature Park	1567
Juan Mayor Site of Scientific Interest	29
Barranco del Agua Site of Scientific Interest	75
Total Terrestrial Zone	10265
MARINE CORE ZONE (ha)	
Integral Reserve Zone of the Marine Reserve	3400
Total core zone	13665

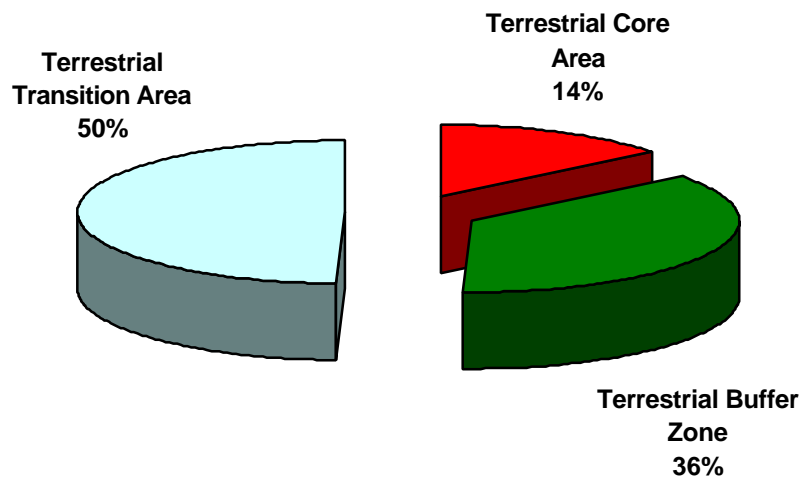


BUFFER ZONE	
Terrestrial transition zone	
Las Nieves Nature Park, except core zone	3322
Cumbre Vieja Nature Park, except core zone	5932
Montaña de Azufre Natural Monument	88
Risco de la Concepcion Natural Monument	61
Costa de Hiscaguan Natural Monument	325
Barranco del Jorado Natural Monument	101
Todoque volcanic tube Natural Monument	47
El Tablado Protected Landscape	224
Barranco de Las Angustias Protected Landscape	1718
Tamanca Protected Landscape	2005
El Remo Protected Landscape	183
Los Sables SCI	3
Montaña de la Centinela SCI	11
Montaña de la Breña SCI	26
Riscos de Bajamar SCI	49
Barlovento, Garafía and El Paso SCI	5318
El Paso and Santa Cruz de La Palma SCI	1558
Santa Cruz de La Palma SCI	204
Breña Alta SCI	21
Sabinar de Puntallana SCI	17
Sabinar de La Galga SCI	67
Monteverde de Don Pedro - Juan Adalid SCI	688
Monteverde Gallegos – Franceses SCI	1361
Monteverde de Lomo Grande SCI	497
Monteverde de Barranco Seco - Bco. de Agua SCI	1061
Monteverde de Breña Alta SCI	787
Total terrestrial transition zone	25674
Marine transition zone	
Fuencaliente Marine Reserve, except integral reserve zone	3335
Costa de Garafía SCI	3145
Total marine transition zone	6470

Zona Tampón Terrestre



TRANSITION ZONE	
REST OF THE ISLAND	
Total Terrestrial Core Zone (ha)	10265
Total Terrestrial Buffer Zone (ha)	25674
Total Surface Area of the Island (708,32 Km ²)	70832
Transition Zone (ha)	34893



4.5. APPROPRIATE ZONING RATIONALE AND GENERAL CRITERIA

The proposed zoning for the reserve has been carried out based on the general criterion that all the selected zones can perfectly cover the functions of conservation, development and logistics entrusted to the reserve, giving consideration to the functionality of the spaces, their natural and heritage values and, of course, the necessary degree of protection to guarantee the success of the designated functions.

Each proposed space is legally sustained with all the guarantees of protection, conservation and functionality in line with the objectives that are set for a Biosphere Reserve. Its status is also in line with its level of uses.

In the design and processing of zoning for the island of La Palma, the following considerations have been taken into account:

- a) The existence of La Caldera de Taburiente National Park, declared as such in 1954. The first National Park to be approved after almost two decades of decadence in nature conservation policy in Spain. This was one of the first steps to re-activating the present Network of National Parks.
- b) The existence of a complete Network of National Parks consolidated under the Canary Island Natural Spaces Act (Law 12/1994), which, for the case of La Palma, includes five degrees of protection for the purpose of developing an integral management model capable of making Canary Island diversity and the protection of cultural and aesthetic values compatible with a sustainable use of scarce and valuable island resources.
- c) The consolidation of a series of sites of community interest, included in the Natura 2000 Network, that overlap and complement the previous protected areas, taking on board a dynamic vision of the territory in the connection of natural habitats and habitats of species, including areas like the Special Protection Areas for Birds.
- d) The existence of a Natural Resources Planning Strategy that provides a framework for all different protection mechanisms in the island's regional planning system. The Canary Islands Natural Spaces Act (Law 12/1994 of December 19), defines the island as a priority



territorial area in the Natural Resource Planning Strategies (PORNs from their initials in Spanish) and they are included in the Island Planning Strategies (PIOs), so a single planning instrument is used for the integral planning of each island.

- e) The existence of a Marine Fishing Reserve, with the corresponding zoning system.

Apart from these aspects related to the terrestrial and marine environment, consideration must be given to the fact that La Palma is the seed of the first known legislation in the world concerning Protection of the Skies; the Protection of the Skies Act appeared because there was a need to prevent light pollution from affecting the Roque de Los Muchachos Astrophysics Centre, sited in the proposed core zone, and thus allowing it function properly.

Starting with these foundations and recognising the different values and functions of each space, zoning is established depending on the category of each space and the following criteria:

CORE ZONE:

As the most valuable spaces for conservation should be included in the core zone, it was decided to select those Natural Spaces that already enjoy the maximum level of protection in Canary Island, national and international legislation, and which also contain a regional scale representative sample of the main habitats; Parks, Reserves and Sites of Scientific Interest, plus the exclusion zone of the La Palma Marine Reserve, included in the Fuencaliente Marine Strip SCI, which forms part of the Natura 2000 Network.

Emphasis must also be given to the fact that the cultural dimension is also contemplated in this form of cataloguing natural spaces, by including archaeological sites of exceptional importance.

- La Caldera de Taburiente National Park
- Huelguen and El Pinar de Garafía Integral Nature Reserves.
- Barranco del Agua and Juan Mayor Sites of Scientific Interest. The Site of the Fuencaliente salt flats has not been included because of its obvious predominance of human intervention.
- Restricted Use Zones of the Cumbre Vieja and Las Nieves Nature Parks.
- Integral Reserve Zone of the La Palma Marine Reserve.

BUFFER ZONE

This is an area of high natural and scenic value where many conservationist activities are presently carried out alongside activities that are compatible with ecological practises, like environmental education, recreation, ecological tourism, walking and applied and basic



research. An enormous effort has been made in recent years, to make some traditional farming and livestock activities compatible with conserving valuable communities and ecosystems. Thus the first fruits of a policy of redefining the model for integrating traditional uses in the environment are now starting to appear. It also includes high value areas of human intervention, like agricultural cultural landscapes, elements of integrated rural architecture and, especially, an archaeological heritage of exceptional importance.

It also includes all the other areas belonging to the Canary Island Network of Natural Spaces and the remaining 17 spaces of the island that have been proposed for inclusion in the Natura 2000 Network, which, furthermore, includes important marine-coastal environments.

TRANSITION ZONE

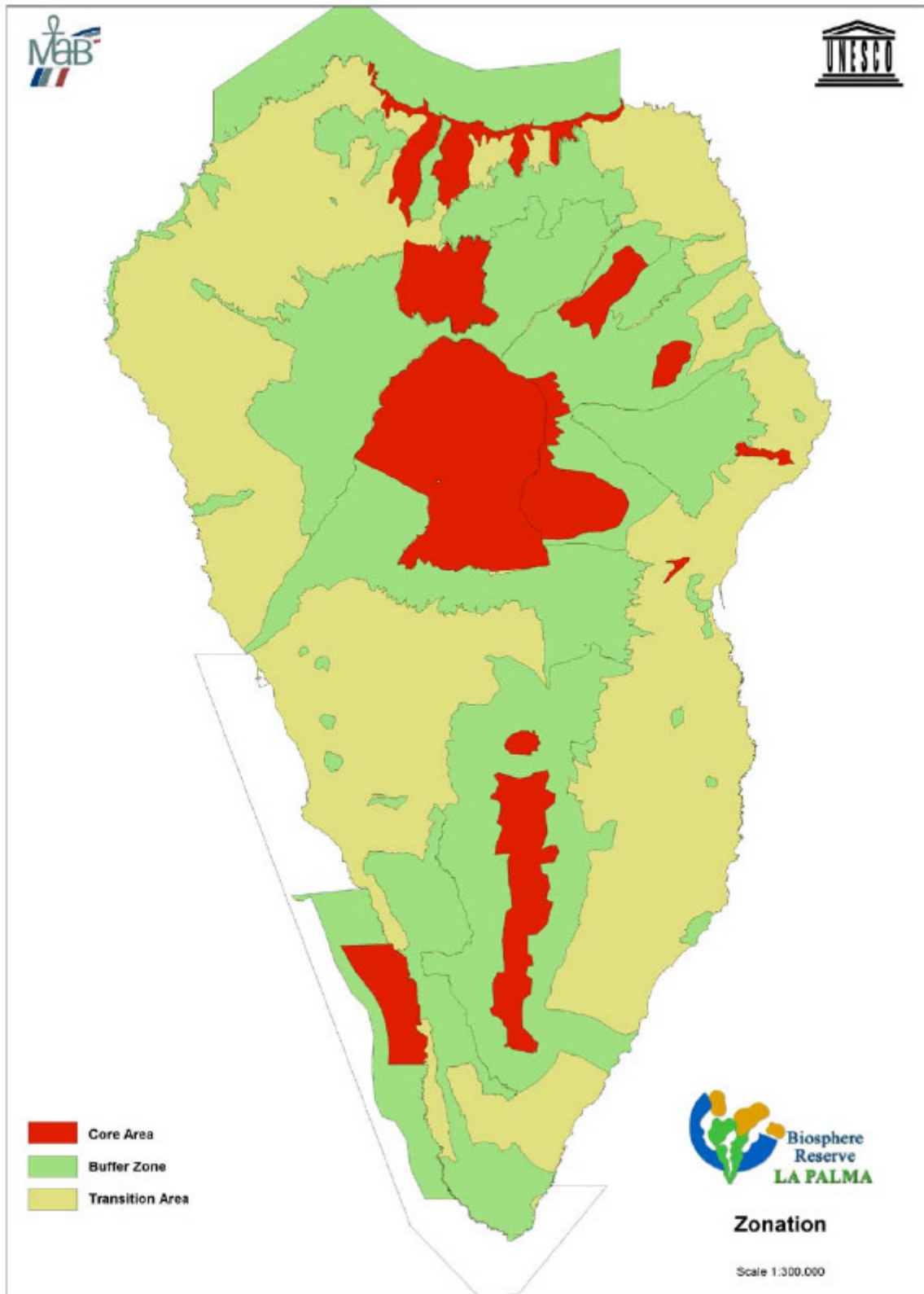
The Rest of the Island

The transition zone comes under the Island Planning Strategy that contemplates a harmonious regional development of the island. One outstanding aspect is the presence of an exceptional rural heritage and singular agricultural landscapes.

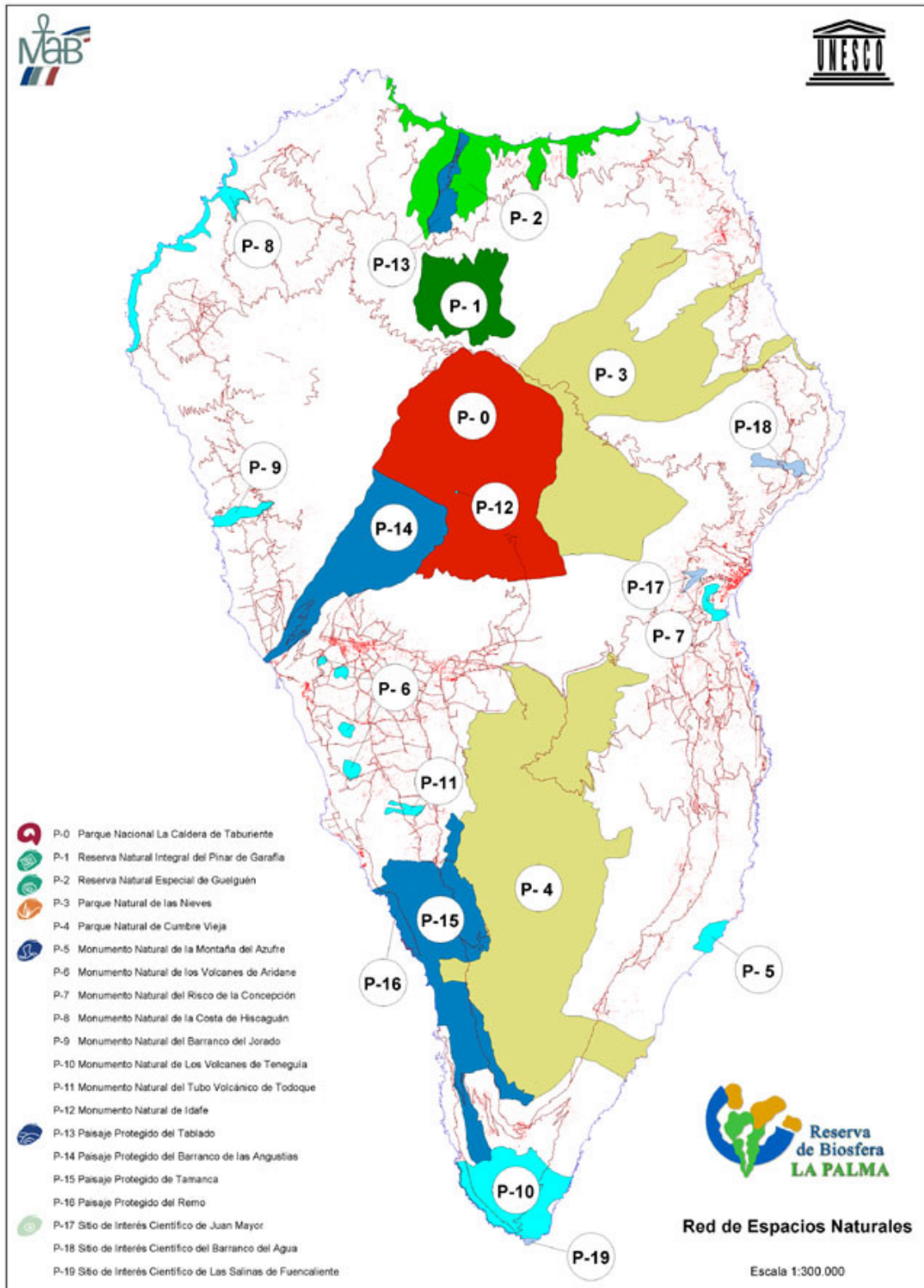
This is the space in which practically all the productive activities of the reserve take place, with the exception of nature tourism.

In particular, it is the specific scope for implementing the La Palma Sustainable Development Plan and the Rural Development Plan generated within the contexts of the Leader + Programme. In this framework, the development of Agenda 21s in each municipality will make it possible to fit the zone's activities in with the presence of the core and transition zones more coherently.

ZONING MAP



PROTECTED AREAS NETWORK (National and Regional Declarations)



NATURA 200 NETWORK (European Network)

