

# GALAPAGOS REPORT 2011-2012

## INTRODUCTION

### THE GREAT CHALLENGE OF GALAPAGOS TODAY AND IN THE FUTURE: HUMAN WELFARE DEPENDENT ON THE CONSERVATION OF ITS ECOSYSTEMS AND BIODIVERSITY

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The **Galapagos National Park Service** has its headquarters in Puerto Ayora, Santa Cruz Island, Galapagos and is the Ecuadorian governmental institution responsible for the administration and management of the protected areas of Galapagos.

The **Governing Council of Galapagos** has its headquarters in Puerto Baquerizo Moreno, San Cristóbal Island, and is the Ecuadorian governmental institution responsible for planning and the administration of the province.

The **Charles Darwin Foundation**, an international non-profit organization registered in Belgium, operates the Charles Darwin Research Station in Puerto Ayora, Santa Cruz Island, Galapagos.

**Galapagos Conservancy**, based in Fairfax, Virginia USA, is the only US non-profit organization focused exclusively on the long-term protection of the Galapagos Archipelago.

# **The great challenge of Galapagos today and in the future: Human welfare dependent on the conservation of its ecosystems and biodiversity**

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The difficulty of understanding that maintaining ecosystems and their biodiversity over time is the foundation of our survival as a species has been at the core of an ongoing conflict that pits “conservation” against “development.” This struggle has come to dominate economic, political and environmental discourse. However, in Ecuador and in Galapagos in particular, the Constitution establishes the legal and conceptual framework to contextualize this paradigm. Given the changing environmental conditions resulting from global climate change and the relentless pressure on natural ecosystems, there is an urgent need for humans to coexist in balance with nature. This philosophy, referred to as “*buen vivir*” or “living well” is expressed in Article 258 of the Ecuadorian Constitution, which states that there will be a special legal framework in Galapagos and that “planning and development will adhere strictly to the principles of conservation of Ecuador’s natural patrimony and *buen vivir*.” This clearly demonstrates recognition and understanding that Galapagos ecosystems, which encompass all human activities in the islands, determine the limits that must be respected and the opportunities that can be taken advantage of.

The vision of *buen vivir* provided by the Ecuadorian Constitution must be supported by management tools that help translate the Special Law into planning and public policy that will build a sustainable, just and equitable society—one where the population lives in harmony with nature and becomes a model for the world. The road to sustainability in Galapagos must be built collectively, reflecting both the individual perspective and the common good, both today and in the future.

The first step is to recognize and accept that Galapagos is not only unique, but also a place where everything is interconnected. While it is divided into different administrative units, the interconnections among them

are undeniable. These interconnections include both the natural world (flow of matter and energy) but also human society (flow of people, materials, information, etc.). Moreover, the biophysical, economic and sociocultural flows operate at different scales of space and time, requiring an understanding of the connections and relationships between each island and the archipelago, each canton and the province, Galapagos and the Republic of Ecuador, and Ecuador and the planet. Therefore, when making decisions we must not only optimize the use of economic and financial resources but also, and more importantly, ensure that our actions are based on two fundamental and absolutely complementary criteria: 1) the carrying capacity of ecosystems, which establishes the foundation for the development of the local society, and 2) the creation of the conditions needed to achieve human wellbeing today and in the future.

Galapagos is currently experiencing an accelerated loss of its isolation, or what some authors call an increase in its “geographical opening.” This makes the province and its ecosystems very vulnerable to any natural or anthropogenic disruptions. In this sense, it is clear that the province urgently needs a unique and integrated land use plan that ensures the long-term sustainability of its socioecological system.

Land use planning is an important issue in the archipelago, and it is central to the process of change currently occurring in Ecuador. Planning and methodology documents are no longer merely interesting creations to be archived in institutional libraries; rather they are becoming effective tools that guide institutional planning and management based on clearly established national goals and objectives. To ensure a better present and future for Galapagos, land use planning must help us to implement the special regimen for Galapagos established in the Constitution, through integrated and preventive management that anticipates external factors to which we are and will be exposed, and that also promotes *buen vivir* in perhaps one of the last natural paradises on earth.

It is important to link socioeconomic activities to the conservation of ecosystems and their ability to generate environmental services. Land use planning in Galapagos should: 1) respect the ecological integrity and resilience of insular and marine ecosystems, understanding that they are the natural foundation of the archipelago, and 2) understand the potential of the archipelago from the

perspective of the needs and activities of humans within a sustainable system. Efforts must be made to establish a well-organized and structured land use model for the region, and to develop public policy guidelines to ensure that programs and projects are developed consensually and are aligned with common territorial objectives. These efforts should result in zoning and land use that move beyond the mindset of protected areas versus populated areas. A single zoning system is needed that rationally assigns uses and activities, delimits the protected areas, and establishes criteria for the location and establishment of infrastructure, in such a way that will:

- Promote the rational use of ecosystem services, respecting their integrity and ecological resilience;
- Contribute to social welfare and economic development in a balanced and sustainable way throughout the province, and
- Define the areas designated for protection and for human settlements in a coherent and integrated manner.

In order to align the mandate of the Constitution with the local population’s need to live in a healthy environment with equal opportunity (the essence of sustainability), it is important to establish cooperative relationships among stakeholders of the urban and agricultural areas, and between those areas and the natural system of Galapagos. The conservation of Galapagos is the fundamental prerequisite to achieve sustainability of the province. Human wellbeing must be seen as the ultimate goal with the economy the means to achieving that goal, not the goal itself.

This edition of the Galapagos Report, like previous editions, is intended to be more than just a publication. It is meant to be a useful tool for citizens and decision-makers alike. It includes a range of articles that address many of the changes that are needed to ensure the conservation of the natural resource base of Galapagos and the welfare of the local population.

The report is organized into five sections:

1. **New approaches.** Effective knowledge management, including access to and use of information, is vital for informed and responsible decision-making. The first section of the report



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- deals with the development of new approaches for the generation and management of knowledge.
2. **Human systems.** The second section focuses on human systems, providing information about critical issues such as population and migration, and the establishment of systems and regulations for water use and human mobility. Tackling these issues is essential if we want Galapagos to move towards sustainability.
  3. **Tourism.** As tourism is the main indirect driver of change in the socioecological system of Galapagos, the third section speaks to the urgent need to transition to a true ecotourism model in the archipelago.
  4. **Marine management.** In addition to tourism, marine fisheries represent an important economic activity for Galapagos. But these activities pose potential threats to coastal marine ecosystems. Applied science focused on generating information for the effective management of these areas must be considered a top priority.
  5. **Biodiversity and ecosystem restoration.** The final section of the report includes topics related more directly to the natural world, such as the control and eradication of invasive species, as well as the restoration of threatened ecosystems and species.
- We hope that a more informed society will come to understand and accept that nature does not need humans, but that we humans depend on the capacity of ecosystems to generate environmental services (benefits). In the case of Galapagos, we still have time to shape the path of development within the limits of the archipelago's natural ecosystems. If we do not succeed, future generations will inherit the need to find another place to live.