

GALAPAGOS: A REFERENCE FOR GLOBAL SUSTAINABLE DEVELOPMENT?

UCI - EMPOWERING SUSTAINABILITY ON EARTH
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Summary

- **2030 Agenda for Sustainable Development Goals (SDGs)**
- **Galapagos as a scenario for policy options**
- **Pros and cons – existing challenges**
- **Factors contributing to Sustainability**
- **Conclusions**



Why Galapagos?

A microcosm of policy options towards sustainable development;

- 1) To transform the entire archipelago in a natural reserve - which means limit human presence to a minimum**
- 2) To keep the archipelago as it is - same population, entry and exit controls, monitoring invasive species and natural growth**
- 3) To develop further the tourist potential of Galapagos. Even with Environmental Impact Studies, the future would be uncertain.**



2030 Agenda for SDG

- Some people say that Einstein defined insanity as “doing the same thing over and over again while expecting different results”.
- Humankind at the crossroads to **balance economic growth, social development and environmental protection.**
However, there is a place on Earth that is emblematic of this universal challenge: Galapagos. A reference for the future?
- January 2016, 17 Sustainable Development Goals (SDGs) of the **2030 Agenda** for Sustainable Development — adopted by world leaders in September 2015 at an historic UN Summit — officially came into force.



G A L A P A G O S
I S L A N D S

Marchena

Georgica

Darwin Bay

Roca Redonda

Punta Espinosa

Hernandina

Black Beach

Uvina Beach

Isabela

Puerto Villamil

James Bay

Puerto Egas

Santiago

Rabida

Piazon

Santa Cruz

Puerto Ayora

Santa Fe

Andrew Bay

Punta Comorant

Floriana

Post Office Bay

Champion Island

Punta Suarez

Espanola

Kicker Rock

Punta Pitt

San Cristobal

Puerto Baquerizo Moreno

Candies Bay

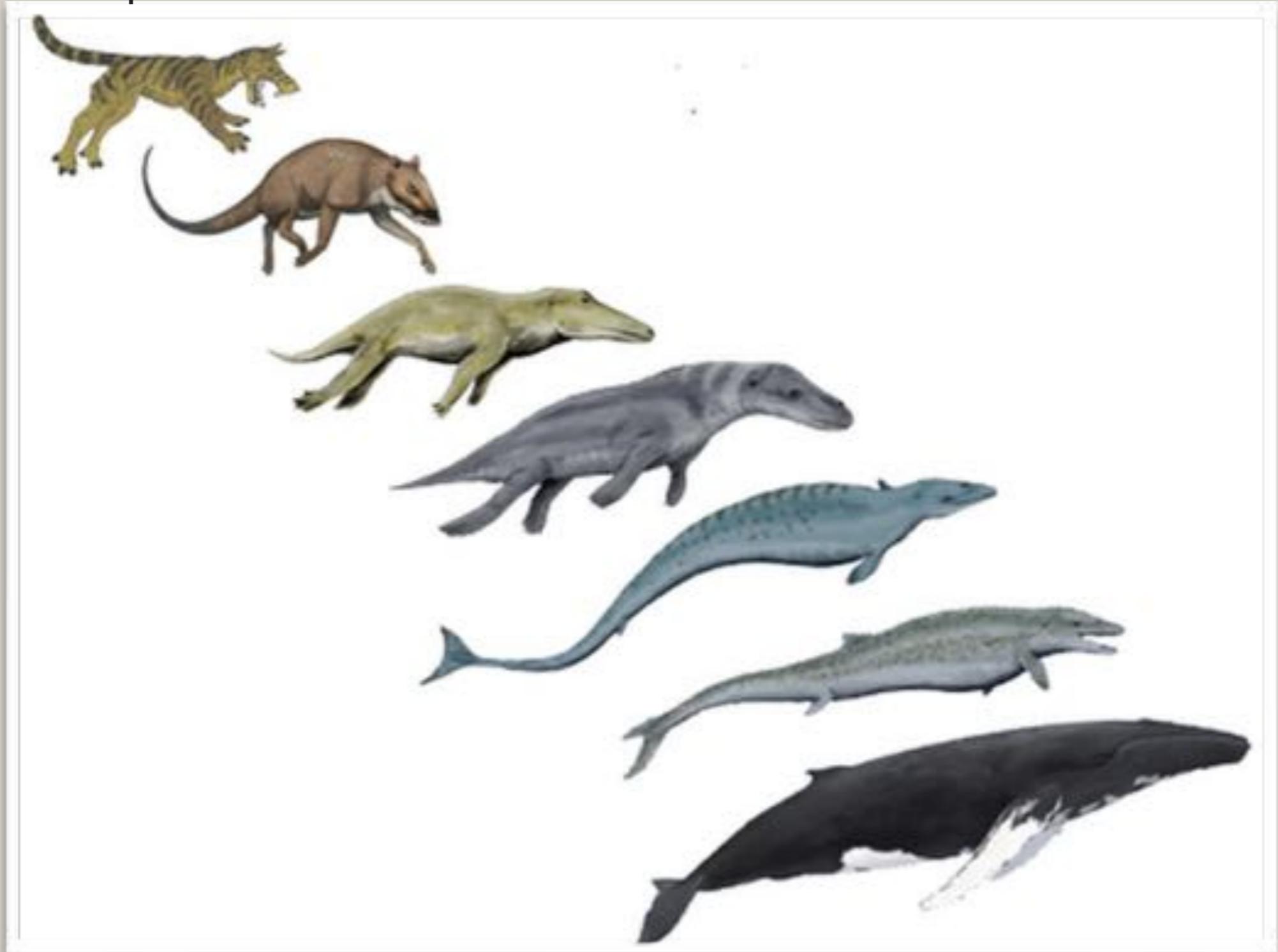
Galapagos

Quick Facts

- Ecuador
- Volcanic Archipelago in the Pacific Ocean
- Charles Darwin "Theory of Evolution" 1859
- 1,000 Km (625 miles) from the shore
- 21 islands (3 inhabited)
- 25,000 people

GALAPAGOS - DARWIN - THEORY OF EVOLUTION

“All species of organisms arise and develop through the natural selection of small, inherited variations that increase the individual's ability to compete, survive, and reproduce.”



Galapagos

- 1930 the **1st protective legislation** for the Galápagos was created
- 1957 UNESCO and the government of Ecuador organized a "**fact-finding**" **expedition and established a research center**
- 1959 Ecuadorian government declared **97.5% of the archipelago's land area a National Park** (only excepting areas already colonized)
- 1959 **The Charles Darwin Foundation (CDF) was founded** to research and support the government for effective management of Galápagos
- 1978 recognized by UNESCO as a **World Heritage Site**
- 1985 recognized by UNESCO as a **Biosphere Reserve**
- 1986 the 70,000 square km (27,000 sq mi) of ocean surrounding the islands was declared a **Marine Reserve**
- 1990 the archipelago became a **whale sanctuary**
- **Galapagos is managed by a Special Administrative Board gathering local and federal institutions.**

Galapagos



Galapagos

\$15,000 Fine

Avianca 



Galapagos - Challenges

- Main challenge to keep the **invasive species out of Galapagos**
- Everything in the islands arrive by boat - food, water, people, clothes, medications, etc. So far, a total of:
 - **36 vertebrate species** have been introduced to Galapagos. Most of the more invasive and devastating species are primarily **goats, rats, cats, pigs, and dogs.**
 - Some **750 introduced plant species** with nearly 90% of them brought deliberately by humans for agricultural and ornamental purposes - ex. **Blackberry kills native plants, and changing the micro-climate.**
 - Approximately **543 alien insect species.** Most arrived on lumber, and vegetables, and other organic material.

Galapagos

Brief Reflection on EGO vs. ECO

- For instance we hear that in Galapagos animals are not afraid of humans.



As a result of unsustainable development we have caused a genetic imprint separating us from other spe





Galapagos

- So, why the animals are afraid of us today?
- **Fear is** an emotion, an unspoken **memory**
- There are serious **studies of fear** in animals such as mice showing that **fear can be selectively bred into succeeding generations**, suggesting a strong genetic component.

Points for Discussion

- **If you were the Mayor of Santa Cruz (member of the Administrative Board of Galapagos), what policy option would you consider?**
- **Evict the population (25,000) preserving the only "time capsule" of evolution existing in the planet while risking a serious social and political problem?**
- **Accept proposals by Chinese investors to build high-rise hotels (as in the Bahamas) to increase income and promote eco-tourism?**

Conclusions

- **Enhance Capacity Development - individuals** 
institutions, society
- **Monitor Consumption Patterns**
- **Urban Planning**
- **Enforce Governance and Legal Framework**
- **Exercise Strict Demographic Controls**
- **Strengthen Immigration / Customs Control**
- **All this is real under social, economic and environmental threat**













